Environmental & Safety Solutions, Inc.

CLOSURE REQUEST REPORT

Ross Draw Unit 42

Eddy County, New Mexico

Incident Number nAB1605654667

Prepared For:

WPX Energy Permian, LLC

5315 Buena Vista Dr.

Carlsbad, NM 88220

Carlsbad ● Midland ● San Antonio ● Lubbock ● Hobbs ● Lafayette

SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Closure Request Report (CRR) detailing delineation and excavation activities and soil sampling events associated with an inadvertent release of crude oil and produced water at the Ross Draw Unit 42 (Site). Based on completed remedial actions and laboratory analytical results from recent soil sampling events, WPX is requesting No Further Action (NFA) for the subject release.

SITE LOCATION AND RELEASE BACKGROUND

The Site is located in Unit K, Section 22, Township 26 South, Range 30 East, in Eddy County, New Mexico (32.02600°, -103.87139°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM) (**Figure 1** in **Appendix A**).

On February 20, 2016, a loose polish rod liner caused approximately 13 barrels (bbls) of a crude oil and produced water mixture to be released onto the well pad surface. Vacuum trucks were immediately dispatched and recovered approximately 11 bbls of fluid. All fluids were reported to be contained to the well pad. WPX reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on February 22, 2016, and was subsequently assigned Incident Number nAB1605654667. **Figure 2** in **Appendix A** depicts the observed subject release footprint, hereafter referred to as the Area of Concern (AOC).

A series of Closure reports were prepared and submitted, and were each denied due to the following reason(s):

March 29, 2023

- *Depth to groundwater is not adequately identified. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. If evidence of depth to ground water within a ½ mile radius of the site cannot be provided, impacted soils will need to meet Table 1 Closure Criteria for ground water at a depth of 50 feet or less.*

June 21, 2023

- *Closure denied due to incomplete closure report. The following are missing: scaled site map/sampling diagram, description of remediation activities, photographs of the remediated site, and final sampling lab analyses.*

July 28, 2023

- *Closure denied. Additional horizontal delineation required.*

October 3, 2023

- *Closure denied. All areas not reasonably needed for production or subsequent drilling operations must be 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. Remediation on an active site can be deferred in areas immediately under or around production equipment such as production tanks, wellheads, and pipelines where remediation could cause a major facility deconstruction so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. The deferral request must specify which sample points are being requested for deferral including an explanation why the contaminants can't be removed. Submit a report via the OCD permitting portal by December 29, 2022.*

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December 22, 2023

- *Deferral denied. Horizontal delineation must meet the requirements of the reclamation standards 19.1529.13 NMAC (600 mg/kg CL, 100 mg/kg TPH, 50 mg/kg BTEX, 10 mg/kg benzene) or OCD approved "background" values for the upper 4 feet of the impacted area. Site characterization with delineation samples conducted in 2019 and 2020 is incomplete. Sampling depths are inconsistent and does not constitute delineation of the release. Remediation closure can be requested when conditions of 19.15.29.12 NMAC are met. Submit a complete report by April 30, 2024.*

NMOCD met with Etech on January 9, 2024, to discuss the denied Deferral Request Report (DRR) and to request the advancement of existing delineation soil samples and collection of composite samples within the AOC. Due to the large extent of the AOC, NMOCD approved a Sampling Variance Request (SVR) for 5-point composite confirmation soil samples to represent a maximum of 400 square feet per soil sample collected from within the AOC floor and 200 square feet for latera/edge confirmation soil samples on February 13, 2024. The SVR and approved email receipt is provided in **Appendix B**. The summary of additional field activities is described below.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

Etech characterized 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.

The nearest permitted water well used in the original CR with depth to water data was United States Geological Survey (USGS) well 320125103514701, located approximately 0.5 miles southeast of the Site. USGS well 320125103514701 has a reported depth of water 117 feet below ground surface (bgs) from 1987. Due to the age of the groundwater measurement (greater than 25 years old), NMOCD determined the data to be insufficient to assist with the regional groundwater depth estimate at the Site.

Since the submittal of the CR, Talon LPE drilled a soil boring (MW-1) on December 8, 2020, located approximately 0.3 miles north of the Site on the Ross Draw Unit #38 well pad. Using a truck mounted drill rig equipped with hollow stem auger, the soil boring was advanced to a total depth of 105 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. Well records for referenced wells are provided in **Appendix C**. The MW-1 soil boring location and regional groundwater well locations are shown in **Figure 1A** in **Appendix A**.

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

Based on the results from the desktop review and further supported 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	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B	50 mg/kg

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

DELINEATION SOIL SAMPLING ACTIVITIES

From August 11, 2023, through March 20, 2024, Etech conducted delineation activities to assess the presence or absence of residual soil impacts associated with the AOC. Six boreholes (BH01 through BH06) were advanced via hand auger and/or heavy equipment, and ten potholes (PH01 through PH10) were advanced via heavy equipment within and around the AOC. Delineation activities were driven by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. A minimum of two samples were collected from each delineation soil sampling location, representing the highest observed field screening concentrations and the greatest depth. Field screening results and soil descriptions are included on soil sampling logs shown in **Appendix D**. The delineation soil sample locations are shown in **Figure 2** in **Appendix A**. Photographic documentation of delineation activities is included in **Appendix E**.

Delineation soil samples were placed directly 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 Laboratories (Envirotech) in Farmington, New Mexico, for analysis of COCs.

DELINEATION LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all delineation soil samples indicated that COC concentrations were below the Site Closure Criteria. Laboratory analytical results are summarized in **Table 1** included in **Appendix F**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix G**.

CONFIRMATION SOIL SAMPLING ACTIVITIES

From February 29, 2024, through March 20, 2024, Etech collected 5-point composite confirmation soil samples within the AOC at the approved sampling frequency of 400 square feet (FS01 through FS43 and SW01 through SW05). The 5-point composite soil samples were comprised of five equivalent aliquots homogenized in a 1-gallon, resealable plastic bag. Confirmation soil samples were field screened, handled and analyzed as previously described. The locations of the confirmation soil samples are shown in **Figure 3** in **Appendix A**. Photographic documentation during soil sampling activities is included in **Appendix E**.

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Laboratory analytical results for FS12 at 0.25-foot bgs indicated TPH-GRO + TPH-DRO exceeded the Site Closure Criteria and warranted additional remediation. As such, an excavation was advanced to 0.5-foot bgs in the area associated with FS12. Impacted soil was excavated and removed from the Site and transported to a licensed and approved landfill under WPX approved waste manifests. Following the completion of the excavation, a 5-point confirmation soil sample (FS12A) was collected, handled, and analyzed as previously described.

Upon receipt of the final confirmation soil sample results, the excavation was backfilled with clean, locally sourced soil and the Site was restored to "as close to its original state" as possible. Photographic documentation of excavation activities is included in **Appendix E**.

CONFIRMATION LABORATORY ANALTICAL RESULTS

Laboratory analytical results for all confirmation soil samples were below the Site Closure Criteria. Laboratory analytical results are summarized in **Table 1** included in **Appendix F**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix G**.

CLOSURE REQUEST

The conditions issued in the denial responses for this release have been addressed, including the most recent request for supplemental soil sampling activities to further characterize the AOC. Based on the updated Site Characterization from recent depth to groundwater confirmation and laboratory analytical results from all soil sampling events, concentrations of the COCs for delineation and final confirmation soil samples were below the applicable Closure Criteria. Due to the active status of the well pad where the inadvertent release occurred, the top 4 feet of the AOC is not ready to undergo complete reclamation in which the primary purpose is to reestablish vegetation. Since depth to groundwater at the Site is estimated to be greater than 100 feet bgs and there are no sensitive receptors within the established buffers in NMAC 19.15.29.12, WPX believes residual chloride concentrations within the AOC exceeding the reclamation standard but below the Site Closure Criteria meets the requirements set forth in NMAC 19.15.29.13 regulations and is equally protective of human health, the environment, and groundwater.

WPX will reassess the Site during plugging and abandonment activities and address those soil concentrations above the reclamation requirements of 600 mg/kg chloride and 100 mg/kg TPH associated with the inadvertent release (**Figure 4** in **Appendix A**). The final remediation will be confirmed via excavation confirmation sampling and is subject to change. As such, NFA appears warranted at this time and the CVR associated with Incident Number nAB1605654667 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 Erick Herrera (432) 305-6416 or erick@etechenv.com. **Appendix H** provides correspondence email notification receipts associated with the subject release, referenced in the attached denied Closure Request Report (CRR). Previous remediation activities and soil sample analytical results for the subject release can be referenced in previously submitted reports in **Appendix I**.

Sincerely,
Etech Environmental and Safety Solutions, Inc.



Erick Herrera
Staff Geologist



Joseph S. Hernandez
Senior Managing Geologist

cc: Jim Raley, WPX
New Mexico Oil Conservation Division
Bureau of Land Management

Appendices:

Appendix A: Figure 1: Site Map
Figure 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: Confirmation Soil Sample Locations
Figure 4: Future Restoration Areas

Appendix B: Approved Sampling Variance Request

Appendix C: Referenced Well Records

Appendix D: Soil Sampling Logs

Appendix E: Photographic Log

Appendix F: Tables

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

Appendix H: Correspondence & Notifications

Appendix I: Previously Submitted Reports

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APPENDIX A

Figures

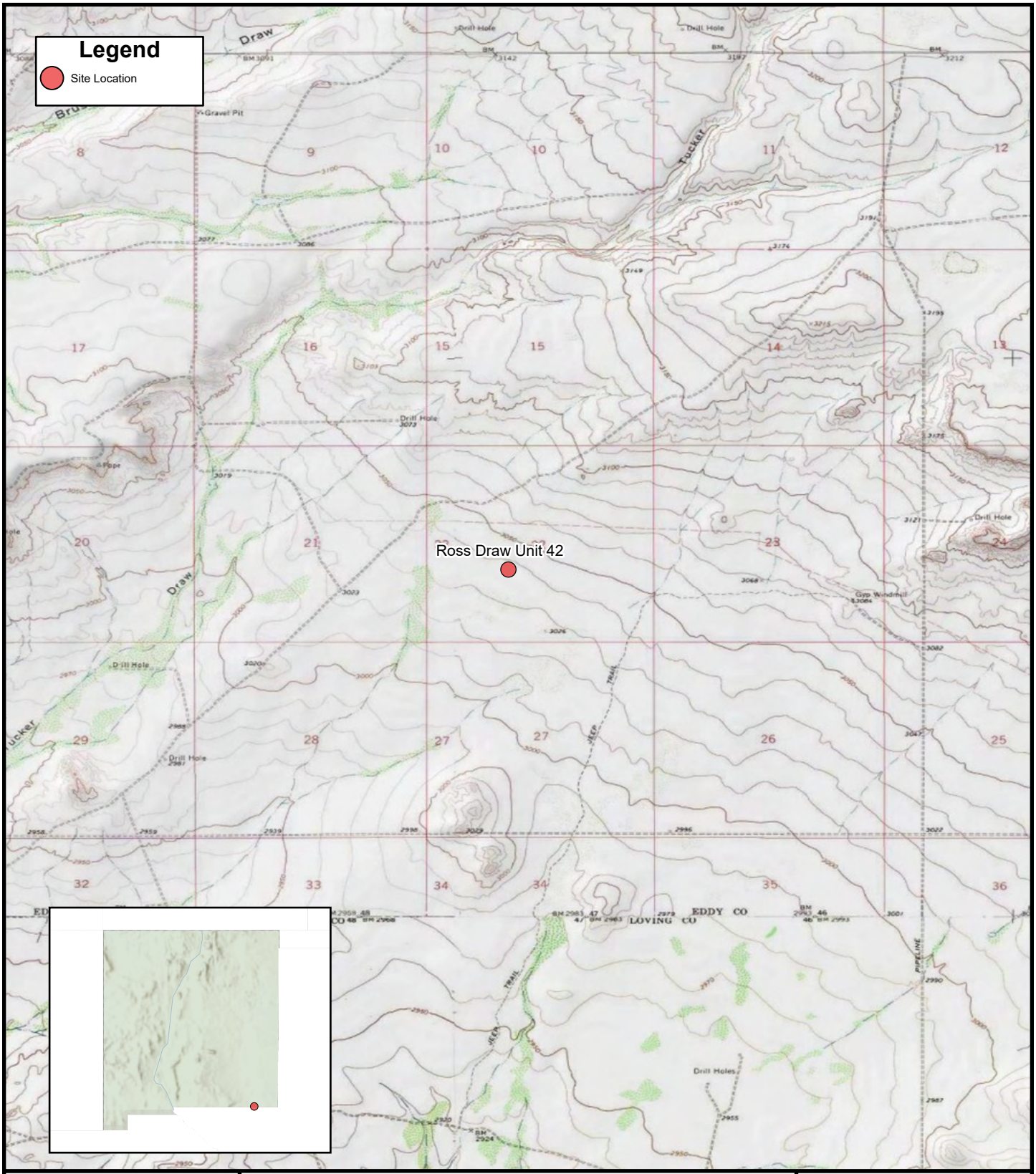


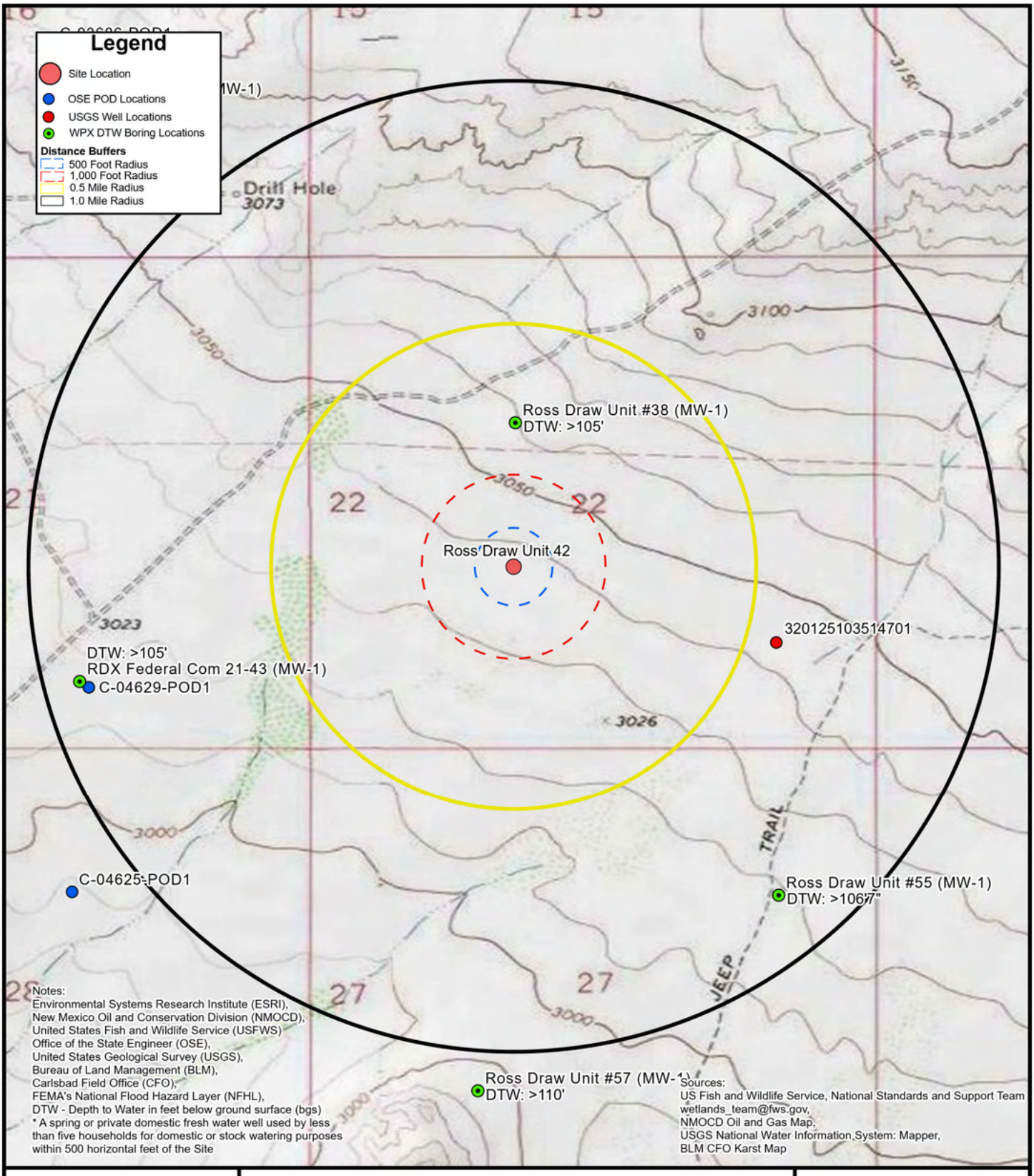
FIGURE 1

Site Location Map

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 2,000 4,000 Feet



eTECH

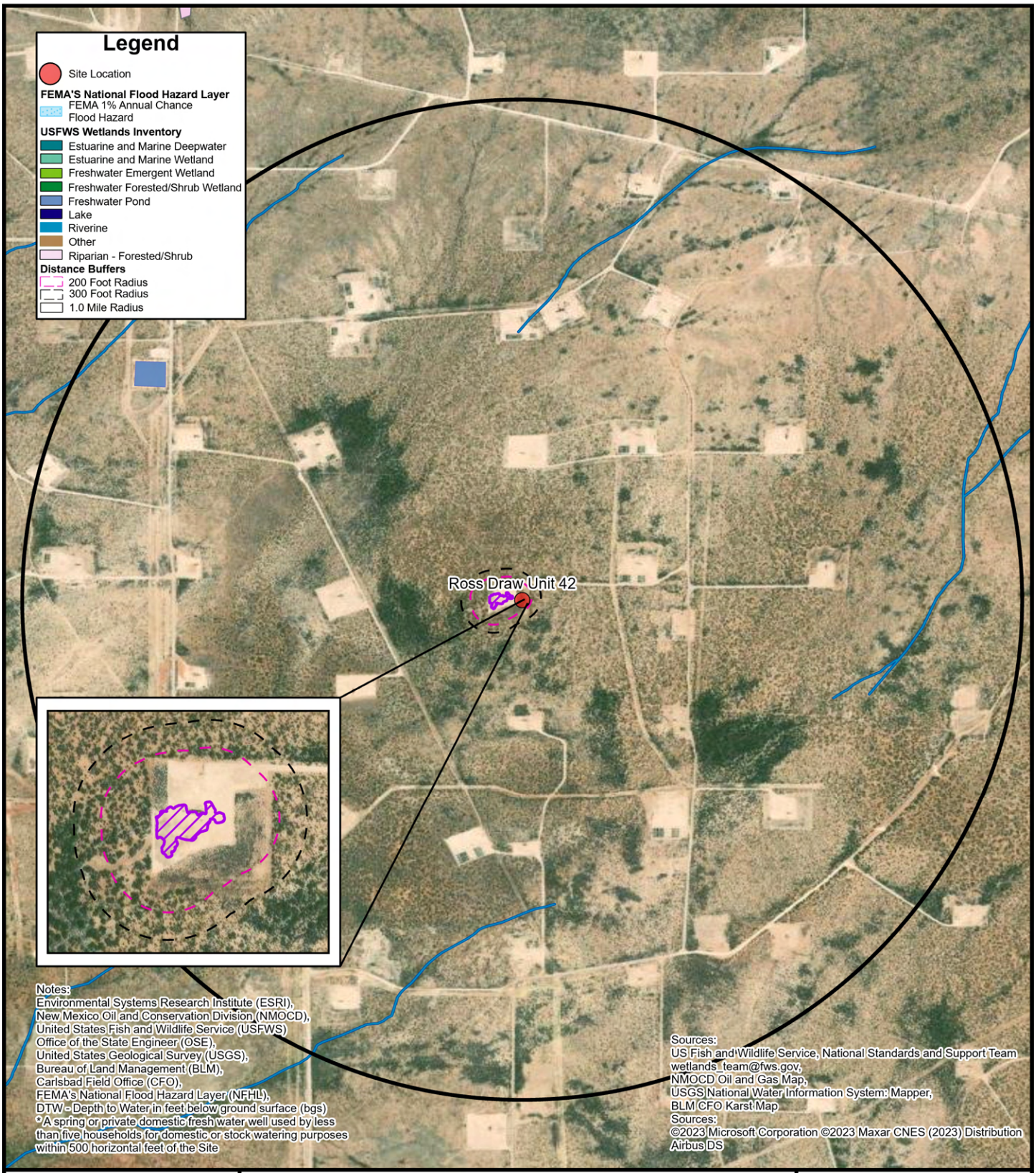
FIGURE 1A

Site Characterization Map
Groundwater

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 500 1,000 Feet



eTECH

FIGURE 1B

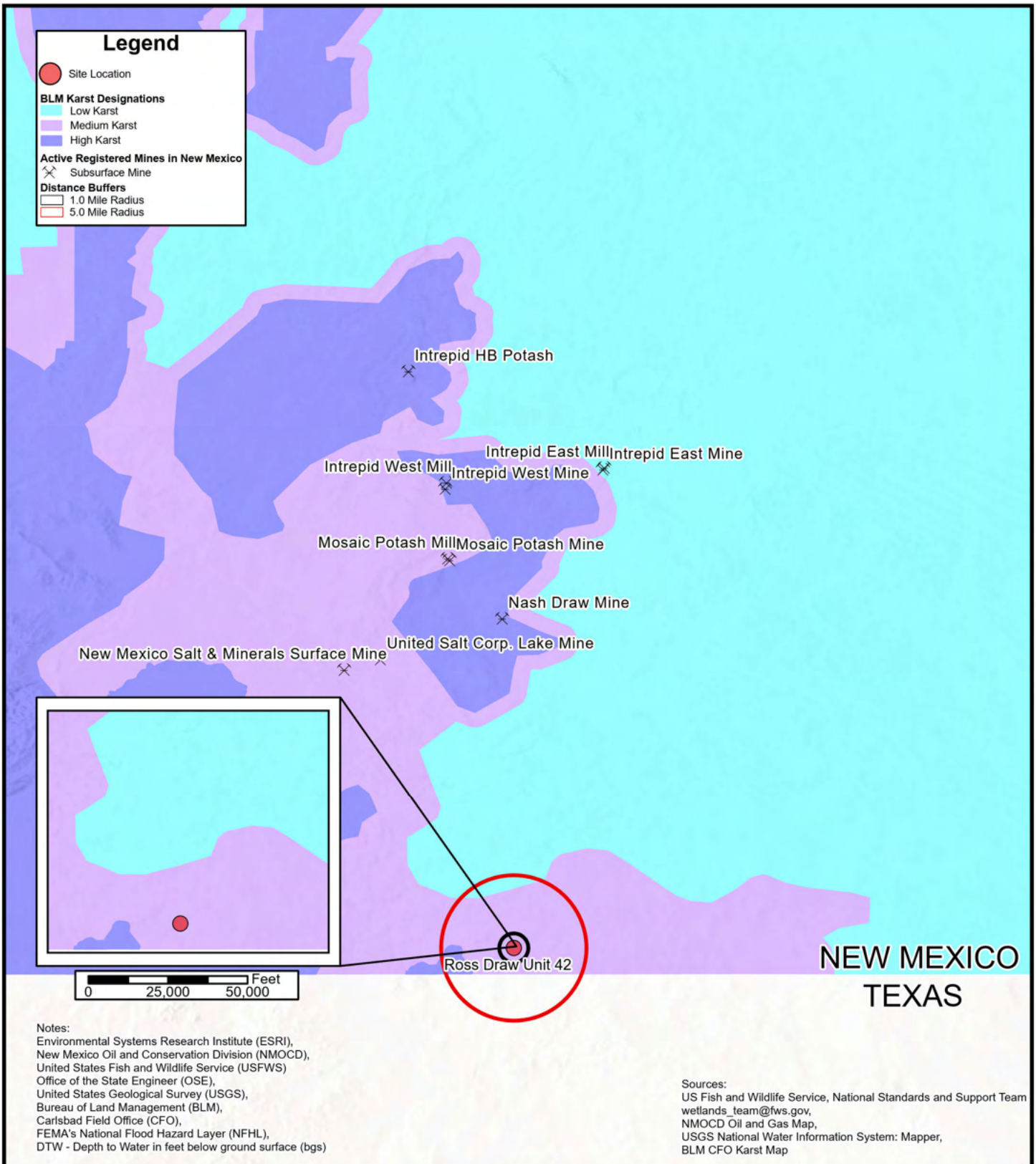
Site Characterization Map

Surficial Receptors

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 500 1,000 Feet



Notes:
Environmental Systems Research Institute (ESRI),
New Mexico Oil and Conservation Division (NMOCD),
United States Fish and Wildlife Service (USFWS)
Office of the State Engineer (OSE),
United States Geological Survey (USGS),
Bureau of Land Management (BLM),
Carlsbad Field Office (CFO),
FEMA's National Flood Hazard Layer (NFHL),
DTW - Depth to Water in feet below ground surface (bgs)

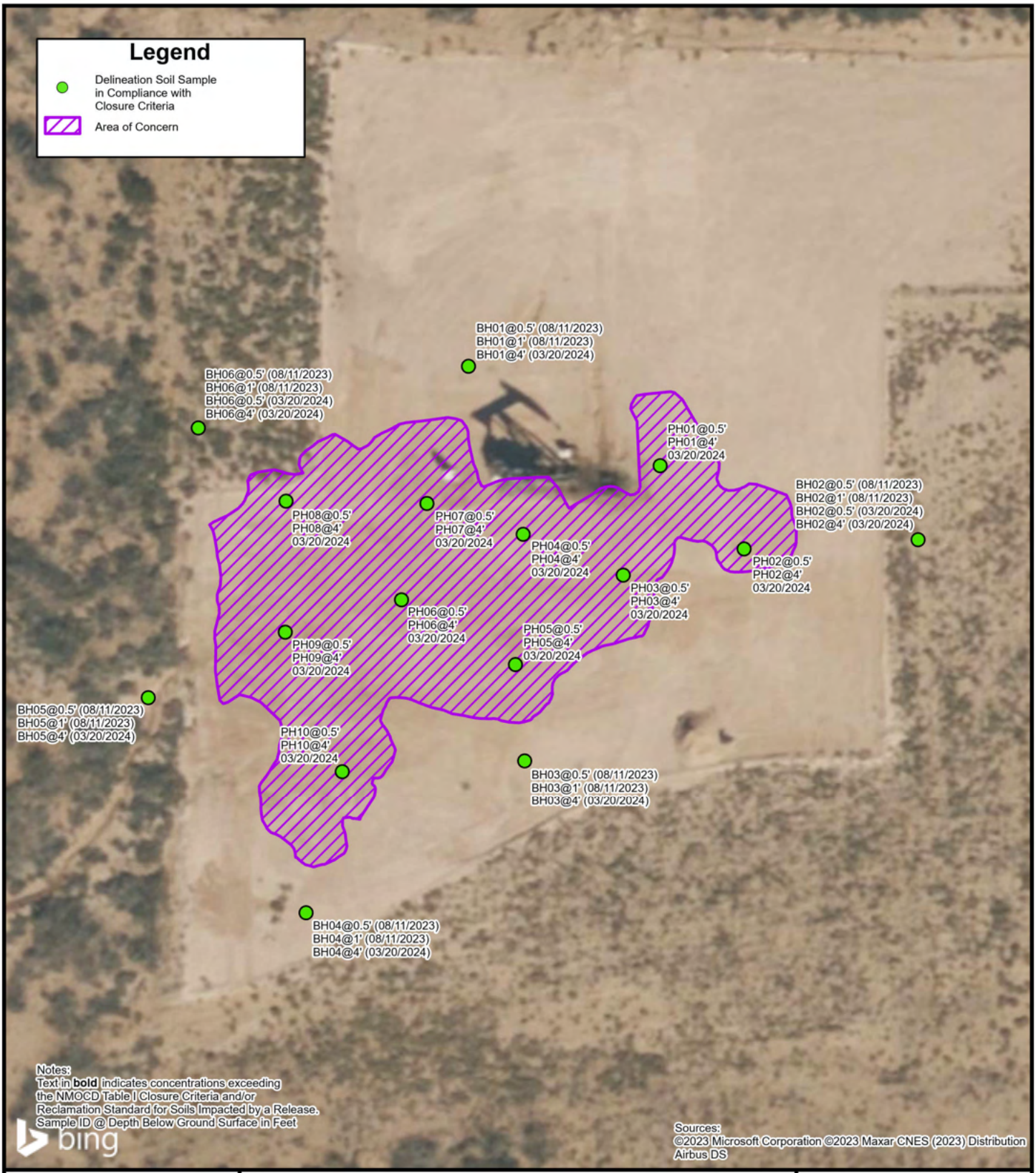
Sources:
US Fish and Wildlife Service, National Standards and Support Team
wetlands_team@fws.gov,
NMOCD Oil and Gas Map,
USGS National Water Information System: Mapper,
BLM CFO Karst Map

eTECH

FIGURE 1C
Site Characterization Map
Subsurface Receptors

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N
Feet
0 25,000 50,000



eTECH

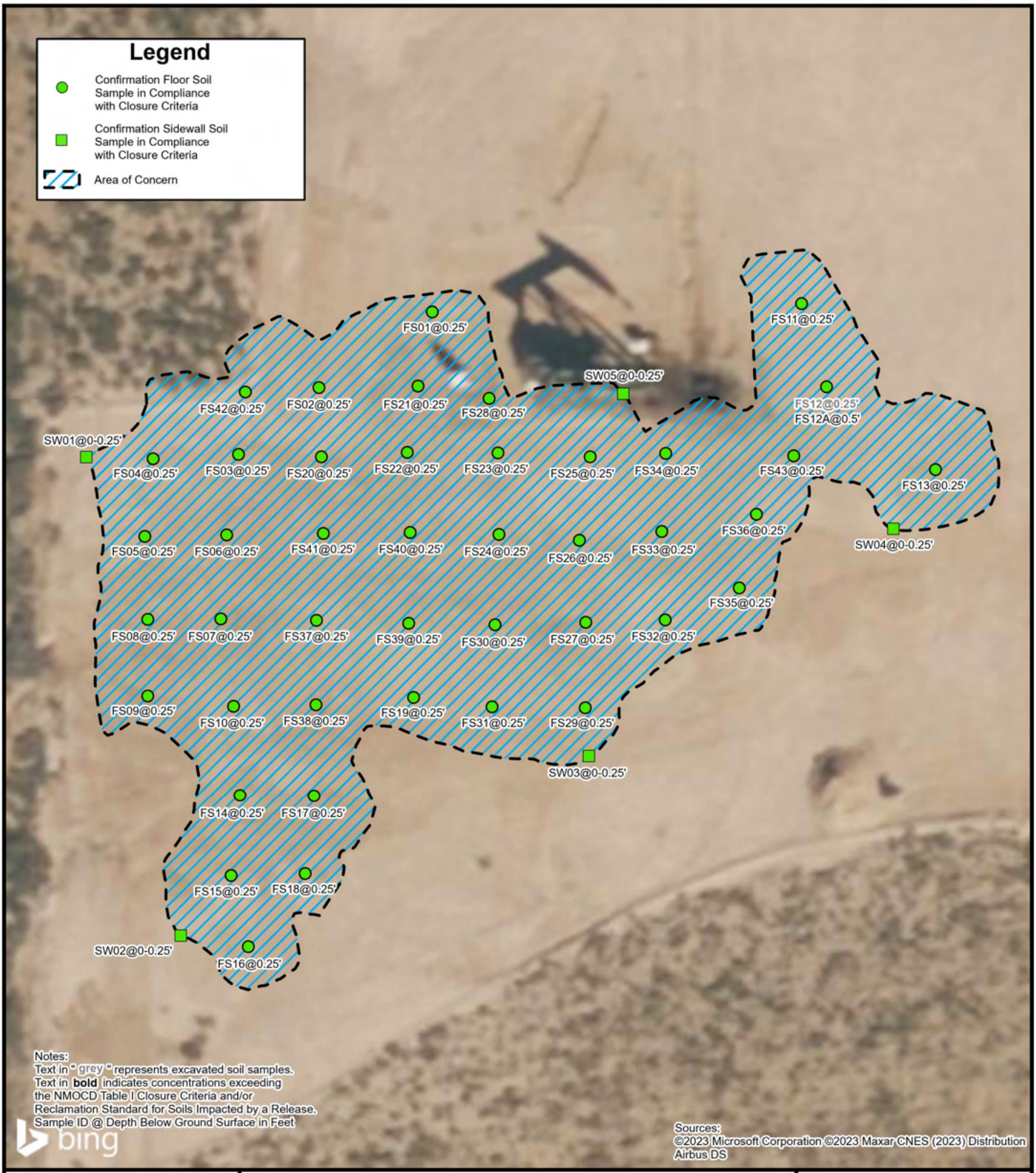
FIGURE 2

Delineation Soil Sample Locations

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 30 60 Feet



eTECH

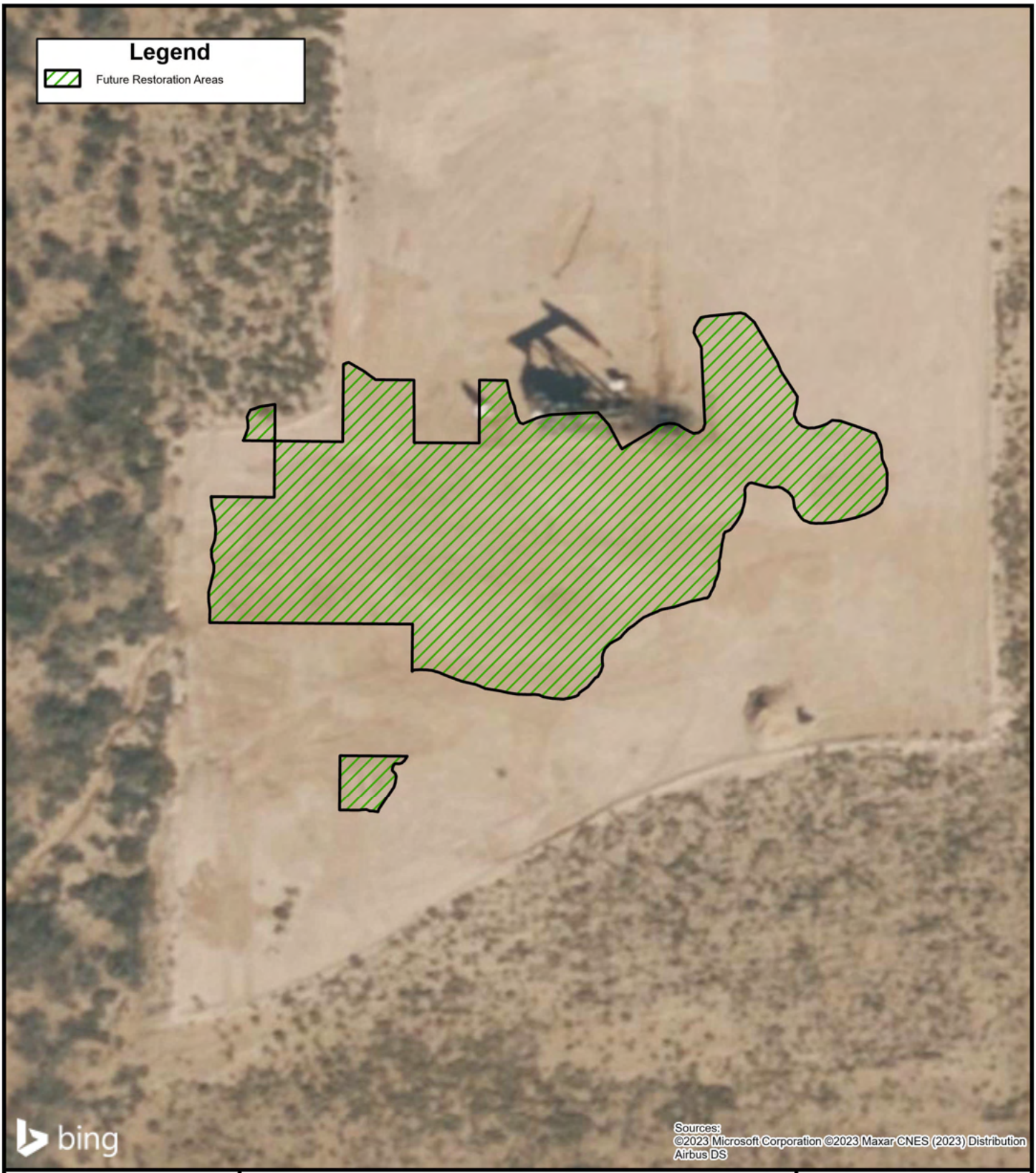
FIGURE 3

Confirmation Soil Sample Locations

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 20 40 Feet



eTECH

FIGURE 4

Future Restoration Areas

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 25 50 Feet

APPENDIX B

Approved Sampling Variance Request

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 317691

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 317691
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAB1605654667**
Incident Name	**NAB1605654667 ROSS DRAW UNIT #042 @ 30-015-42945**
Incident Type	**Produced Water Release**
Incident Status	**Initial C-141 Approved**
Incident Well	**[30-015-42945] ROSS DRAW UNIT #042**

Location of Release Source	
Site Name	**ROSS DRAW UNIT #042**
Date Release Discovered	**02/20/2016**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	16,930
What is the estimated number of samples that will be gathered	43
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/29/2024
Time sampling will commence	08:30 AM
Please provide any information necessary for observers to contact samplers	Please contact Gilbert Moreno at 432-305-6414 with any questions
Please provide any information necessary for navigation to sampling site	From Stateline rd/Whitehorn rd. go east on Stateline rd for approximately 2.6 mi. head north on Lease rd approximately 0.78 mi. head east approximately 0.30 mi. to reach the RDU42 well pad.

Abe Valladares

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Tuesday, February 13, 2024 9:29 AM
To: Joseph Hernandez
Cc: Devon-Team; jim.raley@dvn.com; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD; Velez, Nelson, EMNRD
Subject: WPX Site Sampling Variance Request Ross Draw Unit #042 (nAB1605654667)

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

Joseph,

The variance is approved for 400 ft2 floor confirmation samples. The release area will still need confirmation sidewall samples representing no more than 200 ft2. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Joseph Hernandez <joseph@etechenv.com>
Sent: Monday, February 12, 2024 12:57 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Devon-Team <Devon-Team@etechenv.com>; jim.raley@dvn.com
Subject: [EXTERNAL] WPX Site Sampling Variance Request Ross Draw Unit #042 (nAB1605654667)

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

Good afternoon,

Attached you will find the cover letter with the sampling variance request information for the Ross Draw Unit #042 (**nAB1605654667**) for your review. Due to the large area of concern (16,930 square feet), WPX requests a sampling variance for 5-point composite confirmation soil samples to represent a maximum of 400 square feet per soil sample collected from the area of concern. As such, 43 confirmation soil samples are anticipated to be collected, compared to the 85 soil samples utilizing a sampling frequency of 200 square feet. Lateral/edge confirmation soil samples will still be collected at a sampling frequency representing no more than 200 square feet per soil sample. Confirmation soil samples will be submitted to an accredited laboratory for analysis of BTEX (Method EPA 8260B), TPH (Method EPA 8015D) and chloride (Method EPA 300.0).

Please let me know if you have any questions or require any additional information.

Joseph S. Hernandez
Senior Managing Geologist
Environmental & Safety Solutions, Inc.
Cell: (432) 305-6413

APPENDIX C

Referenced Well Records

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1		Location: Ross Draw Unit #38	
Date: 12/8/2020		Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG	Drilled By: Talon LPE
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None / Seal Depth Interval: None	Latitude: 32.030300
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-100 feet bgs		Boring Total Depth (ft. BGS): 105	Longitude: -103.871338
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 100-105 ft		Well Total Depth (ft. BGS): 105	Depth to Water (ft. BTOC): > 105 / DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks	Well Completion
0	NM	L	D	N	N	NM	SW	NS	Pale orange/pale pink to buff colored fine sand with minor medium and coarse sand	
5										
10										
15										
20	NM	L	D	N	N	NM	SP	NS	Pale orange/pale pink poorly graded fine sand	
25										
30										
35	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale orange poorly graded fine sand	
40										
45										
50										
55										
60										
65										
70	NM	L	D	N	N	NM	SP	NS	Brick red brown poorly graded fine sand	
75										
80										
85										
90										
95										
100	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale orange poorly graded fine sand - TD 105' BGS	

APPENDIX D

Soil Sampling Logs

eTECH	Sample Name: BH01	Date: 08/11/2023 & 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM & EK	Method: Backhoe and Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4 inches	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	208	0.0	No	BH01	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	208	0.0	No	BH01	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	<116	0.0	No		2	2		
						3		
Dry	<116	0.0	No	BH01	4	4		

Total Depth

eTECH	Sample Name: BH02	Date: 08/11/2023 & 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM & EK	Method: Backhoe and Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4 inches	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	372	0.0	No	BH02	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	132	0.0	No	BH02	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	<116	0.0	No		2	2		
						3		
Dry	<116	0.0	No	BH02	4	4		

Total Depth

eTECH	Sample Name: BH03	Date: 08/11/2023 & 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM & EK	Method: Backhoe and Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4 inches	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	300	0.0	No	BH03	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	132	0.0	No	BH03	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	<116	0.0	No		2	2		
						3		
Dry	<116	0.0	No	BH03	4	4		

Total Depth

eTECH	Sample Name: BH04	Date: 08/11/2023 & 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM & EK	Method: Backhoe and Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4 inches	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	<108	0.0	No	BH04	0.5			
Dry	<108	0.0	No	BH04	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	<116	0.0	No		2	2		
						3		
Dry	<116	0.0	No	BH04	4	4		

Total Depth

eTECH	Sample Name: BH05	Date: 08/11/2023 & 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM & EK	Method: Backhoe and Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4 inches	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	<108	0.0	No	BH05	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	<108	0.0	No	BH05	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	<116	0.0	No		2	2		
						3		
Dry	<116	0.0	No	BH05	4	4		

Total Depth

eTECH	Sample Name: BH06	Date: 08/11/2023 & 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM & EK	Method: Backhoe and Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4 inches	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	SP-SM	(0-4') SAND, dry, brown, very fine to fine grain poorly graded with trace silt, no stain, no odor.
Dry	<108	0.1	No	BH06	0.5			
Dry	<108	0.0	No	BH06	1	1		
Dry	<116	0.0	No		2	2		
						3		
Dry	<116	0.0	No	BH06	4	4		

Total Depth

eTECH	Sample Name: PH01	Date: 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Site Coordinates: 32.02600, -103.87139	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	736	0.1	No	PH01	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	436	0.1	No	PH01	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	320	0.0	No		2	2		
						3		
Dry	356	0.1	No	PH01	4	4		

Total Depth

eTECH	Sample Name: PH02	Date: 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Site Coordinates: 32.02600, -103.87139	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	<116	0.2	No	PH02	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	<116	0.0	No	PH02	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	136	0.0	No		2	2		
						3		
Dry	164	0.1	No	PH02	4	4		

Total Depth

eTECH	Sample Name: PH03	Date: 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Site Coordinates: 32.02600, -103.87139	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	4,060	1.0	No	PH03	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	5,592	0.5	No	PH03	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	5,164	0.0	No		2	2		
						3		
Dry	2,512	0.9	No	PH03	4	4		

Total Depth

eTECH	Sample Name: PH04	Date: 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Site Coordinates: 32.02600, -103.87139	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	2,512	0.0	No	PH04	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	2,160	0.2	No	PH04	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	1,232	0.0	No		2	2		
						3		
Dry	<116	0.1	No	PH04	4	4		
						Total Depth		

eTECH	Sample Name: PH05	Date: 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Site Coordinates: 32.02600, -103.87139	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	4,060	0.0	No	PH05	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	4,400	0.0	No	PH05	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	3,060	0.0	No		2	2		
						3		
Dry	1,516	0.0	No	PH05	4	4		

Total Depth

eTECH	Sample Name: PH06	Date: 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Site Coordinates: 32.02600, -103.87139	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	4,060	0.1	No	PH06	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	3,060	0.6	No	PH06	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	3,744	0.2	No		2	2		
						3		
Dry	3,452	0.5	No	PH06	4	4		

Total Depth

eTECH	Sample Name: PH07	Date: 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Site Coordinates: 32.02600, -103.87139	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	<116	0.2	No	PH07	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	396	0.0	No	PH07	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	356	0.0	No		2	2		
						3		
Dry	356	0.0	No	PH07	4	4		

Total Depth

eTECH	Sample Name: PH08	Date: 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Site Coordinates: 32.02600, -103.87139	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	<116	0.0	No	PH08	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	<116	0.0	No	PH08	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	<116	0.0	No		2	2		
						3		
Dry	<116	0.0	No	PH08	4	4		

Total Depth

eTECH	Sample Name: PH09	Date: 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Site Coordinates: 32.02600, -103.87139	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	<116	0.1	No	PH09	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	<116	0.0	No	PH09	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	<116	0.0	No		2	2		
						3		
Dry	<116	0.0	No	PH09	4	4		

Total Depth

eTECH	Sample Name: PH10	Date: 03/20/2024
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Site Coordinates: 32.02600, -103.87139	Hole Diameter: N/A	Total Depth: 4 feet

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	
Dry	<116	0.0	No	PH10	0.5			(0-1') CALICHE, dry, tan, well graded with silt, fine to coarse grain, trace small gravel, no stain, no odor.
Dry	<116	0.2	No	PH10	1	1	SP-SM	(1-4') SAND, dry, brown,very fine to fine grain, poorly graded, with trace silt, no stain no odor.
Dry	<116	0.1	No		2	2		
						3		
Dry	<116	0.0	No	PH10	4	4		

Total Depth

APPENDIX E

Photographic Log

PHOTOGRAPHIC LOG
WPX Energy Permian, LLC
Ross Draw Unit 42
Incident Number nAB1605654667



Photograph 1 **Date: 02/29/2024**
Description: Southeastern view of confirmation sampling activities.



Photograph 2 **Date: 02/29/2024**
Description: Southeastern view of confirmation sampling activities.

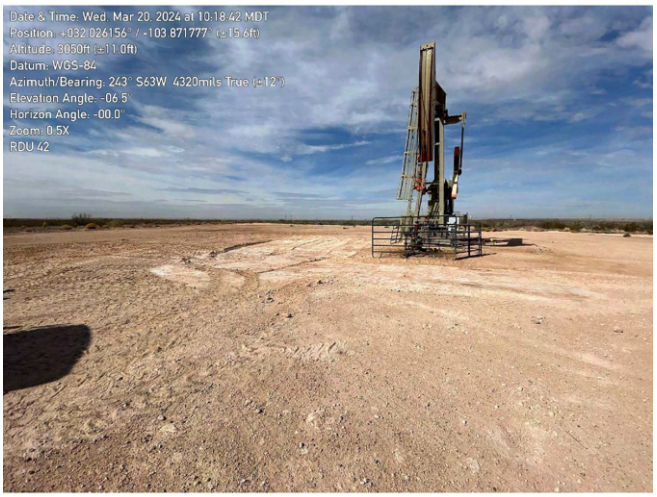


Photograph 3 **Date: 02/29/2024**
Description: Southwestern view of confirmation sampling activities.



Photograph 4 **Date: 02/29/2024**
Description: Northeastern view of confirmation sampling activities.

PHOTOGRAPHIC LOG
WPX Energy Permian, LLC
Ross Draw Unit 42
Incident Number nAB1605654667



Photograph 5 **Date: 03/20/2024**
Description: Northwestern view of excavation activities.



Photograph 6 **Date: 03/20/2024**
Description: Northwestern view of delineation activities.



Photograph 7 **Date: 03/20/2024**
Description: Northeastern view of delineation Activities.



Photograph 8 **Date: 03/20/2024**
Description: Northwestern view of restoration activities.

APPENDIX F

Tables

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC
Ross Draw Unit 42
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 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Samples - Incident Number nAB1605654667										
BH01	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	187
BH01	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	182
BH01	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH02	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	112
BH02	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	125
BH02	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH02	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH03	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	121
BH03	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	114
BH03	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH04	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH04	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH04	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	21.7
BH05	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH05	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH05	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH06	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH06	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH06	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH06	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
PH01	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,370
PH01	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	397
PH02	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	38.7
PH02	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	122
PH03	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	4,350
PH03	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,670
PH04	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,840
PH04	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	54.4
PH05	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	4,490
PH05	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,500

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC
Ross Draw Unit 42
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 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**20,000**
PH06	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	3,280
PH06	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	4,670
PH07	03/20/2024	0.5	<0.0250	<0.0500	<20.0	164	215	164	379	<100
PH07	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	329
PH08	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
PH08	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
PH09	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	36.8
PH09	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	38.5
PH10	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	39.4
PH10	03/20/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
Confirmation Samples - Incident Number nAB1605654667										
FS01	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	127
FS02	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,340
FS03	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,830
FS04	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
FS05	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,030
FS06	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,920
FS07	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,490
FS08	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	9,040
FS09	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	124
FS10	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	306
FS11	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,580
FS12	02/29/2024	0.25	<0.0250	<0.0500	<20.0	1,340	847	**1,340**	2,190	3,770
FS12A	03/20/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	5,440
FS13	02/29/2024	0.25	<0.0250	<0.0500	<20.0	371	220	371	591	976
FS14	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	396
FS15	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	133
FS16	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
FS17	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<200
FS18	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	5,370
FS19	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,330

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC
Ross Draw Unit 42
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 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
FS20	02/29/2024	0.25	<0.0250	<0.0500	<20.0	251	<50.0	251	251	8,780
FS21	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	131
FS22	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	6,030
FS23	02/29/2024	0.25	<0.0250	<0.0500	<20.0	34.6	<50.0	34.6	34.6	6,680
FS24	02/29/2024	0.25	<0.0250	<0.0500	<20.0	527	345	527	872	14,700
FS25	02/29/2024	0.25	<0.0250	<0.0500	<20.0	34.8	53.1	34.8	87.9	6,180
FS26	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	8,880
FS27	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	10,200
FS28	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	9,070
FS29	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,160
FS30	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,170
FS31	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,260
FS32	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,210
FS33	02/29/2024	0.25	<0.0250	<0.0500	<20.0	32.8	<50.0	32.8	32.8	11,300
FS34	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	60.1	<25.0	60.1	2,230
FS35	02/29/2024	0.25	<0.0250	<0.0500	<20.0	26.7	<50.0	26.7	26.7	10,800
FS36	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	9,750
FS37	02/29/2024	0.25	<0.0250	<0.0500	<20.0	28.0	61.5	28.0	89.5	1,940
FS38	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	267
FS39	02/29/2024	0.25	<0.0250	<0.0500	<20.0	201	209	201	410	4,880
FS40	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,710
FS41	02/29/2024	0.25	<0.0250	<0.0500	<20.0	28.0	97.0	28.0	125	2,300
FS42	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	158
FS43	02/29/2024	0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	18,700

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC
Ross Draw Unit 42
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 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**20,000**
SW01	02/29/2024	0-0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
SW02	02/29/2024	0-0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
SW03	02/29/2024	0-0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<200
SW04	02/29/2024	0-0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	595
SW05	02/29/2024	0-0.25	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	222

Notes:
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.

APPENDIX G

Laboratory Analytical Reports & Chain-of-Custody Documentation

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

Report to:

Anna Byers









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:	Ross Draw Unit #042
Work Order:	E308094
Job Number:	01058-0007
Received:	8/14/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/18/23

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E308094
Date Received: 8/14/2023 8:15:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/14/2023 8:15:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 14:03

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 0.5'	E308094-01A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH01 1'	E308094-02A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

BH01 0.5'

E308094-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Benzene	ND	0.0250	1	08/15/23	08/16/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/16/23	
Toluene	ND	0.0250	1	08/15/23	08/16/23	
o-Xylene	ND	0.0250	1	08/15/23	08/16/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/16/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/16/23	
Surrogate: 4-Bromochlorobenzene-PID		*94.9 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.0 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333018
Diesel Range Organics (C10-C28)	ND	25.0	1	08/14/23	08/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/14/23	08/17/23	
Surrogate: n-Nonane		*88.4 %*	*50-200*	*08/14/23*	*08/17/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333045
Chloride	**187**	20.0	1	08/16/23	08/17/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

BH01 1'

E308094-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Benzene	ND	0.0250	1	08/15/23	08/16/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/16/23	
Toluene	ND	0.0250	1	08/15/23	08/16/23	
o-Xylene	ND	0.0250	1	08/15/23	08/16/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/16/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/16/23	
Surrogate: 4-Bromochlorobenzene-PID		*94.5 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.8 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333018
Diesel Range Organics (C10-C28)	ND	25.0	1	08/14/23	08/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/14/23	08/17/23	
Surrogate: n-Nonane		*88.4 %*	*50-200*	*08/14/23*	*08/17/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333045
Chloride	**182**	40.0	2	08/16/23	08/17/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333022-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.51*		*8.00*		*93.9*	*70-130*			
LCS (2333022-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.74	0.0250	5.00		94.9	70-130			
Ethylbenzene	4.79	0.0250	5.00		95.7	70-130			
Toluene	4.83	0.0250	5.00		96.5	70-130			
o-Xylene	4.83	0.0250	5.00		96.7	70-130			
p,m-Xylene	9.76	0.0500	10.0		97.6	70-130			
Total Xylenes	14.6	0.0250	15.0		97.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.54*		*8.00*		*94.2*	*70-130*			
Matrix Spike (2333022-MS1)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Benzene	4.59	0.0250	5.00	ND	91.9	54-133			
Ethylbenzene	4.67	0.0250	5.00	ND	93.5	61-133			
Toluene	4.69	0.0250	5.00	ND	93.7	61-130			
o-Xylene	4.73	0.0250	5.00	ND	94.6	63-131			
p,m-Xylene	9.53	0.0500	10.0	ND	95.3	63-131			
Total Xylenes	14.3	0.0250	15.0	ND	95.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.65*		*8.00*		*95.6*	*70-130*			
Matrix Spike Dup (2333022-MSD1)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Benzene	4.80	0.0250	5.00	ND	96.1	54-133	4.47	20	
Ethylbenzene	4.87	0.0250	5.00	ND	97.3	61-133	4.03	20	
Toluene	4.90	0.0250	5.00	ND	98.0	61-130	4.48	20	
o-Xylene	4.89	0.0250	5.00	ND	97.9	63-131	3.44	20	
p,m-Xylene	9.91	0.0500	10.0	ND	99.1	63-131	3.90	20	
Total Xylenes	14.8	0.0250	15.0	ND	98.7	63-131	3.75	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.55*		*8.00*		*94.3*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333022-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.24*		*8.00*		*90.5*	*70-130*			
LCS (2333022-BS2)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	45.4	20.0	50.0		90.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.30*		*8.00*		*91.3*	*70-130*			
Matrix Spike (2333022-MS2)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Gasoline Range Organics (C6-C10)	43.9	20.0	50.0	ND	87.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike Dup (2333022-MSD2)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.3	70-130	6.01	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.29*		*8.00*		*91.1*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333018-BLK1)									Prepared: 08/14/23 Analyzed: 08/16/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*48.3*		*50.0*		*96.6*	*50-200*			
LCS (2333018-BS1)									Prepared: 08/14/23 Analyzed: 08/16/23
Diesel Range Organics (C10-C28)	228	25.0	250		91.2	38-132			
Surrogate: n-Nonane	*44.4*		*50.0*		*88.8*	*50-200*			
Matrix Spike (2333018-MS1)				**Source: E308093-06**					Prepared: 08/14/23 Analyzed: 08/16/23
Diesel Range Organics (C10-C28)	230	25.0	250	ND	91.9	38-132			
Surrogate: n-Nonane	*43.2*		*50.0*		*86.5*	*50-200*			
Matrix Spike Dup (2333018-MSD1)				**Source: E308093-06**					Prepared: 08/14/23 Analyzed: 08/16/23
Diesel Range Organics (C10-C28)	229	25.0	250	ND	91.4	38-132	0.508	20	
Surrogate: n-Nonane	*42.5*		*50.0*		*85.0*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333045-BLK1)									Prepared: 08/16/23 Analyzed: 08/17/23
Chloride	ND	20.0							
LCS (2333045-BS1)									Prepared: 08/16/23 Analyzed: 08/17/23
Chloride	257	20.0	250		103	90-110			
Matrix Spike (2333045-MS1)				**Source: E308088-01**					Prepared: 08/16/23 Analyzed: 08/17/23
Chloride	1450	400	250	1170	114	80-120			
Matrix Spike Dup (2333045-MSD1)				**Source: E308088-01**					Prepared: 08/16/23 Analyzed: 08/17/23
Chloride	1560	400	250	1170	158	80-120	7.33	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 14:03

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

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

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

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

Client: WPX Energy Permian, LLC.	**Bill To**	Lab Use Only	TAT / EPA Program
Project: Ross Draw Unit #042	Attention: Jim Raley	Lab WO# E308094 / Job Number 01058-0007	1D 2D 3D Standard: 5 Day TAT; CWA SDWA RCRA
Project Manager: Anna Byers	Address: 5315 Buena Vista Dr.		
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220		
City, State, Zip_Odessa,TX, 79765	Phone: 575-885-7502		
Phone: 575-200-6754	Email: jim.raley@dvn.com		
Email: Devon-team@etechenv.com	WBS/WO: 21204782		
Collected by: Gilbert Moreno	Incident ID: nAB1613035815		

Analysis and Method: Depth(ft.); TPH GRO/DRO/ORO by 8015; BTEX by 8021; VOC by 8260; Metals 6010; Chloride 300.0; TDS; Cation/Anion; BGDOC NM; GDOC TX

State: NM x; CO; UT; AZ; TX

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TDS	Cation/Anion	BGDOC NM		GDOC TX		Remarks
9:40	8.11.23	S	1	BH01	1	0.5'								X				
9:50	8.11.23	S	1	BH01	2	1'								X				

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date 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.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8.11.23	17:30	Michelle Gamble	8-11-23	1730
Michelle Gamble	8.12.23	2145	Cathy Mena	8/14/23	8:15

Lab Use Only: Received on ice: (Y) / N; T1 ____ T2 ____ T3 ____; AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other ____

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

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

envirotech

Envirotech Analytical Laboratory

Printed: 8/14/2023 11:47:32AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/14/23 08:15	Work Order ID:	E308094
Phone:	(575) 200-6754	Date Logged In:	08/14/23 09:16	Logged In By:	Caitlin Mars
Email:	anna@etechenv.vom	Due Date:	08/18/23 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Anna Byers



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:	Ross Draw Unit #042
Work Order:	E308095
Job Number:	01058-0007
Received:	8/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/18/23

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E308095
Date Received: 8/14/2023 8:15:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/14/2023 8:15:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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
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Cell: 775-287-1762
whinchman@envirotech-inc.com

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Laboratory Administrator
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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:01

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH02 0.5'	E308095-01A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH02 1'	E308095-02A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

BH02 0.5'

E308095-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Benzene	ND	0.0250	1	08/15/23	08/16/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/16/23	
Toluene	ND	0.0250	1	08/15/23	08/16/23	
o-Xylene	ND	0.0250	1	08/15/23	08/16/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/16/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/16/23	
Surrogate: 4-Bromochlorobenzene-PID		*94.7 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.9 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333032
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*90.5 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	**112**	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

BH02 1'

E308095-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Benzene	ND	0.0250	1	08/15/23	08/16/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/16/23	
Toluene	ND	0.0250	1	08/15/23	08/16/23	
o-Xylene	ND	0.0250	1	08/15/23	08/16/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/16/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/16/23	
Surrogate: 4-Bromochlorobenzene-PID		*94.1 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.9 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333032
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*95.3 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	**125**	20.0	1	08/16/23	08/18/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333022-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.51*		*8.00*		*93.9*	*70-130*			
LCS (2333022-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.74	0.0250	5.00		94.9	70-130			
Ethylbenzene	4.79	0.0250	5.00		95.7	70-130			
Toluene	4.83	0.0250	5.00		96.5	70-130			
o-Xylene	4.83	0.0250	5.00		96.7	70-130			
p,m-Xylene	9.76	0.0500	10.0		97.6	70-130			
Total Xylenes	14.6	0.0250	15.0		97.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.54*		*8.00*		*94.2*	*70-130*			
Matrix Spike (2333022-MS1)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Benzene	4.59	0.0250	5.00	ND	91.9	54-133			
Ethylbenzene	4.67	0.0250	5.00	ND	93.5	61-133			
Toluene	4.69	0.0250	5.00	ND	93.7	61-130			
o-Xylene	4.73	0.0250	5.00	ND	94.6	63-131			
p,m-Xylene	9.53	0.0500	10.0	ND	95.3	63-131			
Total Xylenes	14.3	0.0250	15.0	ND	95.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.65*		*8.00*		*95.6*	*70-130*			
Matrix Spike Dup (2333022-MSD1)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Benzene	4.80	0.0250	5.00	ND	96.1	54-133	4.47	20	
Ethylbenzene	4.87	0.0250	5.00	ND	97.3	61-133	4.03	20	
Toluene	4.90	0.0250	5.00	ND	98.0	61-130	4.48	20	
o-Xylene	4.89	0.0250	5.00	ND	97.9	63-131	3.44	20	
p,m-Xylene	9.91	0.0500	10.0	ND	99.1	63-131	3.90	20	
Total Xylenes	14.8	0.0250	15.0	ND	98.7	63-131	3.75	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.55*		*8.00*		*94.3*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333022-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.24*		*8.00*		*90.5*	*70-130*			
LCS (2333022-BS2)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	45.4	20.0	50.0		90.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.30*		*8.00*		*91.3*	*70-130*			
Matrix Spike (2333022-MS2)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Gasoline Range Organics (C6-C10)	43.9	20.0	50.0	ND	87.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike Dup (2333022-MSD2)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.3	70-130	6.01	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.29*		*8.00*		*91.1*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333032-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*49.7*		*50.0*		*99.4*	*50-200*			
LCS (2333032-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	257	25.0	250		103	38-132			
Surrogate: n-Nonane	*47.7*		*50.0*		*95.3*	*50-200*			
Matrix Spike (2333032-MS1)				**Source: E308095-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	266	25.0	250	ND	107	38-132			
Surrogate: n-Nonane	*46.1*		*50.0*		*92.3*	*50-200*			
Matrix Spike Dup (2333032-MSD1)				**Source: E308095-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	276	25.0	250	ND	110	38-132	3.50	20	
Surrogate: n-Nonane	*42.9*		*50.0*		*85.7*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333042-BLK1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	ND	20.0							
LCS (2333042-BS1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	248	20.0	250		99.3	90-110			
Matrix Spike (2333042-MS1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	380	20.0	250	121	104	80-120			
Matrix Spike Dup (2333042-MSD1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	373	20.0	250	121	101	80-120	1.76	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:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:01

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

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

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

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 8/14/2023 11:53:17AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/14/23 08:15	Work Order ID:	E308095
Phone:	(575) 200-6754	Date Logged In:	08/14/23 09:17	Logged In By:	Caitlin Mars
Email:	anna@etechenv.vom	Due Date:	08/18/23 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Anna Byers









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:	Ross Draw Unit #042
Work Order:	E308096
Job Number:	01058-0007
Received:	8/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/18/23

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E308096
Date Received: 8/14/2023 8:15:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/14/2023 8:15:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:00

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH03 0.5'	E308096-01A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH03 1'	E308096-02A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

BH03 0.5'

E308096-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*92.9 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.7 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*81.6 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	**121**	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

BH03 1'

E308096-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.2 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.6 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*81.9 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	**114**	20.0	1	08/16/23	08/18/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333021-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.50*		*8.00*		*93.8*	*70-130*			
LCS (2333021-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.72	0.0250	5.00		94.3	70-130			
Ethylbenzene	4.73	0.0250	5.00		94.6	70-130			
Toluene	4.78	0.0250	5.00		95.6	70-130			
o-Xylene	4.76	0.0250	5.00		95.3	70-130			
p,m-Xylene	9.65	0.0500	10.0		96.5	70-130			
Total Xylenes	14.4	0.0250	15.0		96.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.55*		*8.00*		*94.4*	*70-130*			
Matrix Spike (2333021-MS1)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.93	0.0250	5.00	ND	98.6	54-133			
Ethylbenzene	4.97	0.0250	5.00	ND	99.5	61-133			
Toluene	5.01	0.0250	5.00	ND	100	61-130			
o-Xylene	5.01	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.47*		*8.00*		*93.4*	*70-130*			
Matrix Spike Dup (2333021-MSD1)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	5.11	0.0250	5.00	ND	102	54-133	3.57	20	
Ethylbenzene	5.16	0.0250	5.00	ND	103	61-133	3.70	20	
Toluene	5.21	0.0250	5.00	ND	104	61-130	4.02	20	
o-Xylene	5.21	0.0250	5.00	ND	104	63-131	3.97	20	
p,m-Xylene	10.5	0.0500	10.0	ND	105	63-131	3.56	20	
Total Xylenes	15.7	0.0250	15.0	ND	105	63-131	3.70	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.49*		*8.00*		*93.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333021-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.34*		*8.00*		*91.8*	*70-130*			
LCS (2333021-BS2)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	47.6	20.0	50.0		95.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.37*		*8.00*		*92.1*	*70-130*			
Matrix Spike (2333021-MS2)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	52.2	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.37*		*8.00*		*92.1*	*70-130*			
Matrix Spike Dup (2333021-MSD2)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	50.4	20.0	50.0	ND	101	70-130	3.57	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.34*		*8.00*		*91.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333024-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*44.5*		*50.0*		*89.0*	*50-200*			
LCS (2333024-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	*40.0*		*50.0*		*79.9*	*50-200*			
Matrix Spike (2333024-MS1)				**Source: E308103-08**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	266	25.0	250	ND	107	38-132			
Surrogate: n-Nonane	*42.3*		*50.0*		*84.6*	*50-200*			
Matrix Spike Dup (2333024-MSD1)				**Source: E308103-08**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	268	25.0	250	ND	107	38-132	0.460	20	
Surrogate: n-Nonane	*37.0*		*50.0*		*74.1*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333042-BLK1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	ND	20.0							
LCS (2333042-BS1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	248	20.0	250		99.3	90-110			
Matrix Spike (2333042-MS1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	380	20.0	250	121	104	80-120			
Matrix Spike Dup (2333042-MSD1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	373	20.0	250	121	101	80-120	1.76	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:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:00

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

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

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

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

Client: WPX Energy Permian, LLC.	**Bill To**	Lab Use Only	TAT / EPA Program
Project: Ross Draw Unit #042	Attention: Jim Raley	Lab WO# E308096 / Job Number 01058-0007	1D 2D 3D Standard: 5 Day TAT; CWA SDWA RCRA
Project Manager: Anna Byers	Address: 5315 Buena Vista Dr.		
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220		
City, State, Zip_Odessa,TX, 79765	Phone: 575-885-7502		
Phone: 575-200-6754	Email: jim.raley@dvn.com		
Email: Devon-team@etechenv.com	WBS/WO: 21204782		
Collected by: Gilbert Moreno	Incident ID: nAB1613035815		

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TDS	Cation/Anion	BGDOC NM		GDOC TX		Remarks
10:20	8.11.23	S	1	BH03	1	0.5'								X				
10:30	8.11.23	S	1	BH03	2	1'								X				

State: NM x | CO | UT | AZ | TX

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date 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.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8.11.23	17:30	Michelle Garcia	8-11-23	1730
Michelle Garcia	8/12/23	2145	Earth Man	8/14/23	8:15

Lab Use Only — Received on ice: (Y) / N

T1 ____ T2 ____ T3 ____

AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other ____

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

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

envirotech

Envirotech Analytical Laboratory

Printed: 8/14/2023 11:58:49AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/14/23 08:15	Work Order ID:	E308096
Phone:	(575) 200-6754	Date Logged In:	08/14/23 09:18	Logged In By:	Caitlin Mars
Email:	anna@etechenv.vom	Due Date:	08/18/23 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Anna Byers









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:	Ross Draw Unit #042
Work Order:	E308097
Job Number:	01058-0007
Received:	8/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
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Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/18/23

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E308097
Date Received: 8/14/2023 8:15:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/14/2023 8:15:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:11

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH04 0.5'	E308097-01A	Solid	08/11/23	08/14/23	Glass Jar, 2 oz.
BH04 1'	E308097-02A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH05 0.5'	E308097-03A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH05 1'	E308097-04A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH06 0.5'	E308097-05A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH06 1'	E308097-06A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH04 0.5'

E308097-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.3 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.8 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*87.0 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH04 1'

E308097-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.8 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*88.2 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH05 0.5'

E308097-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.9 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.6 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*83.3 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH05 1'

E308097-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.9 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.8 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*85.6 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH06 0.5'

E308097-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.0 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.0 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*86.4 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH06 1'

E308097-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.0 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.0 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*88.7 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333021-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.50*		*8.00*		*93.8*	*70-130*			
LCS (2333021-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.72	0.0250	5.00		94.3	70-130			
Ethylbenzene	4.73	0.0250	5.00		94.6	70-130			
Toluene	4.78	0.0250	5.00		95.6	70-130			
o-Xylene	4.76	0.0250	5.00		95.3	70-130			
p,m-Xylene	9.65	0.0500	10.0		96.5	70-130			
Total Xylenes	14.4	0.0250	15.0		96.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.55*		*8.00*		*94.4*	*70-130*			
Matrix Spike (2333021-MS1)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.93	0.0250	5.00	ND	98.6	54-133			
Ethylbenzene	4.97	0.0250	5.00	ND	99.5	61-133			
Toluene	5.01	0.0250	5.00	ND	100	61-130			
o-Xylene	5.01	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.47*		*8.00*		*93.4*	*70-130*			
Matrix Spike Dup (2333021-MSD1)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	5.11	0.0250	5.00	ND	102	54-133	3.57	20	
Ethylbenzene	5.16	0.0250	5.00	ND	103	61-133	3.70	20	
Toluene	5.21	0.0250	5.00	ND	104	61-130	4.02	20	
o-Xylene	5.21	0.0250	5.00	ND	104	63-131	3.97	20	
p,m-Xylene	10.5	0.0500	10.0	ND	105	63-131	3.56	20	
Total Xylenes	15.7	0.0250	15.0	ND	105	63-131	3.70	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.49*		*8.00*		*93.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333021-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.34*		*8.00*		*91.8*	*70-130*			
LCS (2333021-BS2)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	47.6	20.0	50.0		95.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.37*		*8.00*		*92.1*	*70-130*			
Matrix Spike (2333021-MS2)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	52.2	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.37*		*8.00*		*92.1*	*70-130*			
Matrix Spike Dup (2333021-MSD2)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	50.4	20.0	50.0	ND	101	70-130	3.57	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.34*		*8.00*		*91.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333024-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*44.5*		*50.0*		*89.0*	*50-200*			
LCS (2333024-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	*40.0*		*50.0*		*79.9*	*50-200*			
Matrix Spike (2333024-MS1)				**Source: E308103-08**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	266	25.0	250	ND	107	38-132			
Surrogate: n-Nonane	*42.3*		*50.0*		*84.6*	*50-200*			
Matrix Spike Dup (2333024-MSD1)				**Source: E308103-08**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	268	25.0	250	ND	107	38-132	0.460	20	
Surrogate: n-Nonane	*37.0*		*50.0*		*74.1*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333042-BLK1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	ND	20.0							
LCS (2333042-BS1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	248	20.0	250		99.3	90-110			
Matrix Spike (2333042-MS1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	380	20.0	250	121	104	80-120			
Matrix Spike Dup (2333042-MSD1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	373	20.0	250	121	101	80-120	1.76	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:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:11

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

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

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

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 8/14/2023 12:05:09PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/14/23 08:15	Work Order ID:	E308097
Phone:	(575) 200-6754	Date Logged In:	08/14/23 09:19	Logged In By:	Caitlin Mars
Email:	anna@etechenv.vom	Due Date:	08/18/23 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403019
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403019
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:44

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS01 0.25'	E403019-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS02 0.25'	E403019-02A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS03 0.25'	E403019-03A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS04 0.25'	E403019-04A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS05 0.25'	E403019-05A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS06 0.25'	E403019-06A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS07 0.25'	E403019-07A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

FS01 0.25'

E403019-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.3 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.2 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410060
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/06/24	
Surrogate: n-Nonane		*102 %*	*50-200*	*03/06/24*	*03/06/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**127**	20.0	1	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

FS02 0.25'

E403019-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.9 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.5 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410060
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/06/24	
Surrogate: n-Nonane		*106 %*	*50-200*	*03/06/24*	*03/06/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**1340**	200	10	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

FS03 0.25'

E403019-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.2 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.7 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410060
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*104 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**1830**	100	5	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

FS04 0.25'

E403019-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.7 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.5 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410060
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	ND	100	5	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

FS05 0.25'

E403019-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.7 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.3 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410060
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*102 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**1030**	40.0	2	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

FS06 0.25'

E403019-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.6 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.1 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410060
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*97.2 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**1920**	100	5	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

FS07 0.25'

E403019-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.6 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.9 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410060
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**2490**	100	5	03/05/24	03/05/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*7.64*		*8.00*		*95.4*	*70-130*			
LCS (2410019-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.04	0.0250	5.00		101	70-130			
Ethylbenzene	4.89	0.0250	5.00		97.8	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.96	0.0250	5.00		99.2	70-130			
p,m-Xylene	9.98	0.0500	10.0		99.8	70-130			
Total Xylenes	14.9	0.0250	15.0		99.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.69*		*8.00*		*96.1*	*70-130*			
Matrix Spike (2410019-MS1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.12	0.0250	5.00	ND	102	54-133			
Ethylbenzene	4.96	0.0250	5.00	ND	99.1	61-133			
Toluene	5.09	0.0250	5.00	ND	102	61-130			
o-Xylene	5.02	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.8*	*70-130*			
Matrix Spike Dup (2410019-MSD1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.13	0.0250	5.00	ND	103	54-133	0.145	20	
Ethylbenzene	4.97	0.0250	5.00	ND	99.3	61-133	0.227	20	
Toluene	5.10	0.0250	5.00	ND	102	61-130	0.186	20	
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	0.297	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.242	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	0.260	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.63*		*8.00*		*95.4*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.05*		*8.00*		*88.1*	*70-130*			
LCS (2410019-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	42.2	20.0	50.0		84.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.13*		*8.00*		*89.1*	*70-130*			
Matrix Spike (2410019-MS2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	43.1	20.0	50.0	ND	86.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.06*		*8.00*		*88.2*	*70-130*			
Matrix Spike Dup (2410019-MSD2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.7	70-130	7.16	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.10*		*8.00*		*88.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410060-BLK1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*52.8*		*50.0*		*106*	*50-200*			
LCS (2410060-BS1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	303	25.0	250		121	38-132			
Surrogate: n-Nonane	*50.9*		*50.0*		*102*	*50-200*			
Matrix Spike (2410060-MS1)				**Source: E402295-04**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	309	25.0	250	ND	124	38-132			
Surrogate: n-Nonane	*50.1*		*50.0*		*100*	*50-200*			
Matrix Spike Dup (2410060-MSD1)				**Source: E402295-04**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	313	25.0	250	ND	125	38-132	1.21	20	
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:44:33PM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410054-BLK1)									Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	ND	20.0							
LCS (2410054-BS1)									Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2410054-MS1)				**Source: E403019-02**					Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	1730	200	250	1340	157	80-120			M4
Matrix Spike Dup (2410054-MSD1)				**Source: E403019-02**					Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	1690	200	250	1340	141	80-120	2.34	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:44

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403020
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403020
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:40

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS08 0.25'	E403020-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:40:45PM

FS08 0.25'

E403020-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.7 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.2 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/06/24	
Surrogate: n-Nonane		*86.7 %*	*50-200*	*03/06/24*	*03/06/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410051
Chloride	**9040**	200	10	03/05/24	03/05/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:40:45PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*7.64*		*8.00*		*95.4*	*70-130*			
LCS (2410019-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.04	0.0250	5.00		101	70-130			
Ethylbenzene	4.89	0.0250	5.00		97.8	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.96	0.0250	5.00		99.2	70-130			
p,m-Xylene	9.98	0.0500	10.0		99.8	70-130			
Total Xylenes	14.9	0.0250	15.0		99.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.69*		*8.00*		*96.1*	*70-130*			
Matrix Spike (2410019-MS1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.12	0.0250	5.00	ND	102	54-133			
Ethylbenzene	4.96	0.0250	5.00	ND	99.1	61-133			
Toluene	5.09	0.0250	5.00	ND	102	61-130			
o-Xylene	5.02	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.8*	*70-130*			
Matrix Spike Dup (2410019-MSD1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.13	0.0250	5.00	ND	103	54-133	0.145	20	
Ethylbenzene	4.97	0.0250	5.00	ND	99.3	61-133	0.227	20	
Toluene	5.10	0.0250	5.00	ND	102	61-130	0.186	20	
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	0.297	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.242	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	0.260	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.63*		*8.00*		*95.4*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:40:45PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.05*		*8.00*		*88.1*	*70-130*			
LCS (2410019-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	42.2	20.0	50.0		84.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.13*		*8.00*		*89.1*	*70-130*			
Matrix Spike (2410019-MS2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	43.1	20.0	50.0	ND	86.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.06*		*8.00*		*88.2*	*70-130*			
Matrix Spike Dup (2410019-MSD2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.7	70-130	7.16	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.10*		*8.00*		*88.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:40:45PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410059-BLK1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*47.1*		*50.0*		*94.1*	*50-200*			
LCS (2410059-BS1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	269	25.0	250		108	38-132			
Surrogate: n-Nonane	*47.5*		*50.0*		*95.0*	*50-200*			
Matrix Spike (2410059-MS1)				**Source: E403021-03**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132			
Surrogate: n-Nonane	*44.8*		*50.0*		*89.7*	*50-200*			
Matrix Spike Dup (2410059-MSD1)				**Source: E403021-03**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	248	25.0	250	ND	99.4	38-132	1.10	20	
Surrogate: n-Nonane	*43.5*		*50.0*		*87.0*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:40:45PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410051-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410051-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	245	20.0	250		98.1	90-110			
Matrix Spike (2410051-MS1)				**Source: E403009-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	256	20.0	250	ND	102	80-120			
Matrix Spike Dup (2410051-MSD1)				**Source: E403009-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	257	20.0	250	ND	103	80-120	0.477	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:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:40

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.

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

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Envirotech Analytical Laboratory

Printed: 3/4/2024 9:32:20AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403020
Phone:	(539) 573-4018	Date Logged In:	03/04/24 08:57	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
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Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403021
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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.
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Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403021
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:38

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS09 0.25'	E403021-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS10 0.25'	E403021-02A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS11 0.25'	E403021-03A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS12 0.25'	E403021-04A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS13 0.25'	E403021-05A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS14 0.25'	E403021-06A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS15 0.25'	E403021-07A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS16 0.25'	E403021-08A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS17 0.25'	E403021-09A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

FS09 0.25'

E403021-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.3 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.1 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/06/24	
Surrogate: n-Nonane		*91.9 %*	*50-200*	*03/06/24*	*03/06/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**124**	40.0	2	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

FS10 0.25'

E403021-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.0 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.6 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/06/24	
Surrogate: n-Nonane		*93.3 %*	*50-200*	*03/06/24*	*03/06/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**306**	20.0	1	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

FS11 0.25'

E403021-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.7 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.9 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/06/24	
Surrogate: n-Nonane		*88.0 %*	*50-200*	*03/06/24*	*03/06/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**1580**	200	10	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

FS12 0.25'

E403021-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*97.3 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.8 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2410059
Diesel Range Organics (C10-C28)	**1340**	25.0	1	03/06/24	03/06/24	
Oil Range Organics (C28-C36)	**847**	50.0	1	03/06/24	03/06/24	
Surrogate: n-Nonane		*97.3 %*	*50-200*	*03/06/24*	*03/06/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**3770**	200	10	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

FS13 0.25'

E403021-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*99.1 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.3 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2410059
Diesel Range Organics (C10-C28)	**371**	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	**220**	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*91.2 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**976**	200	10	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

FS14 0.25'

E403021-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*99.4 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.9 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*88.3 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**396**	40.0	2	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

FS15 0.25'

E403021-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*98.3 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.2 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*88.4 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	**133**	100	5	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

FS16 0.25'

E403021-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*97.2 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.6 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*89.5 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	ND	100	5	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

FS17 0.25'

E403021-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*98.1 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.0 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2410059
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*89.3 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2410054
Chloride	ND	200	10	03/05/24	03/05/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*7.64*		*8.00*		*95.4*	*70-130*			
LCS (2410019-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.04	0.0250	5.00		101	70-130			
Ethylbenzene	4.89	0.0250	5.00		97.8	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.96	0.0250	5.00		99.2	70-130			
p,m-Xylene	9.98	0.0500	10.0		99.8	70-130			
Total Xylenes	14.9	0.0250	15.0		99.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.69*		*8.00*		*96.1*	*70-130*			
Matrix Spike (2410019-MS1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.12	0.0250	5.00	ND	102	54-133			
Ethylbenzene	4.96	0.0250	5.00	ND	99.1	61-133			
Toluene	5.09	0.0250	5.00	ND	102	61-130			
o-Xylene	5.02	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.8*	*70-130*			
Matrix Spike Dup (2410019-MSD1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.13	0.0250	5.00	ND	103	54-133	0.145	20	
Ethylbenzene	4.97	0.0250	5.00	ND	99.3	61-133	0.227	20	
Toluene	5.10	0.0250	5.00	ND	102	61-130	0.186	20	
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	0.297	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.242	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	0.260	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.63*		*8.00*		*95.4*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.05*		*8.00*		*88.1*	*70-130*			
LCS (2410019-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	42.2	20.0	50.0		84.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.13*		*8.00*		*89.1*	*70-130*			
Matrix Spike (2410019-MS2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	43.1	20.0	50.0	ND	86.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.06*		*8.00*		*88.2*	*70-130*			
Matrix Spike Dup (2410019-MSD2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.7	70-130	7.16	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.10*		*8.00*		*88.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410059-BLK1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*47.1*		*50.0*		*94.1*	*50-200*			
LCS (2410059-BS1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	269	25.0	250		108	38-132			
Surrogate: n-Nonane	*47.5*		*50.0*		*95.0*	*50-200*			
Matrix Spike (2410059-MS1)				**Source: E403021-03**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132			
Surrogate: n-Nonane	*44.8*		*50.0*		*89.7*	*50-200*			
Matrix Spike Dup (2410059-MSD1)				**Source: E403021-03**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	248	25.0	250	ND	99.4	38-132	1.10	20	
Surrogate: n-Nonane	*43.5*		*50.0*		*87.0*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:38:04PM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410054-BLK1)									Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	ND	20.0							
LCS (2410054-BS1)									Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2410054-MS1)				**Source: E403019-02**					Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	1730	200	250	1340	157	80-120			M4
Matrix Spike Dup (2410054-MSD1)				**Source: E403019-02**					Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	1690	200	250	1340	141	80-120	2.34	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:38

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 9:36:27AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403021
Phone:	(539) 573-4018	Date Logged In:	03/04/24 08:57	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403218
Job Number:	01058-0007
Received:	3/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/27/24

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: 3/27/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403218
Date Received: 3/22/2024 9:00:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/22/2024 9:00:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:18

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS12A 0.5'	E403218-01A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:18:51PM

FS12A 0.5'

E403218-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*95.7 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.8 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*92.3 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**5440**	200	10	03/25/24	03/25/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:18:51PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
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	*7.16*		*8.00*		*89.6*	*70-130*			
LCS (2413015-BS1)									Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.95	0.0250	5.00		98.9	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.0	70-130			
Toluene	4.91	0.0250	5.00		98.3	70-130			
o-Xylene	4.83	0.0250	5.00		96.6	70-130			
p,m-Xylene	9.88	0.0500	10.0		98.8	70-130			
Total Xylenes	14.7	0.0250	15.0		98.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike (2413015-MS1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.94	0.0250	5.00	ND	98.8	61-133			
Toluene	4.95	0.0250	5.00	ND	99.0	61-130			
o-Xylene	4.88	0.0250	5.00	ND	97.6	63-131			
p,m-Xylene	9.95	0.0500	10.0	ND	99.5	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.39*		*8.00*		*92.4*	*70-130*			
Matrix Spike Dup (2413015-MSD1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	5.04	0.0250	5.00	ND	101	54-133	1.27	20	
Ethylbenzene	5.00	0.0250	5.00	ND	100	61-133	1.26	20	
Toluene	5.01	0.0250	5.00	ND	100	61-130	1.26	20	
o-Xylene	4.93	0.0250	5.00	ND	98.7	63-131	1.06	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.20	20	
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131	1.16	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.35*		*8.00*		*91.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:18:51PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.91*		*8.00*		*98.9*	*70-130*			
LCS (2413015-BS2)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	52.0	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.86*		*8.00*		*98.2*	*70-130*			
Matrix Spike (2413015-MS2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	51.8	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.84*		*8.00*		*98.0*	*70-130*			
Matrix Spike Dup (2413015-MSD2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	50.0	20.0	50.0	ND	100	70-130	3.61	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.83*		*8.00*		*97.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:18:51PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413030-BLK1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*45.8*		*50.0*		*91.6*	*50-200*			
LCS (2413030-BS1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	298	25.0	250		119	38-132			
Surrogate: n-Nonane	*48.9*		*50.0*		*97.8*	*50-200*			
Matrix Spike (2413030-MS1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	38-132			
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			
Matrix Spike Dup (2413030-MSD1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	282	25.0	250	ND	113	38-132	2.91	20	
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:18:51PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413014-BLK1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	ND	20.0							
LCS (2413014-BS1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2413014-MS1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1370	200	250	1370	1.46	80-120			M4
Matrix Spike Dup (2413014-MSD1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1210	200	250	1370	NR	80-120	12.7	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:18

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page __1__ of __1__

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Envirotech Analytical Laboratory

Printed: 3/26/2024 12:39:10PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/22/24 09:00	Work Order ID:	E403218
Phone:	(539) 573-4018	Date Logged In:	03/22/24 13:27	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/28/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403022
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403022
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:37

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS18 0.25'	E403022-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:37:02PM

FS18 0.25'

E403022-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*98.2 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.6 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410060
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*99.1 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410051
Chloride	**5370**	200	10	03/05/24	03/05/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:37:02PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*7.64*		*8.00*		*95.4*	*70-130*			
LCS (2410019-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.04	0.0250	5.00		101	70-130			
Ethylbenzene	4.89	0.0250	5.00		97.8	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.96	0.0250	5.00		99.2	70-130			
p,m-Xylene	9.98	0.0500	10.0		99.8	70-130			
Total Xylenes	14.9	0.0250	15.0		99.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.69*		*8.00*		*96.1*	*70-130*			
Matrix Spike (2410019-MS1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.12	0.0250	5.00	ND	102	54-133			
Ethylbenzene	4.96	0.0250	5.00	ND	99.1	61-133			
Toluene	5.09	0.0250	5.00	ND	102	61-130			
o-Xylene	5.02	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.8*	*70-130*			
Matrix Spike Dup (2410019-MSD1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.13	0.0250	5.00	ND	103	54-133	0.145	20	
Ethylbenzene	4.97	0.0250	5.00	ND	99.3	61-133	0.227	20	
Toluene	5.10	0.0250	5.00	ND	102	61-130	0.186	20	
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	0.297	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.242	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	0.260	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.63*		*8.00*		*95.4*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:37:02PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.05*		*8.00*		*88.1*	*70-130*			
LCS (2410019-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	42.2	20.0	50.0		84.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.13*		*8.00*		*89.1*	*70-130*			
Matrix Spike (2410019-MS2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	43.1	20.0	50.0	ND	86.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.06*		*8.00*		*88.2*	*70-130*			
Matrix Spike Dup (2410019-MSD2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.7	70-130	7.16	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.10*		*8.00*		*88.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:37:02PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410060-BLK1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*52.8*		*50.0*		*106*	*50-200*			
LCS (2410060-BS1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	303	25.0	250		121	38-132			
Surrogate: n-Nonane	*50.9*		*50.0*		*102*	*50-200*			
Matrix Spike (2410060-MS1)				**Source: E402295-04**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	309	25.0	250	ND	124	38-132			
Surrogate: n-Nonane	*50.1*		*50.0*		*100*	*50-200*			
Matrix Spike Dup (2410060-MSD1)				**Source: E402295-04**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	313	25.0	250	ND	125	38-132	1.21	20	
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:37:02PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410051-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410051-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	245	20.0	250		98.1	90-110			
Matrix Spike (2410051-MS1)				**Source: E403009-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	256	20.0	250	ND	102	80-120			
Matrix Spike Dup (2410051-MSD1)				**Source: E403009-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	257	20.0	250	ND	103	80-120	0.477	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:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:37

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.

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | **Chain of Custody** | Page __1__ of __1__

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 9:44:33AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403022
Phone:	(539) 573-4018	Date Logged In:	03/04/24 08:58	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403023
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403023
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:35

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS19 0.25'	E403023-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:35:24PM

FS19 0.25'

E403023-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.7 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.0 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410060
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*104 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410051
Chloride	**2330**	100	5	03/05/24	03/06/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:35:24PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*7.64*		*8.00*		*95.4*	*70-130*			
LCS (2410019-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.04	0.0250	5.00		101	70-130			
Ethylbenzene	4.89	0.0250	5.00		97.8	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.96	0.0250	5.00		99.2	70-130			
p,m-Xylene	9.98	0.0500	10.0		99.8	70-130			
Total Xylenes	14.9	0.0250	15.0		99.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.69*		*8.00*		*96.1*	*70-130*			
Matrix Spike (2410019-MS1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.12	0.0250	5.00	ND	102	54-133			
Ethylbenzene	4.96	0.0250	5.00	ND	99.1	61-133			
Toluene	5.09	0.0250	5.00	ND	102	61-130			
o-Xylene	5.02	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.8*	*70-130*			
Matrix Spike Dup (2410019-MSD1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.13	0.0250	5.00	ND	103	54-133	0.145	20	
Ethylbenzene	4.97	0.0250	5.00	ND	99.3	61-133	0.227	20	
Toluene	5.10	0.0250	5.00	ND	102	61-130	0.186	20	
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	0.297	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.242	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	0.260	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.63*		*8.00*		*95.4*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:35:24PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.05*		*8.00*		*88.1*	*70-130*			
LCS (2410019-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	42.2	20.0	50.0		84.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.13*		*8.00*		*89.1*	*70-130*			
Matrix Spike (2410019-MS2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	43.1	20.0	50.0	ND	86.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.06*		*8.00*		*88.2*	*70-130*			
Matrix Spike Dup (2410019-MSD2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.7	70-130	7.16	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.10*		*8.00*		*88.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:35:24PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410060-BLK1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*52.8*		*50.0*		*106*	*50-200*			
LCS (2410060-BS1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	303	25.0	250		121	38-132			
Surrogate: n-Nonane	*50.9*		*50.0*		*102*	*50-200*			
Matrix Spike (2410060-MS1)				**Source: E402295-04**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	309	25.0	250	ND	124	38-132			
Surrogate: n-Nonane	*50.1*		*50.0*		*100*	*50-200*			
Matrix Spike Dup (2410060-MSD1)				**Source: E402295-04**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	313	25.0	250	ND	125	38-132	1.21	20	
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:35:24PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410051-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410051-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	245	20.0	250		98.1	90-110			
Matrix Spike (2410051-MS1)				**Source: E403009-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	256	20.0	250	ND	102	80-120			
Matrix Spike Dup (2410051-MSD1)				**Source: E403009-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	257	20.0	250	ND	103	80-120	0.477	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:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:35

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.

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 9:48:51AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403023
Phone:	(539) 573-4018	Date Logged In:	03/04/24 08:58	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403024
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403024
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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
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Cell: 775-287-1762
whinchman@envirotech-inc.com

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Laboratory Administrator
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:34

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS20 0.25'	E403024-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:34:26PM

FS20 0.25'

E403024-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410019
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.7 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410060
Diesel Range Organics (C10-C28)	**251**	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*99.1 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**8780**	200	10	03/05/24	03/06/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:34:26PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*7.64*		*8.00*		*95.4*	*70-130*			
LCS (2410019-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.04	0.0250	5.00		101	70-130			
Ethylbenzene	4.89	0.0250	5.00		97.8	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.96	0.0250	5.00		99.2	70-130			
p,m-Xylene	9.98	0.0500	10.0		99.8	70-130			
Total Xylenes	14.9	0.0250	15.0		99.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.69*		*8.00*		*96.1*	*70-130*			
Matrix Spike (2410019-MS1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.12	0.0250	5.00	ND	102	54-133			
Ethylbenzene	4.96	0.0250	5.00	ND	99.1	61-133			
Toluene	5.09	0.0250	5.00	ND	102	61-130			
o-Xylene	5.02	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.8*	*70-130*			
Matrix Spike Dup (2410019-MSD1)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	5.13	0.0250	5.00	ND	103	54-133	0.145	20	
Ethylbenzene	4.97	0.0250	5.00	ND	99.3	61-133	0.227	20	
Toluene	5.10	0.0250	5.00	ND	102	61-130	0.186	20	
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	0.297	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.242	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	0.260	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.63*		*8.00*		*95.4*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:34:26PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410019-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.05*		*8.00*		*88.1*	*70-130*			
LCS (2410019-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	42.2	20.0	50.0		84.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.13*		*8.00*		*89.1*	*70-130*			
Matrix Spike (2410019-MS2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	43.1	20.0	50.0	ND	86.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.06*		*8.00*		*88.2*	*70-130*			
Matrix Spike Dup (2410019-MSD2)				**Source: E403019-07**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.7	70-130	7.16	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.10*		*8.00*		*88.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:34:26PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410060-BLK1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*52.8*		*50.0*		*106*	*50-200*			
LCS (2410060-BS1)									Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	303	25.0	250		121	38-132			
Surrogate: n-Nonane	*50.9*		*50.0*		*102*	*50-200*			
Matrix Spike (2410060-MS1)				**Source: E402295-04**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	309	25.0	250	ND	124	38-132			
Surrogate: n-Nonane	*50.1*		*50.0*		*100*	*50-200*			
Matrix Spike Dup (2410060-MSD1)				**Source: E402295-04**					Prepared: 03/06/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	313	25.0	250	ND	125	38-132	1.21	20	
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:34:26PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410055-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410055-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2410055-MS1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	14800	400	250	14700	50.5	80-120			M4
Matrix Spike Dup (2410055-MSD1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	15100	400	250	14700	149	80-120	1.64	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:34

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page __1__ of __1__

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 9:51:15AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403024
Phone:	(539) 573-4018	Date Logged In:	03/04/24 08:58	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403025
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403025
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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
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Cell: 775-287-1762
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Laboratory Administrator
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:11

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS21 0.25'	E403025-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:11:52PM

FS21 0.25'

E403025-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*93.7 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*101 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*84.9 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*93.7 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*101 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*84.9 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/08/24	
Surrogate: n-Nonane		*109 %*	*50-200*	*03/06/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**131**	20.0	1	03/05/24	03/06/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:11:52PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	2.83	0.0250	2.50		113	70-130			
Ethylbenzene	2.13	0.0250	2.50		85.1	70-130			
Toluene	2.14	0.0250	2.50		85.5	70-130			
o-Xylene	2.08	0.0250	2.50		83.1	70-130			
p,m-Xylene	3.94	0.0500	5.00		78.7	70-130			
Total Xylenes	6.01	0.0250	7.50		80.2	70-130			
Surrogate: Bromofluorobenzene	*0.512*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike (2410020-MS1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.23	0.0250	2.50	ND	129	48-131			
Ethylbenzene	2.40	0.0250	2.50	ND	96.2	45-135			
Toluene	2.25	0.0250	2.50	ND	90.0	48-130			
o-Xylene	2.34	0.0250	2.50	ND	93.6	43-135			
p,m-Xylene	4.52	0.0500	5.00	ND	90.4	43-135			
Total Xylenes	6.86	0.0250	7.50	ND	91.4	43-135			
Surrogate: Bromofluorobenzene	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: Toluene-d8	*0.395*		*0.500*		*78.9*	*70-130*			
Matrix Spike Dup (2410020-MSD1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.14	0.0250	2.50	ND	126	48-131	2.70	23	
Ethylbenzene	2.35	0.0250	2.50	ND	93.9	45-135	2.44	27	
Toluene	2.33	0.0250	2.50	ND	93.1	48-130	3.32	24	
o-Xylene	2.41	0.0250	2.50	ND	96.5	43-135	3.14	27	
p,m-Xylene	4.68	0.0500	5.00	ND	93.6	43-135	3.53	27	
Total Xylenes	7.09	0.0250	7.50	ND	94.6	43-135	3.40	27	
Surrogate: Bromofluorobenzene	*0.532*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.539*		*0.500*		*108*	*70-130*			
Surrogate: Toluene-d8	*0.423*		*0.500*		*84.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:11:52PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	41.1	20.0	50.0		82.1	70-130			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.533*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.422*		*0.500*		*84.3*	*70-130*			
Matrix Spike (2410020-MS2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	39.6	20.0	50.0	ND	79.2	70-130			
Surrogate: Bromofluorobenzene	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike Dup (2410020-MSD2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	36.6	20.0	50.0	ND	73.1	70-130	7.97	20	
Surrogate: Bromofluorobenzene	*0.480*		*0.500*		*95.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.444*		*0.500*		*88.8*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:11:52PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410068-BLK1)									Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*54.1*		*50.0*		*108*	*50-200*			
LCS (2410068-BS1)									Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	289	25.0	250		115	38-132			
Surrogate: n-Nonane	*58.6*		*50.0*		*117*	*50-200*			
Matrix Spike (2410068-MS1)				**Source: E403009-05**					Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	287	25.0	250	ND	115	38-132			
Surrogate: n-Nonane	*52.4*		*50.0*		*105*	*50-200*			
Matrix Spike Dup (2410068-MSD1)				**Source: E403009-05**					Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	283	25.0	250	ND	113	38-132	1.30	20	
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:11:52PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410055-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410055-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2410055-MS1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	14800	400	250	14700	50.5	80-120			M4
Matrix Spike Dup (2410055-MSD1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	15100	400	250	14700	149	80-120	1.64	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:11

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 9:55:17AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403025
Phone:	(539) 573-4018	Date Logged In:	03/04/24 08:59	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno









5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403026
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403026
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:10

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS22 0.25'	E403026-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS23 0.25'	E403026-02A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS24 0.25'	E403026-03A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS25 0.25'	E403026-04A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS26 0.25'	E403026-05A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS27 0.25'	E403026-06A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS28 0.25'	E403026-07A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

FS22 0.25'

E403026-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*101 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*84.4 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*101 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*84.4 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410067
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*86.0 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**6030**	200	10	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

FS23 0.25'

E403026-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*101 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*84.8 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*101 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*84.8 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410067
Diesel Range Organics (C10-C28)	**34.6**	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*83.5 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**6680**	200	10	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

FS24 0.25'

E403026-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*98.9 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*118 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*75.1 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*98.9 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*118 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*75.1 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410067
Diesel Range Organics (C10-C28)	**527**	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	**345**	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*86.8 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**14700**	400	20	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

FS25 0.25'

E403026-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*84.6 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*84.6 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410067
Diesel Range Organics (C10-C28)	**34.8**	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	**53.1**	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*82.5 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**6180**	200	10	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

FS26 0.25'

E403026-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*99.4 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*85.0 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*99.4 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*85.0 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410067
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*82.8 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**8880**	400	20	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

FS27 0.25'

E403026-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*96.8 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*82.2 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*96.8 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*82.2 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410067
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*86.3 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**10200**	400	20	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

FS28 0.25'

E403026-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*95.8 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*84.8 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*95.8 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*84.8 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410067
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/07/24	
Surrogate: n-Nonane		*82.4 %*	*50-200*	*03/06/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**9070**	400	20	03/05/24	03/06/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	2.83	0.0250	2.50		113	70-130			
Ethylbenzene	2.13	0.0250	2.50		85.1	70-130			
Toluene	2.14	0.0250	2.50		85.5	70-130			
o-Xylene	2.08	0.0250	2.50		83.1	70-130			
p,m-Xylene	3.94	0.0500	5.00		78.7	70-130			
Total Xylenes	6.01	0.0250	7.50		80.2	70-130			
Surrogate: Bromofluorobenzene	*0.512*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike (2410020-MS1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.23	0.0250	2.50	ND	129	48-131			
Ethylbenzene	2.40	0.0250	2.50	ND	96.2	45-135			
Toluene	2.25	0.0250	2.50	ND	90.0	48-130			
o-Xylene	2.34	0.0250	2.50	ND	93.6	43-135			
p,m-Xylene	4.52	0.0500	5.00	ND	90.4	43-135			
Total Xylenes	6.86	0.0250	7.50	ND	91.4	43-135			
Surrogate: Bromofluorobenzene	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: Toluene-d8	*0.395*		*0.500*		*78.9*	*70-130*			
Matrix Spike Dup (2410020-MSD1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.14	0.0250	2.50	ND	126	48-131	2.70	23	
Ethylbenzene	2.35	0.0250	2.50	ND	93.9	45-135	2.44	27	
Toluene	2.33	0.0250	2.50	ND	93.1	48-130	3.32	24	
o-Xylene	2.41	0.0250	2.50	ND	96.5	43-135	3.14	27	
p,m-Xylene	4.68	0.0500	5.00	ND	93.6	43-135	3.53	27	
Total Xylenes	7.09	0.0250	7.50	ND	94.6	43-135	3.40	27	
Surrogate: Bromofluorobenzene	*0.532*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.539*		*0.500*		*108*	*70-130*			
Surrogate: Toluene-d8	*0.423*		*0.500*		*84.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	41.1	20.0	50.0		82.1	70-130			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.533*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.422*		*0.500*		*84.3*	*70-130*			
Matrix Spike (2410020-MS2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	39.6	20.0	50.0	ND	79.2	70-130			
Surrogate: Bromofluorobenzene	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike Dup (2410020-MSD2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	36.6	20.0	50.0	ND	73.1	70-130	7.97	20	
Surrogate: Bromofluorobenzene	*0.480*		*0.500*		*95.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.444*		*0.500*		*88.8*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410067-BLK1)									Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*46.3*		*50.0*		*92.6*	*50-200*			
LCS (2410067-BS1)									Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	242	25.0	250		97.0	38-132			
Surrogate: n-Nonane	*45.8*		*50.0*		*91.5*	*50-200*			
Matrix Spike (2410067-MS1)				**Source: E403039-01**					Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	250	25.0	250	25.2	89.9	38-132			
Surrogate: n-Nonane	*43.9*		*50.0*		*87.8*	*50-200*			
Matrix Spike Dup (2410067-MSD1)				**Source: E403039-01**					Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	269	25.0	250	25.2	97.6	38-132	7.47	20	
Surrogate: n-Nonane	*47.0*		*50.0*		*93.9*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:10:59PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410055-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410055-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2410055-MS1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	14800	400	250	14700	50.5	80-120			M4
Matrix Spike Dup (2410055-MSD1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	15100	400	250	14700	149	80-120	1.64	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:10

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 9:59:06AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403026
Phone:	(539) 573-4018	Date Logged In:	03/04/24 08:59	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403027
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403027
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:09

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS29 0.25'	E403027-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS30 0.25'	E403027-02A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS31 0.25'	E403027-03A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS32 0.25'	E403027-04A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:09:11PM

FS29 0.25'

E403027-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*94.9 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*101 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*83.3 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*94.9 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*101 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*83.3 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/08/24	
Surrogate: n-Nonane		*110 %*	*50-200*	*03/06/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**2160**	200	10	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:09:11PM

FS30 0.25'

E403027-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*99.4 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*83.9 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*99.4 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*83.9 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/08/24	
Surrogate: n-Nonane		*93.8 %*	*50-200*	*03/06/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**2170**	100	5	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:09:11PM

FS31 0.25'

E403027-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*95.9 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*84.6 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*95.9 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*84.6 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/08/24	
Surrogate: n-Nonane		*115 %*	*50-200*	*03/06/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**2260**	100	5	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:09:11PM

FS32 0.25'

E403027-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*84.6 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*84.6 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/08/24	
Surrogate: n-Nonane		*109 %*	*50-200*	*03/06/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**2210**	100	5	03/05/24	03/06/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:09:11PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	2.83	0.0250	2.50		113	70-130			
Ethylbenzene	2.13	0.0250	2.50		85.1	70-130			
Toluene	2.14	0.0250	2.50		85.5	70-130			
o-Xylene	2.08	0.0250	2.50		83.1	70-130			
p,m-Xylene	3.94	0.0500	5.00		78.7	70-130			
Total Xylenes	6.01	0.0250	7.50		80.2	70-130			
Surrogate: Bromofluorobenzene	*0.512*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike (2410020-MS1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.23	0.0250	2.50	ND	129	48-131			
Ethylbenzene	2.40	0.0250	2.50	ND	96.2	45-135			
Toluene	2.25	0.0250	2.50	ND	90.0	48-130			
o-Xylene	2.34	0.0250	2.50	ND	93.6	43-135			
p,m-Xylene	4.52	0.0500	5.00	ND	90.4	43-135			
Total Xylenes	6.86	0.0250	7.50	ND	91.4	43-135			
Surrogate: Bromofluorobenzene	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: Toluene-d8	*0.395*		*0.500*		*78.9*	*70-130*			
Matrix Spike Dup (2410020-MSD1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.14	0.0250	2.50	ND	126	48-131	2.70	23	
Ethylbenzene	2.35	0.0250	2.50	ND	93.9	45-135	2.44	27	
Toluene	2.33	0.0250	2.50	ND	93.1	48-130	3.32	24	
o-Xylene	2.41	0.0250	2.50	ND	96.5	43-135	3.14	27	
p,m-Xylene	4.68	0.0500	5.00	ND	93.6	43-135	3.53	27	
Total Xylenes	7.09	0.0250	7.50	ND	94.6	43-135	3.40	27	
Surrogate: Bromofluorobenzene	*0.532*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.539*		*0.500*		*108*	*70-130*			
Surrogate: Toluene-d8	*0.423*		*0.500*		*84.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:09:11PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	41.1	20.0	50.0		82.1	70-130			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.533*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.422*		*0.500*		*84.3*	*70-130*			
Matrix Spike (2410020-MS2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	39.6	20.0	50.0	ND	79.2	70-130			
Surrogate: Bromofluorobenzene	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike Dup (2410020-MSD2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	36.6	20.0	50.0	ND	73.1	70-130	7.97	20	
Surrogate: Bromofluorobenzene	*0.480*		*0.500*		*95.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.444*		*0.500*		*88.8*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:09:11PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410068-BLK1)									Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*54.1*		*50.0*		*108*	*50-200*			
LCS (2410068-BS1)									Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	289	25.0	250		115	38-132			
Surrogate: n-Nonane	*58.6*		*50.0*		*117*	*50-200*			
Matrix Spike (2410068-MS1)				**Source: E403009-05**					Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	287	25.0	250	ND	115	38-132			
Surrogate: n-Nonane	*52.4*		*50.0*		*105*	*50-200*			
Matrix Spike Dup (2410068-MSD1)				**Source: E403009-05**					Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	283	25.0	250	ND	113	38-132	1.30	20	
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:09:11PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410055-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410055-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2410055-MS1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	14800	400	250	14700	50.5	80-120			M4
Matrix Spike Dup (2410055-MSD1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	15100	400	250	14700	149	80-120	1.64	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:09

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

Client: WPX Energy Permian, LLC.	
Project: ROSS DRAW UNIT #042	
Project Manager: Gilbert Moreno	
Address: 13000 W County Rd 100	
City, State, Zip_Odessa,TX, 79765	
Phone: 832-541-7719	
Email: Devon-team@etechenv.com	
Collected by: Edyte Konan	

Bill To	Lab Use Only	TAT	EPA Program
Attention: Jim Raley	Lab WO# E403027	Job Number 01058-0005	1D 2D 3D Standard: 5 day TAT	CWA SDWA
Address: 5315 Buena Vista Dr.			RCRA
City, State, Zip: Carlsbad, NM, 88220	Analysis and Method		State: NM CO UT AZ TX
Phone: 575-885-7502			
Email: jim.raley@dvn.com			
WO: 21204782			
Incident ID: nAB1605654667			

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	Remarks
12:40	02.29.24	S	1	FS29	1	0.25'						X		
12:50	02.29.24	S	1	FS30	2	0.25'						X		
13:00	02.29.24	S	1	FS31	3	0.25'						X		
13:10	02.29.24	S	1	FS32	4	0.25'						X		

03/01/2024

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: EK

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.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	03/01/2024	12:00	Michelle Gonzales	03-01-24	1200
Michelle Gonzales	03-01-24	1723		3·4·24	8:45

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

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

envirotech

Envirotech Analytical Laboratory

Printed: 3/4/2024 10:03:15AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403027
Phone:	(539) 573-4018	Date Logged In:	03/04/24 09:00	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403028
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403028
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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
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Cell: 775-287-1762
whinchman@envirotech-inc.com

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:08

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS33 0.25'	E403028-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:08:03PM

FS33 0.25'

E403028-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*95.8 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*84.1 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*95.8 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*84.1 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410042
Diesel Range Organics (C10-C28)	**32.8**	25.0	1	03/05/24	03/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/05/24	03/06/24	
Surrogate: n-Nonane		*107 %*	*50-200*	*03/05/24*	*03/06/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**11300**	400	20	03/05/24	03/06/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:08:03PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	2.83	0.0250	2.50		113	70-130			
Ethylbenzene	2.13	0.0250	2.50		85.1	70-130			
Toluene	2.14	0.0250	2.50		85.5	70-130			
o-Xylene	2.08	0.0250	2.50		83.1	70-130			
p,m-Xylene	3.94	0.0500	5.00		78.7	70-130			
Total Xylenes	6.01	0.0250	7.50		80.2	70-130			
Surrogate: Bromofluorobenzene	*0.512*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike (2410020-MS1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.23	0.0250	2.50	ND	129	48-131			
Ethylbenzene	2.40	0.0250	2.50	ND	96.2	45-135			
Toluene	2.25	0.0250	2.50	ND	90.0	48-130			
o-Xylene	2.34	0.0250	2.50	ND	93.6	43-135			
p,m-Xylene	4.52	0.0500	5.00	ND	90.4	43-135			
Total Xylenes	6.86	0.0250	7.50	ND	91.4	43-135			
Surrogate: Bromofluorobenzene	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: Toluene-d8	*0.395*		*0.500*		*78.9*	*70-130*			
Matrix Spike Dup (2410020-MSD1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.14	0.0250	2.50	ND	126	48-131	2.70	23	
Ethylbenzene	2.35	0.0250	2.50	ND	93.9	45-135	2.44	27	
Toluene	2.33	0.0250	2.50	ND	93.1	48-130	3.32	24	
o-Xylene	2.41	0.0250	2.50	ND	96.5	43-135	3.14	27	
p,m-Xylene	4.68	0.0500	5.00	ND	93.6	43-135	3.53	27	
Total Xylenes	7.09	0.0250	7.50	ND	94.6	43-135	3.40	27	
Surrogate: Bromofluorobenzene	*0.532*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.539*		*0.500*		*108*	*70-130*			
Surrogate: Toluene-d8	*0.423*		*0.500*		*84.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:08:03PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	41.1	20.0	50.0		82.1	70-130			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.533*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.422*		*0.500*		*84.3*	*70-130*			
Matrix Spike (2410020-MS2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	39.6	20.0	50.0	ND	79.2	70-130			
Surrogate: Bromofluorobenzene	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike Dup (2410020-MSD2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	36.6	20.0	50.0	ND	73.1	70-130	7.97	20	
Surrogate: Bromofluorobenzene	*0.480*		*0.500*		*95.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.444*		*0.500*		*88.8*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:08:03PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410042-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*56.0*		*50.0*		*112*	*50-200*			
LCS (2410042-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	328	25.0	250		131	38-132			
Surrogate: n-Nonane	*56.0*		*50.0*		*112*	*50-200*			
Matrix Spike (2410042-MS1)				**Source: E402288-21**					Prepared: 03/05/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	328	25.0	250	ND	131	38-132			
Surrogate: n-Nonane	*57.7*		*50.0*		*115*	*50-200*			
Matrix Spike Dup (2410042-MSD1)				**Source: E402288-21**					Prepared: 03/05/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	315	25.0	250	ND	126	38-132	4.03	20	
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:08:03PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410055-BLK1)							Prepared: 03/05/24 Analyzed: 03/06/24		
Chloride	ND	20.0							
LCS (2410055-BS1)							Prepared: 03/05/24 Analyzed: 03/06/24		
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2410055-MS1)				**Source: E403026-03**			Prepared: 03/05/24 Analyzed: 03/06/24		
Chloride	14800	400	250	14700	50.5	80-120			M4
Matrix Spike Dup (2410055-MSD1)				**Source: E403026-03**			Prepared: 03/05/24 Analyzed: 03/06/24		
Chloride	15100	400	250	14700	149	80-120	1.64	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:08

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page __1__ of __1__

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 10:06:14AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403028
Phone:	(539) 573-4018	Date Logged In:	03/04/24 09:00	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403029
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403029
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:07

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS34 0.25'	E403029-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:07:13PM

FS34 0.25'

E403029-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*98.6 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*85.5 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*98.6 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*85.5 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410042
Diesel Range Organics (C10-C28)	ND	25.0	1	03/05/24	03/06/24	
Oil Range Organics (C28-C36)	**60.1**	50.0	1	03/05/24	03/06/24	
Surrogate: n-Nonane		*108 %*	*50-200*	*03/05/24*	*03/06/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**2230**	200	10	03/05/24	03/06/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:07:13PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	2.83	0.0250	2.50		113	70-130			
Ethylbenzene	2.13	0.0250	2.50		85.1	70-130			
Toluene	2.14	0.0250	2.50		85.5	70-130			
o-Xylene	2.08	0.0250	2.50		83.1	70-130			
p,m-Xylene	3.94	0.0500	5.00		78.7	70-130			
Total Xylenes	6.01	0.0250	7.50		80.2	70-130			
Surrogate: Bromofluorobenzene	*0.512*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike (2410020-MS1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.23	0.0250	2.50	ND	129	48-131			
Ethylbenzene	2.40	0.0250	2.50	ND	96.2	45-135			
Toluene	2.25	0.0250	2.50	ND	90.0	48-130			
o-Xylene	2.34	0.0250	2.50	ND	93.6	43-135			
p,m-Xylene	4.52	0.0500	5.00	ND	90.4	43-135			
Total Xylenes	6.86	0.0250	7.50	ND	91.4	43-135			
Surrogate: Bromofluorobenzene	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: Toluene-d8	*0.395*		*0.500*		*78.9*	*70-130*			
Matrix Spike Dup (2410020-MSD1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.14	0.0250	2.50	ND	126	48-131	2.70	23	
Ethylbenzene	2.35	0.0250	2.50	ND	93.9	45-135	2.44	27	
Toluene	2.33	0.0250	2.50	ND	93.1	48-130	3.32	24	
o-Xylene	2.41	0.0250	2.50	ND	96.5	43-135	3.14	27	
p,m-Xylene	4.68	0.0500	5.00	ND	93.6	43-135	3.53	27	
Total Xylenes	7.09	0.0250	7.50	ND	94.6	43-135	3.40	27	
Surrogate: Bromofluorobenzene	*0.532*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.539*		*0.500*		*108*	*70-130*			
Surrogate: Toluene-d8	*0.423*		*0.500*		*84.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:07:13PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	41.1	20.0	50.0		82.1	70-130			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.533*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.422*		*0.500*		*84.3*	*70-130*			
Matrix Spike (2410020-MS2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	39.6	20.0	50.0	ND	79.2	70-130			
Surrogate: Bromofluorobenzene	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike Dup (2410020-MSD2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	36.6	20.0	50.0	ND	73.1	70-130	7.97	20	
Surrogate: Bromofluorobenzene	*0.480*		*0.500*		*95.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.444*		*0.500*		*88.8*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:07:13PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410042-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*56.0*		*50.0*		*112*	*50-200*			
LCS (2410042-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	328	25.0	250		131	38-132			
Surrogate: n-Nonane	*56.0*		*50.0*		*112*	*50-200*			
Matrix Spike (2410042-MS1)				**Source: E402288-21**					Prepared: 03/05/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	328	25.0	250	ND	131	38-132			
Surrogate: n-Nonane	*57.7*		*50.0*		*115*	*50-200*			
Matrix Spike Dup (2410042-MSD1)				**Source: E402288-21**					Prepared: 03/05/24 Analyzed: 03/06/24
Diesel Range Organics (C10-C28)	315	25.0	250	ND	126	38-132	4.03	20	
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:07:13PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410055-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410055-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2410055-MS1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	14800	400	250	14700	50.5	80-120			M4
Matrix Spike Dup (2410055-MSD1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	15100	400	250	14700	149	80-120	1.64	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:07

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

Client: WPX Energy Permian, LLC.	
Project: ROSS DRAW UNIT #042	
Project Manager: Gilbert Moreno	
Address: 13000 W County Rd 100	
City, State, Zip_Odessa,TX, 79765	
Phone: 832-541-7719	
Email: Devon-team@etechenv.com	
Collected by: Edyte Konan	

Bill To	Lab Use Only		TAT				EPA Program	
Attention: Jim Raley	Lab WO#: E403029	Job Number: 01058-0007	1D	2D	3D	Standard: 5 day TAT	CWA	SDWA
Address: 5315 Buena Vista Dr.	Analysis and Method							RCRA
City, State, Zip: Carlsbad, NM, 88220							State	
Phone: 575-885-7502							NM: X	CO / UT / AZ / TX
Email: jim.raley@dvn.com								
WO: 21204782								
Incident ID: nAB1605654667								

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC NM		GDOC TX		Remarks
13:30	02.29.24	S	1	FS34	1	0.25'								X				

03/01/2024

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: EK

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.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	03/01/2024	12:00	Michelle Gonzales	03-01-24	1200
Michelle Gonzales	03-01-24	1723		3-4-24	8:45

Lab Use Only
Received on ice: Y / N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

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

envirotech

Envirotech Analytical Laboratory

Printed: 3/4/2024 10:09:26AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403029
Phone:	(539) 573-4018	Date Logged In:	03/04/24 09:00	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403030
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403030
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:06

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS35 0.25'	E403030-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS36 0.25'	E403030-02A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:06:21PM

FS35 0.25'

E403030-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*99.3 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*77.2 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*99.3 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*77.2 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410073
Diesel Range Organics (C10-C28)	**26.7**	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*98.7 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**10800**	400	20	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:06:21PM

FS36 0.25'

E403030-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*92.0 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*92.8 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*92.0 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*92.8 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410073
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*89.8 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**9750**	400	20	03/05/24	03/06/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:06:21PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	2.83	0.0250	2.50		113	70-130			
Ethylbenzene	2.13	0.0250	2.50		85.1	70-130			
Toluene	2.14	0.0250	2.50		85.5	70-130			
o-Xylene	2.08	0.0250	2.50		83.1	70-130			
p,m-Xylene	3.94	0.0500	5.00		78.7	70-130			
Total Xylenes	6.01	0.0250	7.50		80.2	70-130			
Surrogate: Bromofluorobenzene	*0.512*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike (2410020-MS1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.23	0.0250	2.50	ND	129	48-131			
Ethylbenzene	2.40	0.0250	2.50	ND	96.2	45-135			
Toluene	2.25	0.0250	2.50	ND	90.0	48-130			
o-Xylene	2.34	0.0250	2.50	ND	93.6	43-135			
p,m-Xylene	4.52	0.0500	5.00	ND	90.4	43-135			
Total Xylenes	6.86	0.0250	7.50	ND	91.4	43-135			
Surrogate: Bromofluorobenzene	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: Toluene-d8	*0.395*		*0.500*		*78.9*	*70-130*			
Matrix Spike Dup (2410020-MSD1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.14	0.0250	2.50	ND	126	48-131	2.70	23	
Ethylbenzene	2.35	0.0250	2.50	ND	93.9	45-135	2.44	27	
Toluene	2.33	0.0250	2.50	ND	93.1	48-130	3.32	24	
o-Xylene	2.41	0.0250	2.50	ND	96.5	43-135	3.14	27	
p,m-Xylene	4.68	0.0500	5.00	ND	93.6	43-135	3.53	27	
Total Xylenes	7.09	0.0250	7.50	ND	94.6	43-135	3.40	27	
Surrogate: Bromofluorobenzene	*0.532*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.539*		*0.500*		*108*	*70-130*			
Surrogate: Toluene-d8	*0.423*		*0.500*		*84.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:06:21PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	41.1	20.0	50.0		82.1	70-130			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.533*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.422*		*0.500*		*84.3*	*70-130*			
Matrix Spike (2410020-MS2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	39.6	20.0	50.0	ND	79.2	70-130			
Surrogate: Bromofluorobenzene	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike Dup (2410020-MSD2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	36.6	20.0	50.0	ND	73.1	70-130	7.97	20	
Surrogate: Bromofluorobenzene	*0.480*		*0.500*		*95.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.444*		*0.500*		*88.8*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:06:21PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410073-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*54.2*		*50.0*		*108*	*50-200*			
LCS (2410073-BS1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	291	25.0	250		116	38-132			
Surrogate: n-Nonane	*58.1*		*50.0*		*116*	*50-200*			
Matrix Spike (2410073-MS1)				**Source: E403014-03**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	287	25.0	250	ND	115	38-132			
Surrogate: n-Nonane	*55.6*		*50.0*		*111*	*50-200*			
Matrix Spike Dup (2410073-MSD1)				**Source: E403014-03**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	288	25.0	250	ND	115	38-132	0.325	20	
Surrogate: n-Nonane	*58.3*		*50.0*		*117*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:06:21PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410055-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410055-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2410055-MS1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	14800	400	250	14700	50.5	80-120			M4
Matrix Spike Dup (2410055-MSD1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	15100	400	250	14700	149	80-120	1.64	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:06

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 10:13:38AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403030
Phone:	(539) 573-4018	Date Logged In:	03/04/24 09:01	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403031
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403031
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 16:10

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS37 0.25'	E403031-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS38 0.25'	E403031-02A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 4:10:55PM

FS37 0.25'

E403031-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410022
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.6 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*98.3 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410022
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.6 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*98.3 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410073
Diesel Range Organics (C10-C28)	**28.0**	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	**61.5**	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*92.9 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**1940**	40.0	2	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 4:10:55PM

FS38 0.25'

E403031-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410022
Benzene	ND	0.0250	1	03/04/24	03/07/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/07/24	
Toluene	ND	0.0250	1	03/04/24	03/07/24	
o-Xylene	ND	0.0250	1	03/04/24	03/07/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/07/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*101 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.5 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410022
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/07/24	
Surrogate: Bromofluorobenzene		*101 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.5 %*	*70-130*	*03/04/24*	*03/07/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*03/04/24*	*03/07/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410073
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*99.3 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2410055
Chloride	**267**	100	5	03/05/24	03/06/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 4:10:55PM

Volatile Organic Compounds by EPA 8260B

Analyst:

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410022-BLK1)									Prepared: 03/04/24 Analyzed: 03/06/24
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	*0.490*		*0.500*		*98.0*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.493*		*0.500*		*98.6*	*70-130*			
Surrogate: Toluene-d8	*0.551*		*0.500*		*110*	*70-130*			
LCS (2410022-BS1)									Prepared: 03/04/24 Analyzed: 03/06/24
Benzene	2.56	0.0250	2.50		102	70-130			
Ethylbenzene	2.50	0.0250	2.50		100	70-130			
Toluene	3.06	0.0250	2.50		122	70-130			
o-Xylene	2.26	0.0250	2.50		90.5	70-130			
p,m-Xylene	4.53	0.0500	5.00		90.6	70-130			
Total Xylenes	6.79	0.0250	7.50		90.6	70-130			
Surrogate: Bromofluorobenzene	*0.518*		*0.500*		*104*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.494*		*0.500*		*98.8*	*70-130*			
Surrogate: Toluene-d8	*0.599*		*0.500*		*120*	*70-130*			
Matrix Spike (2410022-MS1)				**Source: E403015-01**					Prepared: 03/04/24 Analyzed: 03/06/24
Benzene	2.54	0.0250	2.50	ND	101	48-131			
Ethylbenzene	2.53	0.0250	2.50	ND	101	45-135			
Toluene	2.75	0.0250	2.50	ND	110	48-130			
o-Xylene	2.39	0.0250	2.50	ND	95.6	43-135			
p,m-Xylene	4.79	0.0500	5.00	ND	95.9	43-135			
Total Xylenes	7.18	0.0250	7.50	ND	95.8	43-135			
Surrogate: Bromofluorobenzene	*0.488*		*0.500*		*97.6*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.515*		*0.500*		*103*	*70-130*			
Surrogate: Toluene-d8	*0.533*		*0.500*		*107*	*70-130*			
Matrix Spike Dup (2410022-MSD1)				**Source: E403015-01**					Prepared: 03/04/24 Analyzed: 03/06/24
Benzene	2.39	0.0250	2.50	ND	95.5	48-131	6.13	23	
Ethylbenzene	2.46	0.0250	2.50	ND	98.5	45-135	2.55	27	
Toluene	2.50	0.0250	2.50	ND	100	48-130	9.35	24	
o-Xylene	2.53	0.0250	2.50	ND	101	43-135	5.81	27	
p,m-Xylene	5.07	0.0500	5.00	ND	101	43-135	5.71	27	
Total Xylenes	7.61	0.0250	7.50	ND	101	43-135	5.74	27	
Surrogate: Bromofluorobenzene	*0.500*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.4*	*70-130*			
Surrogate: Toluene-d8	*0.490*		*0.500*		*98.0*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 4:10:55PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410022-BLK1)									Prepared: 03/04/24 Analyzed: 03/06/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.490*		*0.500*		*98.0*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.493*		*0.500*		*98.6*	*70-130*			
Surrogate: Toluene-d8	*0.551*		*0.500*		*110*	*70-130*			
LCS (2410022-BS2)									Prepared: 03/04/24 Analyzed: 03/06/24
Gasoline Range Organics (C6-C10)	58.3	20.0	50.0		117	70-130			
Surrogate: Bromofluorobenzene	*0.516*		*0.500*		*103*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.513*		*0.500*		*103*	*70-130*			
Surrogate: Toluene-d8	*0.587*		*0.500*		*117*	*70-130*			
Matrix Spike (2410022-MS2)				**Source: E403015-01**					Prepared: 03/04/24 Analyzed: 03/06/24
Gasoline Range Organics (C6-C10)	55.5	20.0	50.0	ND	111	70-130			
Surrogate: Bromofluorobenzene	*0.506*		*0.500*		*101*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.480*		*0.500*		*96.0*	*70-130*			
Surrogate: Toluene-d8	*0.547*		*0.500*		*109*	*70-130*			
Matrix Spike Dup (2410022-MSD2)				**Source: E403015-01**					Prepared: 03/04/24 Analyzed: 03/06/24
Gasoline Range Organics (C6-C10)	56.0	20.0	50.0	ND	112	70-130	0.967	20	
Surrogate: Bromofluorobenzene	*0.496*		*0.500*		*99.1*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.495*		*0.500*		*99.0*	*70-130*			
Surrogate: Toluene-d8	*0.547*		*0.500*		*109*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 4:10:55PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410073-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*54.2*		*50.0*		*108*	*50-200*			
LCS (2410073-BS1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	291	25.0	250		116	38-132			
Surrogate: n-Nonane	*58.1*		*50.0*		*116*	*50-200*			
Matrix Spike (2410073-MS1)				**Source: E403014-03**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	287	25.0	250	ND	115	38-132			
Surrogate: n-Nonane	*55.6*		*50.0*		*111*	*50-200*			
Matrix Spike Dup (2410073-MSD1)				**Source: E403014-03**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	288	25.0	250	ND	115	38-132	0.325	20	
Surrogate: n-Nonane	*58.3*		*50.0*		*117*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 4:10:55PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410055-BLK1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	ND	20.0							
LCS (2410055-BS1)									Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2410055-MS1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	14800	400	250	14700	50.5	80-120			M4
Matrix Spike Dup (2410055-MSD1)				**Source: E403026-03**					Prepared: 03/05/24 Analyzed: 03/06/24
Chloride	15100	400	250	14700	149	80-120	1.64	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 16:10

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 10:16:33AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403031
Phone:	(539) 573-4018	Date Logged In:	03/04/24 09:01	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403032
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403032
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:05

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS39 0.25'	E403032-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS40 0.25'	E403032-02A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
FS41 0.25'	E403032-03A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:05:19PM

FS39 0.25'

E403032-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*98.3 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*107 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*82.5 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*98.3 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*107 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*82.5 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410073
Diesel Range Organics (C10-C28)	**201**	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	**209**	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*100 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410056
Chloride	**4880**	200	10	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:05:19PM

FS40 0.25'

E403032-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*98.5 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*86.7 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*98.5 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*86.7 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410073
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*102 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410056
Chloride	**2710**	40.0	2	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:05:19PM

FS41 0.25'

E403032-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*84.5 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*84.5 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410073
Diesel Range Organics (C10-C28)	**28.0**	25.0	1	03/07/24	03/08/24	
Oil Range Organics (C28-C36)	**97.0**	50.0	1	03/07/24	03/08/24	
Surrogate: n-Nonane		*94.7 %*	*50-200*	*03/07/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410056
Chloride	**2300**	100	5	03/05/24	03/05/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:05:19PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	2.83	0.0250	2.50		113	70-130			
Ethylbenzene	2.13	0.0250	2.50		85.1	70-130			
Toluene	2.14	0.0250	2.50		85.5	70-130			
o-Xylene	2.08	0.0250	2.50		83.1	70-130			
p,m-Xylene	3.94	0.0500	5.00		78.7	70-130			
Total Xylenes	6.01	0.0250	7.50		80.2	70-130			
Surrogate: Bromofluorobenzene	*0.512*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike (2410020-MS1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.23	0.0250	2.50	ND	129	48-131			
Ethylbenzene	2.40	0.0250	2.50	ND	96.2	45-135			
Toluene	2.25	0.0250	2.50	ND	90.0	48-130			
o-Xylene	2.34	0.0250	2.50	ND	93.6	43-135			
p,m-Xylene	4.52	0.0500	5.00	ND	90.4	43-135			
Total Xylenes	6.86	0.0250	7.50	ND	91.4	43-135			
Surrogate: Bromofluorobenzene	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: Toluene-d8	*0.395*		*0.500*		*78.9*	*70-130*			
Matrix Spike Dup (2410020-MSD1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.14	0.0250	2.50	ND	126	48-131	2.70	23	
Ethylbenzene	2.35	0.0250	2.50	ND	93.9	45-135	2.44	27	
Toluene	2.33	0.0250	2.50	ND	93.1	48-130	3.32	24	
o-Xylene	2.41	0.0250	2.50	ND	96.5	43-135	3.14	27	
p,m-Xylene	4.68	0.0500	5.00	ND	93.6	43-135	3.53	27	
Total Xylenes	7.09	0.0250	7.50	ND	94.6	43-135	3.40	27	
Surrogate: Bromofluorobenzene	*0.532*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.539*		*0.500*		*108*	*70-130*			
Surrogate: Toluene-d8	*0.423*		*0.500*		*84.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:05:19PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	41.1	20.0	50.0		82.1	70-130			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.533*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.422*		*0.500*		*84.3*	*70-130*			
Matrix Spike (2410020-MS2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	39.6	20.0	50.0	ND	79.2	70-130			
Surrogate: Bromofluorobenzene	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike Dup (2410020-MSD2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	36.6	20.0	50.0	ND	73.1	70-130	7.97	20	
Surrogate: Bromofluorobenzene	*0.480*		*0.500*		*95.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.444*		*0.500*		*88.8*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:05:19PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410073-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*54.2*		*50.0*		*108*	*50-200*			
LCS (2410073-BS1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	291	25.0	250		116	38-132			
Surrogate: n-Nonane	*58.1*		*50.0*		*116*	*50-200*			
Matrix Spike (2410073-MS1)				**Source: E403014-03**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	287	25.0	250	ND	115	38-132			
Surrogate: n-Nonane	*55.6*		*50.0*		*111*	*50-200*			
Matrix Spike Dup (2410073-MSD1)				**Source: E403014-03**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	288	25.0	250	ND	115	38-132	0.325	20	
Surrogate: n-Nonane	*58.3*		*50.0*		*117*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 3:05:19PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410056-BLK1)							Prepared: 03/05/24 Analyzed: 03/05/24		
Chloride	ND	20.0							
LCS (2410056-BS1)							Prepared: 03/05/24 Analyzed: 03/05/24		
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2410056-MS1)				**Source: E403034-01**			Prepared: 03/05/24 Analyzed: 03/05/24		
Chloride	16700	400	250	18700	NR	80-120			M4
Matrix Spike Dup (2410056-MSD1)				**Source: E403034-01**			Prepared: 03/05/24 Analyzed: 03/05/24		
Chloride	16500	400	250	18700	NR	80-120	1.08	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 15:05

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | **Chain of Custody** | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 10:20:17AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403032
Phone:	(539) 573-4018	Date Logged In:	03/04/24 09:02	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403033
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/11/24

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: 3/11/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403033
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/11/24 14:29

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS42 0.25'	E403033-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/11/2024 2:29:34PM

FS42 0.25'

E403033-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RAS			Batch: 2410020
Benzene	ND	0.0250	1	03/04/24	03/08/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/08/24	
Toluene	ND	0.0250	1	03/04/24	03/08/24	
o-Xylene	ND	0.0250	1	03/04/24	03/08/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/08/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*96.2 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RAS			Batch: 2410020
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/08/24	
Surrogate: Bromofluorobenzene		*96.2 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*03/04/24*	*03/08/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*03/04/24*	*03/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/08/24	
Surrogate: n-Nonane		*105 %*	*50-200*	*03/06/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410056
Chloride	**158**	100	5	03/05/24	03/05/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/11/2024 2:29:34PM

Volatile Organic Compounds by EPA 8260B

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
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	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS1)									Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	2.83	0.0250	2.50		113	70-130			
Ethylbenzene	2.13	0.0250	2.50		85.1	70-130			
Toluene	2.14	0.0250	2.50		85.5	70-130			
o-Xylene	2.08	0.0250	2.50		83.1	70-130			
p,m-Xylene	3.94	0.0500	5.00		78.7	70-130			
Total Xylenes	6.01	0.0250	7.50		80.2	70-130			
Surrogate: Bromofluorobenzene	*0.512*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike (2410020-MS1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.23	0.0250	2.50	ND	129	48-131			
Ethylbenzene	2.40	0.0250	2.50	ND	96.2	45-135			
Toluene	2.25	0.0250	2.50	ND	90.0	48-130			
o-Xylene	2.34	0.0250	2.50	ND	93.6	43-135			
p,m-Xylene	4.52	0.0500	5.00	ND	90.4	43-135			
Total Xylenes	6.86	0.0250	7.50	ND	91.4	43-135			
Surrogate: Bromofluorobenzene	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: Toluene-d8	*0.395*		*0.500*		*78.9*	*70-130*			
Matrix Spike Dup (2410020-MSD1)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Benzene	3.14	0.0250	2.50	ND	126	48-131	2.70	23	
Ethylbenzene	2.35	0.0250	2.50	ND	93.9	45-135	2.44	27	
Toluene	2.33	0.0250	2.50	ND	93.1	48-130	3.32	24	
o-Xylene	2.41	0.0250	2.50	ND	96.5	43-135	3.14	27	
p,m-Xylene	4.68	0.0500	5.00	ND	93.6	43-135	3.53	27	
Total Xylenes	7.09	0.0250	7.50	ND	94.6	43-135	3.40	27	
Surrogate: Bromofluorobenzene	*0.532*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.539*		*0.500*		*108*	*70-130*			
Surrogate: Toluene-d8	*0.423*		*0.500*		*84.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/11/2024 2:29:34PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410020-BLK1)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.491*		*0.500*		*98.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.420*		*0.500*		*84.0*	*70-130*			
LCS (2410020-BS2)									Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	41.1	20.0	50.0		82.1	70-130			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.533*		*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.422*		*0.500*		*84.3*	*70-130*			
Matrix Spike (2410020-MS2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	39.6	20.0	50.0	ND	79.2	70-130			
Surrogate: Bromofluorobenzene	*0.527*		*0.500*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.430*		*0.500*		*85.9*	*70-130*			
Matrix Spike Dup (2410020-MSD2)				**Source: E403027-02**					Prepared: 03/04/24 Analyzed: 03/07/24
Gasoline Range Organics (C6-C10)	36.6	20.0	50.0	ND	73.1	70-130	7.97	20	
Surrogate: Bromofluorobenzene	*0.480*		*0.500*		*95.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.444*		*0.500*		*88.8*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/11/2024 2:29:34PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410068-BLK1)									Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*54.1*		*50.0*		*108*	*50-200*			
LCS (2410068-BS1)									Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	289	25.0	250		115	38-132			
Surrogate: n-Nonane	*58.6*		*50.0*		*117*	*50-200*			
Matrix Spike (2410068-MS1)				**Source: E403009-05**					Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	287	25.0	250	ND	115	38-132			
Surrogate: n-Nonane	*52.4*		*50.0*		*105*	*50-200*			
Matrix Spike Dup (2410068-MSD1)				**Source: E403009-05**					Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	283	25.0	250	ND	113	38-132	1.30	20	
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/11/2024 2:29:34PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410056-BLK1)									Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	ND	20.0							
LCS (2410056-BS1)									Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2410056-MS1)				**Source: E403034-01**					Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	16700	400	250	18700	NR	80-120			M4
Matrix Spike Dup (2410056-MSD1)				**Source: E403034-01**					Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	16500	400	250	18700	NR	80-120	1.08	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/11/24 14:29

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Project Information

Chain of Custody

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| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 10:23:41AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403033
Phone:	(539) 573-4018	Date Logged In:	03/04/24 09:02	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403034
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403034
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 14:01

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS43 0.25'	E403034-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 2:01:51PM

FS43 0.25'

E403034-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Benzene	ND	0.0250	1	03/04/24	03/06/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/06/24	
Toluene	ND	0.0250	1	03/04/24	03/06/24	
o-Xylene	ND	0.0250	1	03/04/24	03/06/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/06/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/06/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.8 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/06/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.7 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/06/24	03/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/06/24	03/08/24	
Surrogate: n-Nonane		*102 %*	*50-200*	*03/06/24*	*03/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410056
Chloride	**18700**	400	20	03/05/24	03/05/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 2:01:51PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410006-BLK1)									Prepared: 03/04/24 Analyzed: 03/04/24
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	*7.77*		*8.00*		*97.1*	*70-130*			
LCS (2410006-BS1)									Prepared: 03/04/24 Analyzed: 03/04/24
Benzene	5.02	0.0250	5.00		100	70-130			
Ethylbenzene	4.88	0.0250	5.00		97.6	70-130			
Toluene	5.00	0.0250	5.00		100	70-130			
o-Xylene	4.94	0.0250	5.00		98.9	70-130			
p,m-Xylene	9.97	0.0500	10.0		99.7	70-130			
Total Xylenes	14.9	0.0250	15.0		99.4	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.78*		*8.00*		*97.2*	*70-130*			
Matrix Spike (2410006-MS1)				**Source: E403003-02**					Prepared: 03/04/24 Analyzed: 03/04/24
Benzene	5.13	0.0250	5.00	ND	103	54-133			
Ethylbenzene	4.98	0.0250	5.00	ND	99.6	61-133			
Toluene	5.11	0.0250	5.00	ND	102	61-130			
o-Xylene	5.05	0.0250	5.00	ND	101	63-131			
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
Total Xylenes	15.2	0.0250	15.0	ND	102	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.76*		*8.00*		*97.1*	*70-130*			
Matrix Spike Dup (2410006-MSD1)				**Source: E403003-02**					Prepared: 03/04/24 Analyzed: 03/04/24
Benzene	5.05	0.0250	5.00	ND	101	54-133	1.49	20	
Ethylbenzene	4.91	0.0250	5.00	ND	98.1	61-133	1.46	20	
Toluene	5.03	0.0250	5.00	ND	101	61-130	1.55	20	
o-Xylene	4.97	0.0250	5.00	ND	99.5	63-131	1.52	20	
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131	1.57	20	
Total Xylenes	15.0	0.0250	15.0	ND	99.9	63-131	1.55	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.85*		*8.00*		*98.2*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 2:01:51PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410006-BLK1)									Prepared: 03/04/24 Analyzed: 03/04/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.36*		*8.00*		*92.0*	*70-130*			
LCS (2410006-BS2)									Prepared: 03/04/24 Analyzed: 03/04/24
Gasoline Range Organics (C6-C10)	45.6	20.0	50.0		91.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.47*		*8.00*		*93.4*	*70-130*			
Matrix Spike (2410006-MS2)				**Source: E403003-02**					Prepared: 03/04/24 Analyzed: 03/04/24
Gasoline Range Organics (C6-C10)	47.3	20.0	50.0	ND	94.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.58*		*8.00*		*94.7*	*70-130*			
Matrix Spike Dup (2410006-MSD2)				**Source: E403003-02**					Prepared: 03/04/24 Analyzed: 03/04/24
Gasoline Range Organics (C6-C10)	47.5	20.0	50.0	ND	95.1	70-130	0.528	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.50*		*8.00*		*93.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 2:01:51PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410068-BLK1)									Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*54.1*		*50.0*		*108*	*50-200*			
LCS (2410068-BS1)									Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	289	25.0	250		115	38-132			
Surrogate: n-Nonane	*58.6*		*50.0*		*117*	*50-200*			
Matrix Spike (2410068-MS1)				**Source: E403009-05**					Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	287	25.0	250	ND	115	38-132			
Surrogate: n-Nonane	*52.4*		*50.0*		*105*	*50-200*			
Matrix Spike Dup (2410068-MSD1)				**Source: E403009-05**					Prepared: 03/06/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	283	25.0	250	ND	113	38-132	1.30	20	
Surrogate: n-Nonane	*53.8*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 2:01:51PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410056-BLK1)									Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	ND	20.0							
LCS (2410056-BS1)									Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2410056-MS1)				**Source: E403034-01**					Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	16700	400	250	18700	NR	80-120			M4
Matrix Spike Dup (2410056-MSD1)				**Source: E403034-01**					Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	16500	400	250	18700	NR	80-120	1.08	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 14:01

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | **Chain of Custody** | Page __1__ of __1__

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 10:26:55AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403034
Phone:	(539) 573-4018	Date Logged In:	03/04/24 09:03	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno









5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403035
Job Number:	01058-0007
Received:	3/4/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/8/24

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: 3/8/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403035
Date Received: 3/4/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/4/2024 8:45:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:32

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW01 0.25'	E403035-01A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
SW02 0.25'	E403035-02A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
SW03 0.25'	E403035-03A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
SW04 0.25'	E403035-04A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.
SW05 0.25	E403035-05A	Soil	02/29/24	03/04/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:32:31PM

SW01 0.25'

E403035-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Benzene	ND	0.0250	1	03/04/24	03/06/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/06/24	
Toluene	ND	0.0250	1	03/04/24	03/06/24	
o-Xylene	ND	0.0250	1	03/04/24	03/06/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/06/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/06/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.3 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/06/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.9 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/07/24	
Surrogate: n-Nonane		*107 %*	*50-200*	*03/07/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410056
Chloride	ND	100	5	03/05/24	03/05/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:32:31PM

SW02 0.25'

E403035-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Benzene	ND	0.0250	1	03/04/24	03/06/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/06/24	
Toluene	ND	0.0250	1	03/04/24	03/06/24	
o-Xylene	ND	0.0250	1	03/04/24	03/06/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/06/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/06/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.3 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/06/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.4 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/07/24	
Surrogate: n-Nonane		*104 %*	*50-200*	*03/07/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410056
Chloride	ND	100	5	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:32:31PM

SW03 0.25'

E403035-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Benzene	ND	0.0250	1	03/04/24	03/06/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/06/24	
Toluene	ND	0.0250	1	03/04/24	03/06/24	
o-Xylene	ND	0.0250	1	03/04/24	03/06/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/06/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/06/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.3 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/06/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.2 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/07/24	
Surrogate: n-Nonane		*101 %*	*50-200*	*03/07/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410056
Chloride	ND	200	10	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:32:31PM

SW04 0.25'

E403035-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Benzene	ND	0.0250	1	03/04/24	03/06/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/06/24	
Toluene	ND	0.0250	1	03/04/24	03/06/24	
o-Xylene	ND	0.0250	1	03/04/24	03/06/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/06/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/06/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.0 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/06/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.5 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/07/24	
Surrogate: n-Nonane		*102 %*	*50-200*	*03/07/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410056
Chloride	**595**	200	10	03/05/24	03/06/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:32:31PM

SW05 0.25

E403035-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Benzene	ND	0.0250	1	03/04/24	03/06/24	
Ethylbenzene	ND	0.0250	1	03/04/24	03/06/24	
Toluene	ND	0.0250	1	03/04/24	03/06/24	
o-Xylene	ND	0.0250	1	03/04/24	03/06/24	
p,m-Xylene	ND	0.0500	1	03/04/24	03/06/24	
Total Xylenes	ND	0.0250	1	03/04/24	03/06/24	
Surrogate: 4-Bromochlorobenzene-PID		*95.8 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2410006
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/04/24	03/06/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.6 %*	*70-130*	*03/04/24*	*03/06/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2410074
Diesel Range Organics (C10-C28)	ND	25.0	1	03/07/24	03/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/07/24	03/07/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*03/07/24*	*03/07/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2410056
Chloride	**222**	200	10	03/05/24	03/06/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:32:31PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410006-BLK1)									Prepared: 03/04/24 Analyzed: 03/04/24
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	*7.77*		*8.00*		*97.1*	*70-130*			
LCS (2410006-BS1)									Prepared: 03/04/24 Analyzed: 03/04/24
Benzene	5.02	0.0250	5.00		100	70-130			
Ethylbenzene	4.88	0.0250	5.00		97.6	70-130			
Toluene	5.00	0.0250	5.00		100	70-130			
o-Xylene	4.94	0.0250	5.00		98.9	70-130			
p,m-Xylene	9.97	0.0500	10.0		99.7	70-130			
Total Xylenes	14.9	0.0250	15.0		99.4	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.78*		*8.00*		*97.2*	*70-130*			
Matrix Spike (2410006-MS1)				**Source: E403003-02**					Prepared: 03/04/24 Analyzed: 03/04/24
Benzene	5.13	0.0250	5.00	ND	103	54-133			
Ethylbenzene	4.98	0.0250	5.00	ND	99.6	61-133			
Toluene	5.11	0.0250	5.00	ND	102	61-130			
o-Xylene	5.05	0.0250	5.00	ND	101	63-131			
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
Total Xylenes	15.2	0.0250	15.0	ND	102	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.76*		*8.00*		*97.1*	*70-130*			
Matrix Spike Dup (2410006-MSD1)				**Source: E403003-02**					Prepared: 03/04/24 Analyzed: 03/04/24
Benzene	5.05	0.0250	5.00	ND	101	54-133	1.49	20	
Ethylbenzene	4.91	0.0250	5.00	ND	98.1	61-133	1.46	20	
Toluene	5.03	0.0250	5.00	ND	101	61-130	1.55	20	
o-Xylene	4.97	0.0250	5.00	ND	99.5	63-131	1.52	20	
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131	1.57	20	
Total Xylenes	15.0	0.0250	15.0	ND	99.9	63-131	1.55	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.85*		*8.00*		*98.2*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:32:31PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410006-BLK1)									Prepared: 03/04/24 Analyzed: 03/04/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.36*		*8.00*		*92.0*	*70-130*			
LCS (2410006-BS2)									Prepared: 03/04/24 Analyzed: 03/04/24
Gasoline Range Organics (C6-C10)	45.6	20.0	50.0		91.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.47*		*8.00*		*93.4*	*70-130*			
Matrix Spike (2410006-MS2)				**Source: E403003-02**					Prepared: 03/04/24 Analyzed: 03/04/24
Gasoline Range Organics (C6-C10)	47.3	20.0	50.0	ND	94.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.58*		*8.00*		*94.7*	*70-130*			
Matrix Spike Dup (2410006-MSD2)				**Source: E403003-02**					Prepared: 03/04/24 Analyzed: 03/04/24
Gasoline Range Organics (C6-C10)	47.5	20.0	50.0	ND	95.1	70-130	0.528	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.50*		*8.00*		*93.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:32:31PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410074-BLK1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*50.8*		*50.0*		*102*	*50-200*			
LCS (2410074-BS1)									Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	270	25.0	250		108	38-132			
Surrogate: n-Nonane	*50.5*		*50.0*		*101*	*50-200*			
Matrix Spike (2410074-MS1)				**Source: E403035-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
Surrogate: n-Nonane	*47.7*		*50.0*		*95.3*	*50-200*			
Matrix Spike Dup (2410074-MSD1)				**Source: E403035-05**					Prepared: 03/07/24 Analyzed: 03/07/24
Diesel Range Organics (C10-C28)	279	25.0	250	ND	111	38-132	0.439	20	
Surrogate: n-Nonane	*51.2*		*50.0*		*102*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/8/2024 1:32:31PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2410056-BLK1)									Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	ND	20.0							
LCS (2410056-BS1)									Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2410056-MS1)				**Source: E403034-01**					Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	16700	400	250	18700	NR	80-120			M4
Matrix Spike Dup (2410056-MSD1)				**Source: E403034-01**					Prepared: 03/05/24 Analyzed: 03/05/24
Chloride	16500	400	250	18700	NR	80-120	1.08	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/08/24 13:32

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | **Chain of Custody** | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 3/4/2024 10:29:54AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/04/24 08:45	Work Order ID:	E403035
Phone:	(539) 573-4018	Date Logged In:	03/04/24 09:03	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/08/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	No	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno









5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403214
Job Number:	01058-0007
Received:	3/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/27/24

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: 3/27/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403214
Date Received: 3/22/2024 9:00:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/22/2024 9:00:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:25

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 4'	E403214-01A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:25:58PM

BH01 4'

E403214-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.1 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*97.6 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*90.8 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	ND	20.0	1	03/25/24	03/25/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:25:58PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
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	*7.16*		*8.00*		*89.6*	*70-130*			
LCS (2413015-BS1)									Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.95	0.0250	5.00		98.9	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.0	70-130			
Toluene	4.91	0.0250	5.00		98.3	70-130			
o-Xylene	4.83	0.0250	5.00		96.6	70-130			
p,m-Xylene	9.88	0.0500	10.0		98.8	70-130			
Total Xylenes	14.7	0.0250	15.0		98.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike (2413015-MS1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.94	0.0250	5.00	ND	98.8	61-133			
Toluene	4.95	0.0250	5.00	ND	99.0	61-130			
o-Xylene	4.88	0.0250	5.00	ND	97.6	63-131			
p,m-Xylene	9.95	0.0500	10.0	ND	99.5	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.39*		*8.00*		*92.4*	*70-130*			
Matrix Spike Dup (2413015-MSD1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	5.04	0.0250	5.00	ND	101	54-133	1.27	20	
Ethylbenzene	5.00	0.0250	5.00	ND	100	61-133	1.26	20	
Toluene	5.01	0.0250	5.00	ND	100	61-130	1.26	20	
o-Xylene	4.93	0.0250	5.00	ND	98.7	63-131	1.06	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.20	20	
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131	1.16	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.35*		*8.00*		*91.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:25:58PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.91*		*8.00*		*98.9*	*70-130*			
LCS (2413015-BS2)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	52.0	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.86*		*8.00*		*98.2*	*70-130*			
Matrix Spike (2413015-MS2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	51.8	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.84*		*8.00*		*98.0*	*70-130*			
Matrix Spike Dup (2413015-MSD2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	50.0	20.0	50.0	ND	100	70-130	3.61	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.83*		*8.00*		*97.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:25:58PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413030-BLK1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*45.8*		*50.0*		*91.6*	*50-200*			
LCS (2413030-BS1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	298	25.0	250		119	38-132			
Surrogate: n-Nonane	*48.9*		*50.0*		*97.8*	*50-200*			
Matrix Spike (2413030-MS1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	38-132			
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			
Matrix Spike Dup (2413030-MSD1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	282	25.0	250	ND	113	38-132	2.91	20	
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:25:58PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413014-BLK1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	ND	20.0							
LCS (2413014-BS1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2413014-MS1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1370	200	250	1370	1.46	80-120			M4
Matrix Spike Dup (2413014-MSD1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1210	200	250	1370	NR	80-120	12.7	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:25

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page __1__ of __1__

| | | |

Envirotech Analytical Laboratory

Printed: 3/26/2024 12:36:18PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/22/24 09:00	Work Order ID:	E403214
Phone:	(539) 573-4018	Date Logged In:	03/22/24 13:23	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/28/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403215
Job Number:	01058-0007
Received:	3/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/27/24

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: 3/27/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403215
Date Received: 3/22/2024 9:00:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/22/2024 9:00:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:23

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH02 0.5'	E403215-01A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
BH02 4'	E403215-02A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:23:58PM

BH02 0.5'

E403215-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.0 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*98.5 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*96.1 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	ND	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:23:58PM

BH02 4'

E403215-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.6 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.9 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*93.5 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	ND	20.0	1	03/25/24	03/25/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:23:58PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
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	*7.16*		*8.00*		*89.6*	*70-130*			
LCS (2413015-BS1)									Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.95	0.0250	5.00		98.9	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.0	70-130			
Toluene	4.91	0.0250	5.00		98.3	70-130			
o-Xylene	4.83	0.0250	5.00		96.6	70-130			
p,m-Xylene	9.88	0.0500	10.0		98.8	70-130			
Total Xylenes	14.7	0.0250	15.0		98.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike (2413015-MS1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.94	0.0250	5.00	ND	98.8	61-133			
Toluene	4.95	0.0250	5.00	ND	99.0	61-130			
o-Xylene	4.88	0.0250	5.00	ND	97.6	63-131			
p,m-Xylene	9.95	0.0500	10.0	ND	99.5	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.39*		*8.00*		*92.4*	*70-130*			
Matrix Spike Dup (2413015-MSD1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	5.04	0.0250	5.00	ND	101	54-133	1.27	20	
Ethylbenzene	5.00	0.0250	5.00	ND	100	61-133	1.26	20	
Toluene	5.01	0.0250	5.00	ND	100	61-130	1.26	20	
o-Xylene	4.93	0.0250	5.00	ND	98.7	63-131	1.06	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.20	20	
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131	1.16	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.35*		*8.00*		*91.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:23:58PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.91*		*8.00*		*98.9*	*70-130*			
LCS (2413015-BS2)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	52.0	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.86*		*8.00*		*98.2*	*70-130*			
Matrix Spike (2413015-MS2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	51.8	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.84*		*8.00*		*98.0*	*70-130*			
Matrix Spike Dup (2413015-MSD2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	50.0	20.0	50.0	ND	100	70-130	3.61	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.83*		*8.00*		*97.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:23:58PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413030-BLK1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*45.8*		*50.0*		*91.6*	*50-200*			
LCS (2413030-BS1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	298	25.0	250		119	38-132			
Surrogate: n-Nonane	*48.9*		*50.0*		*97.8*	*50-200*			
Matrix Spike (2413030-MS1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	38-132			
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			
Matrix Spike Dup (2413030-MSD1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	282	25.0	250	ND	113	38-132	2.91	20	
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:23:58PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413014-BLK1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	ND	20.0							
LCS (2413014-BS1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2413014-MS1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1370	200	250	1370	1.46	80-120			M4
Matrix Spike Dup (2413014-MSD1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1210	200	250	1370	NR	80-120	12.7	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:23

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 3/26/2024 12:48:34PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/22/24 09:00	Work Order ID:	E403215
Phone:	(539) 573-4018	Date Logged In:	03/22/24 13:26	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/28/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	No	
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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403216
Job Number:	01058-0007
Received:	3/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/27/24

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: 3/27/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403216
Date Received: 3/22/2024 9:00:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/22/2024 9:00:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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
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Cell: 775-287-1762
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:22

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH03 4'	E403216-01A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
BH04 4'	E403216-02A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
BH05 4'	E403216-03A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:22:53PM

BH03 4'

E403216-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.8 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.5 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*95.8 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	ND	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:22:53PM

BH04 4'

E403216-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.9 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.7 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*94.5 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**21.7**	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:22:53PM

BH05 4'

E403216-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.1 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.9 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*94.4 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	ND	20.0	1	03/25/24	03/25/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:22:53PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
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	*7.16*		*8.00*		*89.6*	*70-130*			
LCS (2413015-BS1)									Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.95	0.0250	5.00		98.9	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.0	70-130			
Toluene	4.91	0.0250	5.00		98.3	70-130			
o-Xylene	4.83	0.0250	5.00		96.6	70-130			
p,m-Xylene	9.88	0.0500	10.0		98.8	70-130			
Total Xylenes	14.7	0.0250	15.0		98.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike (2413015-MS1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.94	0.0250	5.00	ND	98.8	61-133			
Toluene	4.95	0.0250	5.00	ND	99.0	61-130			
o-Xylene	4.88	0.0250	5.00	ND	97.6	63-131			
p,m-Xylene	9.95	0.0500	10.0	ND	99.5	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.39*		*8.00*		*92.4*	*70-130*			
Matrix Spike Dup (2413015-MSD1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	5.04	0.0250	5.00	ND	101	54-133	1.27	20	
Ethylbenzene	5.00	0.0250	5.00	ND	100	61-133	1.26	20	
Toluene	5.01	0.0250	5.00	ND	100	61-130	1.26	20	
o-Xylene	4.93	0.0250	5.00	ND	98.7	63-131	1.06	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.20	20	
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131	1.16	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.35*		*8.00*		*91.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:22:53PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.91*		*8.00*		*98.9*	*70-130*			
LCS (2413015-BS2)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	52.0	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.86*		*8.00*		*98.2*	*70-130*			
Matrix Spike (2413015-MS2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	51.8	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.84*		*8.00*		*98.0*	*70-130*			
Matrix Spike Dup (2413015-MSD2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	50.0	20.0	50.0	ND	100	70-130	3.61	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.83*		*8.00*		*97.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:22:53PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413030-BLK1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*45.8*		*50.0*		*91.6*	*50-200*			
LCS (2413030-BS1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	298	25.0	250		119	38-132			
Surrogate: n-Nonane	*48.9*		*50.0*		*97.8*	*50-200*			
Matrix Spike (2413030-MS1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	38-132			
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			
Matrix Spike Dup (2413030-MSD1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	282	25.0	250	ND	113	38-132	2.91	20	
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:22:53PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413014-BLK1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	ND	20.0							
LCS (2413014-BS1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2413014-MS1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1370	200	250	1370	1.46	80-120			M4
Matrix Spike Dup (2413014-MSD1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1210	200	250	1370	NR	80-120	12.7	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:22

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

Client: WPX Energy Permian, LLC	Bill To	Lab Use Only	TAT / EPA Program
Project: ROSS DRAW UNIT #042	Attention: Jim Raley	Lab WO# E403216	Job Number 01058-00074
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.	1D 2D 3D Standard: 5 day TAT	CWA / SDWA / RCRA
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220	Analysis and Method	State: NM CO UT AZ TX
City, State, Zip: Odessa, TX, 79765	Phone: 575-885-7502		
Phone: 832-541-7719	Email: jim.raley@dvn.com		
Email: Devon-team@etechenv.com	WO: 21204782		
Collected by: Edyte Konan	Incident ID: nAB1605654667		

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	Remarks
14:00	03.20.24	S	1	BH03	1	4'						X		
14:10	03.20.24	S	1	BH04	2	4'						X		
14:20	03.20.24	S	1	BH05	3	4'						X		

3/21/2024

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of the sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: EK

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.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3/21/24	10:00	Michelle Gonzales	3-21-24	1000
Michelle Gonzales	3-21-24	1600		3-22-24	900
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only
Received on ice: (Y) N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

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

envirotech

Envirotech Analytical Laboratory

Printed: 3/26/2024 12:37:51PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/22/24 09:00	Work Order ID:	E403216
Phone:	(539) 573-4018	Date Logged In:	03/22/24 13:26	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/28/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno









5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403217
Job Number:	01058-0007
Received:	3/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/27/24

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: 3/27/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403217
Date Received: 3/22/2024 9:00:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/22/2024 9:00:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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
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Cell: 775-287-1762
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:20

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH06 0.5'	E403217-01A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
BH06 4'	E403217-02A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:20:47PM

BH06 0.5'

E403217-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.1 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.8 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*92.0 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	ND	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:20:47PM

BH06 4'

E403217-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*95.3 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.9 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*94.7 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	ND	20.0	1	03/25/24	03/25/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:20:47PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
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	*7.16*		*8.00*		*89.6*	*70-130*			
LCS (2413015-BS1)									Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.95	0.0250	5.00		98.9	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.0	70-130			
Toluene	4.91	0.0250	5.00		98.3	70-130			
o-Xylene	4.83	0.0250	5.00		96.6	70-130			
p,m-Xylene	9.88	0.0500	10.0		98.8	70-130			
Total Xylenes	14.7	0.0250	15.0		98.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike (2413015-MS1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.94	0.0250	5.00	ND	98.8	61-133			
Toluene	4.95	0.0250	5.00	ND	99.0	61-130			
o-Xylene	4.88	0.0250	5.00	ND	97.6	63-131			
p,m-Xylene	9.95	0.0500	10.0	ND	99.5	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.39*		*8.00*		*92.4*	*70-130*			
Matrix Spike Dup (2413015-MSD1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	5.04	0.0250	5.00	ND	101	54-133	1.27	20	
Ethylbenzene	5.00	0.0250	5.00	ND	100	61-133	1.26	20	
Toluene	5.01	0.0250	5.00	ND	100	61-130	1.26	20	
o-Xylene	4.93	0.0250	5.00	ND	98.7	63-131	1.06	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.20	20	
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131	1.16	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.35*		*8.00*		*91.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:20:47PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.91*		*8.00*		*98.9*	*70-130*			
LCS (2413015-BS2)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	52.0	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.86*		*8.00*		*98.2*	*70-130*			
Matrix Spike (2413015-MS2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	51.8	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.84*		*8.00*		*98.0*	*70-130*			
Matrix Spike Dup (2413015-MSD2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	50.0	20.0	50.0	ND	100	70-130	3.61	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.83*		*8.00*		*97.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:20:47PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413030-BLK1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*45.8*		*50.0*		*91.6*	*50-200*			
LCS (2413030-BS1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	298	25.0	250		119	38-132			
Surrogate: n-Nonane	*48.9*		*50.0*		*97.8*	*50-200*			
Matrix Spike (2413030-MS1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	38-132			
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			
Matrix Spike Dup (2413030-MSD1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	282	25.0	250	ND	113	38-132	2.91	20	
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:20:47PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413014-BLK1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	ND	20.0							
LCS (2413014-BS1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2413014-MS1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1370	200	250	1370	1.46	80-120			M4
Matrix Spike Dup (2413014-MSD1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1210	200	250	1370	NR	80-120	12.7	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:20

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 3/26/2024 12:38:30PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/22/24 09:00	Work Order ID:	E403217
Phone:	(539) 573-4018	Date Logged In:	03/22/24 13:27	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/28/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403219
Job Number:	01058-0007
Received:	3/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/27/24

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: 3/27/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403219
Date Received: 3/22/2024 9:00:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/22/2024 9:00:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:16

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
PH01 0.5'	E403219-01A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH01 4'	E403219-02A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH02 0.5'	E403219-03A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH02 4'	E403219-04A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH03 0.5'	E403219-05A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH03 4'	E403219-06A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH04 0.5'	E403219-07A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH04 4'	E403219-08A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH05 0.5'	E403219-09A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH05 4'	E403219-10A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

PH01 0.5'

E403219-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.5 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.7 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*95.2 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**1370**	200	10	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

PH01 4'

E403219-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*95.4 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.4 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*98.7 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**397**	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

PH02 0.5'

E403219-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*95.2 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.1 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*99.4 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**38.7**	20.0	1	03/25/24	03/26/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

PH02 4'

E403219-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.3 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.5 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*92.9 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**122**	20.0	1	03/25/24	03/26/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

PH03 0.5'

E403219-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*95.5 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.5 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*96.1 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**4350**	40.0	2	03/25/24	03/26/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

PH03 4'

E403219-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.3 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.9 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/27/24	
Surrogate: n-Nonane		*94.5 %*	*50-200*	*03/26/24*	*03/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**2670**	40.0	2	03/25/24	03/26/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

PH04 0.5'

E403219-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.4 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.4 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/27/24	
Surrogate: n-Nonane		*94.5 %*	*50-200*	*03/26/24*	*03/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**2840**	40.0	2	03/25/24	03/26/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

PH04 4'

E403219-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.9 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.6 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/27/24	
Surrogate: n-Nonane		*89.5 %*	*50-200*	*03/26/24*	*03/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**54.4**	20.0	1	03/25/24	03/26/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

PH05 0.5'

E403219-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*95.2 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.3 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/27/24	
Surrogate: n-Nonane		*89.2 %*	*50-200*	*03/26/24*	*03/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**4490**	40.0	2	03/25/24	03/26/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

PH05 4'

E403219-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.2 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2413015
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.4 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413030
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/27/24	
Surrogate: n-Nonane		*94.6 %*	*50-200*	*03/26/24*	*03/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413014
Chloride	**1500**	40.0	2	03/25/24	03/26/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
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	*7.16*		*8.00*		*89.6*	*70-130*			
LCS (2413015-BS1)									Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.95	0.0250	5.00		98.9	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.0	70-130			
Toluene	4.91	0.0250	5.00		98.3	70-130			
o-Xylene	4.83	0.0250	5.00		96.6	70-130			
p,m-Xylene	9.88	0.0500	10.0		98.8	70-130			
Total Xylenes	14.7	0.0250	15.0		98.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike (2413015-MS1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.94	0.0250	5.00	ND	98.8	61-133			
Toluene	4.95	0.0250	5.00	ND	99.0	61-130			
o-Xylene	4.88	0.0250	5.00	ND	97.6	63-131			
p,m-Xylene	9.95	0.0500	10.0	ND	99.5	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.39*		*8.00*		*92.4*	*70-130*			
Matrix Spike Dup (2413015-MSD1)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	5.04	0.0250	5.00	ND	101	54-133	1.27	20	
Ethylbenzene	5.00	0.0250	5.00	ND	100	61-133	1.26	20	
Toluene	5.01	0.0250	5.00	ND	100	61-130	1.26	20	
o-Xylene	4.93	0.0250	5.00	ND	98.7	63-131	1.06	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.20	20	
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131	1.16	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.35*		*8.00*		*91.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413015-BLK1)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.91*		*8.00*		*98.9*	*70-130*			
LCS (2413015-BS2)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	52.0	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.86*		*8.00*		*98.2*	*70-130*			
Matrix Spike (2413015-MS2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	51.8	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.84*		*8.00*		*98.0*	*70-130*			
Matrix Spike Dup (2413015-MSD2)				**Source: E403214-01**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	50.0	20.0	50.0	ND	100	70-130	3.61	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.83*		*8.00*		*97.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413030-BLK1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*45.8*		*50.0*		*91.6*	*50-200*			
LCS (2413030-BS1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	298	25.0	250		119	38-132			
Surrogate: n-Nonane	*48.9*		*50.0*		*97.8*	*50-200*			
Matrix Spike (2413030-MS1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	38-132			
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			
Matrix Spike Dup (2413030-MSD1)				**Source: E403216-01**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	282	25.0	250	ND	113	38-132	2.91	20	
Surrogate: n-Nonane	*45.6*		*50.0*		*91.3*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 3:16:27PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413014-BLK1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	ND	20.0							
LCS (2413014-BS1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2413014-MS1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1370	200	250	1370	1.46	80-120			M4
Matrix Spike Dup (2413014-MSD1)				**Source: E403219-01**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	1210	200	250	1370	NR	80-120	12.7	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 15:16

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page __1__ of __2__

| | | |

Envirotech Analytical Laboratory

Printed: 3/26/2024 12:39:46PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/22/24 09:00	Work Order ID:	E403219
Phone:	(539) 573-4018	Date Logged In:	03/22/24 13:27	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/28/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Gilbert Moreno



5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Ross Draw Unit #042
Work Order:	E403220
Job Number:	01058-0007
Received:	3/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/27/24

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: 3/27/24

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E403220
Date Received: 3/22/2024 9:00:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/22/2024 9:00:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 14:09

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
PH06 0.5'	E403220-01A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH06 4'	E403220-02A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH07 0.5'	E403220-03A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH07 4'	E403220-04A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH08 0.5'	E403220-05A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH08 4'	E403220-06A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH09 0.5'	E403220-07A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH09 4'	E403220-08A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH10 0.5'	E403220-09A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.
PH10 4'	E403220-10A	Soil	03/20/24	03/22/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

PH06 0.5'

E403220-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.1 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.7 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413034
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*88.6 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413020
Chloride	**3280**	40.0	2	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

PH06 4'

E403220-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.4 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.7 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413034
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*89.1 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413020
Chloride	**4670**	40.0	2	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

PH07 0.5'

E403220-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.1 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*89.9 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413034
Diesel Range Organics (C10-C28)	**164**	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	**215**	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*95.3 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413020
Chloride	ND	100	5	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

PH07 4'

E403220-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.7 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.4 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413034
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*93.0 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413020
Chloride	**329**	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

PH08 0.5'

E403220-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.3 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.7 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413034
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*90.8 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413020
Chloride	ND	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

PH08 4'

E403220-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.6 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.5 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413034
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/26/24	
Surrogate: n-Nonane		*94.6 %*	*50-200*	*03/26/24*	*03/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413020
Chloride	ND	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

PH09 0.5'

E403220-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.8 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.2 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413034
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/27/24	
Surrogate: n-Nonane		*93.8 %*	*50-200*	*03/26/24*	*03/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413020
Chloride	**36.8**	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

PH09 4'

E403220-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.9 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.0 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413034
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/27/24	
Surrogate: n-Nonane		*93.8 %*	*50-200*	*03/26/24*	*03/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413020
Chloride	**38.5**	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

PH10 0.5'

E403220-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.7 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.4 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413034
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/27/24	
Surrogate: n-Nonane		*89.0 %*	*50-200*	*03/26/24*	*03/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413020
Chloride	**39.4**	20.0	1	03/25/24	03/25/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

PH10 4'

E403220-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Benzene	ND	0.0250	1	03/25/24	03/26/24	
Ethylbenzene	ND	0.0250	1	03/25/24	03/26/24	
Toluene	ND	0.0250	1	03/25/24	03/26/24	
o-Xylene	ND	0.0250	1	03/25/24	03/26/24	
p,m-Xylene	ND	0.0500	1	03/25/24	03/26/24	
Total Xylenes	ND	0.0250	1	03/25/24	03/26/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.1 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2413010
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/25/24	03/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.4 %*	*70-130*	*03/25/24*	*03/26/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2413034
Diesel Range Organics (C10-C28)	ND	25.0	1	03/26/24	03/27/24	
Oil Range Organics (C28-C36)	ND	50.0	1	03/26/24	03/27/24	
Surrogate: n-Nonane		*88.5 %*	*50-200*	*03/26/24*	*03/27/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2413020
Chloride	ND	20.0	1	03/25/24	03/25/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413010-BLK1)									Prepared: 03/25/24 Analyzed: 03/25/24
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	*7.53*		*8.00*		*94.2*	*70-130*			
LCS (2413010-BS1)									Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	4.92	0.0250	5.00		98.5	70-130			
Ethylbenzene	4.76	0.0250	5.00		95.1	70-130			
Toluene	4.90	0.0250	5.00		98.1	70-130			
o-Xylene	4.83	0.0250	5.00		96.6	70-130			
p,m-Xylene	9.71	0.0500	10.0		97.1	70-130			
Total Xylenes	14.5	0.0250	15.0		96.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.59*		*8.00*		*94.8*	*70-130*			
Matrix Spike (2413010-MS1)				**Source: E403220-02**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	5.02	0.0250	5.00	ND	100	54-133			
Ethylbenzene	4.85	0.0250	5.00	ND	97.0	61-133			
Toluene	5.00	0.0250	5.00	ND	99.9	61-130			
o-Xylene	4.92	0.0250	5.00	ND	98.5	63-131			
p,m-Xylene	9.91	0.0500	10.0	ND	99.1	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.57*		*8.00*		*94.6*	*70-130*			
Matrix Spike Dup (2413010-MSD1)				**Source: E403220-02**					Prepared: 03/25/24 Analyzed: 03/26/24
Benzene	5.11	0.0250	5.00	ND	102	54-133	1.71	20	
Ethylbenzene	4.94	0.0250	5.00	ND	98.9	61-133	1.89	20	
Toluene	5.09	0.0250	5.00	ND	102	61-130	1.77	20	
o-Xylene	5.01	0.0250	5.00	ND	100	63-131	1.79	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.93	20	
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131	1.88	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.52*		*8.00*		*94.0*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413010-BLK1)									Prepared: 03/25/24 Analyzed: 03/25/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.23*		*8.00*		*90.4*	*70-130*			
LCS (2413010-BS2)									Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	43.7	20.0	50.0		87.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.41*		*8.00*		*92.7*	*70-130*			
Matrix Spike (2413010-MS2)				**Source: E403220-02**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	43.0	20.0	50.0	ND	86.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.34*		*8.00*		*91.8*	*70-130*			
Matrix Spike Dup (2413010-MSD2)				**Source: E403220-02**					Prepared: 03/25/24 Analyzed: 03/26/24
Gasoline Range Organics (C6-C10)	41.6	20.0	50.0	ND	83.2	70-130	3.36	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.39*		*8.00*		*92.3*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413034-BLK1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*48.0*		*50.0*		*96.0*	*50-200*			
LCS (2413034-BS1)									Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	321	25.0	250		128	38-132			
Surrogate: n-Nonane	*50.3*		*50.0*		*101*	*50-200*			
Matrix Spike (2413034-MS1)				**Source: E403220-04**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	327	25.0	250	ND	131	38-132			
Surrogate: n-Nonane	*50.9*		*50.0*		*102*	*50-200*			
Matrix Spike Dup (2413034-MSD1)				**Source: E403220-04**					Prepared: 03/26/24 Analyzed: 03/26/24
Diesel Range Organics (C10-C28)	323	25.0	250	ND	129	38-132	1.15	20	
Surrogate: n-Nonane	*51.4*		*50.0*		*103*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	3/27/2024 2:09:21PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2413020-BLK1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	ND	20.0							
LCS (2413020-BS1)									Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	249	20.0	250		99.4	90-110			
Matrix Spike (2413020-MS1)				**Source: E403220-04**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	651	20.0	250	329	129	80-120			M1
Matrix Spike Dup (2413020-MSD1)				**Source: E403220-04**					Prepared: 03/25/24 Analyzed: 03/25/24
Chloride	588	20.0	250	329	104	80-120	10.0	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:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	03/27/24 14:09

M1	Matrix spike recovery was above acceptance limits. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
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: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page __2__ of __2__

| | | |

Envirotech Analytical Laboratory

Printed: 3/26/2024 12:40:13PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	03/22/24 09:00	Work Order ID:	E403220
Phone:	(539) 573-4018	Date Logged In:	03/22/24 13:28	Logged In By:	Alexa Michaels
Email:	devon-team@etechenv.com	Due Date:	03/28/24 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

APPENDIX H

Correspondence & Notifications

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 317691

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 317691
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAB1605654667**
Incident Name	**NAB1605654667 ROSS DRAW UNIT #042 @ 30-015-42945**
Incident Type	**Produced Water Release**
Incident Status	**Initial C-141 Approved**
Incident Well	**[30-015-42945] ROSS DRAW UNIT #042**

Location of Release Source	
Site Name	**ROSS DRAW UNIT #042**
Date Release Discovered	**02/20/2016**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	16,930
What is the estimated number of samples that will be gathered	43
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/29/2024
Time sampling will commence	08:30 AM
Please provide any information necessary for observers to contact samplers	Please contact Gilbert Moreno at 432-305-6414 with any questions
Please provide any information necessary for navigation to sampling site	From Stateline rd/Whitehorn rd. go east on Stateline rd for approximately 2.6 mi. head north on Lease rd approximately 0.78 mi. head east approximately 0.30 mi. to reach the RDU42 well pad.

District I
1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
Energy, Minerals and Natural Resources
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1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 317691
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

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.	2/26/2024

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Energy, Minerals and Natural Resources
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1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 323582

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 323582
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAB1605654667**
Incident Name	**NAB1605654667 ROSS DRAW UNIT #042 @ 30-015-42945**
Incident Type	**Produced Water Release**
Incident Status	**Initial C-141 Approved**
Incident Well	**[30-015-42945] ROSS DRAW UNIT #042**

Location of Release Source	
Site Name	**ROSS DRAW UNIT #042**
Date Release Discovered	**02/20/2016**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	23,622
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	03/20/2024
Time sampling will commence	08:30 AM
Please provide any information necessary for observers to contact samplers	Please contact Gilbert Moreno at 432-305-6414 with any questions
Please provide any information necessary for navigation to sampling site	From Stateline rd/Whitehorn rd. go east on Stateline rd for approximately 2.6 mi. head north on Lease rd approximately 0.78 mi. head east approximately 0.30 mi. to reach the RDU42 well pad.

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CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 323582
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

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.	3/15/2024

Erick Herrera

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Wednesday, August 2, 2023 5:03 PM
To: Erick Herrera
Cc: Bratcher, Michael, EMNRD; Maxwell, Ashley, EMNRD
Subject: RE: [EXTERNAL] WPX Site Sampling Activity Updates (8/7 - 8-11)

Hi Erick,

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

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Administrative Permitting Program
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Erick Herrera <erick@etechenv.com>
Sent: Wednesday, August 2, 2023 3:18 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; blm_nm_cfo_spill@blm.gov
Cc: Raley, Jim <jim.raley@dvn.com>; Devon-Team <Devon-Team@etechenv.com>
Subject: [EXTERNAL] WPX Site Sampling Activity Updates (8/7 - 8-11)

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

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between August 7th through August 11th, 2023:

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 9-4
Incident Number: nAB1803254347
API: 30-015-40180

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 28 #009H
Incident Number: nAB1632648516
API: 30-015-43294

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 17-14
Incident Number: nAB1504834000
API: 30-015-39845

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 15-11
Incident Number: nAB1800557573
API: 30- 015-37093

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDU 61
Incident Number: nAB1631949226
API: 30-015041980

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDU 42
Incident Number: nAB1605654667
API: 30-015-42945

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDU 12
Incident Number: nAB1702749185
API: 30-015-24793

Thank you,

Erick Herrera
Staff Geologist

eTECH Environmental & Safety Solutions, Inc
Work: (432) 305-6416
Cell: (281) 777-4152

APPENDIX I

Previously Submitted Reports

Environmental & Safety Solutions, Inc.

CLOSURE VARIANCE REPORT

Ross Draw Unit 42

Eddy County, New Mexico

Incident Number nAB1605654667

Prepared For:

WPX Energy Permian, LLC

5315 Buena Vista Dr.

Carlsbad, NM 88220

Carlsbad ● Midland ● San Antonio ● Lubbock ● Hobbs ● Lafayette

SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Closure Variance Request (CVR) to document a series of Closure Report (CR) denials issued for an inadvertent release of crude oil and produced water at the Ross Draw Unit 42 (Site). Based on recent correspondence with the New Mexico Oil Conservation Division (NMOCD) and their implementation of new requirements against the current Spill Rule, Site review, and laboratory analytical results from recent soil sampling events, WPX is requesting No Further Action (NFA) at the Site until Plugging and Abandonment (P&A) activities.

SITE LOCATION AND RELEASE BACKGROUND

The Site is located in Unit K, Section 22, Township 26 South, Range 30 East, in Eddy County, New Mexico (32.02600°, -103.87139°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management. (**Figure 1** in **Appendix A**).

On February 20, 2016, a loose polish rod liner caused approximately 13 barrels (bbls) of a crude oil and produced water mixture to be released onto the well pad surface. Vacuum trucks were immediately dispatched and recovered approximately 11 bbls of fluid. All fluids were reported to be contained to the well pad. WPX reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on February 22, 2016, and was subsequently assigned Incident Number nAB1605654667. **Figure 2** in **Appendix A** depicts the observed subject release footprint, hereafter referred to as the Area of Concern (AOC).

All previous closure reports were denied due to the following reason(s):

March 29, 2023

- *Depth to groundwater is not adequately identified. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. If evidence of depth to ground water within a ½ mile radius of the site cannot be provided, impacted soils will need to meet Table 1 Closure Criteria for ground water at a depth of 50 feet or less.*

June 21, 2023

- *Closure denied due to incomplete closure report. The following are missing: scaled site map/sampling diagram, description of remediation activities, photographs of the remediated site, and final sampling lab analyses.*

July 28, 2023

- *Closure denied. Additional horizontal delineation required.*

October 3, 2023

- *Closure denied. All areas not reasonably needed for production or subsequent drilling operations must be 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. Remediation on an active site can be deferred in areas immediately under or around production equipment such as production tanks, wellheads, and pipelines where remediation could cause a major facility deconstruction so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. The deferral request must specify which sample points are being requested for deferral including an explanation why the contaminants can't be removed. Submit a report via the OCD permitting portal by December 29, 2022.*

Etech met with NMOCD on October 25, 2023, to discuss clarification on the most recent denial response, and it was determined that NMOCD was now requiring operators to either remediate future reclamation areas on active well pads or submit a variance until the well pad is undergoes plugging and abandonment (P&A). As a result, this report has been modified to defer future areas of restoration impacted by the release, which does not currently contain soil concentrations above the applicable Closure Criteria for the well pad.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

Etech characterized 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.

The nearest permitted water well used in the original CR with depth to water data was United States Geological Survey (USGS) well 320125103514701, located approximately 0.5 miles southeast of the Site. USGS well 320125103514701 has a reported depth of water 117 feet below ground surface (bgs) from 1987. Due to the age of the groundwater measurement (greater than 25 years old), NMOCD determined the data to be insufficient to assist with the regional groundwater depth estimate at the Site.

Since the submittal of the CR, Talon LPE drilled a soil boring (MW-1) on December 8, 2020, located approximately 0.3 miles north of the Site on the Ross Draw Unit #38 well pad. Using a truck mounted drill rig equipped with hollow stem auger, the soil boring was advanced to a total depth of 105 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. Well records for referenced wells are provided in **Appendix B**. The MW-1 soil boring location and regional groundwater well locations are shown in **Figure 1A** in **Appendix A**.

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

Based on the results from the desktop review and further supported 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
Gasoline Range Organics (GRO) + Diesel Range Organics (DRO)	EPA 8015 M/D	1,000 mg/kg

Benzene	EPA 8021B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B	50 mg/kg

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

CLOSURE VARIANCE REQUEST

The conditions issued in the denial responses for this release have been addressed, including the most recent request for supplemental soil sampling activities to define the horizontal periphery of the release. Based on the updated Site Characterization from recent depth to groundwater confirmation and laboratory analytical results from recent and previous soil sampling events, all concentrations of the COCs for delineation soil samples were below the applicable Closure Criteria for an active well pad.

Due to the active status of the well pad where the inadvertent release occurred, the top 4 feet of the AOC is not ready to undergo complete reclamation in which the primary purpose is to reestablish vegetation. Since depth to groundwater at the Site is estimated to be greater than 100 feet bgs and there are no sensitive receptors within the established buffers in NMAC 19.15.29.12, WPX believes leaving soil in place with chloride concentrations exceeding the reclamation standard but below the Site Closure Criteria meets the requirements set forth in NMAC 19.15.29.13 regulations and is equally protective of human health, the environment, and groundwater. WPX will reassess the Site during P&A activities and address those soil concentrations above the reclamation requirements of 600 mg/kg chloride and 100 mg/kg TPH. WPX estimates approximately 2,538 cubic yards of soil within the top 4 feet of the AOC to be removed during P&A. The final remediation will be confirmed via excavation confirmation sampling and is subject to change. The proposed future restoration area is depicted on **Figure 3** in **Appendix A**. As such, NFA appears warranted at this time and the CVR associated with Incident Number nAB1605654667 should be respectfully considered for a variance by the NMOCD until P&A activities.

If you have any questions or comments, please do not hesitate to contact Joseph Hernandez at (281) 702-2329 or joseph@etechenv.com or Erick Herrera (281) 777-4152 or erick@etechenv.com. **Appendix C** provides correspondence email notification receipts associated with the subject release, referenced in the attached denied Closure Request Report (CRR). Previous remediation activities and soil sample analytical results for the subject release can be referenced in previously submitted reports in **Appendix D**.

Sincerely,
Etech Environmental and Safety Solutions, Inc.

Erick Herrera
Staff Geologist

Joseph S. Hernandez
Senior Managing Geologist

cc: Jim Raley, WPX
New Mexico Oil Conservation Division
Bureau of Land Management

Appendices:

Appendix A: Figure 1: Site Location Map
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APPENDIX A

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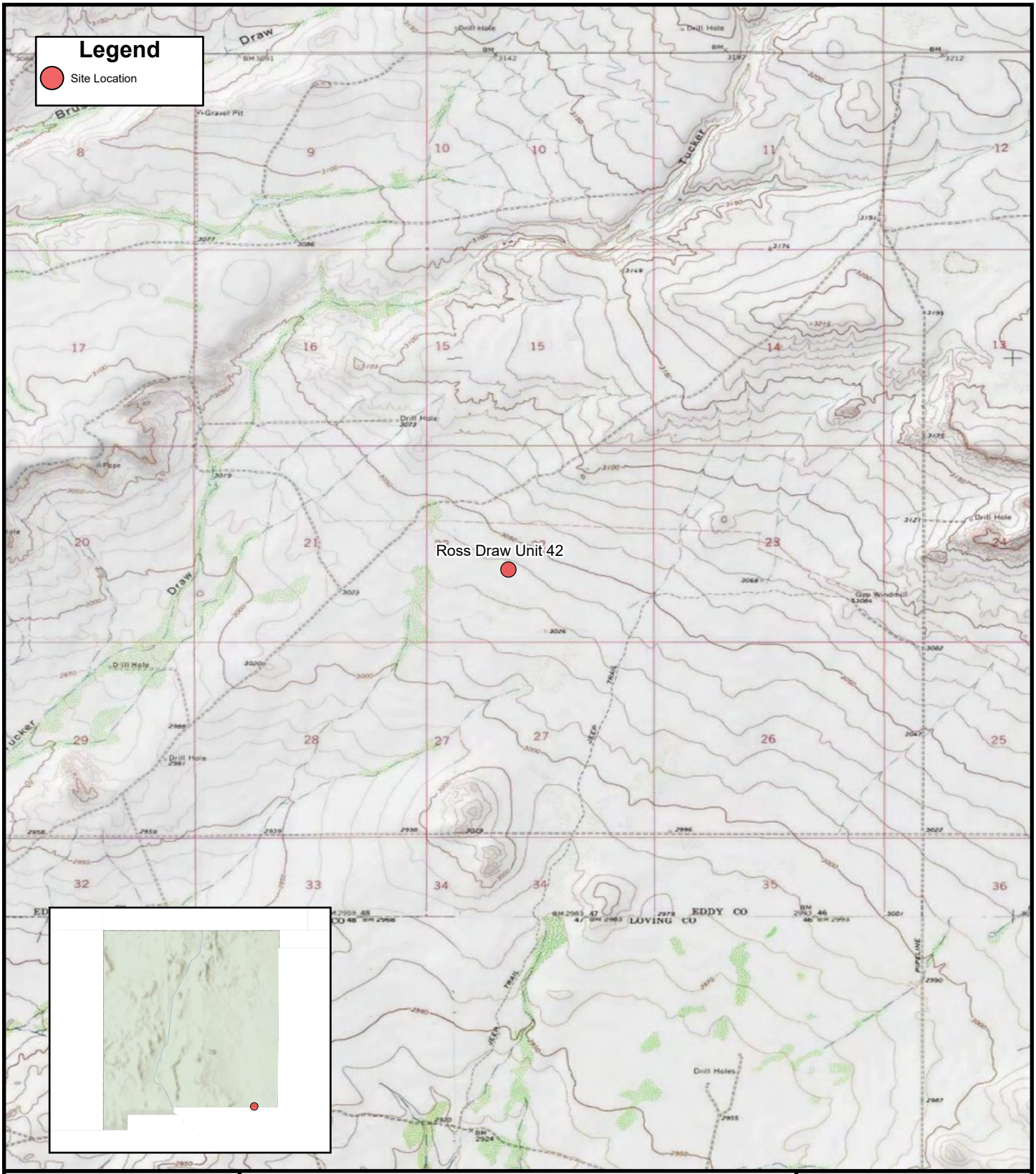


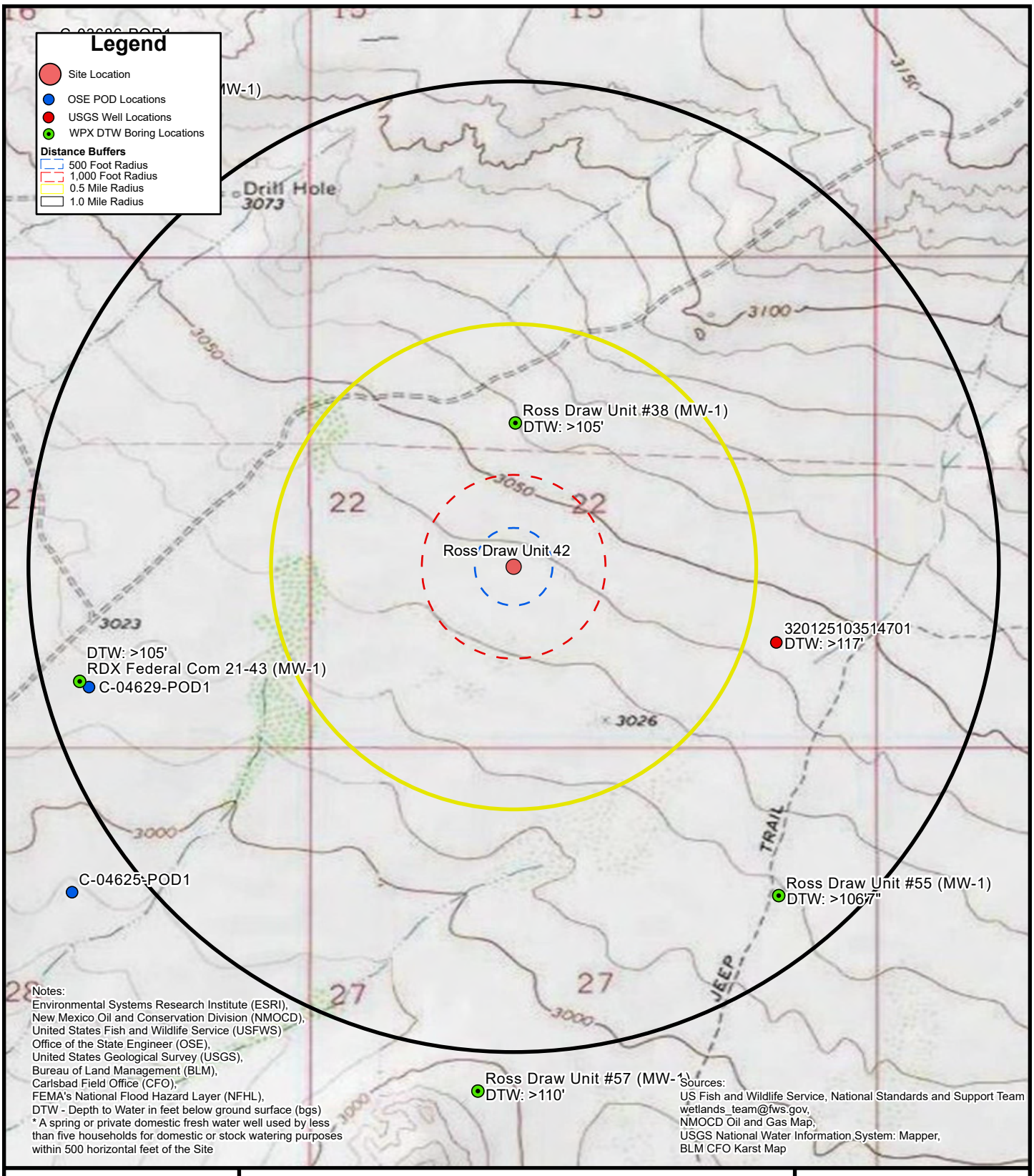
FIGURE 1

Site Location Map

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 2,000 4,000 Feet



Notes:
Environmental Systems Research Institute (ESRI),
New Mexico Oil and Conservation Division (NMOCD),
United States Fish and Wildlife Service (USFWS)
Office of the State Engineer (OSE),
United States Geological Survey (USGS),
Bureau of Land Management (BLM),
Carlsbad Field Office (CFO),
FEMA's National Flood Hazard Layer (NFHL),
DTW - Depth to Water in feet below ground surface (bgs)
* A spring or private domestic fresh water well used by less than five households for domestic or stock watering purposes within 500 horizontal feet of the Site

Sources:
US Fish and Wildlife Service, National Standards and Support Team wetlands_team@fws.gov,
NMOCD Oil and Gas Map,
USGS National Water Information System: Mapper,
BLM CFO Karst Map

eTECH

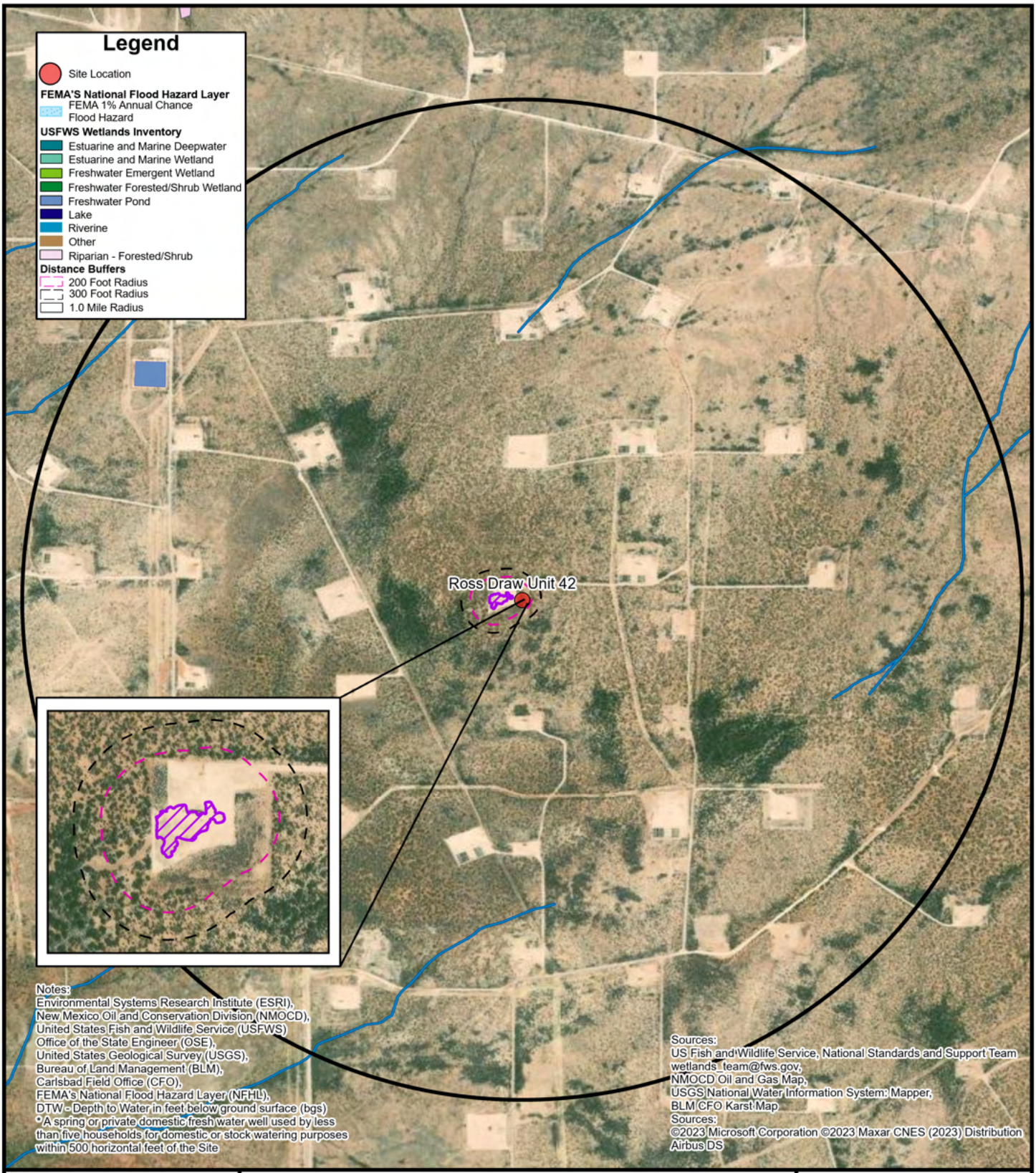
FIGURE 1A

Site Characterization Map
Groundwater

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 500 1,000 Feet



eTECH

FIGURE 1B

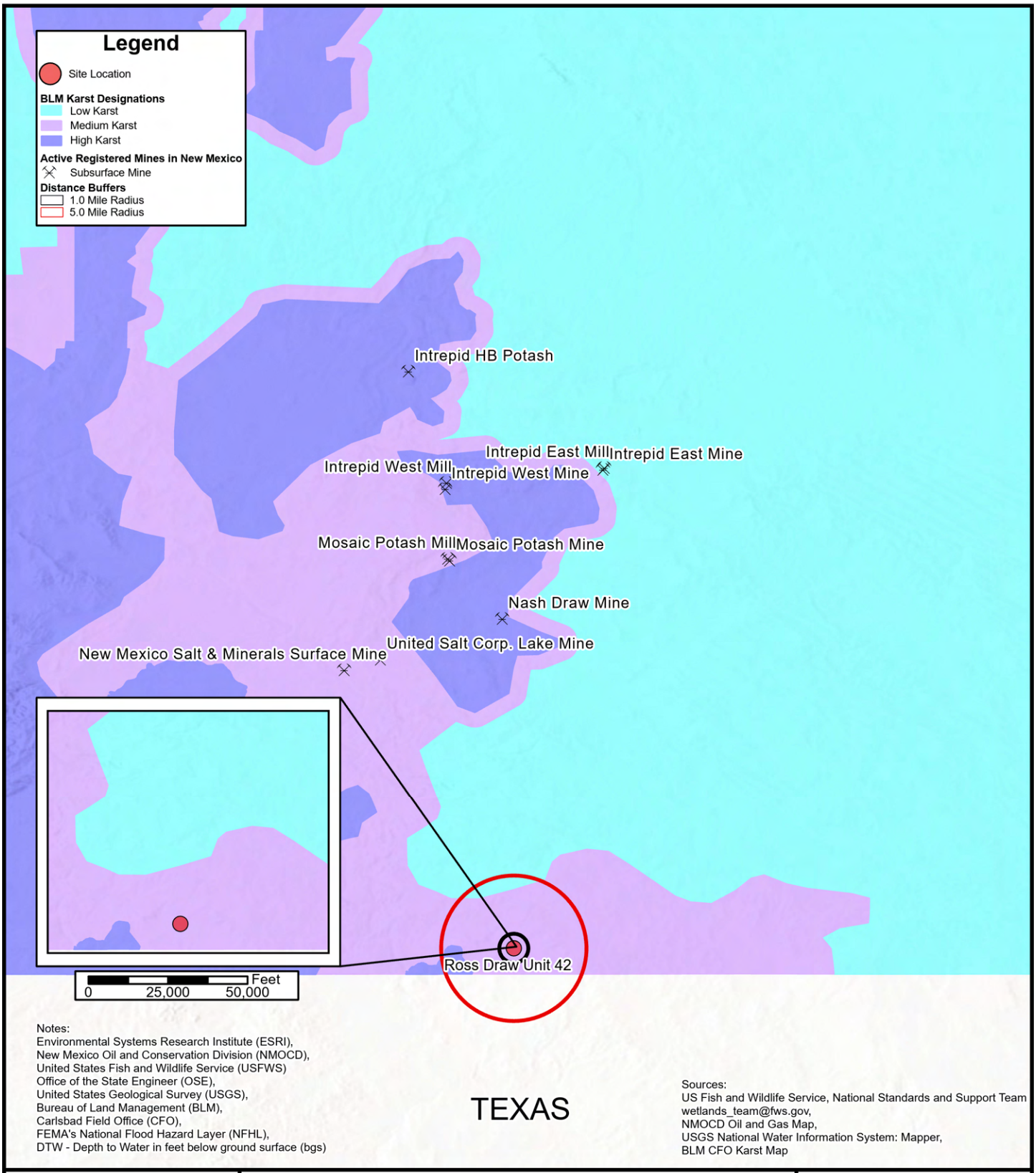
Site Characterization Map

Surficial Receptors

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 500 1,000 Feet



Notes:
Environmental Systems Research Institute (ESRI),
New Mexico Oil and Conservation Division (NMOCD),
United States Fish and Wildlife Service (USFWS)
Office of the State Engineer (OSE),
United States Geological Survey (USGS),
Bureau of Land Management (BLM),
Carlsbad Field Office (CFO),
FEMA's National Flood Hazard Layer (NFHL),
DTW - Depth to Water in feet below ground surface (bgs)

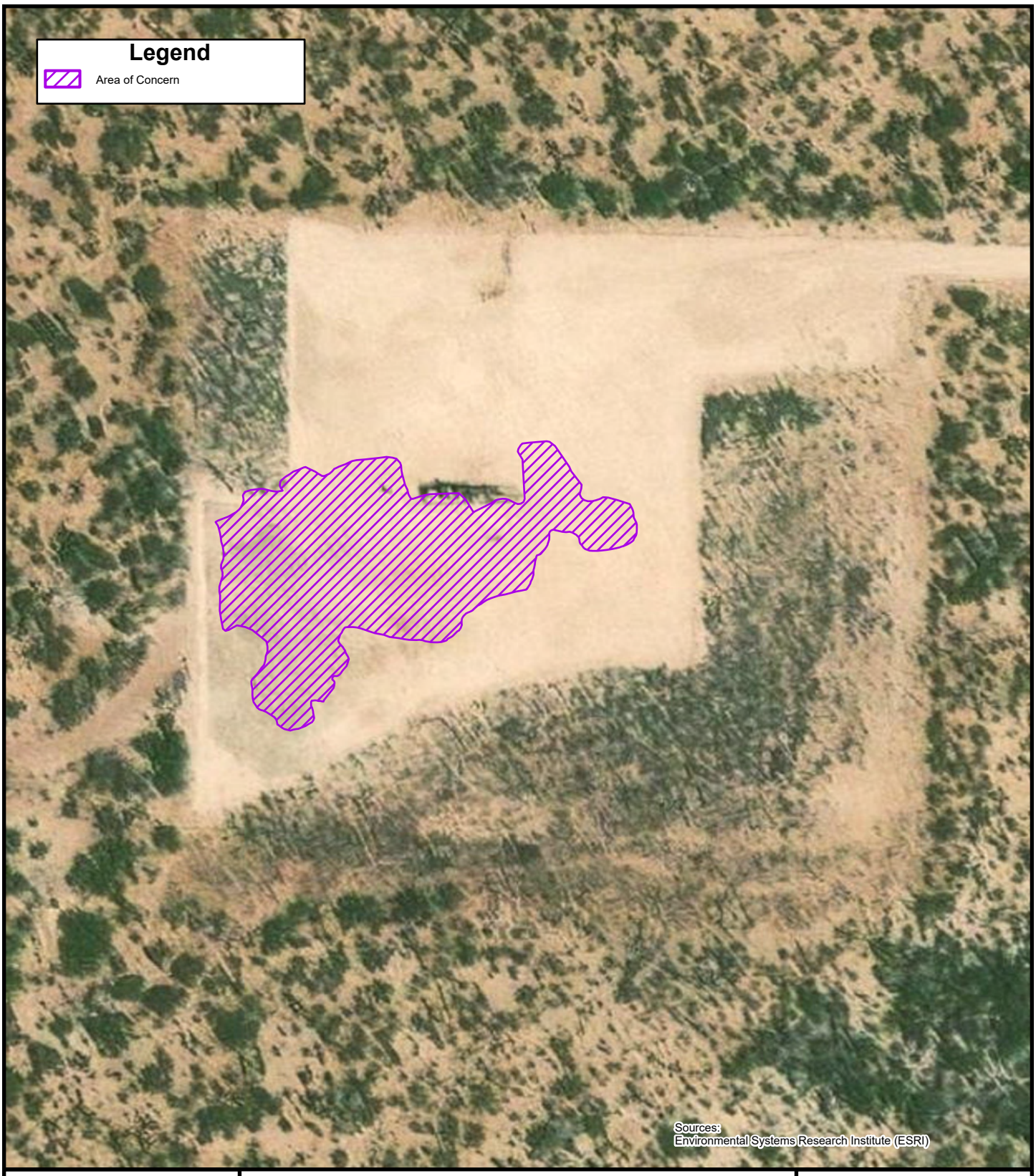
Sources:
US Fish and Wildlife Service, National Standards and Support Team wetlands_team@fws.gov,
NMOCD Oil and Gas Map,
USGS National Water Information System: Mapper,
BLM CFO Karst Map

eTECH

FIGURE 1C
Site Characterization Map
Subsurface Receptors

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N
Feet
0 25,000 50,000



eTECH

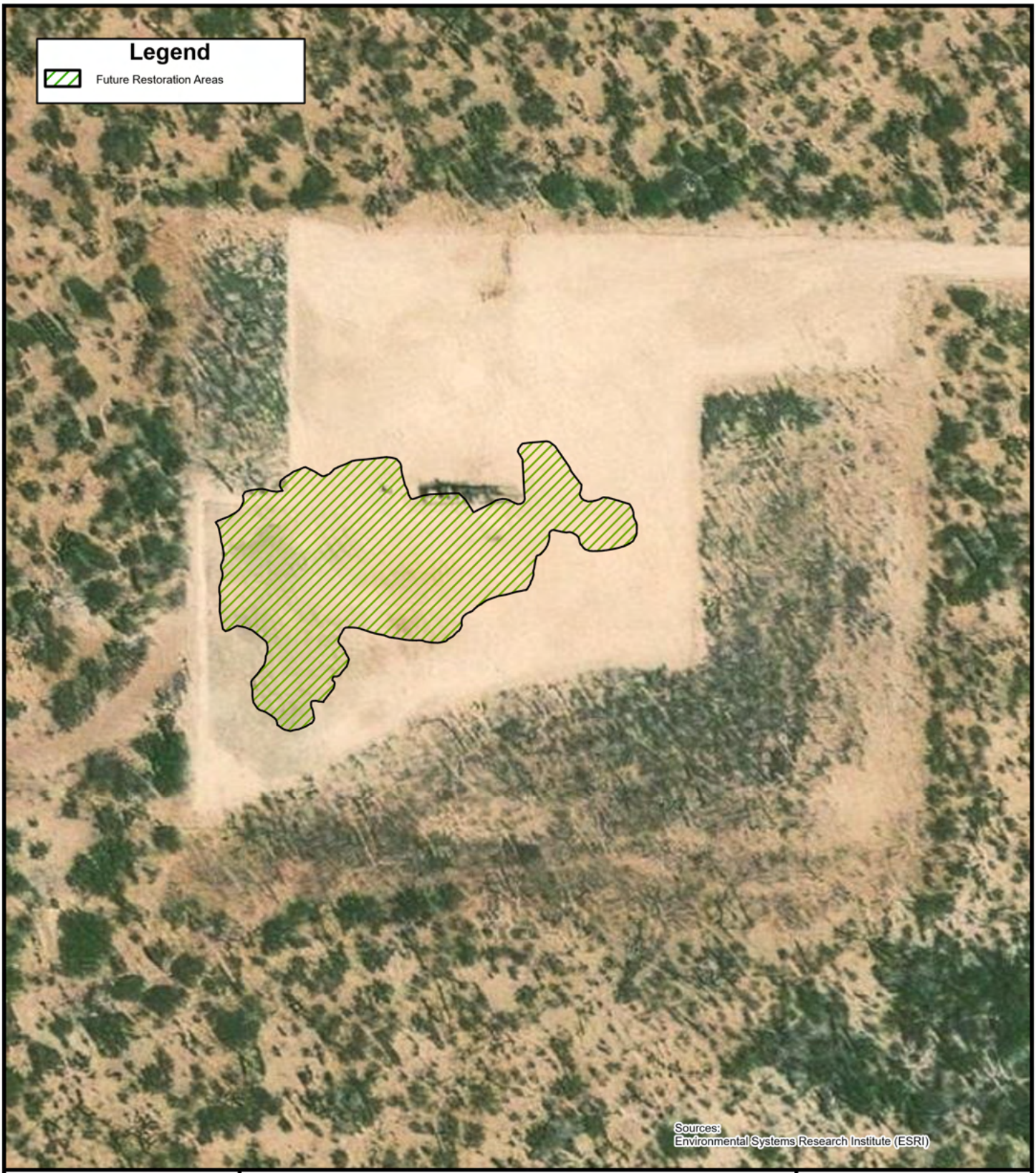
FIGURE 2

Area of Concern

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 45 90 Feet



eTECH

FIGURE 3

Future Restoration Areas

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 45 90 Feet

APPENDIX B

Referenced Well Records

Received by OCD: 4/25/2024 9:24:00 AM

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320125103514701

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320125103514701 26S.30E.22.44124

Eddy County, New Mexico
Latitude 32°01'25", Longitude 103°51'47" NAD27
Land-surface elevation 3,044 feet above NGVD29
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1987-10-21		D	62610		2926.97	NGVD29	1	S			A
1987-10-21		D	62611		2928.54	NAVD88	1	S			A
1987-10-21		D	72019	117.03			1	S			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

Released to Imaging: 4/30/2024 8:02:03 AM

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-06-02 14:53:54 EDT
0.28 0.24 nadww02

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1		Location: Ross Draw Unit #38	
Date: 12/8/2020		Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG	Drilled By: Talon LPE
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None / Seal Depth Interval: None	Latitude: 32.030300
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-100 feet bgs		Boring Total Depth (ft. BGS): 105	Longitude: -103.871338
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 100-105 ft		Well Total Depth (ft. BGS): 105	Depth to Water (ft. BTOC): > 105 / DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks	Well Completion
0	NM	L	D	N	N	NM	SW	NS	Pale orange/pale pink to buff colored fine sand with minor medium and coarse sand	
5										
10										
15										
20	NM	L	D	N	N	NM	SP	NS	Pale orange/pale pink poorly graded fine sand	
25										
30										
35	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale orange poorly graded fine sand	
40										
45										
50										
55										
60										
65										
70	NM	L	D	N	N	NM	SP	NS	Brick red brown poorly graded fine sand	
75										
80										
85										
90										
95										
100	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale orange poorly graded fine sand - TD 105' BGS	

APPENDIX G

NMOCD Notifications

Erick Herrera

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Wednesday, August 2, 2023 5:03 PM
To: Erick Herrera
Cc: Bratcher, Michael, EMNRD; Maxwell, Ashley, EMNRD
Subject: RE: [EXTERNAL] WPX Site Sampling Activity Updates (8/7 - 8-11)

Hi Erick,

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

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Administrative Permitting Program
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Erick Herrera <erick@etechenv.com>
Sent: Wednesday, August 2, 2023 3:18 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; blm_nm_cfo_spill@blm.gov
Cc: Raley, Jim <jim.raley@dvn.com>; Devon-Team <Devon-Team@etechenv.com>
Subject: [EXTERNAL] WPX Site Sampling Activity Updates (8/7 - 8-11)

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

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between August 7th through August 11th, 2023:

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 9-4
Incident Number: nAB1803254347
API: 30-015-40180

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 28 #009H
Incident Number: nAB1632648516
API: 30-015-43294

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 17-14
Incident Number: nAB1504834000
API: 30-015-39845

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 15-11
Incident Number: nAB1800557573
API: 30- 015-37093

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDU 61
Incident Number: nAB1631949226
API: 30-015041980

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDU 42
Incident Number: nAB1605654667
API: 30-015-42945

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDU 12
Incident Number: nAB1702749185
API: 30-015-24793

Thank you,

Erick Herrera
Staff Geologist

eTECH Environmental & Safety Solutions, Inc.

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

APPENDIX H

Denied NMOCD Reports

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

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nAB1605154467 24h289

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company RKI E&P, LLC	Contact Taylor Jones
Address 210 Park Ave. – Ste. 700, OKC, OK 73102	Telephone No. 539-573-7558
Facility Name: Ross Draw Unit 42	Facility Type : Oil and Gas Well

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-42945

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	22	26S	30E	1980	FSL	1800	FWL	Eddy

Latitude: 32.02600 **Longitude:** -103.87139

NATURE OF RELEASE

Type of Release. Oil and Produced Water	Volume of Release: 13 Bbls	Volume Recovered: 11 Bbls
Source of Release Polish rod Liner	Date and Hour of Occurrence 2/20/16 – 10:00 MT	Date and Hour of Discovery 2/20/16 – 10:00 MT
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? NM OIL CONSERVATION	
By Whom?	Date and Hour: ARTESIA DISTRICT	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	FEB 22 2016

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

RECEIVED

Describe Cause of Problem and Remedial Action Taken.*
Polish Rod liner became loose, allowing the release of crude oil and produced water. Crew shut well in and tightened the liner.

Describe Area Affected and Cleanup Action Taken.*

All fluids remained on well site. Vacuum truck dispatched to recover all free standing fluids. Affected soil on well pad to be dug and hauled to disposal.

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

Signature: Taylor Jones

Printed Name: Taylor Jones

Title: Safety Specialist II

E-mail Address: taylor.jones@wpxenergy.com

Date: 02/22/16 Phone: 539-573-7558

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 2/25/16 Expiration Date: N/A

Conditions of Approval: Attached ☐
Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO
LATER THAN: 3/26/16

2RP-3564

* Attach Additional Sheets If Necessary

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

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAB1605654667
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC	OGRID: 246289
Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: Jim.Raley@dvn.com	Incident # *(assigned by OCD)*: nAB1605654667
Contact mailing address: 5315 Buena Vista Drive, Carlsbad NM, 88220	

Location of Release Source

Latitude 32.02600 Longitude -103.87139
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Ross Draw Unit 42	Site Type: Oil and Gas Well
Date Release Discovered: 02/20/2016	API# *(if applicable)*: 30-015-42945

Unit Letter	Section	Township	Range	County
K	22	26S	30E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil/Produced Water	Volume Released (bbls): 13	Volume Recovered (bbls): 11
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	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:
Polish Rod liner became loose, allowing the release of crude oil and produced water. Crew shut well in and tightened the liner. All fluids remained on well site. Vacuum truck dispatched to recover all free-standing fluids. Affected soil on well pad to be dug and hauled to disposal.

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

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAB1605654667
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice 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

☒ 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 Title: Environmental Professional

Signature: Jim Raley Date: 9/13/2023

email: Jim.Raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

Incident ID	nAB1605654667
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	nAB1605654667
District RP	
Facility ID	
Application ID	

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

Printed Name: Jim Raley Title: Environmental Professional

Signature: Date: 9/13/2023

email: Jim.Raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	nAB1605654667
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 9/13/2023

email: Jim.Raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

CLOSURE REQUEST ADDENDUM

Ross Draw Unit 42

Eddy County, New Mexico

Incident Number nAB1605654667

Prepared For:

WPX Energy Permian, LLC

5315 Buena Vista Dr.

Carlsbad, NM 88220

Carlsbad ● Midland ● San Antonio ● Lubbock ● Hobbs ● Lafayette

SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following updated Closure Request Addendum (CRA) to document supplemental soil sampling activities performed to define the horizontal periphery of an inadvertent release of crude oil and produced water at the Ross Draw Unit 42 (Site). Based on Site review and laboratory analytical results from recent soil sampling events, WPX is requesting No Further Action (NFA) at the Site.

The previous CR and both CRA reports were denied on March 29, 2023, June 21, 2023, and July 28, 2023, respectively due to the following reason(s):

March 29, 2023

- *"Depth to groundwater is not adequately identified. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. If evidence of depth to ground water within a ½ mile radius of the site cannot be provided, impacted soils will need to meet Table 1 Closure Criteria for ground water at a depth of 50 feet or less."*

June 21, 2023

- *"Closure denied due to incomplete closure report. The following are missing: scaled site map/sampling diagram, description of remediation activities, photographs of the remediated site, and final sampling lab analyses."*

July 28, 2023

- *"Closure denied. Additional horizontal delineation required."*

SITE LOCATION AND RELEASE BACKGROUND

The Site is located in Unit K, Section 22, Township 26 South, Range 30 East, in Eddy County, New Mexico (32.02600°, -103.87139°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management. (**Figure 1** in **Appendix A**).

On February 20, 2016, a loose polish rod liner caused approximately 13 barrels (bbls) of a crude oil and produced water mixture to be released onto the well pad surface. Vacuum trucks were immediately dispatched and recovered approximately 11 bbls of fluid. All fluids were reported to be contained to the well pad. WPX reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on February 22, 2016, and was subsequently assigned Incident Number nAB1605654667. **Figure 2** in **Appendix A** depicts the observed subject release footprint, hereafter referred to as the Area of Concern (AOC).

SITE CHARACTERIZATION AND CLOSURE CRITERIA

Etech characterized 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.

The nearest permitted water well used in the CR with depth to water data was United States Geological Survey (USGS) well 320125103514701, located approximately 0.5 miles southeast of the Site. USGS well 320125103514701 has a reported depth of water 117 feet below ground surface (bgs) from 1987. Due to the age of the groundwater measurement (greater than 25 years old), NMOCD determined the data to be insufficient to assist with the regional groundwater depth estimate at the Site.

Since the submittal of the CR, Talon LPE drilled a soil boring (MW-1) on December 8, 2020, located approximately 0.3 miles north of the Site on the Ross Draw Unit #38 well pad. Using a truck mounted drill rig equipped with hollow stem auger, the soil boring was advanced to a total depth of 105 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. Well records for referenced wells are provided in **Appendix B**.

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

Based on the results from the desktop review and further supported 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
Gasoline Range Organics (GRO) + Diesel Range Organics (DRO)	EPA 8015 M/D	1,000 mg/kg
Benzene	EPA 8021B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B	50 mg/kg

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

DELINEATION SOIL SAMPLING ACTIVITIES

On August 11, 2023, Etech advanced six delineation boreholes around the AOC via hand auger (BH01 through BH06) to assist with defining the horizontal periphery of residual soil impacts below the Site Closure Criteria. Delineation activities were driven by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. A total of two samples were collected from each delineation soil sample location, representing the highest observed field screening concentrations and the greatest depth. Field screening results and soil descriptions are included on soil sampling logs shown in **Appendix C**. The locations of the delineation soil samples are shown in **Figure 2** in **Appendix A**. Photographic documentation was conducted during delineation activities is included in **Appendix D**.

The delineation soil samples were placed directly into lab provided pre-cleaned jars, packed with minimal void space, labeled, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures, to Envirotech Laboratories (Envirotech) in Farmington, New Mexico, for analysis of COCs.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all delineation soil samples indicated all analyzed COCs were below the applicable Site Closure Criteria and provided sufficient horizontal delineation of the subject release. Laboratory analytical results are summarized in Table I included in **Appendix E**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix F**.

CLOSURE REQUEST

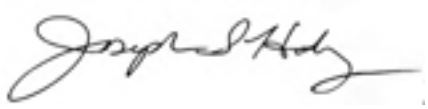
As requested by the NMOCD, supplemental soil sampling activities were performed to define the horizontal periphery of the AOC associated with an inadvertent release of crude oil and produced water at Site. Based on the updated Site Characterization from recent depth to groundwater confirmation and laboratory analytical results from recent soil sampling events, delineation soil samples indicated that all COCs were below the applicable Closure Criteria. WPX believes the completed remedial actions meet 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 at this time and Incident Number nAB1605654667.

If you have any questions or comments, please do not hesitate to contact Joseph Hernandez at (281) 702-2329 or joseph@etechenv.com or Erick Herrera (281) 777-4152 or erick@etechenv.com. **Appendix G** provides correspondence email notification receipts associated with the subject release. Previous remediation activities and soil sample analytical results for the subject release can be referenced in the original CR in **Appendix H**.

Sincerely,
Etech Environmental and Safety Solutions, Inc.



Erick Herrera
Staff Geologist



Joseph S. Hernandez
Senior Managing Geologist

cc: Jim Raley, WPX
New Mexico Oil Conservation Division
Bureau of Land Management

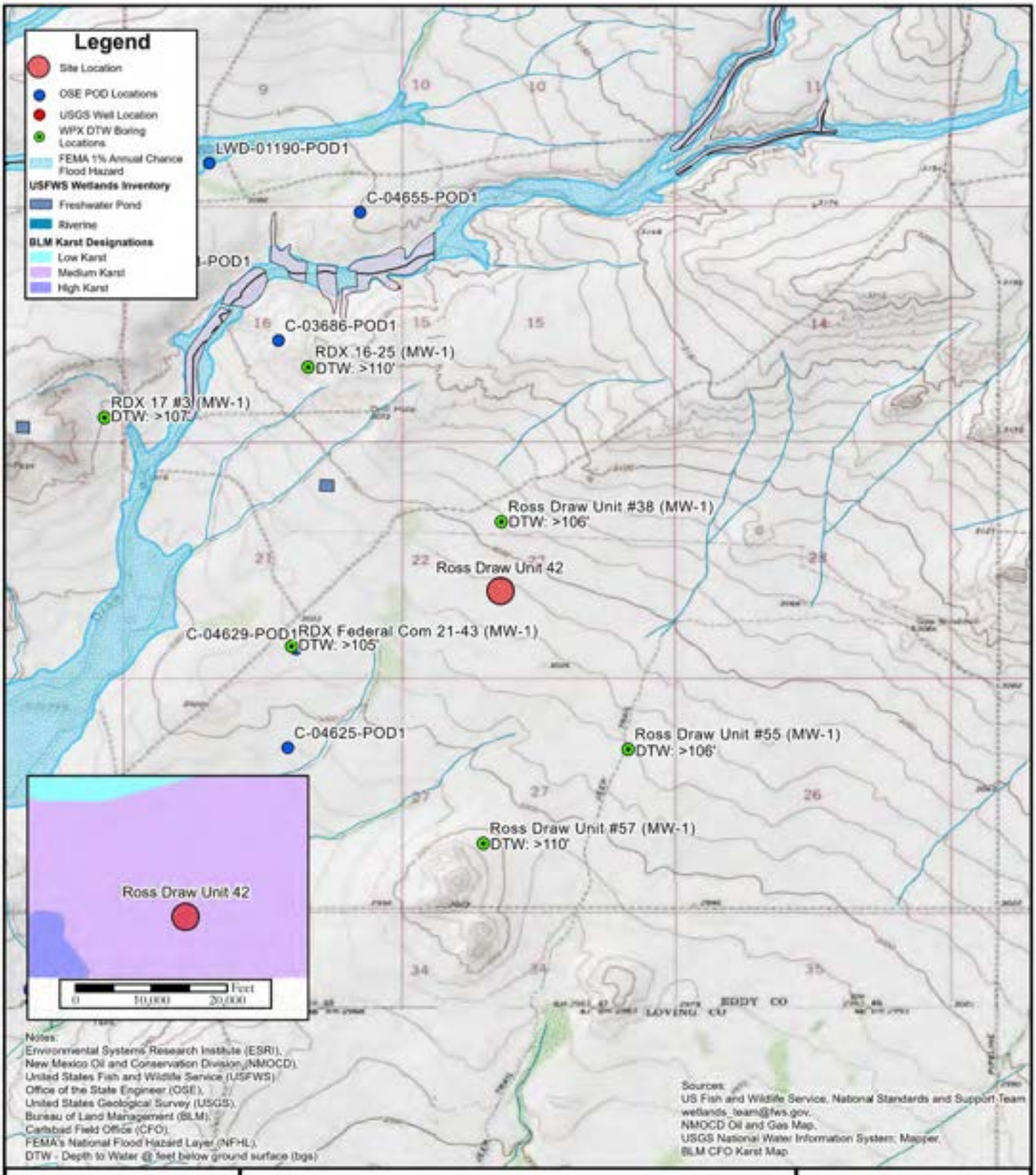
Released to Imaging: 4/30/2024 8:02:03 AM

Appendices:

Appendix A: Figure 1: Site Map
Figure 2: Delineation Soil Sample Locations
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: NMOCD Notifications
Appendix H: Previously Submitted Closure Report

APPENDIX A

Figure 1: Site Map



eTECH

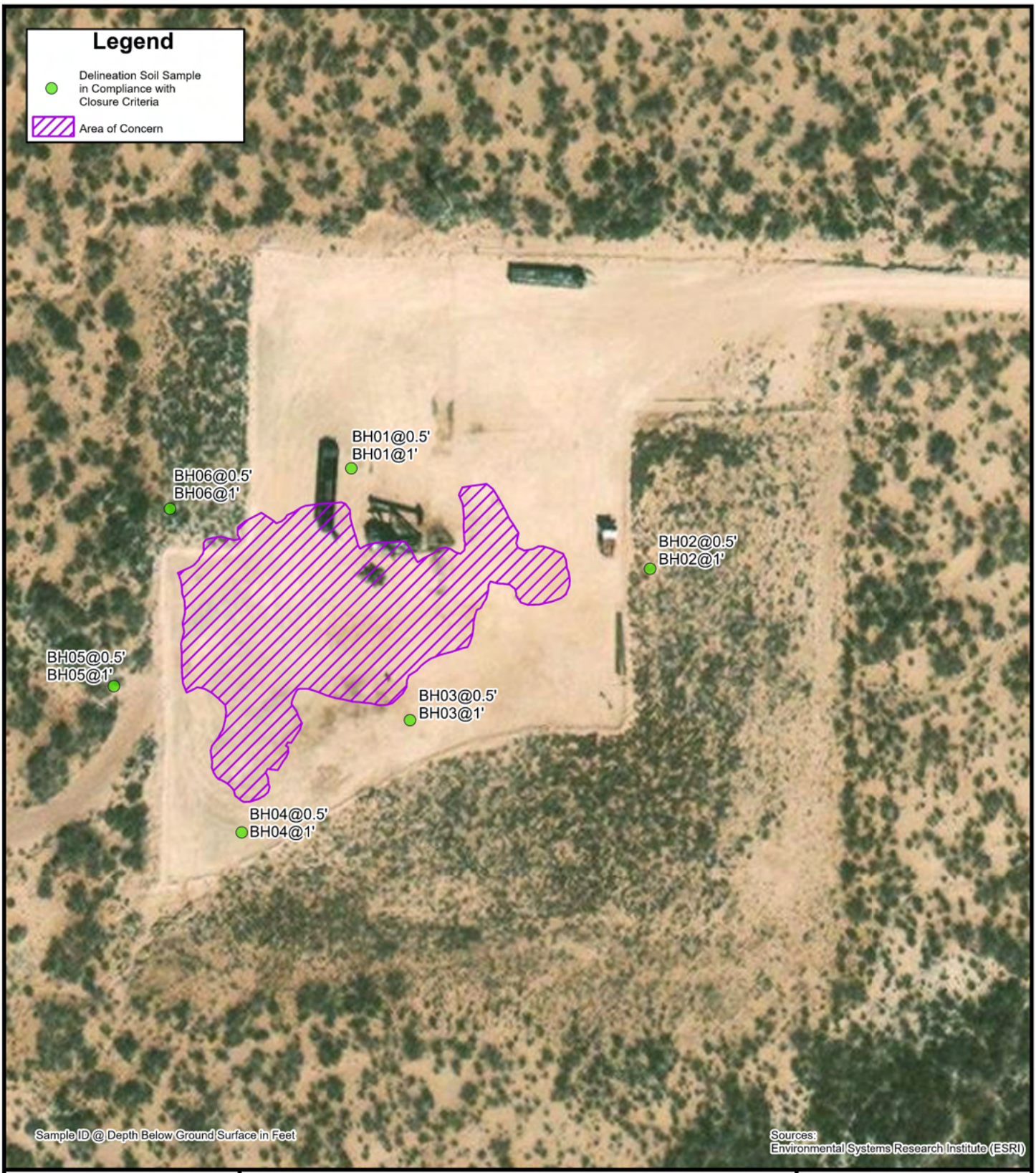
FIGURE 1

Site Map

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

Feet
0
1,500
3,000



eTECH

FIGURE 2

Site Map

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 42
Unit K Sec 22 T26S R30E
Eddy County, New Mexico

N

0 45 90 Feet

APPENDIX B

Referenced Well Records

Received by OCD: 4/25/2024 9:24:00 AM

USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320125103514701

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320125103514701 26S.30E.22.44124

Eddy County, New Mexico
Latitude 32°01'25", Longitude 103°51'47" NAD27
Land-surface elevation 3,044 feet above NGVD29
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1987-10-21		D	62610		2926.97	NGVD29	1	S			A
1987-10-21		D	62611		2928.54	NAVD88	1	S			A
1987-10-21		D	72019	117.03			1	S			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

Questions or Comments
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility FOIA Privacy Policies and Notices
U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels

Released to Imaging: 4/30/2024 8:02:03 AM

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-06-02 14:53:54 EDT
0.28 0.24 nadww02

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1				Location: Ross Draw Unit #38	
Date: 12/8/2020				Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG		Drilled By: Talon LPE	
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None	Seal Depth Interval: None	Latitude: 32.030300	
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-100 feet bgs		Boring Total Depth (ft. BGS): 105		Longitude: -103.871338	
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 100-105 ft		Well Total Depth (ft. BGS): 105		Depth to Water (ft. BTOC): > 105	DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks	Well Completion
0	NM	L	D	N	N	NM	SW	NS	Pale orange/pale pink to buff colored fine sand with minor medium and coarse sand	
5										
10										
15										
20	NM	L	D	N	N	NM	SP	NS	Pale orange/pale pink poorly graded fine sand	
25										
30										
35	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale orange poorly graded fine sand	
40										
45										
50										
55										
60										
65										
70	NM	L	D	N	N	NM	SP	NS	Brick red brown poorly graded fine sand	
75										
80										
85										
90										
95										
100	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale orange poorly graded fine sand - TD 105' BGS	

APPENDIX C

Lithologic Sampling Logs

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

eTECH

	Sample Name: BH01	Date: 08/11/2023
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	SW-SM	(0-0.5') SAND, dry, tan to light brown, fine to coarse grain, well graded with silt, abundant small caliche gravel, no stain, no odor.
Dry	236	0.0	No	BH01	0.5			
Dry	208	0.0	No	BH01	1	1	SP	@1' SAND, dry, brown, fine grain, poorly graded, no stain, no odor.
								Total Depth

eTECH

	Sample Name: BH02	Date: 08/11/2023
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0		
Dry	372	0.0	No	BH02	0.5		SW-SM	(0-0.5') SAND, dry, tan to light brown, fine to coarse grain, well graded with silt, abundant small caliche gravel, no stain, no odor.
Dry	132	0.0	No	BH02	1	1	SP	@1' SAND, dry, brown, fine grain, poorly graded, no stain, no odor.
								Total Depth

eTECH

	Sample Name: BH03	Date: 08/11/2023
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0		
Dry	300	0.0	No	BH03	0.5		SW-SM	(0-0.5') SAND, dry, red-brown, fine to coarse grain, well graded with silt, abundant small caliche gravel, no stain, no odor.
Dry	132	0.0	No	BH03	1	1	SP	@1' SAND, dry, brown, fine grain, poorly graded, no stain, no odor.
								Total Depth

eTECH

	Sample Name: BH04	Date: 08/11/2023
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0		
Dry	<108	0.0	No	BH04	0.5		SP	(0-1') SAND, dry, red-brown, very fine to fine grain poorly graded with trace silt, no stain, no odor.
Dry	<108	0.0	No	BH04	1	1		

Total Depth

eTECH

	Sample Name: BH05	Date: 08/11/2023
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	SP	(0-1') SAND, dry, red-brown, very fine to fine grain poorly graded with trace silt, no stain, no odor.
Dry	<108	0.0	No	BH05	0.5			
Dry	<108	0.0	No	BH05	1	1		

Total Depth

eTECH

	Sample Name: BH06	Date: 08/11/2023
	Site Name: Ross Draw Unit 42	
	Incident Number: nAB1605654667	
	Job Number: 18262	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Site Coordinates: 32.02600, -103.87139	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	SP	(0-1') SAND, dry, red-brown, very fine to fine grain poorly graded with trace silt, no stain, no odor.
Dry	<108	0.0	No	BH06	0.5			
Dry	<108	0.0	No	BH06	1	1		

Total Depth

APPENDIX D

Photographic Log

eTECH

PHOTOGRAPHIC LOG
WPX Energy Permian, LLC
Ross Draw Unit 42
nAB1605654667



Photograph 1 **Date: 08/11/2023**
Description: Northeastern view of delineation activities.



Photograph 2 **Date: 08/11/2023**
Description: Southeastern view of delineation activities.



Photograph 3 **Date: 08/11/2023**
Description: Southern view of delineation activities.



Photograph 4 **Date: 08/11/2023**
Description: Northwestern view of delineation activities.

APPENDIX E

Tables

eTECH

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC
Ross Draw Unit 42
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 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**20,000**
Delineation Soil Samples - Incident Number nAB1605654667										
BH01	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	187
BH01	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	182
BH02	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	112
BH02	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	125
BH03	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	121
BH03	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	114
BH04	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH04	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH05	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH05	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH06	08/11/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH06	08/11/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0

Notes:
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*

APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation

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

Report to:

Anna Byers



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:	Ross Draw Unit #042
Work Order:	E308094
Job Number:	01058-0007
Received:	8/14/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/18/23

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E308094
Date Received: 8/14/2023 8:15:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/14/2023 8:15:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

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ljarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 14:03

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 0.5'	E308094-01A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH01 1'	E308094-02A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

BH01 0.5'

E308094-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Benzene	ND	0.0250	1	08/15/23	08/16/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/16/23	
Toluene	ND	0.0250	1	08/15/23	08/16/23	
o-Xylene	ND	0.0250	1	08/15/23	08/16/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/16/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/16/23	
Surrogate: 4-Bromochlorobenzene-PID		*94.9 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.0 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333018
Diesel Range Organics (C10-C28)	ND	25.0	1	08/14/23	08/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/14/23	08/17/23	
Surrogate: n-Nonane		*88.4 %*	*50-200*	*08/14/23*	*08/17/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333045
Chloride	**187**	20.0	1	08/16/23	08/17/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

BH01 1'

E308094-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Benzene	ND	0.0250	1	08/15/23	08/16/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/16/23	
Toluene	ND	0.0250	1	08/15/23	08/16/23	
o-Xylene	ND	0.0250	1	08/15/23	08/16/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/16/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/16/23	
Surrogate: 4-Bromochlorobenzene-PID		*94.5 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.8 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333018
Diesel Range Organics (C10-C28)	ND	25.0	1	08/14/23	08/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/14/23	08/17/23	
Surrogate: n-Nonane		*88.4 %*	*50-200*	*08/14/23*	*08/17/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333045
Chloride	**182**	40.0	2	08/16/23	08/17/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333022-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.51*		*8.00*		*93.9*	*70-130*			
LCS (2333022-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.74	0.0250	5.00		94.9	70-130			
Ethylbenzene	4.79	0.0250	5.00		95.7	70-130			
Toluene	4.83	0.0250	5.00		96.5	70-130			
o-Xylene	4.83	0.0250	5.00		96.7	70-130			
p,m-Xylene	9.76	0.0500	10.0		97.6	70-130			
Total Xylenes	14.6	0.0250	15.0		97.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.54*		*8.00*		*94.2*	*70-130*			
Matrix Spike (2333022-MS1)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Benzene	4.59	0.0250	5.00	ND	91.9	54-133			
Ethylbenzene	4.67	0.0250	5.00	ND	93.5	61-133			
Toluene	4.69	0.0250	5.00	ND	93.7	61-130			
o-Xylene	4.73	0.0250	5.00	ND	94.6	63-131			
p,m-Xylene	9.53	0.0500	10.0	ND	95.3	63-131			
Total Xylenes	14.3	0.0250	15.0	ND	95.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.65*		*8.00*		*95.6*	*70-130*			
Matrix Spike Dup (2333022-MSD1)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Benzene	4.80	0.0250	5.00	ND	96.1	54-133	4.47	20	
Ethylbenzene	4.87	0.0250	5.00	ND	97.3	61-133	4.03	20	
Toluene	4.90	0.0250	5.00	ND	98.0	61-130	4.48	20	
o-Xylene	4.89	0.0250	5.00	ND	97.9	63-131	3.44	20	
p,m-Xylene	9.91	0.0500	10.0	ND	99.1	63-131	3.90	20	
Total Xylenes	14.8	0.0250	15.0	ND	98.7	63-131	3.75	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.55*		*8.00*		*94.3*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333022-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.24*		*8.00*		*90.5*	*70-130*			
LCS (2333022-BS2)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	45.4	20.0	50.0		90.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.30*		*8.00*		*91.3*	*70-130*			
Matrix Spike (2333022-MS2)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Gasoline Range Organics (C6-C10)	43.9	20.0	50.0	ND	87.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike Dup (2333022-MSD2)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.3	70-130	6.01	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.29*		*8.00*		*91.1*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333018-BLK1)									Prepared: 08/14/23 Analyzed: 08/16/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*48.3*		*50.0*		*96.6*	*50-200*			
LCS (2333018-BS1)									Prepared: 08/14/23 Analyzed: 08/16/23
Diesel Range Organics (C10-C28)	228	25.0	250		91.2	38-132			
Surrogate: n-Nonane	*44.4*		*50.0*		*88.8*	*50-200*			
Matrix Spike (2333018-MS1)				**Source: E308093-06**					Prepared: 08/14/23 Analyzed: 08/16/23
Diesel Range Organics (C10-C28)	230	25.0	250	ND	91.9	38-132			
Surrogate: n-Nonane	*43.2*		*50.0*		*86.5*	*50-200*			
Matrix Spike Dup (2333018-MSD1)				**Source: E308093-06**					Prepared: 08/14/23 Analyzed: 08/16/23
Diesel Range Organics (C10-C28)	229	25.0	250	ND	91.4	38-132	0.508	20	
Surrogate: n-Nonane	*42.5*		*50.0*		*85.0*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 2:03:13PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333045-BLK1)									Prepared: 08/16/23 Analyzed: 08/17/23
Chloride	ND	20.0							
LCS (2333045-BS1)									Prepared: 08/16/23 Analyzed: 08/17/23
Chloride	257	20.0	250		103	90-110			
Matrix Spike (2333045-MS1)				**Source: E308088-01**					Prepared: 08/16/23 Analyzed: 08/17/23
Chloride	1450	400	250	1170	114	80-120			
Matrix Spike Dup (2333045-MSD1)				**Source: E308088-01**					Prepared: 08/16/23 Analyzed: 08/17/23
Chloride	1560	400	250	1170	158	80-120	7.33	20	M4

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 14:03

M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

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

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

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 8/14/2023 11:47:32AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/14/23 08:15	Work Order ID:	E308094
Phone:	(575) 200-6754	Date Logged In:	08/14/23 09:16	Logged In By:	Caitlin Mars
Email:	anna@etechenv.vom	Due Date:	08/18/23 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Anna Byers



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:	Ross Draw Unit #042
Work Order:	E308095
Job Number:	01058-0007
Received:	8/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/18/23

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E308095
Date Received: 8/14/2023 8:15:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/14/2023 8:15:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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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QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO 9

QC - Anions by EPA 300.0/9056A 10

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Chain of Custody etc. 12

Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:01

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH02 0.5'	E308095-01A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH02 1'	E308095-02A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

BH02 0.5'

E308095-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Benzene	ND	0.0250	1	08/15/23	08/16/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/16/23	
Toluene	ND	0.0250	1	08/15/23	08/16/23	
o-Xylene	ND	0.0250	1	08/15/23	08/16/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/16/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/16/23	
Surrogate: 4-Bromochlorobenzene-PID		*94.7 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.9 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333032
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*90.5 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	**112**	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

BH02 1'

E308095-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Benzene	ND	0.0250	1	08/15/23	08/16/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/16/23	
Toluene	ND	0.0250	1	08/15/23	08/16/23	
o-Xylene	ND	0.0250	1	08/15/23	08/16/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/16/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/16/23	
Surrogate: 4-Bromochlorobenzene-PID		*94.1 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333022
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.9 %*	*70-130*	*08/15/23*	*08/16/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333032
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*95.3 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	**125**	20.0	1	08/16/23	08/18/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333022-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.51*		*8.00*		*93.9*	*70-130*			
LCS (2333022-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.74	0.0250	5.00		94.9	70-130			
Ethylbenzene	4.79	0.0250	5.00		95.7	70-130			
Toluene	4.83	0.0250	5.00		96.5	70-130			
o-Xylene	4.83	0.0250	5.00		96.7	70-130			
p,m-Xylene	9.76	0.0500	10.0		97.6	70-130			
Total Xylenes	14.6	0.0250	15.0		97.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.54*		*8.00*		*94.2*	*70-130*			
Matrix Spike (2333022-MS1)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Benzene	4.59	0.0250	5.00	ND	91.9	54-133			
Ethylbenzene	4.67	0.0250	5.00	ND	93.5	61-133			
Toluene	4.69	0.0250	5.00	ND	93.7	61-130			
o-Xylene	4.73	0.0250	5.00	ND	94.6	63-131			
p,m-Xylene	9.53	0.0500	10.0	ND	95.3	63-131			
Total Xylenes	14.3	0.0250	15.0	ND	95.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.65*		*8.00*		*95.6*	*70-130*			
Matrix Spike Dup (2333022-MSD1)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Benzene	4.80	0.0250	5.00	ND	96.1	54-133	4.47	20	
Ethylbenzene	4.87	0.0250	5.00	ND	97.3	61-133	4.03	20	
Toluene	4.90	0.0250	5.00	ND	98.0	61-130	4.48	20	
o-Xylene	4.89	0.0250	5.00	ND	97.9	63-131	3.44	20	
p,m-Xylene	9.91	0.0500	10.0	ND	99.1	63-131	3.90	20	
Total Xylenes	14.8	0.0250	15.0	ND	98.7	63-131	3.75	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.55*		*8.00*		*94.3*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333022-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.24*		*8.00*		*90.5*	*70-130*			
LCS (2333022-BS2)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	45.4	20.0	50.0		90.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.30*		*8.00*		*91.3*	*70-130*			
Matrix Spike (2333022-MS2)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Gasoline Range Organics (C6-C10)	43.9	20.0	50.0	ND	87.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike Dup (2333022-MSD2)				**Source: E308104-11**					Prepared: 08/15/23 Analyzed: 08/16/23
Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.3	70-130	6.01	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.29*		*8.00*		*91.1*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333032-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*49.7*		*50.0*		*99.4*	*50-200*			
LCS (2333032-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	257	25.0	250		103	38-132			
Surrogate: n-Nonane	*47.7*		*50.0*		*95.3*	*50-200*			
Matrix Spike (2333032-MS1)				**Source: E308095-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	266	25.0	250	ND	107	38-132			
Surrogate: n-Nonane	*46.1*		*50.0*		*92.3*	*50-200*			
Matrix Spike Dup (2333032-MSD1)				**Source: E308095-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	276	25.0	250	ND	110	38-132	3.50	20	
Surrogate: n-Nonane	*42.9*		*50.0*		*85.7*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:01:24PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333042-BLK1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	ND	20.0							
LCS (2333042-BS1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	248	20.0	250		99.3	90-110			
Matrix Spike (2333042-MS1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	380	20.0	250	121	104	80-120			
Matrix Spike Dup (2333042-MSD1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	373	20.0	250	121	101	80-120	1.76	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:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:01

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

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

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

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 8/14/2023 11:53:17AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/14/23 08:15	Work Order ID:	E308095
Phone:	(575) 200-6754	Date Logged In:	08/14/23 09:17	Logged In By:	Caitlin Mars
Email:	anna@etechenv.vom	Due Date:	08/18/23 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Anna Byers



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:	Ross Draw Unit #042
Work Order:	E308096
Job Number:	01058-0007
Received:	8/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/18/23

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E308096
Date Received: 8/14/2023 8:15:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/14/2023 8:15:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:00

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH03 0.5'	E308096-01A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH03 1'	E308096-02A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

BH03 0.5'

E308096-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*92.9 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.7 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*81.6 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	**121**	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

BH03 1'

E308096-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.2 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.6 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*81.9 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	**114**	20.0	1	08/16/23	08/18/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333021-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.50*		*8.00*		*93.8*	*70-130*			
LCS (2333021-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.72	0.0250	5.00		94.3	70-130			
Ethylbenzene	4.73	0.0250	5.00		94.6	70-130			
Toluene	4.78	0.0250	5.00		95.6	70-130			
o-Xylene	4.76	0.0250	5.00		95.3	70-130			
p,m-Xylene	9.65	0.0500	10.0		96.5	70-130			
Total Xylenes	14.4	0.0250	15.0		96.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.55*		*8.00*		*94.4*	*70-130*			
Matrix Spike (2333021-MS1)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.93	0.0250	5.00	ND	98.6	54-133			
Ethylbenzene	4.97	0.0250	5.00	ND	99.5	61-133			
Toluene	5.01	0.0250	5.00	ND	100	61-130			
o-Xylene	5.01	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.47*		*8.00*		*93.4*	*70-130*			
Matrix Spike Dup (2333021-MSD1)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	5.11	0.0250	5.00	ND	102	54-133	3.57	20	
Ethylbenzene	5.16	0.0250	5.00	ND	103	61-133	3.70	20	
Toluene	5.21	0.0250	5.00	ND	104	61-130	4.02	20	
o-Xylene	5.21	0.0250	5.00	ND	104	63-131	3.97	20	
p,m-Xylene	10.5	0.0500	10.0	ND	105	63-131	3.56	20	
Total Xylenes	15.7	0.0250	15.0	ND	105	63-131	3.70	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.49*		*8.00*		*93.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333021-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.34*		*8.00*		*91.8*	*70-130*			
LCS (2333021-BS2)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	47.6	20.0	50.0		95.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.37*		*8.00*		*92.1*	*70-130*			
Matrix Spike (2333021-MS2)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	52.2	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.37*		*8.00*		*92.1*	*70-130*			
Matrix Spike Dup (2333021-MSD2)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	50.4	20.0	50.0	ND	101	70-130	3.57	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.34*		*8.00*		*91.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333024-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*44.5*		*50.0*		*89.0*	*50-200*			
LCS (2333024-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	*40.0*		*50.0*		*79.9*	*50-200*			
Matrix Spike (2333024-MS1)				**Source: E308103-08**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	266	25.0	250	ND	107	38-132			
Surrogate: n-Nonane	*42.3*		*50.0*		*84.6*	*50-200*			
Matrix Spike Dup (2333024-MSD1)				**Source: E308103-08**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	268	25.0	250	ND	107	38-132	0.460	20	
Surrogate: n-Nonane	*37.0*		*50.0*		*74.1*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:00:22PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333042-BLK1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	ND	20.0							
LCS (2333042-BS1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	248	20.0	250		99.3	90-110			
Matrix Spike (2333042-MS1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	380	20.0	250	121	104	80-120			
Matrix Spike Dup (2333042-MSD1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	373	20.0	250	121	101	80-120	1.76	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:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:00

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

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

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

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

| | | |

Envirotech Analytical Laboratory

Printed: 8/14/2023 11:58:49AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/14/23 08:15	Work Order ID:	E308096
Phone:	(575) 200-6754	Date Logged In:	08/14/23 09:18	Logged In By:	Caitlin Mars
Email:	anna@etechenv.vom	Due Date:	08/18/23 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

Report to:

Anna Byers



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:	Ross Draw Unit #042
Work Order:	E308097
Job Number:	01058-0007
Received:	8/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 8/18/23

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Ross Draw Unit #042
Workorder: E308097
Date Received: 8/14/2023 8:15:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/14/2023 8:15:00AM, under the Project Name: Ross Draw Unit #042.

The analytical test results summarized in this report with the Project Name: Ross Draw Unit #042 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
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Sample Summary

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:11

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH04 0.5'	E308097-01A	Solid	08/11/23	08/14/23	Glass Jar, 2 oz.
BH04 1'	E308097-02A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH05 0.5'	E308097-03A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH05 1'	E308097-04A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH06 0.5'	E308097-05A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.
BH06 1'	E308097-06A	Soil	08/11/23	08/14/23	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH04 0.5'

E308097-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.3 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.8 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*87.0 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH04 1'

E308097-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.8 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*88.2 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH05 0.5'

E308097-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.9 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.6 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*83.3 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH05 1'

E308097-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.9 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.8 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*85.6 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH06 0.5'

E308097-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.0 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.0 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*86.4 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

BH06 1'

E308097-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Benzene	ND	0.0250	1	08/15/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/15/23	08/15/23	
Toluene	ND	0.0250	1	08/15/23	08/15/23	
o-Xylene	ND	0.0250	1	08/15/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/15/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/15/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.0 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2333021
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.0 %*	*70-130*	*08/15/23*	*08/15/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2333024
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/23	08/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/23	08/15/23	
Surrogate: n-Nonane		*88.7 %*	*50-200*	*08/15/23*	*08/15/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2333042
Chloride	ND	20.0	1	08/16/23	08/18/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333021-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.50*		*8.00*		*93.8*	*70-130*			
LCS (2333021-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.72	0.0250	5.00		94.3	70-130			
Ethylbenzene	4.73	0.0250	5.00		94.6	70-130			
Toluene	4.78	0.0250	5.00		95.6	70-130			
o-Xylene	4.76	0.0250	5.00		95.3	70-130			
p,m-Xylene	9.65	0.0500	10.0		96.5	70-130			
Total Xylenes	14.4	0.0250	15.0		96.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.55*		*8.00*		*94.4*	*70-130*			
Matrix Spike (2333021-MS1)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	4.93	0.0250	5.00	ND	98.6	54-133			
Ethylbenzene	4.97	0.0250	5.00	ND	99.5	61-133			
Toluene	5.01	0.0250	5.00	ND	100	61-130			
o-Xylene	5.01	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.47*		*8.00*		*93.4*	*70-130*			
Matrix Spike Dup (2333021-MSD1)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Benzene	5.11	0.0250	5.00	ND	102	54-133	3.57	20	
Ethylbenzene	5.16	0.0250	5.00	ND	103	61-133	3.70	20	
Toluene	5.21	0.0250	5.00	ND	104	61-130	4.02	20	
o-Xylene	5.21	0.0250	5.00	ND	104	63-131	3.97	20	
p,m-Xylene	10.5	0.0500	10.0	ND	105	63-131	3.56	20	
Total Xylenes	15.7	0.0250	15.0	ND	105	63-131	3.70	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.49*		*8.00*		*93.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333021-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.34*		*8.00*		*91.8*	*70-130*			
LCS (2333021-BS2)									Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	47.6	20.0	50.0		95.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.37*		*8.00*		*92.1*	*70-130*			
Matrix Spike (2333021-MS2)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	52.2	20.0	50.0	ND	104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.37*		*8.00*		*92.1*	*70-130*			
Matrix Spike Dup (2333021-MSD2)				**Source: E308096-02**					Prepared: 08/15/23 Analyzed: 08/15/23
Gasoline Range Organics (C6-C10)	50.4	20.0	50.0	ND	101	70-130	3.57	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.34*		*8.00*		*91.7*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333024-BLK1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*44.5*		*50.0*		*89.0*	*50-200*			
LCS (2333024-BS1)									Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	*40.0*		*50.0*		*79.9*	*50-200*			
Matrix Spike (2333024-MS1)				**Source: E308103-08**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	266	25.0	250	ND	107	38-132			
Surrogate: n-Nonane	*42.3*		*50.0*		*84.6*	*50-200*			
Matrix Spike Dup (2333024-MSD1)				**Source: E308103-08**					Prepared: 08/15/23 Analyzed: 08/15/23
Diesel Range Organics (C10-C28)	268	25.0	250	ND	107	38-132	0.460	20	
Surrogate: n-Nonane	*37.0*		*50.0*		*74.1*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Ross Draw Unit #042	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/18/2023 12:11:26PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2333042-BLK1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	ND	20.0							
LCS (2333042-BS1)									Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	248	20.0	250		99.3	90-110			
Matrix Spike (2333042-MS1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	380	20.0	250	121	104	80-120			
Matrix Spike Dup (2333042-MSD1)				**Source: E308096-01**					Prepared: 08/16/23 Analyzed: 08/18/23
Chloride	373	20.0	250	121	101	80-120	1.76	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:	Ross Draw Unit #042	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/18/23 12:11

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

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

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

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Project Information | Chain of Custody | Page 1 of 1

Client: WPX Energy Permian, LLC.	**Bill To**	Lab Use Only	TAT / EPA Program
Project: Ross Draw Unit #042	Attention: Jim Raley	Lab WO# E308097	Job Number 01058-0007
Project Manager: Anna Byers	Address: 5315 Buena Vista Dr.		1D 2D 3D Standard: 5 Day TAT
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220		CWA SDWA RCRA
City, State, Zip_Odessa,TX, 79765	Phone: 575-885-7502		State: NM CO UT AZ TX
Phone: 575-200-6754	Email: jim.raley@dvn.com		
Email: Devon-team@etechenv.com	WBS/WO: 21204782		
Collected by: Gilbert Moreno	Incident ID: nAB1613035815		

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TDS	Cation/Anion	BGDOC NM		GDOC TX		Remarks
10:40	8.11.23	S	1	BH04	1	0.5'								X				
10:50	8.11.23	S	1	BH04	2	1'								X				
11:00	8.11.23	S	1	BH05	3	0.5'								X				
11:10	8.11.23	S	1	BH05	4	1'								X				
11:20	8.11.23	S	1	BH06	5	0.5'								X				
11:30	8.11.23	S	1	BH06	6	1'								X				

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date 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.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8.11.23	17:30	Michelle Gonzales	8-11-23	1730
Michelle Gonzales	8-12-23	2145	Cath Mar	8/14/23	8:15

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

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

envirotech

Envirotech Analytical Laboratory

Printed: 8/14/2023 12:05:09PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/14/23 08:15	Work Order ID:	E308097
Phone:	(575) 200-6754	Date Logged In:	08/14/23 09:19	Logged In By:	Caitlin Mars
Email:	anna@etechenv.vom	Due Date:	08/18/23 17:00 (4 day TAT)		

Chain of 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: Courier
4. Was the 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 field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the 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 the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

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

Date

envirotech Inc.

APPENDIX G

NMOCD Notifications

Erick Herrera

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Wednesday, August 2, 2023 5:03 PM
To: Erick Herrera
Cc: Bratcher, Michael, EMNRD; Maxwell, Ashley, EMNRD
Subject: RE: [EXTERNAL] WPX Site Sampling Activity Updates (8/7 - 8-11)

Hi Erick,

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

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Administrative Permitting Program
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Erick Herrera <erick@etechenv.com>
Sent: Wednesday, August 2, 2023 3:18 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; blm_nm_cfo_spill@blm.gov
Cc: Raley, Jim <jim.raley@dvn.com>; Devon-Team <Devon-Team@etechenv.com>
Subject: [EXTERNAL] WPX Site Sampling Activity Updates (8/7 - 8-11)

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

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between August 7th through August 11th, 2023:

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 9-4
Incident Number: nAB1803254347
API: 30-015-40180

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 28 #009H
Incident Number: nAB1632648516
API: 30-015-43294

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 17-14
Incident Number: nAB1504834000
API: 30-015-39845

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDX 15-11
Incident Number: nAB1800557573
API: 30- 015-37093

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDU 61
Incident Number: nAB1631949226
API: 30-015041980

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDU 42
Incident Number: nAB1605654667
API: 30-015-42945

Proposed Date: August 7, 2023, August 8, 2023, August 9, 2023, August 10, 2023, August 11, 2023,
Proposed Timeframe: 0800 – 1700 hrs.
Site Name: RDU 12
Incident Number: nAB1702749185
API: 30-015-24793

Thank you,

Erick Herrera
Staff Geologist

eTECH Environmental & Safety Solutions, Inc.

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

APPENDIX H

Previously Submitted Closure Report

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

LT Environmental, Inc.
3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

April 1, 2020

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

RE: Closure Request
WPX Energy Permian, LLC
Ross Draw Unit 42 (2RP-3564)
Incident ID NAB1605654667
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of WPX Energy Permian, LLC (WPX), presents the following Closure Request detailing soil sampling and delineation activities at the Ross Draw Unit 42 (Site) in Unit K, Section 22, Township 26 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling and delineation activities was to confirm the presence or absence of impact to soil following an event that resulted in the release of produced water and crude oil onto the well pad. Based on the delineation activities and results of the soil sampling events, WPX is submitting this report and requesting no further action for this release.

BACKGROUND

On February 20, 2016, a polish rod liner became loose, resulting in approximately 13 barrels (bbls) of crude oil and produced water to be released and contained to the well pad. Vacuum trucks were dispatched and recovered 11 bbls of crude oil and produced water from the impacted area. The spill volume was calculated by averaging the saturated soil depth and estimating the percentage of liquids based on soil type. Any free liquids were added to the total volume. The average saturation depth of the soil was observed to be 0.5 inches within the release extent. The soil capping the pad surface is caliche, which is estimated to have an available space (i.e. porosity) of 15 percent (%) total volume. Based on these assumptions, the following equation was used to calculate total volume:

"saturated soil volume (cubic feet) x (4.21 cubic feet per bbl of liquid) x estimated soil porosity (%)"

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) which was received by the NMOCD on February 22, 2016, and was assigned Remediation Permit Number 2RP-3564 and Incident ID NAB1605654667 (Attachment 1).

SITE CHARACTERIZATION

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 United States Geological Survey (USGS) water well 320125103514701, located approximately 2,650 ft southeast of the Site. Water well 320125103514701 has a reported depth to water of 117 feet bgs and is approximately 7 feet higher in elevation than the Site. The closest significant watercourse to the Site is an unnamed tributary located approximately 2,324 feet southwest of the Site. The Site is greater than 300 feet from any occupied residence, school, hospital, institution, church, or wetland and greater than 1,000 feet to a freshwater well or spring. The Site is not within a 100-year floodplain or overlying a subsurface mine or unstable area.

On February 10, 2020, LTE contracted Southwest Geophysical Consulting, LLC (SGC) to determine the location, description, and boundaries of any karst-related features within a 200-meter boundary surrounding the Site. The survey concluded that no surface karst features were located within the survey area and that the Site is located in a medium-potential karst area. The Cave and Karst Resource Inventory Report is included as Attachment 2.

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.

SITE ASSESSMENT AND DELINEATION SOIL SAMPLING

On May 14, 2019, LTE conducted site investigative activities concurrently with delineation events. The release extent was mapped using a handheld Global Positioning System (GPS) unit and is shown on Figure 2. Utilizing heavy equipment, seven potholes (PH01 through PH07) were advanced within the release footprint to verify the absence of soil impacts. Soil sample locations are presented in Figure 3. Field screening was conducted, at minimum, from every 1-foot interval for volatile aromatic hydrocarbons using a photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Excluding PH03, PH05 and PH06, two samples were collected from each pothole: the most impacted sample based on field screening results and the terminus of the pothole. Three samples were collected from PH03, PH05, and PH06. The soil

samples were placed directly into a pre-cleaned glass jar, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil sample was 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 (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

In an effort to further characterize the vertical and horizontal extent of the impacted area, LTE personnel conducted continued delineation events between February 6, 2020 and February 14, 2020. Utilizing heavy equipment, an additional twenty potholes (PH08 through PH27) were installed within the release footprint to verify the absence of soil impacts. Soil sample locations are presented in Figure 3. Field screening was conducted, at minimum, from every 1-foot interval for volatile aromatic hydrocarbons using a PID and chloride using Hach® chloride QuanTab® test strips. Two samples were collected from each pothole: the most impacted sample based on field screening results and the terminus of the pothole. Soil samples were collected, handled, and analyzed as previously described.

Based on laboratory analytical results for delineation pothole soil samples, no excavation was warranted. Complete laboratory analytical reports are included in Attachment 3. Photographic documentation was conducted during the site visit. Photographs are included in Attachment 4. Soil Sampling Lithologic Logs are included in Attachment 5.

ANALYTICAL RESULTS

Laboratory analytical results of all delineation confirmation soil samples indicate compliance with the Closure Criteria. Laboratory analytical results are summarized in Table 1.

CONCLUSIONS

Laboratory analytical results of delineation soil samples indicate compliance with Closure Criteria, thus WPX is requesting no further action for RP number 2RP-3564 and Incident ID NAB1605654667.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Joseph S. Hernandez
Project Geologist

Ashley L. Ager, M.S., P.G.
Senior Geologist

cc: Jim Raley, WPX
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD
Jim Amos, BLM

Attachments:

Figure 1	Site Location Map
Figure 2	Site Map
Figure 3	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Form C-141
Attachment 2	Cave and Karst Resource Inventory Report
Attachment 3	Laboratory Analytical Reports
Attachment 4	Photographic Log
Attachment 5	Soil Sampling Logs

FIGURES

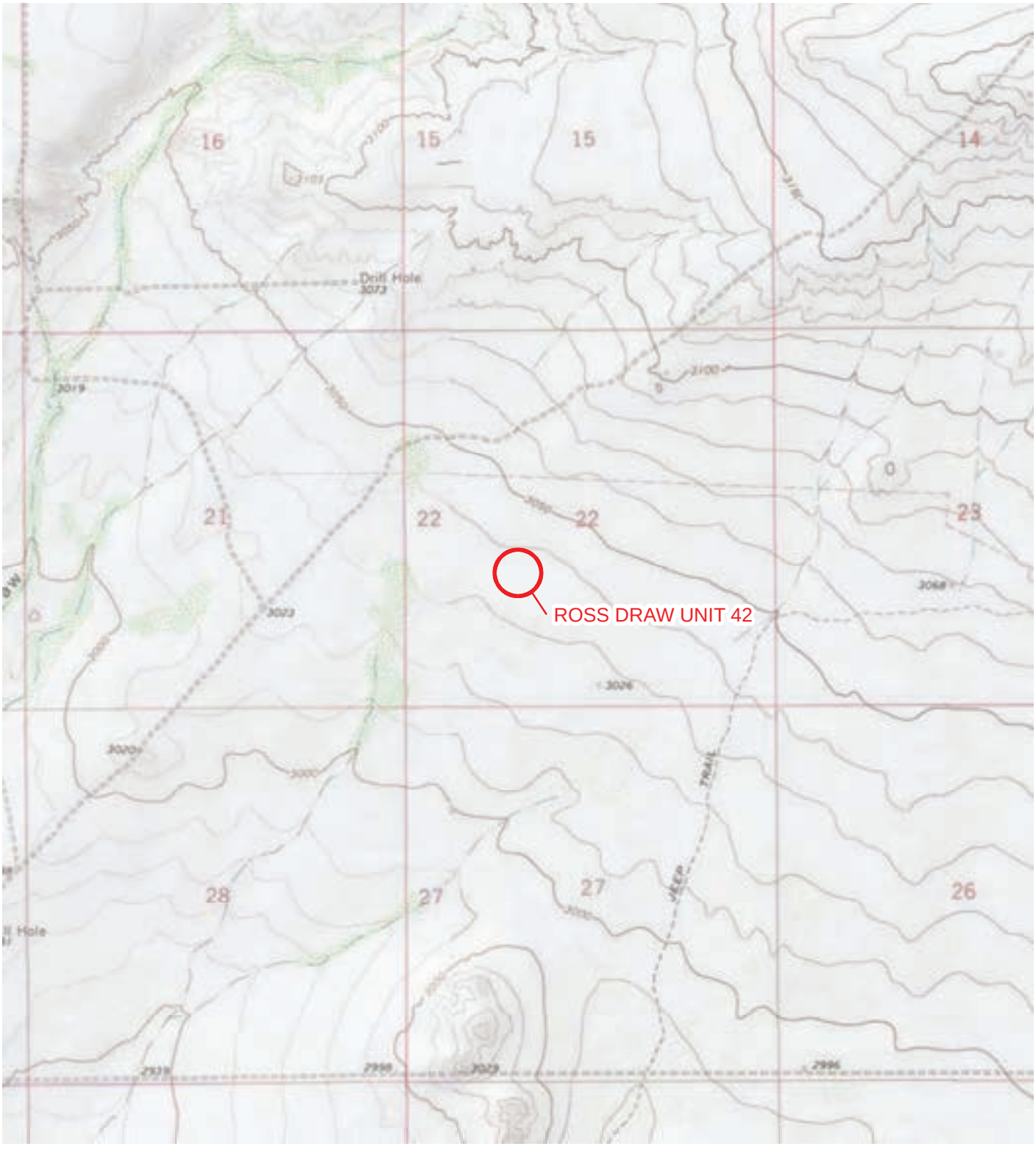


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

FIGURE 1
SITE LOCATION MAP
ROSS DRAW UNIT 42
UNIT K SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034820001_RDU 42\034820001_FIG01_SL_2020_3564.mxd



LEGEND

RELEASE EXTENT (15,895.5 SQUARE FEET)

IMAGE COURTESY OF GOOGLE EARTH 2019

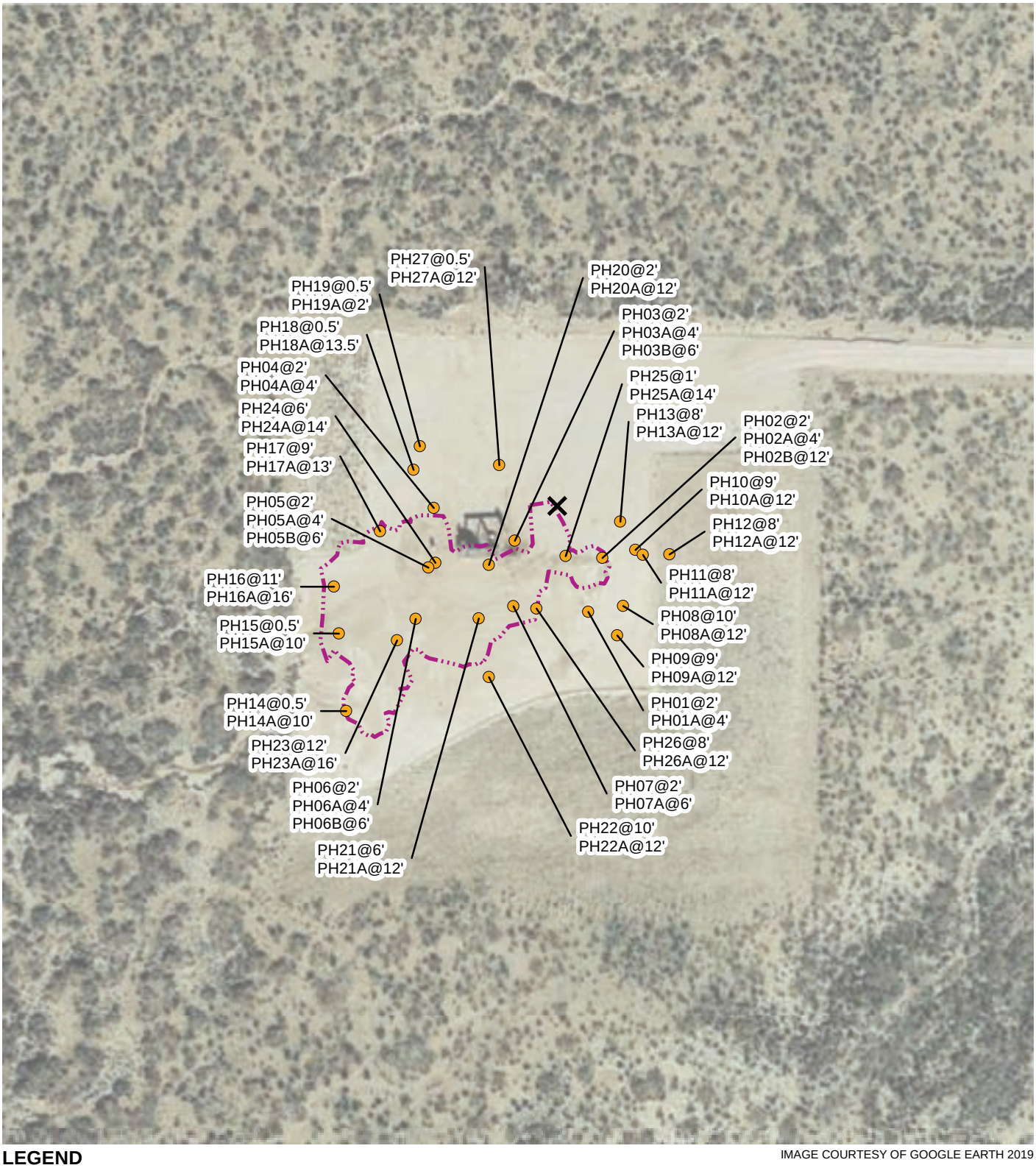
0 100 200

Feet

N

FIGURE 2
SITE MAP
ROSS DRAW UNIT #042
UNIT K SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034820001_RDU 42\034820001_FIG02_ SS_2020_3564_1.mxd



LEGEND

IMAGE COURTESY OF GOOGLE EARTH 2019

RELEASE LOCATION

DELINEATION SOIL SAMPLE

RELEASE EXTENT

0 100 200

Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
ROSS DRAW UNIT 42
UNIT K SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034820001_RDU 42\034820001_FIG03_DELINEATION_2020.mxd

TABLE

Released to Imaging: 4/30/2024 8:02:03 AM
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TABLE 1
SOIL ANALYTICAL RESULTS

ROSS DRAW UNIT 42
REMEDIATION PERMIT NUMBER 2RP-3564
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

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)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	1,000	2,500	20,000
PH01	2	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	225
PH01A	4	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	155
PH02	2	05/14/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	7,150
PH02A	4	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	3,060
PH02B	12	05/14/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	265
PH03	2	05/14/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	75.2
PH03A	4	05/14/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	15.4
PH03B	6	05/14/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	46.3
PH04	2	05/14/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	292
PH04A	4	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	99.3
PH05	2	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	4,530
PH05A	4	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	88.9
PH05B	6	05/14/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<14.9	<14.9	<14.9	<14.9	438
PH06	2	05/14/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	9,950
PH06A	4	05/14/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	6,330
PH06B	6	05/14/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	4,580
PH07	2	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	3,840
PH07A	6	05/14/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	768
PH08	10	02/06/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	359
PH08A	12	02/06/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	109
PH09	9	02/06/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	839
PH09A	12	02/06/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	154
PH10	9	02/06/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	588
PH10A	12	02/06/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	105
PH11	8	02/07/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	799
PH11A	12	02/07/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	149
PH12	8	02/07/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	1,150

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EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

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)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	**1,000**	**2,500**	**20,000**
PH12A	12	02/07/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	190
PH13	8	02/07/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	196
PH13A	12	02/07/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	74.5
PH14	0.5	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	4,280
PH14A	10	02/10/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	187
PH15	0.5	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	279
PH15A	10	02/10/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	445
PH16	11	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	13,600
PH16A	16	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	495
PH17	9	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	1,610
PH17A	13	02/10/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	226
PH18	0.5	02/10/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	559
PH18A	13.5	02/10/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	115
PH19	0.5	02/10/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	56.2
PH19A	2	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	41.8
PH20	2	02/13/2020	<0.000486	<0.000529	<0.000407	<0.000404	<0.000404	<13.9	<11.4	<11.4	<11.4	9,460
PH20A	12	02/13/2020	<0.000488	<0.000531	<0.000409	<0.000406	<0.000406	<13.8	<11.4	<11.4	<11.4	171
PH21	6	02/13/2020	<0.000485	<0.000527	<0.000405	<0.000402	<0.000402	<14.0	<11.5	<11.5	<11.5	4,290
PH21A	12	02/13/2020	<0.000486	<0.000528	<0.000406	<0.000403	<0.000403	<13.9	<11.5	<11.5	<11.5	211
PH22	10	02/13/2020	<0.000481	<0.000522	<0.000402	<0.000399	<0.000399	<13.9	<11.5	<11.5	<11.5	220
PH22A	12	02/13/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<13.9	<11.5	<11.5	<11.5	173
PH23	12	02/13/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<13.9	<11.5	<11.5	<11.5	9,160
PH23A	16	02/13/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<13.9	14.1 J	<11.4	14.1 J	319
PH25	1	02/14/2020	<0.000490	<0.000533	<0.000410	<0.000407	<0.000407	<13.8	<11.4	<11.4	<11.4	7,920
PH25A	14	02/14/2020	<0.000485	<0.000527	<0.000405	<0.000402	<0.000402	<13.8	11.9	<11.4	11.9	366

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REMEDIATION PERMIT NUMBER 2RP-3564
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

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)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	**1,000**	**2,500**	**20,000**
PH24	6	02/13/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<14.0	<11.5	<11.5	<11.5	11,300
PH24A	14	02/13/2020	<0.000485	<0.000527	<0.000405	<0.000402	<0.000402	<13.9	13.6	<11.5	13.6	211
PH26	8	02/13/2020	<0.000481	<0.000522	<0.000402	<0.000399	<0.000399	<13.9	<11.5	<11.5	<11.5	783
PH26A	12	02/13/2020	<0.000483	<0.000525	<0.000404	<0.000401	<0.000401	<13.9	<11.5	<11.5	<11.5	463
PH27	0.5	02/14/2020	<0.000485	<0.000527	<0.000405	<0.000402	<0.000402	<13.8	<11.4	<11.4	<11.4	341
PH27A	12	02/14/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<13.9	12.9	<11.5	12.9	394

Notes:

bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
DRO - diesel range organics
GRO - gasoline range organics
mg/kg - milligrams per kilogram
MRO - motor oil range organics
NMAC - New Mexico Administrative Code
NMOCD - New Mexico Oil Conservation Divisic
NE - not established
TPH - total petroleum hydrocarbons
Bold - indicates result exceeds the applicable regulatory standard
< - indicates result is below laboratory reporting limits
Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

ATTACHMENT 1: FORM C-141

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

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nAB1605154467 — 34628 9

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company RKI E&P, LLC	Contact Taylor Jones
Address 210 Park Ave. – Ste. 700, OKC, OK 73102	Telephone No. 539-573-7558
Facility Name: Ross Draw Unit 42	Facility Type : Oil and Gas Well

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-42945

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	22	26S	30E	1980	FSL	1800	FWL	Eddy

Latitude: 32.02600 **Longitude:** -103.87139

NATURE OF RELEASE

Type of Release. Oil and Produced Water	Volume of Release: 13 Bbls	Volume Recovered: 11 Bbls
Source of Release Polish rod Liner	Date and Hour of Occurrence 2/20/16 – 10:00 MT	Date and Hour of Discovery 2/20/16 – 10:00 MT
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? NM OIL CONSERVATION ARTESIA DISTRICT	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	FEB 22 2016

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

RECEIVED

Describe Cause of Problem and Remedial Action Taken.*
Polish Rod liner became loose, allowing the release of crude oil and produced water. Crew shut well in and tightened the liner.

Describe Area Affected and Cleanup Action Taken.*

All fluids remained on well site. Vacuum truck dispatched to recover all free standing fluids. Affected soil on well pad to be dug and hauled to disposal.

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

Signature: Taylor Jones

Printed Name: Taylor Jones

Title: Safety Specialist II

E-mail Address: taylor.jones@wpxenergy.com

Date: 02/22/16 Phone: 539-573-7558

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 2/25/16 Expiration Date: N/A

Conditions of Approval: Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 3/26/16 Attached ☐

2RP-3564

* Attach Additional Sheets If Necessary

State of New Mexico
Oil Conservation Division

Incident ID	NAB1605654667
District RP	2RP-3564
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

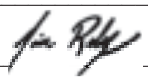
Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAB1605654667
District RP	2RP-3564
Facility ID	
Application ID	

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

Printed Name: Jim Raley Title: Environmental Specialist

Signature:  Date: 4/3/2020

email: james.raley@wpxenergy.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1605654667
District RP	2RP-3564
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jim Raley Title: Environmental Specialist

Signature: _____ Date: 4/3/2020

email: james.raley@wpxenergy.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

ATTACHMENT 2: CAVE AND KARST RESOURCE INVENTORY REPORT



Cave and Karst Resource Inventory Report
Ross Draw Unit 42 Central Tank Battery
Eddy County, New Mexico

Prepared for:

LT Environmental, Inc.

848 East 2nd Avenue

Durango, CO 81301

☐ **Positive for Karst Features – HKOZ remediation process required**

☑ **Negative for Karst Features – MKOZ remediation process may be approved by the Oil Conservation Division**

February 10, 2020

LTE-006-20200130

Published by:

Southwest Geophysical Consulting, LLC
5117 Fairfax Dr. NW
Albuquerque, NM 87114
(505) 585-2550
www.swgeophys.com

Prepared by:

David D. Decker, Ph.D.
Principal, Chief Executive Officer
dave@swgeophys.com

Prepared for:

LT Environmental, Inc.
820 Megan Avenue, Unit B
Rifle, CO 81650

Point of Contact:

Chris McKisson
(970) 285-9985
cmckisson@ltenv.com

MMXX

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Table 1: Survey Track Data Files 4

1.0 INTRODUCTION

This report was commissioned by LT Environmental, Inc. (hereinafter referred to as "the client") on January 30, 2020 for the purpose of determining what, if any, karst-related surface features are present near the Ross Draw Unit 42 Central Tank Battery site (hereinafter termed “RDU 42”, **Figure 1**) and to provide guidance on the level of remediation required. This study does not include subsurface features, which would require a geophysical survey. The study area that this report covers is in a **MEDIUM** karst occurrence zone and entirely located within Bureau of Land Management – Carlsbad Field Office managed lands (**Figure 2**).

As indicated in section ***1.3 Affected Environment***, the bedrock and overlying soil at the survey site are susceptible to sinkhole development and karst features may be hidden beneath the existing soil stratum. Risk associated with sinkhole formation can be minimized during development with proper foundation design and construction, and the control of site hydrology. The Owner/Developer must recognize, however, that a risk of sinkhole-induced damage to infrastructure does exist. The Owner/Developer must evaluate the risks and attendant costs of performing a geophysical survey prior to development, versus no geophysical survey, and must be willing to accept these risks if it is decided that a surface karst survey is sufficient. Southwest Geophysical Consulting, LLC can provide a geophysical survey. If the decision is made to conduct a geophysical survey, a cost estimate and timeline will be provided upon request.

1.1 Goals of this Study

To provide the client with the location, description, photos, and boundaries of any surface karst-related features within a 200-meter boundary surrounding the pad on the RDU47 project site as provided by the client via e-mail on January 30, 2020.

1.2 Summary of Findings

No surface karst features were located within the pedestrian survey area. However, unknown hidden features may still exist beneath the surface. Caution should be exercised during remediation.

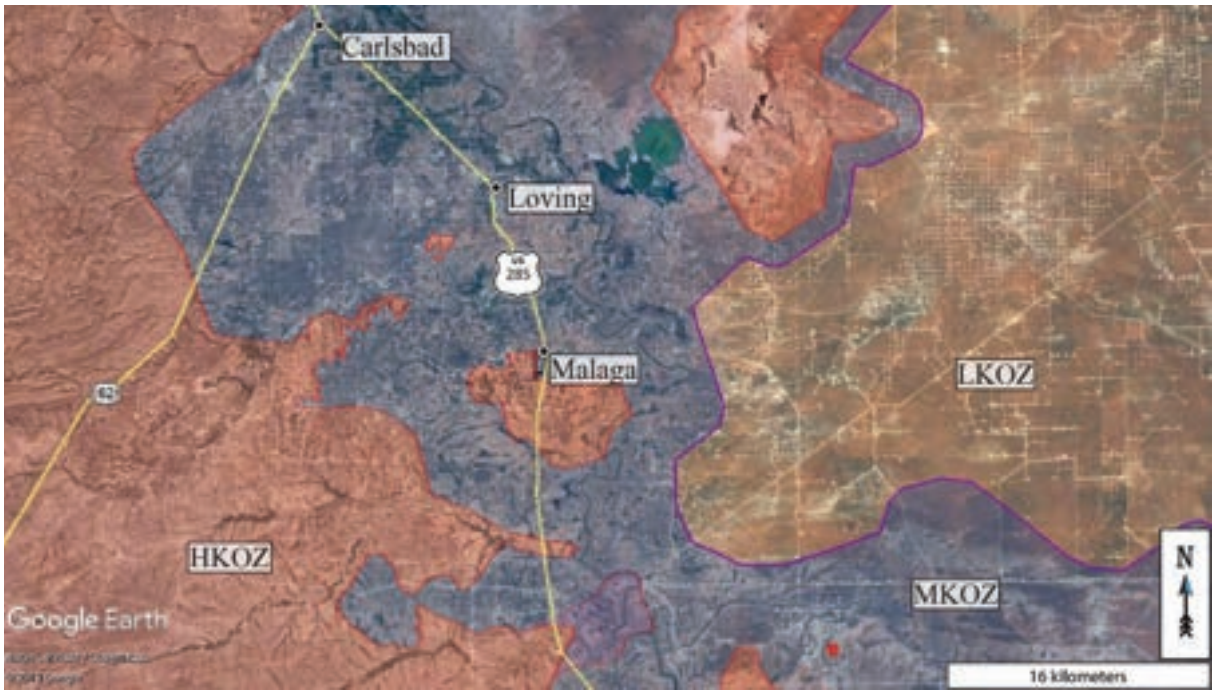


Figure 1: Karst occurrence overview. Red transparent area is a high karst occurrence zone; blue transparent area is a medium karst occurrence zone; no color indicates a low karst occurrence zone. Study area is the red outlined area in the lower-right portion of the image. Background image credit: Google Earth. Image date: February 21, 2019. Datum: WGS-84.

1.3 Affected Environment

The RDU 42 project site is located in evaporite karst terrain, a landform that is characterized by underground drainage through solutionally enlarged conduits. Evaporite karst terrain may contain sinkholes, sinking streams, caves, and springs. Sinkholes leading to underground drainages and voids are common. These karst features, as well as occasional fissures and discontinuities in the bedrock, provide the primary sources for rapid recharge of the groundwater aquifers of the region.

The Bureau of Land Management (BLM) categorizes all areas within the Carlsbad Field Office (CFO) zone of responsibility as having either low, medium, high, or critical cave potential based on geology, occurrence of known caves, density of karst features, and potential impacts to freshwater aquifers. This project occurs within a **MEDIUM** karst occurrence zone[1] (MKOZ, **Figure 1**). A medium karst occurrence zone is defined as an area in known soluble rock types that may have a shallow insoluble overburden. These areas may contain isolated karst features such as caves and sinkholes. Groundwater recharge may not be wholly dependent on karst features, but the karst features still provide the most rapid aquifer recharge in response to surface runoff[2].

An on-site inspection revealed that there are no surface karst features within the pedestrian survey area. However, unknown buried features may exist; therefore, this action is subject to mitigation measures designed to adequately protect known and potential cave/karst resources.

2.0 LOCATION AND DESCRIPTION OF STUDY AREA

2.1 Description of Site

The RDU 42 project site is located in Eddy County, New Mexico, 51 kilometers (31.7 miles) southeast of Carlsbad, New Mexico; 18 kilometers (11 miles) east of US-285, and 2 kilometers (1.2 miles) north of the New Mexico-Texas Border (**Figure 1** and **Figure 2**). The site is located within section 22 of NM T26S R30E. This area is within the Chihuahuan Desert Thornscrub defined by the Southwestern Regional ReGAP Vegetation map[5] and the vegetation consists mostly of areas of grass, sparse creosote, and sparse yucca with very good visibility in most locations. See section ***2.3 Local Geology*** for the geology of the area. The pad and surrounding survey boundary are entirely within a medium karst occurrence zone (**Figure 1**) and are located entirely within BLM-CFO managed lands (**Figure 2**).

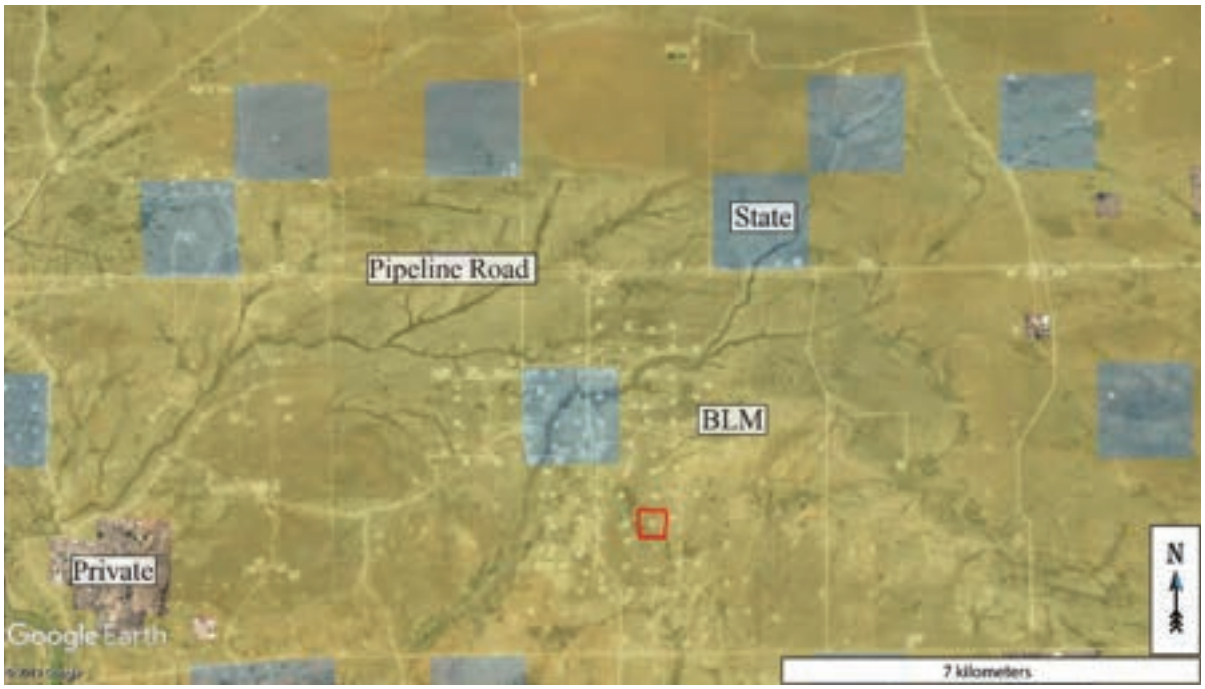


Figure 2: Land ownership overview. Yellow transparent area: BLM-CFO managed land. Blue transparent area: New Mexico State Land Office managed land. No color: Private land. Background image credit: Google Earth. Image date: February 21, 2019. Datum: WGS-84.

2.2 Description of Survey

For this survey 12 lines were walked in a raster pattern at 50-meter (165 feet) intervals in the designated area, providing 90 to 100% coverage for features greater than 50 centimeters (20 inches) in diameter (**Table 1**).

The survey was completed by Garrett Jorgensen on January 31, 2020. The total distance walked was 5.8 kilometers (3.6 miles) and the total area covered was 0.2 square kilometers (51.9 acres).

Table 1: Survey Track Data Files.

File Name	**Surveyor**	**Date**	**Length** (km/miles)	**Area** (km^2/Ac)
RDXSRV_D1S1.kmz	Jorgensen	01/31/2020	5.81/3.61	0.21/51.9



Figure 3: Survey overview. Light blue wavy lines are the actual survey lines walked. Yellow polygon is the pad site. Red polygon is the 200-meter buffer study area. Background image credit: Google Earth. Image date: February 21, 2019. Datum: WGS-84.

2.3 Local Geology



Figure 4: Geology overview. Red polygon highlights the survey area. Pru: Permian Rustler Formation. Pdl: Permian Dewey Lake Formation. Qa: Quaternary units, locally includes both Qg: Quaternary Gatuna Formation and Qs: Quaternary windblown sand. Geologic Map of New Mexico, scale: 1:500,000 (2003), and Google Earth. Image date: February 21, 2019. Datum: WGS-84.

The area surveyed for the RDU 42 project is located at an elevation of 930 meters (3,050 feet), plus or minus 3 meters (9 feet), within the Quaternary Gatuna Formation (Qg – not shown. Within Qa on map) and Quaternary windblown sand (Qs – not shown. Within Qa on map). The Gatuna Formation is a conglomerate composed of calcite cemented limestone and sandstone cobble derived from the Guadalupe Mountains. The large proportion of calcite that makes up the matrix for this formation allows limited karst formation to occur. The entirety of the survey area is underlain by the Permian Dewey Lake Formation (Pdl), which outcrops in the southernmost section of the survey area, and Permian Rustler (Pru) Formation (which does not outcrop within the survey area). The Dewey Lake Formation is composed of calcite cemented, hematite stained quartz sand grains and is not known for forming karst. The Rustler Formation is composed of alternating layers of gypsum and dolomite, both of which are easily dissolved to form karst features[3, 4]. Two easily accessible geologic maps that cover the survey area are the Geologic Map of New Mexico (2003) at 1:500,000 scale[2], and the Geologic Atlas of Texas - Hobbs Sheet (1976) at 1:250,000 scale.

2.4 Description of Karst Features

No surface karst features were located within the 200-meter boundary of the pedestrian survey area for the RDU 42 project.

3.0 RECOMMENDATIONS

No surface karst features were located during this survey. Based on the above findings, allowing use of medium karst occurrence zone spill remediation procedures may be considered by the Oil Conservation Division within the 200-meter survey area. Confirmation to use a lower remediation level should be received from the Oil Conservation Division before proceeding.

Vigilance during remediation is paramount. If voids are encountered during trenching or digging contact the New Mexico State Oil Conservation Division if on State land, and the Bureau of Land Management – Carlsbad Field Office at (575) 234-5972 if on BLM land and request an onsite investigation from a karst expert. A karst consultant can generally be onsite in Eddy County within five hours.

4.0 REFERENCES

1. Rybacki, K., *Karst Potential Map.* CFO Basemap, 2019.
2. Scholle, P.A., *Geologic Map of New Mexico.* 2003. (1:500,000).
3. Johnson, K.S., *Evaporite Karst in the United States.* Carbonates and Evaporites, 1997. **12(1)**: p. 2-14.
4. Martinez, J.D., K.S. Johnson, and J.T. Neal, *Sinkholes in Evaporite Rocks.* American Scientist, 1998. **86(1-2)**: p. 38-51.
5. Whitehead, W. and C. Flynn, *Plant Utilization in Southeastern New Mexico: Botany, Ethnobotany, and Archaeology.* 2017, Carlsbad, NM: Bureau of Land Management, Carlsbad Field Office.

5.0 GLOSSARY OF TERMS

BLM	Bureau of Land Management
CFO	Carlsbad Field Office
cave	A natural opening at the surface, large enough for a person to enter.
GPS	Global Positioning System
NMSLO	New Mexico State Land Office
playa lake	A natural depression on the surface that collects rainwater. Some contain swallets and/or caves, others do not.
pseudokarst	Karst-like terrain that forms through processes other than dissolution.
swallet	A natural opening in the surface, too small for a person, that drains water to an aquifer. Some are "open," meaning a void can be seen below; some are "closed," meaning they are full of sediment.
WGS	World Geodetic System

ATTACHMENT 3: LABORATORY ANALYTICAL RESULTS

Analytical Report 624492

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 42

34819015

20-MAY-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

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

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-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

20-MAY-19

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

Reference: XENCO Report No(s): **624492**
RDU 42
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) 624492. 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. 624492 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,

Jessica Kramer

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 Cross Reference 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH02B	S	05-14-19 13:25	12 ft	624492-001
PH03B	S	05-14-19 13:45	6 ft	624492-002
PH05B	S	05-14-19 14:20	6 ft	624492-003
PH06B	S	05-14-19 14:40	6 ft	624492-004

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 42

Project ID: *34819015*
Work Order Number(s): *624492*

Report Date: *20-MAY-19*
Date Received: *05/16/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3089541 BTEX by EPA 8021B

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

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 624492

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 34819015
Contact: Chris McKisson
Project Location:

Date Received in Lab: Thu May-16-19 10:58 am
Report Date: 20-MAY-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	624492-001		624492-002		624492-003		624492-004					
	Field Id:	PH02B		PH03B		PH05B		PH06B					
	Depth:	12- ft		6- ft		6- ft		6- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	May-14-19 13:25		May-14-19 13:45		May-14-19 14:20		May-14-19 14:40					
BTEX by EPA 8021B	***Extracted:***	May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45					
	Analyzed:	May-17-19 17:58		May-17-19 18:17		May-17-19 18:37		May-17-19 18:56					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
Toluene		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
Ethylbenzene		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
m,p-Xylenes		<0.00402	0.00402	<0.00403	0.00403	<0.00402	0.00402	<0.00398	0.00398				
o-Xylene		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
Total Xylenes		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
Total BTEX		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
Inorganic Anions by EPA 300	***Extracted:***	May-17-19 16:40		May-17-19 16:40		May-17-19 16:40		May-17-19 16:40					
	Analyzed:	May-18-19 11:00		May-18-19 11:08		May-18-19 11:15		May-18-19 11:22					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		265	5.02	46.3	5.00	438	5.01	4580	24.8				
TPH by SW8015 Mod	***Extracted:***	May-18-19 08:00		May-18-19 08:00		May-18-19 08:00		May-18-19 08:00					
	Analyzed:	May-18-19 23:00		May-18-19 23:20		May-18-19 23:40		May-19-19 00:00					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				
Total GRO-DRO		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				

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

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-001	Date Collected:	05.14.19 13.25	Sample Depth:	12 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.40	Basis:	Wet Weight
Seq Number:	3089465				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**265**	5.02	mg/kg	05.18.19 11.00		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.18.19 08.00	Basis:	Wet Weight
Seq Number:	3089547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.18.19 23.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.18.19 23.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.18.19 23.00	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.18.19 23.00	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.18.19 23.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.18.19 23.00	
o-Terphenyl	84-15-1	96	%	70-135	05.18.19 23.00	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-001	Date Collected:	05.14.19 13.25	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.17.19 17.58	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	05.17.19 17.58	
1,4-Difluorobenzene	540-36-3	101	%	70-130	05.17.19 17.58	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-002	Date Collected:	05.14.19 13.45	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.40	Basis:	Wet Weight
Seq Number:	3089465				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**46.3**	5.00	mg/kg	05.18.19 11.08		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.18.19 08.00	Basis:	Wet Weight
Seq Number:	3089547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.18.19 23.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.18.19 23.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.18.19 23.20	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.18.19 23.20	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.18.19 23.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.18.19 23.20	
o-Terphenyl	84-15-1	100	%	70-135	05.18.19 23.20	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-002	Date Collected:	05.14.19 13.45	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.17.19 18.17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.17.19 18.17	
1,4-Difluorobenzene	540-36-3	101	%	70-130	05.17.19 18.17	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-003	Date Collected:	05.14.19 14.20	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.40	Basis:	Wet Weight
Seq Number:	3089465				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**438**	5.01	mg/kg	05.18.19 11.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.18.19 08.00	Basis:	Wet Weight
Seq Number:	3089547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.18.19 23.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	05.18.19 23.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	05.18.19 23.40	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	05.18.19 23.40	U	1
Total GRO-DRO	PHC628	<14.9	14.9	mg/kg	05.18.19 23.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.18.19 23.40	
o-Terphenyl	84-15-1	100	%	70-135	05.18.19 23.40	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-003	Date Collected:	05.14.19 14.20	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.17.19 18.37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.17.19 18.37	
1,4-Difluorobenzene	540-36-3	104	%	70-130	05.17.19 18.37	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-004	Date Collected:	05.14.19 14.40	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.40	Basis:	Wet Weight
Seq Number:	3089465				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4580**	24.8	mg/kg	05.18.19 11.22		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.18.19 08.00	Basis:	Wet Weight
Seq Number:	3089547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.19.19 00.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.19.19 00.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.19.19 00.00	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.19.19 00.00	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.19.19 00.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	05.19.19 00.00	
o-Terphenyl	84-15-1	103	%	70-135	05.19.19 00.00	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-004	Date Collected:	05.14.19 14.40	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.17.19 18.56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	05.17.19 18.56	
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.17.19 18.56	

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 Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 624492

LT Environmental, Inc.

RDU 42

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089465 — Matrix: Solid — Date Prep: 05.17.19
MB Sample Id: 7678112-1-BLK — LCS Sample Id: 7678112-1-BKS — LCSD Sample Id: 7678112-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	256	102	255	102	90-110	0	20	mg/kg	05.18.19 08:06	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089465 — Matrix: Soil — Date Prep: 05.17.19
Parent Sample Id: 624494-001 — MS Sample Id: 624494-001 S — MSD Sample Id: 624494-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1270	251	1390	48	1390	48	90-110	0	20	mg/kg	05.18.19 15:21	X

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089465 — Matrix: Soil — Date Prep: 05.17.19
Parent Sample Id: 624494-011 — MS Sample Id: 624494-011 S — MSD Sample Id: 624494-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	575	250	786	84	785	84	90-110	0	20	mg/kg	05.18.19 15:36	X

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3089547 — Matrix: Solid — Date Prep: 05.18.19
MB Sample Id: 7678172-1-BLK — LCS Sample Id: 7678172-1-BKS — LCSD Sample Id: 7678172-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1090	109	1090	109	70-135	0	20	mg/kg	05.18.19 21:20	
Diesel Range Organics (DRO)	<8.13	1000	1040	104	1040	104	70-135	0	20	mg/kg	05.18.19 21:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		123		128		70-135	%	05.18.19 21:20
o-Terphenyl	112		115		120		70-135	%	05.18.19 21:20

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

QC Summary 624492

LT Environmental, Inc.

RDU 42

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3089547 | Matrix: Soil | Date Prep: 05.18.19
Parent Sample Id: 624491-001 | MS Sample Id: 624491-001 S | MSD Sample Id: 624491-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<7.99	998	1160	116	1160	116	70-135	0	20	mg/kg	05.18.19 22:20	
Diesel Range Organics (DRO)	<8.11	998	1140	114	1140	114	70-135	0	20	mg/kg	05.18.19 22:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		124		70-135	%	05.18.19 22:20
o-Terphenyl	109		114		70-135	%	05.18.19 22:20

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089541 | Matrix: Solid | Date Prep: 05.17.19
MB Sample Id: 7678184-1-BLK | LCS Sample Id: 7678184-1-BKS | LCSD Sample Id: 7678184-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.114	114	0.113	113	70-130	1	35	mg/kg	05.17.19 16:00	
Toluene	<0.000455	0.0998	0.108	108	0.107	107	70-130	1	35	mg/kg	05.17.19 16:00	
Ethylbenzene	<0.000564	0.0998	0.113	113	0.112	112	70-130	1	35	mg/kg	05.17.19 16:00	
m,p-Xylenes	<0.00101	0.200	0.236	118	0.234	118	70-130	1	35	mg/kg	05.17.19 16:00	
o-Xylene	<0.000344	0.0998	0.114	114	0.114	114	70-130	0	35	mg/kg	05.17.19 16:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		104		104		70-130	%	05.17.19 16:00
4-Bromofluorobenzene	81		100		102		70-130	%	05.17.19 16:00

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089541 | Matrix: Soil | Date Prep: 05.17.19
Parent Sample Id: 624492-001 | MS Sample Id: 624492-001 S | MSD Sample Id: 624492-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000433	0.0994	0.105	105	0.0880	88	70-130	18	35	mg/kg	05.17.19 16:40	
Toluene	<0.000453	0.0994	0.0987	99	0.0826	83	70-130	18	35	mg/kg	05.17.19 16:40	
Ethylbenzene	<0.000561	0.0994	0.104	105	0.0864	87	70-130	18	35	mg/kg	05.17.19 16:40	
m,p-Xylenes	<0.00101	0.199	0.216	109	0.180	91	70-130	18	35	mg/kg	05.17.19 16:40	
o-Xylene	0.000523	0.0994	0.105	105	0.0873	87	70-130	18	35	mg/kg	05.17.19 16:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	05.17.19 16:40
4-Bromofluorobenzene	105		101		70-130	%	05.17.19 16:40

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

Page 607 of 1072

Chain of Custody

Work Order No: 624492

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com Page 1 of 1

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970)285-9985	Email:	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	34819015	Routine	☒
P.O. Number:	2RP-3564	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.5/0.4	Thermometer ID	
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
PH02B	S	5/14/2019	13:25	12'	1	X	X	X
PH03B	S		13:45	6'	1	X	X	X
PH05B	S		14:20	6'	1	X	X	X
PH06B	S		14:40	6'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

TAT starts the day received by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			05/15/2019 12:45	2		5/16/19 1058
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.000
Page 17 of 19



After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 05/16/2019 10:58:00 AM

Work Order #: 624492

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.4
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 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)?	**N/A**
#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: Brianna Teel Date: 05/16/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 05/16/2019

Jessica Kramer

Analytical Report 624493

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 42

34819015

28-MAY-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

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

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-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

28-MAY-19

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

Reference: XENCO Report No(s): **624493**
RDU 42
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) 624493. 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. 624493 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,

Jessica Kramer

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 Cross Reference 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	05-14-19 13:00	2 ft	624493-001
PH01A	S	05-14-19 13:05	4 ft	624493-002
PH02	S	05-14-19 13:15	2 ft	624493-003
PH02A	S	05-14-19 13:20	4 ft	624493-004
PH03	S	05-14-19 13:35	2 ft	624493-005
PH03A	S	05-14-19 13:40	4 ft	624493-006
PH04	S	05-14-19 13:55	2 ft	624493-007
PH04A	S	05-14-19 14:00	4 ft	624493-008
PH05	S	05-14-19 14:10	2 ft	624493-009
PH05A	S	05-14-19 14:15	4 ft	624493-010
PH06	S	05-14-19 14:30	2 ft	624493-011
PH06A	S	05-14-19 14:35	4 ft	624493-012
PH07	S	05-14-19 14:50	2 ft	624493-013
PH07A	S	05-14-19 15:00	6 ft	624493-014

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 42

Project ID: *34819015*
Work Order Number(s): *624493*

Report Date: *28-MAY-19*
Date Received: *05/16/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3089346 Inorganic Anions by EPA 300

Lab Sample ID 624493-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 624493-001, -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-3089541 BTEX by EPA 8021B

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

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 624493

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 34819015
Contact: Chris McKisson
Project Location:

Date Received in Lab: Thu May-16-19 10:58 am
Report Date: 28-MAY-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	624493-001		624493-002		624493-003		624493-004		624493-005		624493-006	
	Field Id:	PH01		PH01A		PH02		PH02A		PH03		PH03A	
	Depth:	2- ft		4- ft		2- ft		4- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-14-19 13:00		May-14-19 13:05		May-14-19 13:15		May-14-19 13:20		May-14-19 13:35		May-14-19 13:40	
BTEX by EPA 8021B	*Extracted:*	May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45	
	Analyzed:	May-17-19 19:15		May-17-19 19:34		May-17-19 19:53		May-17-19 20:12		May-17-19 20:31		May-17-19 20:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
m,p-Xylenes		<0.00399	0.00399	<0.00401	0.00401	<0.00397	0.00397	<0.00401	0.00401	<0.00398	0.00398	<0.00404	0.00404
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
Inorganic Anions by EPA 300	*Extracted:*	May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30	
	Analyzed:	May-17-19 09:22		May-17-19 09:30		May-17-19 09:37		May-18-19 03:37		May-17-19 10:21		May-17-19 10:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		225	4.99	155	5.00	7150	50.2	3060	25.1	75.2	4.96	15.4	5.05
TPH by SW8015 Mod	*Extracted:*	May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00	
	Analyzed:	May-24-19 19:13		May-24-19 20:13		May-24-19 20:33		May-24-19 20:52		May-24-19 21:12		May-24-19 21:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total GRO-DRO		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

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Jessica Kramer
Project Assistant

Final 1.000

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 624493

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 34819015
Contact: Chris McKisson
Project Location:

Date Received in Lab: Thu May-16-19 10:58 am
Report Date: 28-MAY-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	624493-007		624493-008		624493-009		624493-010		624493-011		624493-012	
	Field Id:	PH04		PH04A		PH05		PH05A		PH06		PH06A	
	Depth:	2- ft		4- ft		2- ft		4- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-14-19 13:55		May-14-19 14:00		May-14-19 14:10		May-14-19 14:15		May-14-19 14:30		May-14-19 14:35	
BTEX by EPA 8021B	*Extracted:*	May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45	
	Analyzed:	May-17-19 22:04		May-17-19 22:23		May-17-19 22:42		May-17-19 23:01		May-17-19 23:20		May-17-19 23:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Toluene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Ethylbenzene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
m,p-Xylenes		<0.00397	0.00397	<0.00399	0.00399	<0.00400	0.00400	<0.00400	0.00400	<0.00402	0.00402	<0.00398	0.00398
o-Xylene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Total Xylenes		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Total BTEX		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Inorganic Anions by EPA 300	*Extracted:*	May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30	
	Analyzed:	May-17-19 10:35		May-17-19 10:42		May-17-19 10:50		May-17-19 10:57		May-17-19 11:04		May-17-19 11:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		292	5.00	99.3	5.02	4530	49.8	88.9	4.95	9950	49.5	6330	49.5
TPH by SW8015 Mod	*Extracted:*	May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00	
	Analyzed:	May-24-19 21:51		May-24-19 22:10		May-24-19 22:30		May-24-19 22:49		May-24-19 23:28		May-24-19 23:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total GRO-DRO		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

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Jessica Kramer
Project Assistant

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Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 624493

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 34819015
Contact: Chris McKisson
Project Location:

Date Received in Lab: Thu May-16-19 10:58 am
Report Date: 28-MAY-19
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	624493-013		624493-014					
	Field Id:	PH07		PH07A					
	Depth:	2- ft		6- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	May-14-19 14:50		May-14-19 15:00					
BTEX by EPA 8021B	***Extracted:***	May-17-19 08:45		May-17-19 08:45					
	Analyzed:	May-17-19 23:58		May-18-19 00:17					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00202	0.00202				
Toluene		<0.00200	0.00200	<0.00202	0.00202				
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202				
m,p-Xylenes		<0.00399	0.00399	<0.00403	0.00403				
o-Xylene		<0.00200	0.00200	<0.00202	0.00202				
Total Xylenes		<0.00200	0.00200	<0.00202	0.00202				
Total BTEX		<0.00200	0.00200	<0.00202	0.00202				
Inorganic Anions by EPA 300	***Extracted:***	May-17-19 16:15		May-17-19 16:15					
	Analyzed:	May-18-19 07:30		May-18-19 07:37					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		3840	25.2	768	4.96				
TPH by SW8015 Mod	***Extracted:***	May-24-19 10:00		May-24-19 10:00					
	Analyzed:	May-25-19 00:07		May-25-19 00:26					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0				
Total GRO-DRO		<15.0	15.0	<15.0	15.0				

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Jessica Kramer
Project Assistant

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Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-001	Date Collected:	05.14.19 13.00	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**225**	4.99	mg/kg	05.17.19 09.22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 19.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 19.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 19.13	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 19.13	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 19.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.24.19 19.13	
o-Terphenyl	84-15-1	97	%	70-135	05.24.19 19.13	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-001	Date Collected:	05.14.19 13.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.17.19 19.15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	05.17.19 19.15	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.17.19 19.15	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-002	Date Collected:	05.14.19 13.05	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**155**	5.00	mg/kg	05.17.19 09.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.24.19 20.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	05.24.19 20.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	05.24.19 20.13	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	05.24.19 20.13	U	1
Total GRO-DRO	PHC628	<14.9	14.9	mg/kg	05.24.19 20.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	05.24.19 20.13	
o-Terphenyl	84-15-1	99	%	70-135	05.24.19 20.13	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-002	Date Collected:	05.14.19 13.05	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.17.19 19.34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	05.17.19 19.34	
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.17.19 19.34	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-003	Date Collected:	05.14.19 13.15	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7150**	50.2	mg/kg	05.17.19 09.37		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 20.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 20.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 20.33	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 20.33	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 20.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	05.24.19 20.33	
o-Terphenyl	84-15-1	101	%	70-135	05.24.19 20.33	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-003	Date Collected:	05.14.19 13.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.17.19 19.53	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.17.19 19.53	
1,4-Difluorobenzene	540-36-3	104	%	70-130	05.17.19 19.53	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-004	Date Collected:	05.14.19 13.20	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3060**	25.1	mg/kg	05.18.19 03.37		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 20.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 20.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 20.52	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 20.52	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 20.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.24.19 20.52	
o-Terphenyl	84-15-1	96	%	70-135	05.24.19 20.52	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-004	Date Collected:	05.14.19 13.20	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.17.19 20.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	05.17.19 20.12	
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.17.19 20.12	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-005	Date Collected:	05.14.19 13.35	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**75.2**	4.96	mg/kg	05.17.19 10.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 21.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 21.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 21.12	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 21.12	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 21.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.24.19 21.12	
o-Terphenyl	84-15-1	98	%	70-135	05.24.19 21.12	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-005	Date Collected:	05.14.19 13.35	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.17.19 20.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	05.17.19 20.31	
1,4-Difluorobenzene	540-36-3	104	%	70-130	05.17.19 20.31	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-006	Date Collected:	05.14.19 13.40	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.4**	5.05	mg/kg	05.17.19 10.28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 21.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 21.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 21.31	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 21.31	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 21.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.24.19 21.31	
o-Terphenyl	84-15-1	93	%	70-135	05.24.19 21.31	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-006	Date Collected:	05.14.19 13.40	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	05.17.19 20.50	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	05.17.19 20.50	
4-Bromofluorobenzene	460-00-4	110	%	70-130	05.17.19 20.50	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-007	Date Collected:	05.14.19 13.55	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**292**	5.00	mg/kg	05.17.19 10.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 21.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 21.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 21.51	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 21.51	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 21.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.24.19 21.51	
o-Terphenyl	84-15-1	96	%	70-135	05.24.19 21.51	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-007	Date Collected:	05.14.19 13.55	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.17.19 22.04	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.17.19 22.04	
1,4-Difluorobenzene	540-36-3	99	%	70-130	05.17.19 22.04	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-008	Date Collected:	05.14.19 14.00	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.3**	5.02	mg/kg	05.17.19 10.42		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 22.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 22.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 22.10	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 22.10	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 22.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	05.24.19 22.10	
o-Terphenyl	84-15-1	101	%	70-135	05.24.19 22.10	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-008	Date Collected:	05.14.19 14.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.17.19 22.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.17.19 22.23	
1,4-Difluorobenzene	540-36-3	100	%	70-130	05.17.19 22.23	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-009	Date Collected:	05.14.19 14.10	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4530**	49.8	mg/kg	05.17.19 10.50		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 22.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 22.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 22.30	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 22.30	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 22.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	05.24.19 22.30	
o-Terphenyl	84-15-1	99	%	70-135	05.24.19 22.30	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-009	Date Collected:	05.14.19 14.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.17.19 22.42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.17.19 22.42	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.17.19 22.42	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-010	Date Collected:	05.14.19 14.15	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**88.9**	4.95	mg/kg	05.17.19 10.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 22.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 22.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 22.49	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 22.49	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 22.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	05.24.19 22.49	
o-Terphenyl	84-15-1	100	%	70-135	05.24.19 22.49	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-010	Date Collected:	05.14.19 14.15	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.17.19 23.01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	05.17.19 23.01	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.17.19 23.01	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-011	Date Collected:	05.14.19 14.30	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9950**	49.5	mg/kg	05.17.19 11.04		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 23.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 23.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 23.28	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 23.28	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 23.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.24.19 23.28	
o-Terphenyl	84-15-1	99	%	70-135	05.24.19 23.28	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-011	Date Collected:	05.14.19 14.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.17.19 23.20	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.17.19 23.20	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.17.19 23.20	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-012	Date Collected:	05.14.19 14.35	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6330**	49.5	mg/kg	05.17.19 11.11		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 23.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 23.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 23.47	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 23.47	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 23.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	05.24.19 23.47	
o-Terphenyl	84-15-1	97	%	70-135	05.24.19 23.47	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-012	Date Collected:	05.14.19 14.35	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.17.19 23.39	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	05.17.19 23.39	
4-Bromofluorobenzene	460-00-4	103	%	70-130	05.17.19 23.39	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-013	Date Collected:	05.14.19 14.50	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.15	Basis:	Wet Weight
Seq Number:	3089461				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3840**	25.2	mg/kg	05.18.19 07.30		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.25.19 00.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.25.19 00.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.25.19 00.07	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.25.19 00.07	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.25.19 00.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	05.25.19 00.07	
o-Terphenyl	84-15-1	97	%	70-135	05.25.19 00.07	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-013	Date Collected:	05.14.19 14.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.17.19 23.58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.17.19 23.58	
1,4-Difluorobenzene	540-36-3	104	%	70-130	05.17.19 23.58	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-014	Date Collected:	05.14.19 15.00	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.15	Basis:	Wet Weight
Seq Number:	3089461				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**768**	4.96	mg/kg	05.18.19 07.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.25.19 00.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.25.19 00.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.25.19 00.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.25.19 00.26	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.25.19 00.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.25.19 00.26	
o-Terphenyl	84-15-1	96	%	70-135	05.25.19 00.26	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-014	Date Collected:	05.14.19 15.00	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.18.19 00.17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.18.19 00.17	
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.18.19 00.17	

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 Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 624493

LT Environmental, Inc.

RDU 42

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089346 — Matrix: Solid — Date Prep: 05.16.19
MB Sample Id: 7678025-1-BLK — LCS Sample Id: 7678025-1-BKS — LCSD Sample Id: 7678025-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	255	102	257	103	90-110	1	20	mg/kg	05.16.19 17:23	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089461 — Matrix: Solid — Date Prep: 05.17.19
MB Sample Id: 7678111-1-BLK — LCS Sample Id: 7678111-1-BKS — LCSD Sample Id: 7678111-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.82	250	254	102	254	102	90-110	0	20	mg/kg	05.18.19 04:07	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089346 — Matrix: Soil — Date Prep: 05.16.19
Parent Sample Id: 624487-001 — MS Sample Id: 624487-001 S — MSD Sample Id: 624487-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	135	248	379	98	379	98	90-110	0	20	mg/kg	05.17.19 11:33	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089346 — Matrix: Soil — Date Prep: 05.16.19
Parent Sample Id: 624493-003 — MS Sample Id: 624493-003 S — MSD Sample Id: 624493-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7150	251	9800	1056	10000	1135	90-110	2	20	mg/kg	05.17.19 09:44	X

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089461 — Matrix: Soil — Date Prep: 05.17.19
Parent Sample Id: 624555-002 — MS Sample Id: 624555-002 S — MSD Sample Id: 624555-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	66.8	250	327	104	321	102	90-110	2	20	mg/kg	05.18.19 04:29	

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

QC Summary 624493

LT Environmental, Inc.

RDU 42

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3089461 Matrix: Soil Date Prep: 05.17.19
Parent Sample Id: 624555-011 MS Sample Id: 624555-011 S MSD Sample Id: 624555-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	66.3	250	328	105	325	103	90-110	1	20	mg/kg	05.18.19 06:10	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3090323 Matrix: Solid Date Prep: 05.24.19
MB Sample Id: 7678654-1-BLK LCS Sample Id: 7678654-1-BKS LCSD Sample Id: 7678654-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1120	112	1130	113	70-135	1	20	mg/kg	05.24.19 18:33	
Diesel Range Organics (DRO)	8.16	1000	1110	111	1110	111	70-135	0	20	mg/kg	05.24.19 18:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		127		126		70-135	%	05.24.19 18:33
o-Terphenyl	94		106		105		70-135	%	05.24.19 18:33

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3090323 Matrix: Soil Date Prep: 05.24.19
Parent Sample Id: 624493-001 MS Sample Id: 624493-001 S MSD Sample Id: 624493-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	9.79	999	1020	101	1030	102	70-135	1	20	mg/kg	05.24.19 19:33	
Diesel Range Organics (DRO)	<8.12	999	979	98	985	99	70-135	1	20	mg/kg	05.24.19 19:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		122		70-135	%	05.24.19 19:33
o-Terphenyl	122		121		70-135	%	05.24.19 19:33

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

QC Summary 624493

LT Environmental, Inc.

RDU 42

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089541 | Matrix: Solid | Date Prep: 05.17.19
MB Sample Id: 7678184-1-BLK | LCS Sample Id: 7678184-1-BKS | LCSD Sample Id: 7678184-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.114	114	0.113	113	70-130	1	35	mg/kg	05.17.19 16:00	
Toluene	<0.000455	0.0998	0.108	108	0.107	107	70-130	1	35	mg/kg	05.17.19 16:00	
Ethylbenzene	<0.000564	0.0998	0.113	113	0.112	112	70-130	1	35	mg/kg	05.17.19 16:00	
m,p-Xylenes	<0.00101	0.200	0.236	118	0.234	118	70-130	1	35	mg/kg	05.17.19 16:00	
o-Xylene	<0.000344	0.0998	0.114	114	0.114	114	70-130	0	35	mg/kg	05.17.19 16:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		104		104		70-130	%	05.17.19 16:00
4-Bromofluorobenzene	81		100		102		70-130	%	05.17.19 16:00

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089541 | Matrix: Soil | Date Prep: 05.17.19
Parent Sample Id: 624492-001 | MS Sample Id: 624492-001 S | MSD Sample Id: 624492-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000433	0.0994	0.105	105	0.0880	88	70-130	18	35	mg/kg	05.17.19 16:40	
Toluene	<0.000453	0.0994	0.0987	99	0.0826	83	70-130	18	35	mg/kg	05.17.19 16:40	
Ethylbenzene	<0.000561	0.0994	0.104	105	0.0864	87	70-130	18	35	mg/kg	05.17.19 16:40	
m,p-Xylenes	<0.00101	0.199	0.216	109	0.180	91	70-130	18	35	mg/kg	05.17.19 16:40	
o-Xylene	0.000523	0.0994	0.105	105	0.0873	87	70-130	18	35	mg/kg	05.17.19 16:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	05.17.19 16:40
4-Bromofluorobenzene	105		101		70-130	%	05.17.19 16:40

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

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com

Work Order No: 624493

Page 1 of 2

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970)285-9985 Email:	Email:	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	34819015	Routine	☒
P.O. Number:	2RP-3564	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.5/0.4	Thermometer ID:	
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH01	S	05/14/2019	12:00	2'	1	X	X	X
PH01A	S		12:05	4'	1			
BH02	S		13:15	2'	1			
PH02A	S		13:20	4'	1			
PH03	S		13:35	2'	2			
PH03A	S		13:40	4'	2			
PH04	S		13:55	2'	1			
PH04A	S		14:00	4'	1			
PH05	S		14:10	2'	1			
PH05A	S		14:15	4'	1			

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions 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 $76.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		05/15/2019 12:45	2		5/16/19 1058
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.000
Page 40 of 43

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Chain of Custody

XENCO LABORATORIES

Work Order No: 602493

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970)265-9985 Email:	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@ltenv.com	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	34819015	Routine	☒
P.O. Number:	2RP-3564	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	05/04	Thermometer ID	
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
PH06	S	05/14/2019	14:30	2'	1	X	X	X
PH06A	S		14:35	4'	1	X	X	X
PH07	S		14:50	2'	1	X	X	X
PH07A	S		15:00	6'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			05/15/2019 12:45	2		5/16/19 1058
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.000
Page 41 of 43



After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 05/16/2019 10:58:00 AM

Work Order #: 624493

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.4
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 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)?	**N/A**
#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: Brianna Teel Date: 05/16/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 05/16/2019

Jessica Kramer

Analytical Report 651917

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 42

034820001

02-APR-20

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-APR-20

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

Reference: XENCO Report No(s): **651917**
RDU 42
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) 651917. 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. 651917 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,

Jessica Kramer

Jessica Kramer
Project Manager

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 Cross Reference 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH08	S	02-06-20 13:40	10 ft	651917-001
PH08A	S	02-06-20 14:00	12 ft	651917-002
PH09	S	02-06-20 14:50	9 ft	651917-003
PH09A	S	02-06-20 15:20	12 ft	651917-004
PH10	S	02-06-20 16:15	9 ft	651917-005
PH10A	S	02-06-20 16:22	12 ft	651917-006
PH11	S	02-07-20 11:05	8 ft	651917-007
PH11A	S	02-07-20 11:15	12 ft	651917-008
PH12	S	02-07-20 11:57	8 ft	651917-009
PH12A	S	02-07-20 12:05	12 ft	651917-010
PH13	S	02-07-20 13:05	8 ft	651917-011
PH13A	S	02-07-20 13:15	12 ft	651917-012
PH14	S	02-10-20 09:15	0.5 ft	651917-013
PH14A	S	02-10-20 10:05	10 ft	651917-014
PH15	S	02-10-20 10:35	0.5 ft	651917-015
PH15A	S	02-10-20 11:25	10 ft	651917-016
PH16	S	02-10-20 12:37	11 ft	651917-017
PH16A	S	02-10-20 13:30	16 ft	651917-018
PH17	S	02-10-20 14:20	9 ft	651917-020
PH17A	S	02-10-20 14:40	13 ft	651917-021
PH18	S	02-10-20 14:50	0.5 ft	651917-022
PH18A	S	02-10-20 15:25	13.5 ft	651917-023
PH19	S	02-10-20 15:50	0.5 ft	651917-024
PH19A	S	02-10-20 15:52	2 ft	651917-025
PH16B	S	02-10-20 13:40	18 ft	Not Analyzed

Version: 1.%

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 42

Project ID: *034820001*
Work Order Number(s): *651917*

Report Date: *02-APR-20*
Date Received: *02/11/2020*

Sample receipt non conformances and comments:

V1.001 Revision (client email) Corrected typo on sample name. JK 04/02/20
PH014A TO PH14A
PH015 TO PH15

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3116201 TPH by SW8015 Mod
Surrogate 1-Chlorooctane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 651917-004.

Batch: LBA-3116229 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3116230 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 651917

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Tue Feb-11-20 08:10 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	651917-001		651917-002		651917-003		651917-004		651917-005		651917-006	
	Field Id:	PH08		PH08A		PH09		PH09A		PH10		PH10A	
	Depth:	10- ft		12- ft		9- ft		12- ft		9- ft		12- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-06-20 13:40		Feb-06-20 14:00		Feb-06-20 14:50		Feb-06-20 15:20		Feb-06-20 16:15		Feb-06-20 16:22	
BTEX by EPA 8021B	*Extracted:*	Feb-11-20 10:00		Feb-11-20 10:00		Feb-11-20 10:00		Feb-11-20 10:00		Feb-11-20 10:00		Feb-11-20 10:00	
	Analyzed:	Feb-11-20 18:05		Feb-11-20 18:26		Feb-11-20 18:46		Feb-11-20 19:06		Feb-11-20 19:27		Feb-11-20 19:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Toluene		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Ethylbenzene		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
m,p-Xylenes		<0.00402	0.00402	<0.00398	0.00398	<0.00404	0.00404	<0.00403	0.00403	<0.00397	0.00397	<0.00399	0.00399
o-Xylene		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Xylenes, Total		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Total BTEX		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Chloride by EPA 300	*Extracted:*	Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30	
	Analyzed:	Feb-11-20 12:52		Feb-11-20 12:58		Feb-11-20 13:03		Feb-11-20 13:09		Feb-11-20 13:15		Feb-11-20 13:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		359	10.1	109	10.0	839	10.1	154	9.98	588	9.94	105	10.0
TPH by SW8015 Mod	*Extracted:*	Feb-11-20 09:50		Feb-11-20 09:50		Feb-11-20 09:50		Feb-11-20 09:50		Feb-11-20 09:50		Feb-11-20 09:50	
	Analyzed:	Feb-11-20 13:26		Feb-11-20 13:26		Feb-11-20 13:46		Feb-11-20 13:46		Feb-11-20 14:05		Feb-11-20 14:05	
	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	<50.1	50.1	<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.1	50.1
Diesel Range Organics (DRO)		<50.2	50.2	<50.1	50.1	<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.1	50.1	<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.1	50.1
Total GRO-DRO		<50.2	50.2	<50.1	50.1	<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.1	50.1
Total TPH		<50.2	50.2	<50.1	50.1	<49.9	49.9	<50.0	50.0	<50.3	50.3	<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.

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

Version: 1.%

Jessica Kramer
Project Manager

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 651917

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Tue Feb-11-20 08:10 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	651917-007		651917-008		651917-009		651917-010		651917-011		651917-012	
	Field Id:	PH11		PH11A		PH12		PH12A		PH13		PH13A	
	Depth:	8- ft		12- ft		8- ft		12- ft		8- ft		12- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-07-20 11:05		Feb-07-20 11:15		Feb-07-20 11:57		Feb-07-20 12:05		Feb-07-20 13:05		Feb-07-20 13:15	
BTEX by EPA 8021B	***Extracted:***	Feb-11-20 10:00		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04	
	Analyzed:	Feb-11-20 20:08		Feb-11-20 14:13		Feb-11-20 14:33		Feb-11-20 14:54		Feb-11-20 15:14		Feb-11-20 15:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
m,p-Xylenes		<0.00399	0.00399	<0.00399	0.00399	<0.00404	0.00404	<0.00403	0.00403	<0.00403	0.00403	<0.00402	0.00402
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
Xylenes, Total		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	Feb-11-20 10:30		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09	
	Analyzed:	Feb-11-20 13:26		Feb-11-20 13:59		Feb-11-20 14:16		Feb-11-20 14:22		Feb-11-20 14:27		Feb-11-20 14:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		799	10.1	149	9.96	1150	50.0	190	10.0	196	10.1	74.5	10.0
TPH by SW8015 Mod	***Extracted:***	Feb-11-20 09:50		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05	
	Analyzed:	Feb-11-20 14:25		Feb-11-20 15:05		Feb-11-20 15:45		Feb-11-20 15:45		Feb-11-20 16:04		Feb-11-20 16:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<49.8	49.8	<50.3	50.3	<50.1	50.1	<49.9	49.9	<50.2	50.2
Diesel Range Organics (DRO)		<50.1	50.1	<49.8	49.8	<50.3	50.3	<50.1	50.1	<49.9	49.9	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<49.8	49.8	<50.3	50.3	<50.1	50.1	<49.9	49.9	<50.2	50.2
Total GRO-DRO		<50.1	50.1	<49.8	49.8	<50.3	50.3	<50.1	50.1	<49.9	49.9	<50.2	50.2
Total TPH		<50.1	50.1	<49.8	49.8	<50.3	50.3	<50.1	50.1	<49.9	49.9	<50.2	50.2

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Jessica Kramer
Project Manager

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 651917

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Tue Feb-11-20 08:10 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	651917-013		651917-014		651917-015		651917-016		651917-017		651917-018	
	Field Id:	PH14		PH14A		PH15		PH15A		PH16		PH16A	
	Depth:	0.5- ft		10- ft		0.5- ft		10- ft		11- ft		16- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-10-20 09:15		Feb-10-20 10:05		Feb-10-20 10:35		Feb-10-20 11:25		Feb-10-20 12:37		Feb-10-20 13:30	
BTEX by EPA 8021B	*Extracted:*	Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 10:00		Feb-11-20 10:00	
	Analyzed:	Feb-11-20 15:55		Feb-11-20 16:15		Feb-11-20 16:35		Feb-11-20 16:56		Feb-11-20 17:24		Feb-11-20 17:45	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00402	0.00402	<0.00401	0.00401	<0.00402	0.00402	<0.00399	0.00399	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Xylenes, Total		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Chloride by EPA 300	*Extracted:*	Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 10:30		Feb-11-20 10:30	
	Analyzed:	Feb-11-20 14:49		Feb-11-20 14:55		Feb-11-20 15:01		Feb-11-20 15:06		Feb-11-20 12:30		Feb-11-20 12:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		4280	50.0	187	9.98	279	10.0	445	9.90	13600	198	495	9.94
TPH by SW8015 Mod	*Extracted:*	Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 09:50		Feb-11-20 09:50	
	Analyzed:	Feb-11-20 16:24		Feb-11-20 16:24		Feb-11-20 16:44		Feb-11-20 16:44		Feb-11-20 13:06		Feb-11-20 13:06	
	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	<50.3	50.3	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.0	50.0
Total GRO-DRO		<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.0	50.0
Total TPH		<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.0	50.0

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Jessica Kramer
Project Manager

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 651917

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

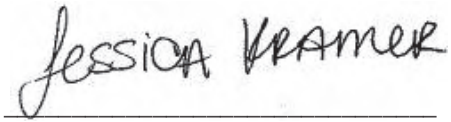
Date Received in Lab: Tue Feb-11-20 08:10 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	651917-020		651917-021		651917-022		651917-023		651917-024		651917-025	
	Field Id:	PH17		PH17A		PH18		PH18A		PH19		PH19A	
	Depth:	9- ft		13- ft		0.5- ft		13.5- ft		0.5- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-10-20 14:20		Feb-10-20 14:40		Feb-10-20 14:50		Feb-10-20 15:25		Feb-10-20 15:50		Feb-10-20 15:52	
BTEX by EPA 8021B	***Extracted:***	Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04	
	Analyzed:	Feb-11-20 18:17		Feb-11-20 18:38		Feb-11-20 18:58		Feb-11-20 19:19		Feb-11-20 19:39		Feb-11-20 19:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00398	0.00398	<0.00398	0.00398	<0.00396	0.00396	<0.00396	0.00396	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
Xylenes, Total		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09	
	Analyzed:	Feb-11-20 15:19		Feb-11-20 15:37		Feb-11-20 15:55		Feb-11-20 16:01		Feb-11-20 16:07		Feb-11-20 16:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1610	50.0	226	9.92	559	9.98	115	9.94	56.2	9.90	41.8	9.98
TPH by SW8015 Mod	***Extracted:***	Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05	
	Analyzed:	Feb-11-20 17:24		Feb-11-20 17:24		Feb-11-20 17:43		Feb-11-20 17:43		Feb-11-20 18:03		Feb-11-20 18:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.8	49.8	<50.0	50.0	<49.8	49.8
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.8	49.8	<50.0	50.0	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.8	49.8	<50.0	50.0	<49.8	49.8
Total GRO-DRO		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.8	49.8	<50.0	50.0	<49.8	49.8
Total TPH		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.8	49.8	<50.0	50.0	<49.8	49.8

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Jessica Kramer
Project Manager

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH08**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-001	Date Collected:	02.06.20 13.40	Sample Depth:	10 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**359**	10.1	mg/kg	02.11.20 12.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.11.20 13.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.11.20 13.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.11.20 13.26	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.11.20 13.26	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.11.20 13.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	02.11.20 13.26	
o-Terphenyl	84-15-1	102	%	70-135	02.11.20 13.26	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH08**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-001	Date Collected:	02.06.20 13.40	Sample Depth:	10 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.20 18.05	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.11.20 18.05	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.11.20 18.05	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH08A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-002	Date Collected:	02.06.20 14.00	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**109**	10.0	mg/kg	02.11.20 12.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.11.20 13.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.11.20 13.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.11.20 13.26	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.11.20 13.26	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.11.20 13.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	02.11.20 13.26	
o-Terphenyl	84-15-1	123	%	70-135	02.11.20 13.26	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH08A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-002	Date Collected:	02.06.20 14.00	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.20 18.26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.11.20 18.26	
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.11.20 18.26	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH09**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-003	Date Collected:	02.06.20 14.50	Sample Depth:	9 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**839**	10.1	mg/kg	02.11.20 13.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.11.20 13.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.11.20 13.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.11.20 13.46	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.11.20 13.46	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.11.20 13.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	02.11.20 13.46	
o-Terphenyl	84-15-1	134	%	70-135	02.11.20 13.46	

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RDU 42

Sample Id:	**PH09**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-003	Date Collected:	02.06.20 14.50	Sample Depth:	9 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.11.20 18.46	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.11.20 18.46	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.11.20 18.46	

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RDU 42

Sample Id:	**PH09A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-004	Date Collected:	02.06.20 15.20	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**154**	9.98	mg/kg	02.11.20 13.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 13.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 13.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 13.46	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 13.46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 13.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	136	%	70-135	02.11.20 13.46	**
o-Terphenyl	84-15-1	131	%	70-135	02.11.20 13.46	

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RDU 42

Sample Id:	**PH09A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-004	Date Collected:	02.06.20 15.20	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.11.20 19.06	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.11.20 19.06	
1,4-Difluorobenzene	540-36-3	100	%	70-130	02.11.20 19.06	

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RDU 42

Sample Id:	**PH10**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-005	Date Collected:	02.06.20 16.15	Sample Depth:	9 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**588**	9.94	mg/kg	02.11.20 13.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.11.20 14.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.11.20 14.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.11.20 14.05	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.11.20 14.05	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.11.20 14.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	02.11.20 14.05	
o-Terphenyl	84-15-1	126	%	70-135	02.11.20 14.05	

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RDU 42

Sample Id:	**PH10**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-005	Date Collected:	02.06.20 16.15	Sample Depth:	9 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.11.20 19.27	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	02.11.20 19.27	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.11.20 19.27	

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RDU 42

Sample Id:	**PH10A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-006	Date Collected:	02.06.20 16.22	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**105**	10.0	mg/kg	02.11.20 13.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.11.20 14.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.11.20 14.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.11.20 14.05	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.11.20 14.05	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.11.20 14.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	02.11.20 14.05	
o-Terphenyl	84-15-1	118	%	70-135	02.11.20 14.05	

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RDU 42

Sample Id:	**PH10A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-006	Date Collected:	02.06.20 16.22	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 19.47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.11.20 19.47	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.11.20 19.47	

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RDU 42

Sample Id:	**PH11**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-007	Date Collected:	02.07.20 11.05	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**799**	10.1	mg/kg	02.11.20 13.26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.11.20 14.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.11.20 14.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.11.20 14.25	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.11.20 14.25	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.11.20 14.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	02.11.20 14.25	
o-Terphenyl	84-15-1	102	%	70-135	02.11.20 14.25	

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RDU 42

Sample Id:	**PH11**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-007	Date Collected:	02.07.20 11.05	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 20.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.11.20 20.08	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 20.08	

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RDU 42

Sample Id:	**PH11A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-008	Date Collected:	02.07.20 11.15	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**149**	9.96	mg/kg	02.11.20 13.59		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.11.20 15.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.11.20 15.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.11.20 15.05	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.11.20 15.05	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.11.20 15.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	02.11.20 15.05	
o-Terphenyl	84-15-1	100	%	70-135	02.11.20 15.05	

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RDU 42

Sample Id:	**PH11A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-008	Date Collected:	02.07.20 11.15	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 14.13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	86	%	70-130	02.11.20 14.13	
4-Bromofluorobenzene	460-00-4	86	%	70-130	02.11.20 14.13	

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RDU 42

Sample Id:	**PH12**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-009	Date Collected:	02.07.20 11.57	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1150**	50.0	mg/kg	02.11.20 14.16		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.11.20 15.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.11.20 15.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.11.20 15.45	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.11.20 15.45	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.11.20 15.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	02.11.20 15.45	
o-Terphenyl	84-15-1	129	%	70-135	02.11.20 15.45	

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RDU 42

Sample Id:	**PH12**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-009	Date Collected:	02.07.20 11.57	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.11.20 14.33	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.11.20 14.33	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 14.33	

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RDU 42

Sample Id:	**PH12A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-010	Date Collected:	02.07.20 12.05	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**190**	10.0	mg/kg	02.11.20 14.22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.11.20 15.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.11.20 15.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.11.20 15.45	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.11.20 15.45	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.11.20 15.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	02.11.20 15.45	
o-Terphenyl	84-15-1	131	%	70-135	02.11.20 15.45	

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RDU 42

Sample Id:	**PH12A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-010	Date Collected:	02.07.20 12.05	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.11.20 14.54	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.11.20 14.54	
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.11.20 14.54	

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RDU 42

Sample Id:	**PH13**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-011	Date Collected:	02.07.20 13.05	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**196**	10.1	mg/kg	02.11.20 14.27		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.11.20 16.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.11.20 16.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.11.20 16.04	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.11.20 16.04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.11.20 16.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	02.11.20 16.04	
o-Terphenyl	84-15-1	100	%	70-135	02.11.20 16.04	

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RDU 42

Sample Id:	**PH13**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-011	Date Collected:	02.07.20 13.05	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.11.20 15.14	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 15.14	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 15.14	

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RDU 42

Sample Id:	**PH13A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-012	Date Collected:	02.07.20 13.15	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**74.5**	10.0	mg/kg	02.11.20 14.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.11.20 16.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.11.20 16.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.11.20 16.04	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.11.20 16.04	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.11.20 16.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	131	%	70-135	02.11.20 16.04	
o-Terphenyl	84-15-1	122	%	70-135	02.11.20 16.04	

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RDU 42

Sample Id:	**PH13A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-012	Date Collected:	02.07.20 13.15	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.20 15.34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	02.11.20 15.34	
4-Bromofluorobenzene	460-00-4	93	%	70-130	02.11.20 15.34	

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RDU 42

Sample Id:	**PH14**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-013	Date Collected:	02.10.20 09.15	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4280**	50.0	mg/kg	02.11.20 14.49		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.11.20 16.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	133	%	70-135	02.11.20 16.24	
o-Terphenyl	84-15-1	131	%	70-135	02.11.20 16.24	

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RDU 42

Sample Id:	**PH14**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-013	Date Collected:	02.10.20 09.15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.11.20 15.55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 15.55	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.11.20 15.55	

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RDU 42

Sample Id:	**PH14A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-014	Date Collected:	02.10.20 10.05	Sample Depth:	10 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**187**	9.98	mg/kg	02.11.20 14.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.11.20 16.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	02.11.20 16.24	
o-Terphenyl	84-15-1	121	%	70-135	02.11.20 16.24	

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Sample Id:	**PH14A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-014	Date Collected:	02.10.20 10.05	Sample Depth:	10 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.20 16.15	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 16.15	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 16.15	

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RDU 42

Sample Id:	**PH15**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-015	Date Collected:	02.10.20 10.35	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**279**	10.0	mg/kg	02.11.20 15.01		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 16.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 16.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 16.44	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 16.44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 16.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	02.11.20 16.44	
o-Terphenyl	84-15-1	118	%	70-135	02.11.20 16.44	

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RDU 42

Sample Id:	**PH15**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-015	Date Collected:	02.10.20 10.35	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.11.20 16.35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 16.35	
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.11.20 16.35	

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RDU 42

Sample Id:	**PH15A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-016	Date Collected:	02.10.20 11.25	Sample Depth:	10 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**445**	9.90	mg/kg	02.11.20 15.06		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.11.20 16.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.11.20 16.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.11.20 16.44	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.11.20 16.44	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.11.20 16.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	131	%	70-135	02.11.20 16.44	
o-Terphenyl	84-15-1	125	%	70-135	02.11.20 16.44	

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RDU 42

Sample Id:	**PH15A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-016	Date Collected:	02.10.20 11.25	Sample Depth:	10 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.20 16.56	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 16.56	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.11.20 16.56	

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RDU 42

Sample Id:	**PH16**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-017	Date Collected:	02.10.20 12.37	Sample Depth:	11 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13600**	198	mg/kg	02.11.20 12.30		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 13.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	02.11.20 13.06	
o-Terphenyl	84-15-1	130	%	70-135	02.11.20 13.06	

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RDU 42

Sample Id:	**PH16**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-017	Date Collected:	02.10.20 12.37	Sample Depth:	11 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 17.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.11.20 17.24	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 17.24	

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RDU 42

Sample Id:	**PH16A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-018	Date Collected:	02.10.20 13.30	Sample Depth:	16 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**495**	9.94	mg/kg	02.11.20 12.36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 13.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	02.11.20 13.06	
o-Terphenyl	84-15-1	123	%	70-135	02.11.20 13.06	

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RDU 42

Sample Id:	**PH16A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-018	Date Collected:	02.10.20 13.30	Sample Depth:	16 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 17.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	02.11.20 17.45	
4-Bromofluorobenzene	460-00-4	111	%	70-130	02.11.20 17.45	

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RDU 42

Sample Id:	**PH17**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-020	Date Collected:	02.10.20 14.20	Sample Depth:	9 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1610**	50.0	mg/kg	02.11.20 15.19		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 17.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	134	%	70-135	02.11.20 17.24	
o-Terphenyl	84-15-1	131	%	70-135	02.11.20 17.24	

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RDU 42

Sample Id:	**PH17**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-020	Date Collected:	02.10.20 14.20	Sample Depth:	9 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.11.20 18.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 18.17	
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.11.20 18.17	

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RDU 42

Sample Id:	**PH17A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-021	Date Collected:	02.10.20 14.40	Sample Depth:	13 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**226**	9.92	mg/kg	02.11.20 15.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 17.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	132	%	70-135	02.11.20 17.24	
o-Terphenyl	84-15-1	128	%	70-135	02.11.20 17.24	

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RDU 42

Sample Id:	**PH17A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-021	Date Collected:	02.10.20 14.40	Sample Depth:	13 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.20 18.38	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 18.38	
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.11.20 18.38	

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RDU 42

Sample Id:	**PH18**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-022	Date Collected:	02.10.20 14.50	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**559**	9.98	mg/kg	02.11.20 15.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.11.20 17.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	02.11.20 17.43	
o-Terphenyl	84-15-1	128	%	70-135	02.11.20 17.43	

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RDU 42

Sample Id:	**PH18**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-022	Date Collected:	02.10.20 14.50	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.20 18.58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 18.58	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 18.58	

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RDU 42

Sample Id:	**PH18A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-023	Date Collected:	02.10.20 15.25	Sample Depth:	13.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**115**	9.94	mg/kg	02.11.20 16.01		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.11.20 17.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	02.11.20 17.43	
o-Terphenyl	84-15-1	123	%	70-135	02.11.20 17.43	

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RDU 42

Sample Id:	**PH18A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-023	Date Collected:	02.10.20 15.25	Sample Depth:	13.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.11.20 19.19	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 19.19	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 19.19	

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RDU 42

Sample Id:	**PH19**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-024	Date Collected:	02.10.20 15.50	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**56.2**	9.90	mg/kg	02.11.20 16.07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 18.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 18.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 18.03	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 18.03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 18.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	02.11.20 18.03	
o-Terphenyl	84-15-1	131	%	70-135	02.11.20 18.03	

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RDU 42

Sample Id:	**PH19**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-024	Date Collected:	02.10.20 15.50	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.11.20 19.39	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 19.39	
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.11.20 19.39	

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RDU 42

Sample Id:	**PH19A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-025	Date Collected:	02.10.20 15.52	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**41.8**	9.98	mg/kg	02.11.20 16.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.11.20 18.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.11.20 18.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.11.20 18.03	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.11.20 18.03	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.11.20 18.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	132	%	70-135	02.11.20 18.03	
o-Terphenyl	84-15-1	130	%	70-135	02.11.20 18.03	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH19A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-025	Date Collected:	02.10.20 15.52	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 19.59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 19.59	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.11.20 19.59	

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 Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 651917

LT Environmental, Inc.

RDU 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116181 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696390-1-BLK — LCS Sample Id: 7696390-1-BKS — LCSD Sample Id: 7696390-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	268	107	269	108	90-110	0	20	mg/kg	02.11.20 10:44	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116234 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696405-1-BLK — LCS Sample Id: 7696405-1-BKS — LCSD Sample Id: 7696405-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	350	366	105	364	104	90-110	1	20	mg/kg	02.11.20 13:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116181 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651915-001 — MS Sample Id: 651915-001 S — MSD Sample Id: 651915-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	551	199	793	122	787	117	90-110	1	20	mg/kg	02.11.20 11:01	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116181 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651916-009 — MS Sample Id: 651916-009 S — MSD Sample Id: 651916-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	483	200	707	112	707	111	90-110	0	20	mg/kg	02.11.20 12:19	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116234 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651917-008 — MS Sample Id: 651917-008 S — MSD Sample Id: 651917-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	149	200	365	108	366	109	90-110	0	20	mg/kg	02.11.20 14:05	

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

QC Summary 651917

LT Environmental, Inc.

RDU 42

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3116234 Matrix: Soil Date Prep: 02.11.20
Parent Sample Id: 651917-020 MS Sample Id: 651917-020 S MSD Sample Id: 651917-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1610	200	1830	110	1830	109	90-110	0	20	mg/kg	02.11.20 15:25	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3116201 Matrix: Solid Date Prep: 02.11.20
MB Sample Id: 7696392-1-BLK LCS Sample Id: 7696392-1-BKS LCSD Sample Id: 7696392-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	978	98	886	89	70-135	10	35	mg/kg	02.11.20 10:24	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	974	97	70-135	11	35	mg/kg	02.11.20 10:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		131		128		70-135	%	02.11.20 10:24
o-Terphenyl	111		120		102		70-135	%	02.11.20 10:24

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3116250 Matrix: Solid Date Prep: 02.11.20
MB Sample Id: 7696428-1-BLK LCS Sample Id: 7696428-1-BKS LCSD Sample Id: 7696428-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	887	89	845	85	70-135	5	35	mg/kg	02.11.20 14:45	
Diesel Range Organics (DRO)	<50.0	1000	797	80	915	92	70-135	14	35	mg/kg	02.11.20 14:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		113		120		70-135	%	02.11.20 14:45
o-Terphenyl	120		103		116		70-135	%	02.11.20 14:45

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3116201 Matrix: Solid Date Prep: 02.11.20
MB Sample Id: 7696392-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.11.20 10:04	

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

QC Summary 651917

LT Environmental, Inc.

RDU 42

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116250 | Matrix: Solid | Date Prep: 02.11.20
MB Sample Id: 7696428-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.11.20 14:45	

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116201 | Matrix: Soil | Date Prep: 02.11.20
Parent Sample Id: 651915-001 | MS Sample Id: 651915-001 S | MSD Sample Id: 651915-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	888	89	972	97	70-135	9	35	mg/kg	02.11.20 10:48	
Diesel Range Organics (DRO)	<49.9	998	981	98	1070	107	70-135	9	35	mg/kg	02.11.20 10:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	133		132		70-135	%	02.11.20 10:48
o-Terphenyl	123		122		70-135	%	02.11.20 10:48

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116250 | Matrix: Soil | Date Prep: 02.11.20
Parent Sample Id: 651917-008 | MS Sample Id: 651917-008 S | MSD Sample Id: 651917-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	829	83	938	94	70-135	12	35	mg/kg	02.11.20 15:25	
Diesel Range Organics (DRO)	<49.9	997	895	90	1050	105	70-135	16	35	mg/kg	02.11.20 15:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		131		70-135	%	02.11.20 15:25
o-Terphenyl	123		135		70-135	%	02.11.20 15:25

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

QC Summary 651917

LT Environmental, Inc.

RDU 42

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116229 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696394-1-BLK — LCS Sample Id: 7696394-1-BKS — LCSD Sample Id: 7696394-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.110	110	0.110	110	70-130	0	35	mg/kg	02.11.20 11:17	
Toluene	<0.00200	0.100	0.106	106	0.105	105	70-130	1	35	mg/kg	02.11.20 11:17	
Ethylbenzene	<0.00200	0.100	0.101	101	0.100	100	71-129	1	35	mg/kg	02.11.20 11:17	
m,p-Xylenes	<0.00400	0.200	0.208	104	0.204	102	70-135	2	35	mg/kg	02.11.20 11:17	
o-Xylene	<0.00200	0.100	0.104	104	0.103	103	71-133	1	35	mg/kg	02.11.20 11:17	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		105		105		70-130	%	02.11.20 11:17
4-Bromofluorobenzene	96		94		95		70-130	%	02.11.20 11:17

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116230 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696403-1-BLK — LCS Sample Id: 7696403-1-BKS — LCSD Sample Id: 7696403-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.122	122	0.122	122	70-130	0	35	mg/kg	02.11.20 12:31	
Toluene	<0.00200	0.100	0.112	112	0.111	111	70-130	1	35	mg/kg	02.11.20 12:31	
Ethylbenzene	<0.00200	0.100	0.108	108	0.107	107	71-129	1	35	mg/kg	02.11.20 12:31	
m,p-Xylenes	<0.00400	0.200	0.211	106	0.209	105	70-135	1	35	mg/kg	02.11.20 12:31	
o-Xylene	<0.00200	0.100	0.106	106	0.105	105	71-133	1	35	mg/kg	02.11.20 12:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		108		108		70-130	%	02.11.20 12:31
4-Bromofluorobenzene	96		91		91		70-130	%	02.11.20 12:31

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116229 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651915-001 — MS Sample Id: 651915-001 S — MSD Sample Id: 651915-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.118	119	0.114	115	70-130	3	35	mg/kg	02.11.20 11:58	
Toluene	<0.00198	0.0992	0.115	116	0.111	112	70-130	4	35	mg/kg	02.11.20 11:58	
Ethylbenzene	<0.00198	0.0992	0.112	113	0.107	108	71-129	5	35	mg/kg	02.11.20 11:58	
m,p-Xylenes	<0.00397	0.198	0.230	116	0.221	112	70-135	4	35	mg/kg	02.11.20 11:58	
o-Xylene	<0.00198	0.0992	0.114	115	0.109	110	71-133	4	35	mg/kg	02.11.20 11:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		105		70-130	%	02.11.20 11:58
4-Bromofluorobenzene	96		96		70-130	%	02.11.20 11:58

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

QC Summary 651917

LT Environmental, Inc.

RDU 42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3116230 Matrix: Soil Date Prep: 02.11.20

Parent Sample Id: 651917-008 MS Sample Id: 651917-008 S MSD Sample Id: 651917-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.123	123	0.121	121	70-130	2	35	mg/kg	02.11.20 13:12	
Toluene	<0.00199	0.0996	0.124	124	0.111	111	70-130	11	35	mg/kg	02.11.20 13:12	
Ethylbenzene	<0.00199	0.0996	0.119	119	0.108	108	71-129	10	35	mg/kg	02.11.20 13:12	
m,p-Xylenes	<0.00398	0.199	0.234	118	0.211	106	70-135	10	35	mg/kg	02.11.20 13:12	
o-Xylene	<0.00199	0.0996	0.118	118	0.106	106	71-133	11	35	mg/kg	02.11.20 13:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		109		70-130	%	02.11.20 13:12
4-Bromofluorobenzene	94		94		70-130	%	02.11.20 13:12

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

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Chain of Custody

XENCO LABORATORIES
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 Crailsbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 165917

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Project Manager:	Chris McKissen	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	820 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970) 285-9985	Email:	cmckissen@ltenv.com & abyers@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	03482000 1	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	2.0	Thermometer ID	TNM007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	85

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH08	S	2/6/20	1340	10'	1				
	PH08A		2/6/20	1400	12'	1				
	PH09		2/6/20	1450	9'	1				
	PH09A		2/6/20	1520	12'	1				
	PH10		2/6/20	1615	9'	1				
	PH10A		2/6/20	1622	12'	1				
	PH11		2/7/20	1105	8'	1				
	PH11A		2/7/20	1115	12'	1				
	PH12		2/7/20	1157	8'	1				
	PH12A		2/7/20	1205	12'	1				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		2/11/20 7:30am	2		2/11/20 08:10
			4		
			6		

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.001
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Chain of Custody

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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 Carlsbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 451917

Project Manager:	Chris McKissen	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	920 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	970 285 9985	Email:	kmckissen@ltenv.com + akyer@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	~~03482[illegible]~~ 03482000 01	Routine ☒	
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT				
Temperature (°C):		Temp Blank:	Yes No	Wet Ice: Yes No
Received Intact:	Yes No	Thermometer ID		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH13	S	2/7/20	1310	8'	1				
	PH13A		2/7/20	1315	12	1				
	PH14		2/10/20	0915	0.5'	1				
	PH14A			1005	10'	1				
	PH15			1035	0.5'	1				
	PH15A			1120	10'	1				
	PH16			1237	11'	1				24 HR RUSH
	PH16A			1330	16'	1				
	PH16B			1340	18'	1				on hold for PH16A
	PH17	↓	↓	1420	9'	1				

Preservative Codes: MeOH: Me; None: NO; HNO3: HN; H2SO4: H2; HCL: HL; NaOH: Na; Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	[signature]	2/11/20 7:30am	[signature]	[signature]	2/11/20 08:10

Received by OCD: 4/25/2024 9:24:00 AM
Final 1.001
Page 64 of 66
Released to Imaging: 4/30/2024 8:02:03 AM

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Chain of Custody

Work Order No: 451917

XENCO LABORATORIES
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Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
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Page 3 of 3

Project Manager:	Chris McKissen	Bill to: (if different)	→
Company Name:	LT Environmental	Company Name:	→
Address:	920 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970) 285-9985	Email:	cmckissen@ltenv.com + cbyers@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	034820001	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):		Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2SO4: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:30pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH17A	S	2/10/20	1440	13'	1				
	PH18			1450	0.5'	1				
	PH18A			1525	13.5'	1				
	PH19			1550	0.5'	1				
	PH19A	↓	↓	1552	2'	1				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		2/11/20 7:30am			2/11/20 08:10

Revised Date 05/2019 Rev. 2019.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.001
Page 65 of 66

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02.11.2020 08.10.00 AM

Work Order #: 651917

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2
#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 Date: 02.11.2020

Checklist reviewed by: Jessica Kramer Date: 02.11.2020

Jessica Kramer

Analytical Report 652450

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 42

034820001

02-APR-20

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-APR-20

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

Reference: XENCO Report No(s): **652450**
RDU 42
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) 652450. 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. 652450 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,

Jessica Kramer

Jessica Kramer
Project Manager

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 Cross Reference 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH20	S	02-13-20 09:40	2 ft	652450-001
PH20A	S	02-13-20 10:15	12 ft	652450-002
PH21	S	02-13-20 11:25	6 ft	652450-003
PH21A	S	02-13-20 11:40	12 ft	652450-004
PH22	S	02-13-20 13:55	10 ft	652450-005
PH22A	S	02-13-20 14:00	12 ft	652450-006
PH23	S	02-13-20 15:05	12 ft	652450-007
PH23A	S	02-13-20 15:15	16 ft	652450-008
PH24	S	02-13-20 16:00	6 ft	652450-009
PH24A	S	02-13-20 16:20	14 ft	652450-010
PH26	S	02-13-20 13:15	8 ft	652450-011
PH26A	S	02-13-20 13:25	12 ft	652450-012
PH20B	S	02-13-20 10:30	13 ft	Not Analyzed
PH24B	S	02-13-20 16:25	16 ft	Not Analyzed

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 42

Project ID: *034820001*
Work Order Number(s): *652450*

Report Date: *02-APR-20*
Date Received: *02/14/2020*

Sample receipt non conformances and comments:

V1.001 Revision - (client email) Corrected typo on Sample 012 from PH6 to PH26 JK 04/02/20

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3116662 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3116666 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 652450

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Fri Feb-14-20 10:30 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652450-001		652450-002		652450-003		652450-004		652450-005		652450-006	
	Field Id:	PH20		PH20A		PH21		PH21A		PH22		PH22A	
	Depth:	2- ft		12- ft		6- ft		12- ft		10- ft		12- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-20 09:40		Feb-13-20 10:15		Feb-13-20 11:25		Feb-13-20 11:40		Feb-13-20 13:55		Feb-13-20 14:00	
BTEX by EPA 8021B	*Extracted:*	Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00	
	Analyzed:	Feb-15-20 05:39		Feb-15-20 05:59		Feb-15-20 06:20		Feb-15-20 06:40		Feb-15-20 07:01		Feb-15-20 07:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000486	0.000486	<0.000488	0.000488	<0.000485	0.000485	<0.000486	0.000486	<0.000481	0.000481	<0.000484	0.000484
Toluene		<0.000529	0.000529	<0.000531	0.000531	<0.000527	0.000527	<0.000528	0.000528	<0.000522	0.000522	<0.000526	0.000526
Ethylbenzene		<0.000407	0.000407	<0.000409	0.000409	<0.000405	0.000405	<0.000406	0.000406	<0.000402	0.000402	<0.000405	0.000405
m,p-Xylenes		<0.000755	0.000755	<0.000758	0.000758	<0.000752	0.000752	<0.000754	0.000754	<0.000746	0.000746	<0.000751	0.000751
o-Xylene		<0.000404	0.000404	<0.000406	0.000406	<0.000402	0.000402	<0.000403	0.000403	<0.000399	0.000399	<0.000401	0.000401
Total Xylenes		<0.000404	0.000404	<0.000406	0.000406	<0.000402	0.000402	<0.000403	0.000403	<0.000399	0.000399	<0.000401	0.000401
Total BTEX		<0.000404	0.000404	<0.000406	0.000406	<0.000402	0.000402	<0.000403	0.000403	<0.000399	0.000399	<0.000401	0.000401
Chloride by EPA 300	*Extracted:*	Feb-14-20 16:30		Feb-14-20 16:30		Feb-14-20 16:30		Feb-14-20 16:30		Feb-14-20 20:00		Feb-14-20 20:00	
	Analyzed:	Feb-14-20 22:05		Feb-14-20 22:11		Feb-14-20 22:17		Feb-14-20 22:23		Feb-15-20 00:17		Feb-15-20 00:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9460	3.53	171	0.353	4290	3.54	211	0.353	220	1.77	173	1.75
TPH by SW8015 Mod	*Extracted:*	Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:15		Feb-14-20 17:15	
	Analyzed:	Feb-15-20 00:17		Feb-15-20 00:17		Feb-15-20 00:36		Feb-15-20 00:36		Feb-15-20 01:55		Feb-15-20 02:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<13.9	13.9	<13.8	13.8	<14.0	14.0	<13.9	13.9	<13.9	13.9	<13.9	13.9
Diesel Range Organics (DRO)		<11.4	11.4	<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5
Motor Oil Range Hydrocarbons (MRO)		<11.4	11.4	<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5
Total TPH		<11.4	11.4	<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5

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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Version: 1.%

Jessica Kramer
Project Manager

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 652450

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Fri Feb-14-20 10:30 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652450-007		652450-008		652450-009		652450-010		652450-011		652450-012	
	Field Id:	PH23		PH23A		PH24		PH24A		PH26		PH26A	
	Depth:	12- ft		16- ft		6- ft		14- ft		8- ft		12- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-20 15:05		Feb-13-20 15:15		Feb-13-20 16:00		Feb-13-20 16:20		Feb-13-20 13:15		Feb-13-20 13:25	
BTEX by EPA 8021B	***Extracted:***	Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:09		Feb-14-20 17:09	
	Analyzed:	Feb-15-20 07:42		Feb-15-20 08:02		Feb-15-20 08:22		Feb-15-20 08:43		Feb-15-20 00:35		Feb-15-20 00:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000484	0.000484	<0.000484	0.000484	<0.000484	0.000484	<0.000485	0.000485	<0.000481	0.000481	<0.000483	0.000483
Toluene		<0.000526	0.000526	<0.000526	0.000526	<0.000526	0.000526	<0.000527	0.000527	<0.000522	0.000522	<0.000525	0.000525
Ethylbenzene		<0.000405	0.000405	<0.000405	0.000405	<0.000405	0.000405	<0.000405	0.000405	<0.000402	0.000402	<0.000404	0.000404
m,p-Xylenes		<0.000751	0.000751	<0.000751	0.000751	<0.000751	0.000751	<0.000752	0.000752	<0.000746	0.000746	<0.000749	0.000749
o-Xylene		<0.000401	0.000401	<0.000401	0.000401	<0.000401	0.000401	<0.000402	0.000402	<0.000399	0.000399	<0.000401	0.000401
Total Xylenes		<0.000401	0.000401	<0.000401	0.000401	<0.000401	0.000401	<0.000402	0.000402	<0.000399	0.000399	<0.000401	0.000401
Total BTEX		<0.000401	0.000401	<0.000401	0.000401	<0.000401	0.000401	<0.000402	0.000402	<0.000399	0.000399	<0.000401	0.000401
Chloride by EPA 300	***Extracted:***	Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00	
	Analyzed:	Feb-14-20 23:00		Feb-14-20 23:20		Feb-14-20 23:26		Feb-14-20 23:32		Feb-14-20 23:39		Feb-14-20 23:58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9160	3.53	319	0.353	11300	3.53	211	0.352	783	0.353	463	0.353
TPH by SW8015 Mod	***Extracted:***	Feb-14-20 17:15		Feb-14-20 17:15		Feb-14-20 17:15		Feb-14-20 17:15		Feb-14-20 17:15		Feb-14-20 17:15	
	Analyzed:	Feb-15-20 02:34		Feb-15-20 02:54		Feb-15-20 02:54		Feb-15-20 03:14		Feb-15-20 03:14		Feb-15-20 03:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<13.9	13.9	<13.9	13.9	<14.0	14.0	<13.9	13.9	<13.9	13.9	<13.9	13.9
Diesel Range Organics (DRO)		<11.5	11.5	14.1 J	11.5	<11.5	11.5	13.6 J	11.5	<11.5	11.5	<11.5	11.5
Motor Oil Range Hydrocarbons (MRO)		<11.5	11.5	<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5
Total TPH		<11.5	11.5	14.1 J	11.4	<11.5	11.5	13.6 J	11.5	<11.5	11.5	<11.5	11.5

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.
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Version: 1.%

Jessica Kramer
Project Manager

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Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH20**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-001	Date Collected:	02.13.20 09.40	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 16.30	Basis:	Wet Weight
Seq Number:	3116675				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9460**	99.8	3.53	mg/kg	02.14.20 22.05		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116690				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	49.9	13.9	mg/kg	02.15.20 00.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.9	11.4	mg/kg	02.15.20 00.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.9	11.4	mg/kg	02.15.20 00.17	U	1
Total TPH	PHC635	<11.4	49.9	11.4	mg/kg	02.15.20 00.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	02.15.20 00.17	
o-Terphenyl	84-15-1	99	%	70-135	02.15.20 00.17	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH20**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-001	Date Collected:	02.13.20 09.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	02.15.20 05.39	U	1
Toluene	108-88-3	<0.000529	0.00200	0.000529	mg/kg	02.15.20 05.39	U	1
Ethylbenzene	100-41-4	<0.000407	0.00200	0.000407	mg/kg	02.15.20 05.39	U	1
m,p-Xylenes	179601-23-1	<0.000755	0.00401	0.000755	mg/kg	02.15.20 05.39	U	1
o-Xylene	95-47-6	<0.000404	0.00200	0.000404	mg/kg	02.15.20 05.39	U	1
Total Xylenes	1330-20-7	<0.000404	0.00200	0.000404	mg/kg	02.15.20 05.39	U	1
Total BTEX		<0.000404	0.00200	0.000404	mg/kg	02.15.20 05.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.15.20 05.39	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.15.20 05.39	

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RDU 42

Sample Id:	**PH20A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-002	Date Collected:	02.13.20 10.15	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 16.30	Basis:	Wet Weight
Seq Number:	3116675				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**171**	9.98	0.353	mg/kg	02.14.20 22.11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116690				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	02.15.20 00.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.8	11.4	mg/kg	02.15.20 00.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	02.15.20 00.17	U	1
Total TPH	PHC635	<11.4	49.8	11.4	mg/kg	02.15.20 00.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	02.15.20 00.17	
o-Terphenyl	84-15-1	106	%	70-135	02.15.20 00.17	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH20A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-002	Date Collected:	02.13.20 10.15	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000488	0.00201	0.000488	mg/kg	02.15.20 05.59	U	1
Toluene	108-88-3	<0.000531	0.00201	0.000531	mg/kg	02.15.20 05.59	U	1
Ethylbenzene	100-41-4	<0.000409	0.00201	0.000409	mg/kg	02.15.20 05.59	U	1
m,p-Xylenes	179601-23-1	<0.000758	0.00402	0.000758	mg/kg	02.15.20 05.59	U	1
o-Xylene	95-47-6	<0.000406	0.00201	0.000406	mg/kg	02.15.20 05.59	U	1
Total Xylenes	1330-20-7	<0.000406	0.00201	0.000406	mg/kg	02.15.20 05.59	U	1
Total BTEX		<0.000406	0.00201	0.000406	mg/kg	02.15.20 05.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.15.20 05.59	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.15.20 05.59	

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RDU 42

Sample Id:	**PH21**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-003	Date Collected:	02.13.20 11.25	Sample Depth:	6 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 16.30	Basis:	Wet Weight
Seq Number:	3116675				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4290**	100	3.54	mg/kg	02.14.20 22.17		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116690				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	02.15.20 00.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.3	11.5	mg/kg	02.15.20 00.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	02.15.20 00.36	U	1
Total TPH	PHC635	<11.5	50.3	11.5	mg/kg	02.15.20 00.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	02.15.20 00.36	
o-Terphenyl	84-15-1	94	%	70-135	02.15.20 00.36	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH21**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-003	Date Collected:	02.13.20 11.25	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	02.15.20 06.20	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	02.15.20 06.20	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	02.15.20 06.20	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	02.15.20 06.20	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	02.15.20 06.20	U	1
Total Xylenes	1330-20-7	<0.000402	0.00200	0.000402	mg/kg	02.15.20 06.20	U	1
Total BTEX		<0.000402	0.00200	0.000402	mg/kg	02.15.20 06.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	02.15.20 06.20	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.15.20 06.20	

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RDU 42

Sample Id:	**PH21A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-004	Date Collected:	02.13.20 11.40	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 16.30	Basis:	Wet Weight
Seq Number:	3116675				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**211**	9.98	0.353	mg/kg	02.14.20 22.23		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116690				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	02.15.20 00.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	02.15.20 00.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	02.15.20 00.36	U	1
Total TPH	PHC635	<11.5	50.1	11.5	mg/kg	02.15.20 00.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.15.20 00.36	
o-Terphenyl	84-15-1	102	%	70-135	02.15.20 00.36	

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RDU 42

Sample Id:	**PH21A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-004	Date Collected:	02.13.20 11.40	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	02.15.20 06.40	U	1
Toluene	108-88-3	<0.000528	0.00200	0.000528	mg/kg	02.15.20 06.40	U	1
Ethylbenzene	100-41-4	<0.000406	0.00200	0.000406	mg/kg	02.15.20 06.40	U	1
m,p-Xylenes	179601-23-1	<0.000754	0.00400	0.000754	mg/kg	02.15.20 06.40	U	1
o-Xylene	95-47-6	<0.000403	0.00200	0.000403	mg/kg	02.15.20 06.40	U	1
Total Xylenes	1330-20-7	<0.000403	0.00200	0.000403	mg/kg	02.15.20 06.40	U	1
Total BTEX		<0.000403	0.00200	0.000403	mg/kg	02.15.20 06.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	02.15.20 06.40	
1,4-Difluorobenzene	540-36-3	94	%	70-130	02.15.20 06.40	

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RDU 42

Sample Id:	**PH22**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-005	Date Collected:	02.13.20 13.55	Sample Depth:	10 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**220**	50.1	1.77	mg/kg	02.15.20 00.17		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	02.15.20 01.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.2	11.5	mg/kg	02.15.20 01.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	02.15.20 01.55	U	1
Total TPH	PHC635	<11.5	50.2	11.5	mg/kg	02.15.20 01.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	02.15.20 01.55	
o-Terphenyl	84-15-1	113	%	70-135	02.15.20 01.55	

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RDU 42

Sample Id:	**PH22**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-005	Date Collected:	02.13.20 13.55	Sample Depth:	10 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000481	0.00198	0.000481	mg/kg	02.15.20 07.01	U	1
Toluene	108-88-3	<0.000522	0.00198	0.000522	mg/kg	02.15.20 07.01	U	1
Ethylbenzene	100-41-4	<0.000402	0.00198	0.000402	mg/kg	02.15.20 07.01	U	1
m,p-Xylenes	179601-23-1	<0.000746	0.00396	0.000746	mg/kg	02.15.20 07.01	U	1
o-Xylene	95-47-6	<0.000399	0.00198	0.000399	mg/kg	02.15.20 07.01	U	1
Total Xylenes	1330-20-7	<0.000399	0.00198	0.000399	mg/kg	02.15.20 07.01	U	1
Total BTEX		<0.000399	0.00198	0.000399	mg/kg	02.15.20 07.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.15.20 07.01	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.15.20 07.01	

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RDU 42

Sample Id:	**PH22A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-006	Date Collected:	02.13.20 14.00	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**173**	49.4	1.75	mg/kg	02.15.20 00.24		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	02.15.20 02.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.2	11.5	mg/kg	02.15.20 02.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	02.15.20 02.34	U	1
Total TPH	PHC635	<11.5	50.2	11.5	mg/kg	02.15.20 02.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	02.15.20 02.34	
o-Terphenyl	84-15-1	119	%	70-135	02.15.20 02.34	

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RDU 42

Sample Id:	**PH22A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-006	Date Collected:	02.13.20 14.00	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	02.15.20 07.21	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	02.15.20 07.21	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	02.15.20 07.21	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	02.15.20 07.21	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.21	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.21	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	92	%	70-130	02.15.20 07.21	
4-Bromofluorobenzene	460-00-4	89	%	70-130	02.15.20 07.21	

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RDU 42

Sample Id:	**PH23**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-007	Date Collected:	02.13.20 15.05	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9160**	99.6	3.53	mg/kg	02.14.20 23.00		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	02.15.20 02.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	02.15.20 02.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	02.15.20 02.34	U	1
Total TPH	PHC635	<11.5	50.0	11.5	mg/kg	02.15.20 02.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	02.15.20 02.34	
o-Terphenyl	84-15-1	109	%	70-135	02.15.20 02.34	

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RDU 42

Sample Id:	**PH23**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-007	Date Collected:	02.13.20 15.05	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	02.15.20 07.42	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	02.15.20 07.42	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	02.15.20 07.42	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	02.15.20 07.42	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.42	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.42	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.15.20 07.42	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.15.20 07.42	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH23A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-008	Date Collected:	02.13.20 15.15	Sample Depth:	16 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**319**	9.96	0.353	mg/kg	02.14.20 23.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	02.15.20 02.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	**14.1**	50.0	11.5	mg/kg	02.15.20 02.54	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	50.0	11.4	mg/kg	02.15.20 02.54	U	1
Total TPH	PHC635	**14.1**	50.0	11.4	mg/kg	02.15.20 02.54	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	02.15.20 02.54	
o-Terphenyl	84-15-1	111	%	70-135	02.15.20 02.54	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH23A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-008	Date Collected:	02.13.20 15.15	Sample Depth:	16 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	02.15.20 08.02	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	02.15.20 08.02	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	02.15.20 08.02	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	02.15.20 08.02	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.02	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.02	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.15.20 08.02	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.15.20 08.02	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH24**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-009	Date Collected:	02.13.20 16.00	Sample Depth:	6 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11300**	99.8	3.53	mg/kg	02.14.20 23.26		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	02.15.20 02.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.3	11.5	mg/kg	02.15.20 02.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	02.15.20 02.54	U	1
Total TPH	PHC635	<11.5	50.3	11.5	mg/kg	02.15.20 02.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	02.15.20 02.54	
o-Terphenyl	84-15-1	111	%	70-135	02.15.20 02.54	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH24**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-009	Date Collected:	02.13.20 16.00	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	02.15.20 08.22	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	02.15.20 08.22	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	02.15.20 08.22	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	02.15.20 08.22	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.22	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.22	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.15.20 08.22	
1,4-Difluorobenzene	540-36-3	101	%	70-130	02.15.20 08.22	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH24A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-010	Date Collected:	02.13.20 16.20	Sample Depth:	14 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**211**	9.94	0.352	mg/kg	02.14.20 23.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	02.15.20 03.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	**13.6**	50.0	11.5	mg/kg	02.15.20 03.14	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	02.15.20 03.14	U	1
Total TPH	PHC635	**13.6**	50.0	11.5	mg/kg	02.15.20 03.14	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.15.20 03.14	
o-Terphenyl	84-15-1	112	%	70-135	02.15.20 03.14	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH24A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-010	Date Collected:	02.13.20 16.20	Sample Depth:	14 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	02.15.20 08.43	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	02.15.20 08.43	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	02.15.20 08.43	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	02.15.20 08.43	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	02.15.20 08.43	U	1
Total Xylenes	1330-20-7	<0.000402	0.00200	0.000402	mg/kg	02.15.20 08.43	U	1
Total BTEX		<0.000402	0.00200	0.000402	mg/kg	02.15.20 08.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.15.20 08.43	
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.15.20 08.43	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH26**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-011	Date Collected:	02.13.20 13.15	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**783**	9.98	0.353	mg/kg	02.14.20 23.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	02.15.20 03.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	02.15.20 03.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	02.15.20 03.14	U	1
Total TPH	PHC635	<11.5	50.1	11.5	mg/kg	02.15.20 03.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	02.15.20 03.14	
o-Terphenyl	84-15-1	108	%	70-135	02.15.20 03.14	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH26**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-011	Date Collected:	02.13.20 13.15	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.09	Basis:	Wet Weight
Seq Number:	3116666				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000481	0.00198	0.000481	mg/kg	02.15.20 00.35	U	1
Toluene	108-88-3	<0.000522	0.00198	0.000522	mg/kg	02.15.20 00.35	U	1
Ethylbenzene	100-41-4	<0.000402	0.00198	0.000402	mg/kg	02.15.20 00.35	U	1
m,p-Xylenes	179601-23-1	<0.000746	0.00396	0.000746	mg/kg	02.15.20 00.35	U	1
o-Xylene	95-47-6	<0.000399	0.00198	0.000399	mg/kg	02.15.20 00.35	U	1
Total Xylenes	1330-20-7	<0.000399	0.00198	0.000399	mg/kg	02.15.20 00.35	U	1
Total BTEX		<0.000399	0.00198	0.000399	mg/kg	02.15.20 00.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.15.20 00.35	
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.15.20 00.35	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH26A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-012	Date Collected:	02.13.20 13.25	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**463**	9.98	0.353	mg/kg	02.14.20 23.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	02.15.20 03.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	02.15.20 03.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	02.15.20 03.33	U	1
Total TPH	PHC635	<11.5	50.0	11.5	mg/kg	02.15.20 03.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	02.15.20 03.33	
o-Terphenyl	84-15-1	109	%	70-135	02.15.20 03.33	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH26A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-012	Date Collected:	02.13.20 13.25	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.09	Basis:	Wet Weight
Seq Number:	3116666				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000483	0.00199	0.000483	mg/kg	02.15.20 00.55	U	1
Toluene	108-88-3	<0.000525	0.00199	0.000525	mg/kg	02.15.20 00.55	U	1
Ethylbenzene	100-41-4	<0.000404	0.00199	0.000404	mg/kg	02.15.20 00.55	U	1
m,p-Xylenes	179601-23-1	<0.000749	0.00398	0.000749	mg/kg	02.15.20 00.55	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.15.20 00.55	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.15.20 00.55	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.15.20 00.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	02.15.20 00.55	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.15.20 00.55	

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 Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 652450

LT Environmental, Inc.

RDU 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116675 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696717-1-BLK — LCS Sample Id: 7696717-1-BKS — LCSD Sample Id: 7696717-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	250	259	104	259	104	90-110	0	20	mg/kg	02.14.20 19:30	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116669 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696728-1-BLK — LCS Sample Id: 7696728-1-BKS — LCSD Sample Id: 7696728-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	250	261	104	261	104	90-110	0	20	mg/kg	02.14.20 22:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116675 — Matrix: Soil — Date Prep: 02.14.20
Parent Sample Id: 652447-009 — MS Sample Id: 652447-009 S — MSD Sample Id: 652447-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5910	202	6090	89	6110	99	90-110	0	20	mg/kg	02.14.20 20:59	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116675 — Matrix: Soil — Date Prep: 02.14.20
Parent Sample Id: 652491-001 — MS Sample Id: 652491-001 S — MSD Sample Id: 652491-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.5	200	224	104	226	105	90-110	1	20	mg/kg	02.14.20 19:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116669 — Matrix: Soil — Date Prep: 02.14.20
Parent Sample Id: 652450-007 — MS Sample Id: 652450-007 S — MSD Sample Id: 652450-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9160	200	9380	110	9360	99	90-110	0	20	mg/kg	02.14.20 23:07	

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

QC Summary 652450

LT Environmental, Inc.

RDU 42

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3116669 Matrix: Soil Date Prep: 02.14.20
Parent Sample Id: 652513-001 MS Sample Id: 652513-001 S MSD Sample Id: 652513-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	279	199	486	104	488	105	90-110	0	20	mg/kg	02.15.20 00:49	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3116690 Matrix: Solid Date Prep: 02.14.20
MB Sample Id: 7696775-1-BLK LCS Sample Id: 7696775-1-BKS LCSD Sample Id: 7696775-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.9	1000	890	89	882	88	70-135	1	35	mg/kg	02.14.20 21:00	
Diesel Range Organics (DRO)	<11.5	1000	942	94	1020	102	70-135	8	35	mg/kg	02.14.20 21:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		106		112		70-135	%	02.14.20 21:00
o-Terphenyl	100		105		107		70-135	%	02.14.20 21:00

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3116693 Matrix: Solid Date Prep: 02.14.20
MB Sample Id: 7696789-1-BLK LCS Sample Id: 7696789-1-BKS LCSD Sample Id: 7696789-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.9	1000	944	94	827	83	70-135	13	35	mg/kg	02.15.20 01:35	
Diesel Range Organics (DRO)	<11.5	1000	1030	103	873	87	70-135	17	35	mg/kg	02.15.20 01:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	81		118		100		70-135	%	02.15.20 01:35
o-Terphenyl	88		112		100		70-135	%	02.15.20 01:35

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3116690 Matrix: Solid Date Prep: 02.14.20
MB Sample Id: 7696775-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<11.5	mg/kg	02.17.20 10:51	

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

QC Summary 652450

LT Environmental, Inc.

RDU 42

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116693 | Matrix: Solid | Date Prep: 02.14.20
MB Sample Id: 7696789-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<11.5	mg/kg	02.15.20 01:35	

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116690 | Matrix: Soil | Date Prep: 02.14.20
Parent Sample Id: 652491-001 | MS Sample Id: 652491-001 S | MSD Sample Id: 652491-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.8	997	926	93	905	91	70-135	2	35	mg/kg	02.14.20 21:19	
Diesel Range Organics (DRO)	<11.4	997	1050	105	995	100	70-135	5	35	mg/kg	02.14.20 21:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		109		70-135	%	02.14.20 21:19
o-Terphenyl	111		115		70-135	%	02.14.20 21:19

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116693 | Matrix: Soil | Date Prep: 02.14.20
Parent Sample Id: 652450-005 | MS Sample Id: 652450-005 S | MSD Sample Id: 652450-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.8	997	897	90	985	99	70-135	9	35	mg/kg	02.15.20 02:15	
Diesel Range Organics (DRO)	<11.4	997	961	96	1090	109	70-135	13	35	mg/kg	02.15.20 02:15	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		124		70-135	%	02.15.20 02:15
o-Terphenyl	110		118		70-135	%	02.15.20 02:15

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

QC Summary 652450

LT Environmental, Inc.

RDU 42

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116662 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696732-1-BLK — LCS Sample Id: 7696732-1-BKS — LCSD Sample Id: 7696732-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.102	102	0.0998	100	70-130	2	35	mg/kg	02.14.20 23:52	
Toluene	<0.000528	0.100	0.0982	98	0.0957	96	70-130	3	35	mg/kg	02.14.20 23:52	
Ethylbenzene	<0.000406	0.100	0.0938	94	0.0911	91	71-129	3	35	mg/kg	02.14.20 23:52	
m,p-Xylenes	<0.000754	0.200	0.193	97	0.187	94	70-135	3	35	mg/kg	02.14.20 23:52	
o-Xylene	<0.000403	0.100	0.0969	97	0.0942	94	71-133	3	35	mg/kg	02.14.20 23:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		105		104		70-130	%	02.14.20 23:52
4-Bromofluorobenzene	96		95		94		70-130	%	02.14.20 23:52

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116666 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696733-1-BLK — LCS Sample Id: 7696733-1-BKS — LCSD Sample Id: 7696733-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.109	109	0.106	106	70-130	3	35	mg/kg	02.14.20 23:13	
Toluene	<0.000528	0.100	0.0984	98	0.0970	97	70-130	1	35	mg/kg	02.14.20 23:13	
Ethylbenzene	<0.000406	0.100	0.0934	93	0.0922	92	71-129	1	35	mg/kg	02.14.20 23:13	
m,p-Xylenes	<0.000754	0.200	0.182	91	0.180	90	70-135	1	35	mg/kg	02.14.20 23:13	
o-Xylene	<0.000403	0.100	0.0929	93	0.0919	92	71-133	1	35	mg/kg	02.14.20 23:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		108		109		70-130	%	02.14.20 23:13
4-Bromofluorobenzene	94		90		90		70-130	%	02.14.20 23:13

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116662 — Matrix: Soil — Date Prep: 02.14.20
Parent Sample Id: 652447-007 — MS Sample Id: 652447-007 S — MSD Sample Id: 652447-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000487	0.100	0.116	116	0.0907	91	70-130	24	35	mg/kg	02.15.20 00:33	
Toluene	<0.000530	0.100	0.110	110	0.0863	86	70-130	24	35	mg/kg	02.15.20 00:33	
Ethylbenzene	<0.000408	0.100	0.102	102	0.0788	79	71-129	26	35	mg/kg	02.15.20 00:33	
m,p-Xylenes	<0.000757	0.201	0.213	106	0.169	85	70-135	23	35	mg/kg	02.15.20 00:33	
o-Xylene	<0.000405	0.100	0.109	109	0.0875	88	71-133	22	35	mg/kg	02.15.20 00:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	02.15.20 00:33
4-Bromofluorobenzene	96		94		70-130	%	02.15.20 00:33

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

QC Summary 652450

LT Environmental, Inc.

RDU 42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3116666 Matrix: Soil Date Prep: 02.14.20

Parent Sample Id: 652450-011 MS Sample Id: 652450-011 S MSD Sample Id: 652450-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000483	0.0994	0.115	116	0.105	105	70-130	9	35	mg/kg	02.14.20 23:54	
Toluene	<0.000525	0.0994	0.106	107	0.0972	97	70-130	9	35	mg/kg	02.14.20 23:54	
Ethylbenzene	<0.000404	0.0994	0.102	103	0.0938	94	71-129	8	35	mg/kg	02.14.20 23:54	
m,p-Xylenes	<0.000749	0.199	0.199	100	0.183	92	70-135	8	35	mg/kg	02.14.20 23:54	
o-Xylene	<0.000401	0.0994	0.101	102	0.0940	94	71-133	7	35	mg/kg	02.14.20 23:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	02.14.20 23:54
4-Bromofluorobenzene	93		94		70-130	%	02.14.20 23:54

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike

Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added

LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

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XENCO LABORATORIES

Chain of Custody

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 Carlsbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 652450

Project Manager:	Chris McKissen	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	820 Meyer Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	970 285 9985	Email:	cmckissen@ltenv.com, abyers

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	03482000 01	Routine	☑
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	0.6	Thermometer ID	TH1007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	14

ANALYSIS REQUEST

Preservative Codes
MeOH: Me
None: NO
HNO3: HN
H2SO4: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH20	S	2/13/20	0940	2'	1				
	PH20A			1015	12'	1				
	PH21			1125	6'	1				
	PH21A			1140	12'	1				
	PH22			1355	10'	1				
	PH22A			1400	12'	1				
	PH23			1505	12'	1				
	PH23A			1515	16'	1				
	PH24			1600	6'	1				
	PH24A	↓	↓	1620	14'	1				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		2/14/20 10:00am	2		2/14/20 10:30
			4		
			6		

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.002
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Chain of Custody

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 Carlsbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 652450

Project Manager:	Chris McKissen	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	920 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	970 285 9985	Email:	cmckissen@ltenv.com, abyers@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	ROW 42	Turn Around	
Project Number:	03482000 1	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT				
Temperature (°C):		Temp Blank:	Yes No	Wet Ice: Yes No
Received Intact:	Yes No	Thermometer ID		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH26	S	2/13/20	1315	8'	1	X	X	X	
	PH26A	S	2/13/20	1325	12'	1	X	X	X	
	PH20B	S	2/13/20	1035	13'	1	X	X	X	
	PH24B ok per	S	2/13/20	1625	16'	1	X	X	X	HOLD for PH20A HOLD for PH24A

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2SO4: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		2/14/20 10:00am			2/14/20 10:30

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Final 1.002
Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM

Analytical Report 652515

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 42

03482001

18-FEB-20

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)

18-FEB-20

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

Reference: XENCO Report No(s): **652515**
RDU 42
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) 652515. 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. 652515 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,

Jessica Kramer

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 Cross Reference 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH25	S	02-14-20 09:17	1 ft	652515-001
PH25A	S	02-14-20 09:53	14 ft	652515-002
PH27	S	02-14-20 10:10	0.5 ft	652515-003
PH27A	S	02-14-20 10:50	12 ft	652515-004
PH25b	S	02-14-20 09:55	16 ft	Not Analyzed

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 42

Project ID: *03482001*
Work Order Number(s): *652515*

Report Date: *18-FEB-20*
Date Received: *02/14/2020*

Sample receipt non conformances and comments:

V1.001 - Revision corrected project name from RDV 42 to RDU 42

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3116798 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 652515

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 03482001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Fri Feb-14-20 04:35 pm
Report Date: 18-FEB-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652515-001		652515-002		652515-003		652515-004					
	Field Id:	PH25		PH25A		PH27		PH27A					
	Depth:	1- ft		14- ft		0.5- ft		12- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Feb-14-20 09:17		Feb-14-20 09:53		Feb-14-20 10:10		Feb-14-20 10:50					
BTEX by EPA 8021B	***Extracted:***	Feb-17-20 14:23		Feb-17-20 14:23		Feb-17-20 14:23		Feb-17-20 14:23					
	Analyzed:	Feb-17-20 17:34		Feb-17-20 17:55		Feb-17-20 18:15		Feb-17-20 18:35					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.000490	0.000490	<0.000485	0.000485	<0.000485	0.000485	<0.000484	0.000484				
Toluene		<0.000533	0.000533	<0.000527	0.000527	<0.000527	0.000527	<0.000526	0.000526				
Ethylbenzene		<0.000410	0.000410	<0.000405	0.000405	<0.000405	0.000405	<0.000405	0.000405				
m,p-Xylenes		<0.000761	0.000761	<0.000752	0.000752	<0.000752	0.000752	<0.000751	0.000751				
o-Xylene		<0.000407	0.000407	<0.000402	0.000402	<0.000402	0.000402	<0.000401	0.000401				
Total Xylenes		<0.000407	0.000407	<0.000402	0.000402	<0.000402	0.000402	<0.000401	0.000401				
Total BTEX		<0.000407	0.000407	<0.000402	0.000402	<0.000402	0.000402	<0.000401	0.000401				
Chloride by EPA 300	***Extracted:***	Feb-17-20 11:00		Feb-17-20 11:00		Feb-17-20 11:00		Feb-17-20 11:00					
	Analyzed:	Feb-17-20 14:18		Feb-17-20 14:24		Feb-17-20 14:30		Feb-17-20 14:36					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		7920	1.77	366	0.351	341	0.353	394	0.353				
TPH by SW8015 Mod	***Extracted:***	Feb-17-20 12:15		Feb-17-20 12:15		Feb-17-20 12:15		Feb-17-20 12:15					
	Analyzed:	Feb-17-20 14:13		Feb-17-20 14:34		Feb-17-20 14:34		Feb-17-20 14:54					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<13.8	13.8	<13.8	13.8	<13.8	13.8	<13.9	13.9				
Diesel Range Organics (DRO)		<11.4	11.4	11.9 J	11.4	<11.4	11.4	12.9 J	11.5				
Motor Oil Range Hydrocarbons (MRO)		<11.4	11.4	<11.4	11.4	<11.4	11.4	<11.5	11.5				
Total TPH		<11.4	11.4	11.9 J	11.4	<11.4	11.4	12.9 J	11.5				

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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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH25**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-001	Date Collected:	02.14.20 09.17	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 11.00	Basis:	Wet Weight
Seq Number:	3116743				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7920**	49.9	1.77	mg/kg	02.17.20 14.18		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 12.15	Basis:	Wet Weight
Seq Number:	3116742				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	02.17.20 14.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.8	11.4	mg/kg	02.17.20 14.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	02.17.20 14.13	U	1
Total TPH	PHC635	<11.4	49.8	11.4	mg/kg	02.17.20 14.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.17.20 14.13	
o-Terphenyl	84-15-1	102	%	70-135	02.17.20 14.13	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH25**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-001	Date Collected:	02.14.20 09.17	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 14.23	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000490	0.00202	0.000490	mg/kg	02.17.20 17.34	U	1
Toluene	108-88-3	<0.000533	0.00202	0.000533	mg/kg	02.17.20 17.34	U	1
Ethylbenzene	100-41-4	<0.000410	0.00202	0.000410	mg/kg	02.17.20 17.34	U	1
m,p-Xylenes	179601-23-1	<0.000761	0.00404	0.000761	mg/kg	02.17.20 17.34	U	1
o-Xylene	95-47-6	<0.000407	0.00202	0.000407	mg/kg	02.17.20 17.34	U	1
Total Xylenes	1330-20-7	<0.000407	0.00202	0.000407	mg/kg	02.17.20 17.34	U	1
Total BTEX		<0.000407	0.00202	0.000407	mg/kg	02.17.20 17.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.17.20 17.34	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.17.20 17.34	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH25A**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-002	Date Collected:	02.14.20 09.53	Sample Depth:	14 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 11.00	Basis:	Wet Weight
Seq Number:	3116743				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**366**	9.92	0.351	mg/kg	02.17.20 14.24		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 12.15	Basis:	Wet Weight
Seq Number:	3116742				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	02.17.20 14.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	**11.9**	49.8	11.4	mg/kg	02.17.20 14.34	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	02.17.20 14.34	U	1
Total TPH	PHC635	**11.9**	49.8	11.4	mg/kg	02.17.20 14.34	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.17.20 14.34	
o-Terphenyl	84-15-1	110	%	70-135	02.17.20 14.34	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH25A**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-002	Date Collected:	02.14.20 09.53	Sample Depth:	14 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 14.23	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	02.17.20 17.55	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	02.17.20 17.55	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	02.17.20 17.55	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	02.17.20 17.55	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	02.17.20 17.55	U	1
Total Xylenes	1330-20-7	<0.000402	0.00200	0.000402	mg/kg	02.17.20 17.55	U	1
Total BTEX		<0.000402	0.00200	0.000402	mg/kg	02.17.20 17.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91	%	70-130	02.17.20 17.55	
4-Bromofluorobenzene	460-00-4	87	%	70-130	02.17.20 17.55	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH27**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-003	Date Collected:	02.14.20 10.10	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 11.00	Basis:	Wet Weight
Seq Number:	3116743				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**341**	9.96	0.353	mg/kg	02.17.20 14.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 12.15	Basis:	Wet Weight
Seq Number:	3116742				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.9	13.8	mg/kg	02.17.20 14.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.9	11.4	mg/kg	02.17.20 14.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.9	11.4	mg/kg	02.17.20 14.34	U	1
Total TPH	PHC635	<11.4	49.9	11.4	mg/kg	02.17.20 14.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	02.17.20 14.34	
o-Terphenyl	84-15-1	103	%	70-135	02.17.20 14.34	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH27**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-003	Date Collected:	02.14.20 10.10	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 14.23	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	02.17.20 18.15	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	02.17.20 18.15	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	02.17.20 18.15	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	02.17.20 18.15	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	02.17.20 18.15	U	1
Total Xylenes	1330-20-7	<0.000402	0.00200	0.000402	mg/kg	02.17.20 18.15	U	1
Total BTEX		<0.000402	0.00200	0.000402	mg/kg	02.17.20 18.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.17.20 18.15	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.17.20 18.15	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH27A**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-004	Date Collected:	02.14.20 10.50	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 11.00	Basis:	Wet Weight
Seq Number:	3116743				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**394**	9.98	0.353	mg/kg	02.17.20 14.36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 12.15	Basis:	Wet Weight
Seq Number:	3116742				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	02.17.20 14.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	**12.9**	50.1	11.5	mg/kg	02.17.20 14.54	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	02.17.20 14.54	U	1
Total TPH	PHC635	**12.9**	50.1	11.5	mg/kg	02.17.20 14.54	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.17.20 14.54	
o-Terphenyl	84-15-1	110	%	70-135	02.17.20 14.54	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH27A**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-004	Date Collected:	02.14.20 10.50	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 14.23	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	02.17.20 18.35	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	02.17.20 18.35	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	02.17.20 18.35	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	02.17.20 18.35	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.17.20 18.35	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.17.20 18.35	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.17.20 18.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.17.20 18.35	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.17.20 18.35	

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 Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 652515

LT Environmental, Inc.

RDU 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116743 — Matrix: Solid — Date Prep: 02.17.20
MB Sample Id: 7696809-1-BLK — LCS Sample Id: 7696809-1-BKS — LCSD Sample Id: 7696809-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	250	255	102	255	102	90-110	0	20	mg/kg	02.17.20 11:54	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116743 — Matrix: Soil — Date Prep: 02.17.20
Parent Sample Id: 652519-010 — MS Sample Id: 652519-010 S — MSD Sample Id: 652519-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	23.3	200	232	104	232	104	90-110	0	20	mg/kg	02.17.20 13:27	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116743 — Matrix: Soil — Date Prep: 02.17.20
Parent Sample Id: 652566-001 — MS Sample Id: 652566-001 S — MSD Sample Id: 652566-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	733	200	948	108	953	110	90-110	1	20	mg/kg	02.17.20 12:10	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116742 — Matrix: Solid — Date Prep: 02.17.20
MB Sample Id: 7696815-1-BLK — LCS Sample Id: 7696815-1-BKS — LCSD Sample Id: 7696815-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.9	1000	797	80	837	84	70-135	5	35	mg/kg	02.17.20 12:52	
Diesel Range Organics (DRO)	<11.5	1000	870	87	920	92	70-135	6	35	mg/kg	02.17.20 12:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		110		119		70-135	%	02.17.20 12:52
o-Terphenyl	97		97		104		70-135	%	02.17.20 12:52

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116742 — Matrix: Solid — Date Prep: 02.17.20
MB Sample Id: 7696815-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<11.5	mg/kg	02.17.20 12:32	

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

QC Summary 652515

LT Environmental, Inc.

RDU 42

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116742 | Matrix: Soil | Date Prep: 02.17.20
Parent Sample Id: 652566-001 | MS Sample Id: 652566-001 S | MSD Sample Id: 652566-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.9	998	846	85	809	81	70-135	4	35	mg/kg	02.17.20 13:12	
Diesel Range Organics (DRO)	<11.4	998	953	95	894	90	70-135	6	35	mg/kg	02.17.20 13:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		99		70-135	%	02.17.20 13:12
o-Terphenyl	106		100		70-135	%	02.17.20 13:12

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3116798 | Matrix: Solid | Date Prep: 02.17.20
MB Sample Id: 7696814-1-BLK | LCS Sample Id: 7696814-1-BKS | LCSD Sample Id: 7696814-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.114	114	0.109	109	70-130	4	35	mg/kg	02.17.20 15:52	
Toluene	<0.000528	0.100	0.104	104	0.101	101	70-130	3	35	mg/kg	02.17.20 15:52	
Ethylbenzene	<0.000406	0.100	0.0990	99	0.0963	96	71-129	3	35	mg/kg	02.17.20 15:52	
m,p-Xylenes	<0.000754	0.200	0.193	97	0.188	94	70-135	3	35	mg/kg	02.17.20 15:52	
o-Xylene	<0.000403	0.100	0.0977	98	0.0952	95	71-133	3	35	mg/kg	02.17.20 15:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		108		107		70-130	%	02.17.20 15:52
4-Bromofluorobenzene	96		89		90		70-130	%	02.17.20 15:52

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3116798 | Matrix: Soil | Date Prep: 02.17.20
Parent Sample Id: 652515-001 | MS Sample Id: 652515-001 S | MSD Sample Id: 652515-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000485	0.0998	0.129	129	0.121	121	70-130	6	35	mg/kg	02.17.20 16:33	
Toluene	<0.000527	0.0998	0.119	119	0.121	121	70-130	2	35	mg/kg	02.17.20 16:33	
Ethylbenzene	<0.000405	0.0998	0.115	115	0.115	115	71-129	0	35	mg/kg	02.17.20 16:33	
m,p-Xylenes	<0.000752	0.200	0.225	113	0.222	111	70-135	1	35	mg/kg	02.17.20 16:33	
o-Xylene	<0.000402	0.0998	0.113	113	0.111	111	71-133	2	35	mg/kg	02.17.20 16:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	02.17.20 16:33
4-Bromofluorobenzene	94		92		70-130	%	02.17.20 16:33

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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Chain of Custody

Work Order No: 652515

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 Crailsbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Project Manager:	Chris McKissen	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	920 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	970 285 9985	Email:	cmckissen@ltenv.com, abyers@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	034820001	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Ann Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT	Temp Blank: Yes No	Wet Ice: Yes No	
Temperature (°C):	0.8	Thermometer ID	TNM007
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	5

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH25	S	2/14/20	0917	0 & 1'	1				
	PH25A	S		0953	14'	1				
	PH27	S		1010	0.5'	1				
	PH27A	S		1050	12'	1				
	PH26B 0 & 1'	S		0955	16'	1				HOLD for PH25A results

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Ann Byers		2/14/20 16:35	3		
			4		
			5		

Revised Date 082819 Rev. 2019.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.001
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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02.14.2020 04.35.00 PM

Work Order #: 652515

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

Temperature Measuring device used : TNM 007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.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?	**No**
#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: Martha Castro Date: 02.14.2020

Checklist reviewed by: Jessica Kramer Date: 02.18.2020

Jessica Kramer

ATTACHMENT 4: PHOTOGRAPHIC LOG

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

PHOTOGRAPHIC LOG



Photograph 1: View of the Site facing northeast.



Photograph 2: View of the Site facing north.



Photograph 3: View of the Site facing east.



Photograph 4: View of the Site facing south.

Ross Draw Unit 42
32.026123308, -103.8718851
Photographs Taken: October 31, 2016 though February 14, 2020

A proud member of WSP

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM



Photograph 5: Northeast view of the Site during delineation events.



Photograph 6: Northwest view of the Site during delineation events.



Photograph 7: West view of the Site during delineation events.



Photograph 8: Northwest view of the Site during delineation events.

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ATTACHMENT 5: SOIL SAMPLING LOGS

LT Environmental, Inc.
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Carlsbad, New Mexico 88220
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Identifier:	Date:
PH01	05/14/2019
Project Name:	**RP Number:**
RDU 42	2RP 3564
Logged By: L. Lambert	**Method:** backhoe
Hole Diameter: 1.5'	**Total Depth:** 4'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:
Field Screening: chlorides
Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche pad ~0.5'
M	<192		N	PH01	1		SM	Sand, silts, brown, moist
					2'			Nodes, no plastic
					3			moldable/easily broken
M	<192		N	PH01A	4'			moist
					5			deepest depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier: PH2	Date: 05/19/2019
Project Name: RDU 42	AP Number: 2RP-3564
Logged By: [illegible]	Method: auger
Hole Diameter: 15'	Total Depth: 12'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:
Field Screening: chlorides
Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche pad (~0.5')
					1		SM	Sand, silty, brown, moist, medium plasticity,
M	(9.2) >4102		N	PH2	2			
					3			
M	(9.2) >4102		N	PH2A	4			
					5			
D	(8.8) >4102		N		6		SM	Sand, gravelly settled, some sand lens
					7			
					8			
					9		SC	low plasticity clayey sand, w/ 1/4" rocks
D	(7.8) 958		N		10			
					11			
D	C192 (K1)		N	PH2B	12'		SP	Light tan sand, fine, high moisture, well graded



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Identifier: PH-03	Date: 05/14/2019
Project Name: RDU 42	RP Number: 2RP 3564
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: L. Lambert / Method: bucket
Lat/Long:	Field Screening: chlorides / Hole Diameter: 1.5' / Total Depth: 4'
Comments:	

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche ~0.5'
M	CH2 (C1)		N	PH-3	1		SM	Sand, Red, brown, moist,
					2			Nodular, no Plastic
								No ribbon
					3			
M	CH2 (C1)		N	PH-3	4'			
								deepest depth
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier: PH-4	Date: 05/14/2019
Project Name: RDU 42	RP Number: 2RP 3564
Logged By: L Laumbach	Method: backhoe
Lat/Long:	Field Screening: chloride
Hole Diameter: 1.5'	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche pad ~0.5'
M	<192		N	PH-4	1 2'		SM	Sd, fine, brown, non plastic, mod dense, no odor
M	<192		N	PH-4A	3 4'			deepest depth
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier:	Date:
PH05	05/14/2019
Project Name:	**RP Number:**
RDU 42	2RP 3564
Logged By: L. Lambach	**Method:** backhoe
Hole Diameter: 1.5'	**Total Depth:** 6'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:
Field Screening: chlorides
Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche pad ~ 0.5'
					1		SM	Sand, silty, brown, moist
M	>4102 (8.8)		N	PH05	2'			N odor, moldable, no plastic, non gritty
					3			
M	1318 (4.8)		N	PH05A	4'			
					5			
M	858 (3.8)		N	PH05B	6'		SP/SM	50/50 sand silty, brown, no odor
					7			deepest depth
					8			
					9			
					10			
					11			
					12			

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Identifier	Date
PH-6	05/14/2019
Project Name	**PO Number**
RDU 42	2RP 3564
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: L. Lawrence / Method: backhoe
Lab Tests / Field Screening	Hole Diameter: 15' / Total Depth: 6'
Comments	

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil Rock Type	Lithology/Remarks
					0			caliche
					1		SM	Sand (fine), brown, moist
M	74102 (9.0)		N	PH-6	2			N odor
					3			mottled - non plastic - easily broken
M			N	PH-6A	4			
					5		SP/SM	light brn, SP/SM sand (fine)
M			N	PH-6B	6			
					7			deepest depth
					8			
					9			
					10			
					11			
					12			

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Identifier:	Date:
PH07	05/14/2019
Project Name:	**RP Number:**
RDU 42	2RP3564
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: L. Lamb Method: backhoe
Lat/Long:	Field Screening: chlorides Hole Diameter: 1.5' Total Depth: 6'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche
					1		SM	brown sand
M			N	PH07	2			moist
					3			
					4			
					5		SP/SM	light tan sand nodules
M			N	PH07A	6			
					7			deepest depth
					8			
					9			
					10			
					11			
					12			

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BH or PH Name: PH08	Date: 2/6/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564 & 1-6-2020 Release
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 12'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	156		N		0.5	0.5	Caliche	
D	128		N		1	1	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-sorted, trace organics
D	156		N		2	2	SP-SM	Brown sand w/ silt. Med grained, no odor, no plasticity, poorly-sorted, trace organics
D	BDL		N		3	3	SP-SM	Brown sand w/ silt. Med grained, no odor, no plasticity, poorly-sorted, trace organics
D	BDL		N		4	4	SP-SM	Brown sand w/ silt. Med grained, no odor, no plasticity, poorly-sorted, trace organics
D	BDL		N		5	5	SP-SM	Brown sand w/ silt. Med grained, no odor, no plasticity, poorly-sorted, trace organics
D	128		N		6	6	SP-SM	Lt. brown sand w/ silt and gravel.
D	276		N		7	7	SP-SM	Lt. brown medium grained sand w/ silt. No plasticity, poorly sorted
D	312		N		8	8	SP-SM	Lt. brown medium grained sand w/ silt. No plasticity, poorly sorted. Clumped, easily broken.
D	352		N		9	9	SP-SM	Fine Sand w/ silt, compact, hard to break w/ fingers. Lt brown w/ gravel
D	980		N		10	10	SP	Pink, fine grained sand, no plasticity, compact, clumped
					11			
D	BDL		N		12	12	SP	Fine sand, no plasticity, well sorted. Lt pink/ brown

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BH or PH Name: PH09	Date: 2/6/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 12'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		Surface Layer Caliche
D	BDL		N		0.5	0.5	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-graded.
D	BDL		N		1	1	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-graded.
D	BDL		N		2	2	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-graded.
D	BDL		N		3	3	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-graded. Trace organics
D	BDL		N		4	4	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-graded. Trace organics
D	BDL		N		5	5	SP-SM	Brown, poorly grade silt sand (fine) w/ gravel, no plasticity, no odor
D	BDL		N		6	6	SM	Brown, poorly grade silt sand (fine), compact, no plasticity
D	BDL		N		7	7	SM	Brown, poorly grade silt sand (fine), compact, no plasticity
D	244		N		8	8	SP-SM	Lt. brown silty sand (fine) w/ gravel. Poorly graded
D	768		N		9	9	SP-SM	Lt. brown silty sand. Compact. Poorly graded
D	592		N		10	10	SP-SM	Lt. pink/ yellow, poorly graded silt sand (fine)
D	708		N		11	11	SM	Lt. brown poorly graded silt sand (fine)
D	180		N		12	12	SP	Lt. brown/ pink sand (med)

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BH or PH Name: PH10	Date: 2/6/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
D	244		N		0.5	0.5	SM	Brown, poorly-graded silt sand(fine)
D	212		N		1	1	SM	Brown, poorly-graded silt sand(fine)
D	BDL		N		2	2	SM	Brown, poorly-graded silt sand(fine)
D	BDL		N		3	3	SM	Brown, poorly-graded silt sand(fine)
D	BDL		N		4	4	SM	Brown, poorly-graded silt sand(fine)
D	BDL		N		5	5	SP-SM	Lt. brown sand w/ silt and gravel
D	128		N		6	6	SP-SM	Lt. brown compact, silt sand w/ gravel
D	212		N		7	7	SP-SM	Lt. brown compact, silt sand w/ gravel
D	348		N		8	8	SM	Lt. brown compact, silt sand w/ gravel
D	608		N		9	9	SM	Lt. Pink/brown-yellow silt sand (fine)
D	424		N		10	10	SP	Lt. pink fine sand, compact
D	280		N		11	11	SP	Lt. pink/ brown sand (med)
D	BDL		N		12	12	SP	Lt. pink/ brown sand (med)

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BH or PH Name: PH11	Date: 2/7/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		Caliche
D	280		N		0.5	0.5	SM	Brown, poorly-graded silt sand(fine) with trace of caliche
D	196		N		1	1	SM	Brown, poorly-graded silt sand(fine), no plasticity, organics
D	196		N		2	2	SM	Brown, poorly-graded silt sand(fine), no plasticity, organics
D	148		N		3	3	SM	Brown, poorly-graded silt sand(fine), no plasticity, organics
D	BDL		N		4	4	SP-SM	Silt-sand w/ gravel
						5		
D	664		N		6	6	SP	Compact fine grained sand w/ silt. Lt brown-yellow, poorly graded
						7		
D	720		N		8	8	SM	Compact fine grained sand w/ silt. Modules of white fine grained sand, various sizes, breakable by hand, some yellow fines
D	556		N		9	9	SM	Lt. pink/brown fine sile-sand, compact
D	384		N		10	10	SM	Lt. pink/brown fine sile-sand, compact-difficult to crush by hand
					11			
D	168		N		12	12	SP	Black, red, white, brown sand (med)

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BH or PH Name: PH12	Date: 2/7/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
D	148		N		0.5	0.5	SM	Silt sand, poorly graded, traces of caliche
D	168		N		1	1	SM	Silt sand, poorly graded
D	196		N		2	2	SM	Silt sand, poorly graded, organics
D	196		N		3	3	SM	Poorly-graded, brown silt sand (fine)
D	148		N		4	4	SP-SM	Silt sand w/ gravel
						5		
D	280		N		6	6	SM	Lt. Brown, compact, fine grained silt sand
						7		
M	988		N		8	8	SM	Moist, compact silt sand, clumped white and brown
D	848		N		9	9	SM	Lt. pink silt sand (fine)
D	384		N		10	10	SM	Lt. pink silt sand (fine)
						11		
D	196		N		12	12	SP	Sand(med)

LT Environmental, Inc.
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Carlsbad, New Mexico 88220
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BH or PH Name: PH13	Date: 2/7/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 12'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	BDL		N		0.5	0.5	SM	SM w/ gravel, moist, brown
D	168		N		1	1	SM	SM w/ gravel, moist, brown
D	148		N		2	2	SM	SM w/ gravel, moist, brown
D	124		N		3	3	SM	SM w/ gravel, moist, brown
D	124		N		4	4	SM	SM w/ gravel, moist, brown
						5		
D	BDL		N		6	6	SM	Compact, SM, Lt. brown (fine)
D						7		
M	196		N		8	8	SM	Compact! Difficult to break w/ hand. Fine SM
D	168		N		9	9	SM	Compact Lt. pink silt sand (fine)
D	124		N		10	10	SP	(fine-med) poorly graded
						11		
D	BDL		N		12	12	SP	(med) poorly graded

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BH or PH Name: PH14	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 12'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	BDL		N		0.5	0.5	SM	SM w/ gravel, moist, brown
D	168		N		1	1	SM	SM w/ gravel, moist, brown
D	148		N		2	2	SM	SM w/ gravel, moist, brown
D	124		N		3	3	SM	SM w/ gravel, moist, brown
D	124		N		4	4	SM	SM w/ gravel, moist, brown
						5		
D	BDL		N		6	6	SM	Compact, SM, Lt. brown (fine)
						7		
M	196		N		8	8	SM	Compact! Difficult to break w/ hand. Fine SM
D	168		N		9	9	SM	Compact Lt. pink silt sand (fine)
D	124		N		10	10	SP	(fine-med) poorly graded
						11		
						12		

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BH or PH Name: PH15	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit Mouth of Fluid Drainage to Pasture

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	220		N		0.5	0.5	SM	Brown, poorly graded silt sand (fine)
M	196		N		1	1	SM	Brown, poorly graded silt sand (fine)
M	BDL		N		2	2	SM	Brown, poorly graded silt sand (fine)
D	BDL		N		3	3	SM	Brown, poorly graded silt sand (fine)
D	BDL		N		4	4	SM	Brown, poorly graded silt sand (fine)
D	220		N		5	5	SM	Brown, poorly graded silt sand (fine)
D	148		N		6	6	SM	Brown, poorly graded silt sand (fine)
D	BDL		N		7	7	SM	Lt. brown, fine grained silt sand, poorly graded
D	348		N		8	8	SM	Lt. brown, fine grained silt sand, poorly graded
D	916		N		9	9	SM	Lt. brown, fine grained silt sand, poorly graded
D	312		N		10	10	SM	Lt. brown, fine grained silt sand, poorly graded
						11		
						12		

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BH or PH Name: PH16	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 18'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	3,600		N		0.5	0.5	SW-SM	Poorly-sorted, well-graded
M	384		N		1	1	SM	Organics, poorly-graded
M	664		N		2	2	SM	Organics, poorly-graded
M	780		N		3	3	SM	Organics, poorly-graded
M	780		N		4	4	SW-SM	Silt sand w/ gravel
M	1,228		N		5	5	SW-SM	Silt sand w/ gravel
M	424		N		6	6	SW-SM	Silt sand w/ gravel
M	720		N		7	7	SW-SM	Silt sand w/ gravel
M	464		N		8	8	SW-SM	Silt sand w/ gravel
M	1,320		N		9	9	SW-SM	Silt sand w/ gravel
M	3,600		N		10	10	SW-SM	Silt sand w/ gravel
M	11,232		Y		11	11	SW-SM	Compact, moist, yellow staining
M	8,060		N		12	12	SM	Compact, moist, fine, poorly graded

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BH or PH Name: PH16	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 18'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	8,060		N		12	12	SM	Compact, moist, fine, poorly graded
M	10,432		N		13	13	SM	Moist, mod. Plasticity clayey sand (fine)
M	8,060		N		14	14	SM	Compact, clayey sand, mod. Plastic, layering
D	4,148		N		15	15	SM	Dry, fine, Lt. brown-pink, poorly-graded
D	384		N		16	16	SP	Sand (Med)
D	348		N		17	17	SP	Sand (Med)
D	248		N		18	18	SP	Sand (Med)
								TD at 18'. Max reach
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH17	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 13'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	1,144		N		0.5	0.5	SW-	Brown, well graded sand w/ silt
D	848		N		1	1	SM	Brown, poorly-graded silt sand(fine)
D	608		N		2	2	SM	Brown, poorly-graded silt sand(fine)
M	508		N		3	3	SM	Brown, poorly-graded silt sand(fine)
M	464		N		4	4	SM	Brown, poorly-graded silt sand(fine)
D	664		N		5	5	SW-SM	Brown, well graded sand w/ silt and gravel
D	664		N		6	6	SW-SM	Brown, well graded sand w/ silt and gravel
D	780		N		7	7	SM	Med. Sand w/ gravel, white clayey clasts, mod plastic
D	1,320		N		8	8	SC	Clayey sand(fine), compact, dry clay, mod plastic
D	1,520		N		9	9	SM	(dry clay clasts, red) Silty sand, compact (fin), lt brown/ pink
D	508		N		10	10	SM	Compact silt sand, Lt. pink/brown (fine)
D	664		N		11	11	SM	Compact silt sand, Lt. pink/brown (fine)
D	464		N		12	12	SM	Compact silt sand, Lt. pink/brown (fine)

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BH or PH Name: PH17	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 13'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	464		N		12	12	SM	Compact silt sand, Lt. pink/brown (fine)
D	196		N		13	13	SP	Poorly graded sand
						14		
						15		
						16		
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH18	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 13.5'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	556		N		0.5	0.5	SW-	Well graded sand w/ silt
D	348		N		1	1	SM	Silty sand
D	168		N		2	2	SM	Silty sand
M	BDL		N		3	3	SM	Silty sand
M	BDL		N		4	4	SM	Lt. brown, compact silty sand
						5		
D	BDL		N		6	6	SM	Compact, Lt pink silty sand
						7		
D	384		N		8	8	SM	Grey-lt. pink silty sand
						9		
D	348		N		10	10	SM	Compact, pink, silty sand
						11		
D	280		N		12	12	SM	Compact, pink, silty sand

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BH or PH Name: PH18	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564 &
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 13.5'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	280		N		12	12	SM	Compact, pink silty sand
D	124		N		13	13	SP	Poorly graded sand
						14		
						15		
						16		
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH19	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB			Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 2'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	BDL		N		0.5		SM	Silty sand
D	BDL		N		1	1	SM	Silty sand
D	BDL		N		2	2	SM	Silty sand
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

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BH or PH Name: PH20	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 13'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	5,420		N		0.5	0.5	SP-SM	Brown, poorly-grade silt sand (med), low plasticity, trace organics
M	6,352		N		1	1	SP-SM	Brown, poorly-grade silt sand (med), low plasticity, trace organics
M	8,060		N		2	2	SP-SM	Brown, poorly-grade silt sand (med), low plasticity, trace organics
M	7,440		N		3	3	SP-SM	Brown, poorly-grade silt sand (med), low plasticity, trace organics
M	4,256		N		4	4	SP-SM	Brown, poorly-grade silt sand (med), low plasticity, trace organics
						5		
D	5,420		N		6	6	SP-SM	Lt brown, poorly-graded silt sand (fine) no plasticity
						7		
D	580		N		8	8	SM	Lt. brown and white silt-sand (fine), poorly-graded, no plasticity and clumped
						9		
D	268		N		10	10	SP	Reddish brown, compact poorly-graded sand (fine)
						11		
D	480		N		12	12	SP	Yellow-brown sand (coarse), poorly-graded

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BH or PH Name: PH20	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 13'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	480		N		12	12	SP	Yellow-brown sand (coarse), poorly-graded
D	148		N		13	13	SP	Yellow-brown sand (coarse), poorly-graded, compact-clumped
						14		
						15		
						16		
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH21	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	1,608		N		0.5	0.5	SP-SM	Brown, poorly-graded sand (fine) w/ silt
M	1,036		N		1	1	SP-SM	Brown, poorly-graded sand (fine) w/ silt
M	388		N		2	2	SP-SM	Brown, poorly-graded sand (fine) w/ silt
M	888		N		3	3	SP-SM	Brown, poorly-graded sand (fine) w/ silt
M	1,588		N		4	4	SP-SM	Brown, poorly-graded sand (fine) w/ silt
						5		
M	3,600		N		6	6	SP-SM	Lt brown, sand w/ silt mod plastic
						7		
M	820		N		8	8	SP-SM	Lt brown, sand w/ silt mod plastic
						9		
D	480		N		10	10	SP-SM	Compact sand(fine) w/ silt, lt. pink-brown. Clumped in distinguishable layers
						11		
D	204		N		12	12	SP	Sand (coarse)

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BH or PH Name: PH22	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	BDL		N		0.5		SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		1	1	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		2	2	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		3	3	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		4	4	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no odor, low plasticity
						5		
D	BDL		N		6	6	SP-SM	Lt brown, poorly-graded sand (fine) with gravel, no plasticity, no odor
						7		
D	BDL		N		8	8	SP-SM	Lt brown, poorly-graded sand (fine) with white gravel, no plasticity, no odor
						9		
D	BDL		N		10	10	SP	Poorly-graded sand, compact, light pink to brown
						11		
D	BDL		N		12	12	SP	Poorly-graded sand, compact, light pink to brown

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BH or PH Name: PH23	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 16'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	BDL		N		0.5	0.5	SP-SM	Brown, poorly-graded sand (med) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		1	1	SP-SM	Brown, poorly-graded sand (med) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		2	2	SP-SM	Brown, poorly-graded sand (med) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		3	3	SP-SM	Brown, poorly-graded sand (med) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		4	4	SP-SM	Brown, poorly-graded sand (med) w/ silt. Trace organics, no odor, low plasticity
						5		
M	BDL		N		6	6	SP-SM	Brown, poorly-graded sand (med) w/ silt and caliche clasts. Trace organics, no odor, low plasticity
						7		
M	2,710		N		8	8	SP-SM	Brown, poorly-graded sand (med) w/ silt and caliche clasts. Trace organics, no odor, low plasticity
						9		
M	4,388		N		10	10	SP-SM	Brown, poorly-graded sand (med) w/ silt and caliche clasts. Trace organics, no odor, low plasticity
						11		
M	5,760		N		12	12	SC	Grey and red clay

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BH or PH Name: PH23	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 16'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	5,760		N		12	12	SC	Grey and Red clay
						13		
D	720		N		14	14	SP	Poorly graded sand. No plasticity
						15		
D	BDL		N		16	16	SP	Poorly graded sand. No plasticity
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH24	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 16'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	2,452		N		0.5		SP-SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	3,130		N		1	1	SP-SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	2,088		N		2	2	SP-SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	2,452		N		3	3	SP-SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	3,398		N		4	4	SP-SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
						5		
M	9,684		N		6	6	SP-SM	Lt. brown poorly graded sand (m) w/ silt, no plasticity
						7		
D	2,262		N		8	8	SP-SM	Lt. brown and white poorly graded sand (f) w/ silt, no plasticity
						9		
D	1,064		N		10	10	SM	Reddish brown silty sand
						11		
D	2,452		N		12	12	SM	Pink brown silty sand

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BH or PH Name: PH24	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 16'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	1,164		N		12	12	SM	Pink brown silty sand
						13		
D	BDL		N		14	14	SP	Poorly graded sand. (med)
						15		
D	BDL		N		16	16	SP	Yellow Poorly graded sand. (med)
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

BH or PH Name: PH25	Date: 2/14/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 16'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	3,696		N		0.5	0.5	SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	7,764		N		1	1	SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	7,764		N		2	2	SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	5,248		N		3	3	SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	3,696		N		4	4	SP-SM	Brown, poorly-graded sand (med) w/ silt and gravel. Organics, low plasticity
						5		
M	3,696		N		6	6	SP-SM	Lt. brown, poorly-graded sand (med) w/ silt.
						7		
D	646		N		8	8	SP-SM	Yellow brown, poorly-graded sand (med) w/ silt.
						9		
D	970		N		10	10	SP-SM	Reddish brown, poorly-graded sand (fine) w/ silt.
						11		
D	882		N		12	12	SP-SM	Lt. pink/ brown poorly-graded sand (fine) w/ silt

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BH or PH Name: PH25	Date: 2/14/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 16'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	882		N		12	12	SP-SM	Lt. pink/ brown poorly-graded sand (fine) w/ silt
						13		
D	BDL		N		14	14	SLTS	Silt Stone. yellow, pink, white
						15		
D	BDL		N		16	16	SP	Lt. pink, poorly graded sand. (med)
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH26	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
D	204		N		0.5	0.5	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no plasticity
D	204		N		1	1	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no plasticity
D	BDL		N		2	2	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no plasticity
D	BDL		N		3	3	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no plasticity
D	BDL		N		4	4	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no plasticity
						5		
D	344		N		6	6	SP-SM	Lt. brown, poorly-graded sand (fine) w/ silt. No platicity, no odor.
						7		
D	756		N		8	8	SP-SM	Lt. brown/white, poorly-graded sand (fine) w/ silt. No platicity, no odor.
						9		
D	580		N		10	10	SP-SC	Lt. brown, poorly-graded, compact sand w/ clay. Red, dry clay clasts
						11		
D	304		N		12	12	SP	Poorly graded sand(med), no plasticity.

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Carlsbad, New Mexico 88220
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BH or PH Name: PH27	Date: 2/14/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 12'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
D	BDL		N		0.5		SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
D	BDL		N		1	1	SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
D	BDL		N		2	2	SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
D	BDL		N		3	3	SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
D	BDL		N		4	4	SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
						5		
D	BDL		N		6	6	SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
						7		
D	BDL		N		8	8	SP	Poorly graded sand (med)
						9		
D	BDL		N		10	10	SP	Poorly graded sand (med)
						11		
D	BDL		N		12	12	SP	Poorly graded sand (med)

LT Environmental, Inc.
3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

April 1, 2020

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

RE: Closure Request
WPX Energy Permian, LLC
Ross Draw Unit 42 (2RP-3564)
Incident ID NAB1605654667
Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of WPX Energy Permian, LLC (WPX), presents the following Closure Request detailing soil sampling and delineation activities at the Ross Draw Unit 42 (Site) in Unit K, Section 22, Township 26 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling and delineation activities was to confirm the presence or absence of impact to soil following an event that resulted in the release of produced water and crude oil onto the well pad. Based on the delineation activities and results of the soil sampling events, WPX is submitting this report and requesting no further action for this release.

BACKGROUND

On February 20, 2016, a polish rod liner became loose, resulting in approximately 13 barrels (bbls) of crude oil and produced water to be released and contained to the well pad. Vacuum trucks were dispatched and recovered 11 bbls of crude oil and produced water from the impacted area. The spill volume was calculated by averaging the saturated soil depth and estimating the percentage of liquids based on soil type. Any free liquids were added to the total volume. The average saturation depth of the soil was observed to be 0.5 inches within the release extent. The soil capping the pad surface is caliche, which is estimated to have an available space (i.e. porosity) of 15 percent (%) total volume. Based on these assumptions, the following equation was used to calculate total volume:

"saturated soil volume (cubic feet) x (4.21 cubic feet per bbl of liquid) x estimated soil porosity (%)"

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) which was received by the NMOCD on February 22, 2016, and was assigned Remediation Permit Number 2RP-3564 and Incident ID NAB1605654667 (Attachment 1).

SITE CHARACTERIZATION

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 United States Geological Survey (USGS) water well 320125103514701, located approximately 2,650 ft southeast of the Site. Water well 320125103514701 has a reported depth to water of 117 feet bgs and is approximately 7 feet higher in elevation than the Site. The closest significant watercourse to the Site is an unnamed tributary located approximately 2,324 feet southwest of the Site. The Site is greater than 300 feet from any occupied residence, school, hospital, institution, church, or wetland and greater than 1,000 feet to a freshwater well or spring. The Site is not within a 100-year floodplain or overlying a subsurface mine or unstable area.

On February 10, 2020, LTE contracted Southwest Geophysical Consulting, LLC (SGC) to determine the location, description, and boundaries of any karst-related features within a 200-meter boundary surrounding the Site. The survey concluded that no surface karst features were located within the survey area and that the Site is located in a medium-potential karst area. The Cave and Karst Resource Inventory Report is included as Attachment 2.

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.

SITE ASSESSMENT AND DELINEATION SOIL SAMPLING

On May 14, 2019, LTE conducted site investigative activities concurrently with delineation events. The release extent was mapped using a handheld Global Positioning System (GPS) unit and is shown on Figure 2. Utilizing heavy equipment, seven potholes (PH01 through PH07) were advanced within the release footprint to verify the absence of soil impacts. Soil sample locations are presented in Figure 3. Field screening was conducted, at minimum, from every 1-foot interval for volatile aromatic hydrocarbons using a photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Excluding PH03, PH05 and PH06, two samples were collected from each pothole: the most impacted sample based on field screening results and the terminus of the pothole. Three samples were collected from PH03, PH05, and PH06. The soil

samples were placed directly into a pre-cleaned glass jar, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil sample was 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 (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

In an effort to further characterize the vertical and horizontal extent of the impacted area, LTE personnel conducted continued delineation events between February 6, 2020 and February 14, 2020. Utilizing heavy equipment, an additional twenty potholes (PH08 through PH27) were installed within the release footprint to verify the absence of soil impacts. Soil sample locations are presented in Figure 3. Field screening was conducted, at minimum, from every 1-foot interval for volatile aromatic hydrocarbons using a PID and chloride using Hach® chloride QuanTab® test strips. Two samples were collected from each pothole: the most impacted sample based on field screening results and the terminus of the pothole. Soil samples were collected, handled, and analyzed as previously described.

Based on laboratory analytical results for delineation pothole soil samples, no excavation was warranted. Complete laboratory analytical reports are included in Attachment 3. Photographic documentation was conducted during the site visit. Photographs are included in Attachment 4. Soil Sampling Lithologic Logs are included in Attachment 5.

ANALYTICAL RESULTS

Laboratory analytical results of all delineation confirmation soil samples indicate compliance with the Closure Criteria. Laboratory analytical results are summarized in Table 1.

CONCLUSIONS

Laboratory analytical results of delineation soil samples indicate compliance with Closure Criteria, thus WPX is requesting no further action for RP number 2RP-3564 and Incident ID NAB1605654667.

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

Sincerely,

LT ENVIRONMENTAL, INC.

Joseph S. Hernandez
Project Geologist

Ashley L. Ager, M.S., P.G.
Senior Geologist

cc: Jim Raley, WPX
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD
Jim Amos, BLM

Attachments:

Figure 1	Site Location Map
Figure 2	Site Map
Figure 3	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Form C-141
Attachment 2	Cave and Karst Resource Inventory Report
Attachment 3	Laboratory Analytical Reports
Attachment 4	Photographic Log
Attachment 5	Soil Sampling Logs

FIGURES

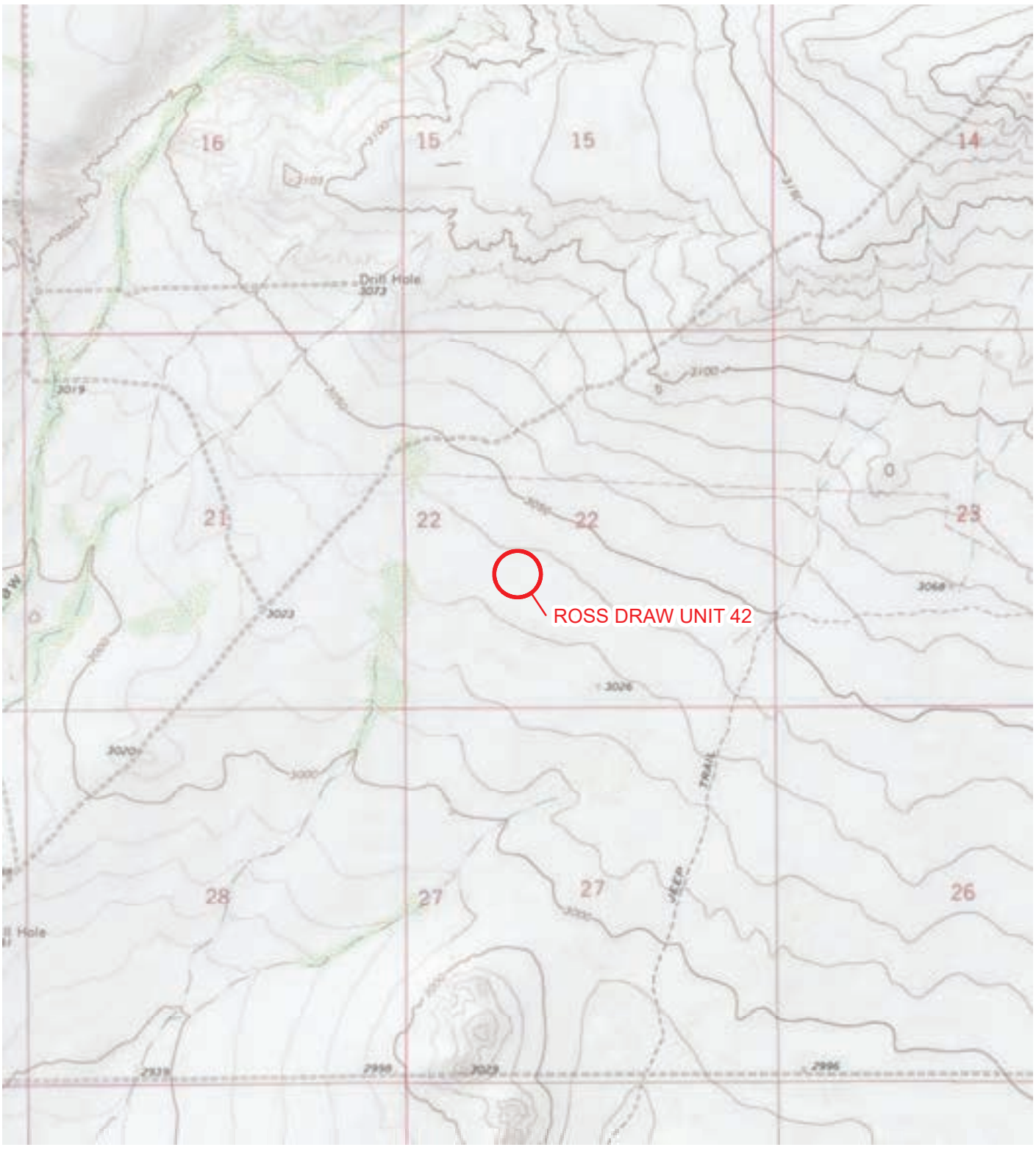


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

FIGURE 1
SITE LOCATION MAP
ROSS DRAW UNIT 42
UNIT K SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034820001_RDU 42\034820001_FIG01_SL_2020_3564.mxd



LEGEND

RELEASE EXTENT (15,895.5 SQUARE FEET)

IMAGE COURTESY OF GOOGLE EARTH 2019

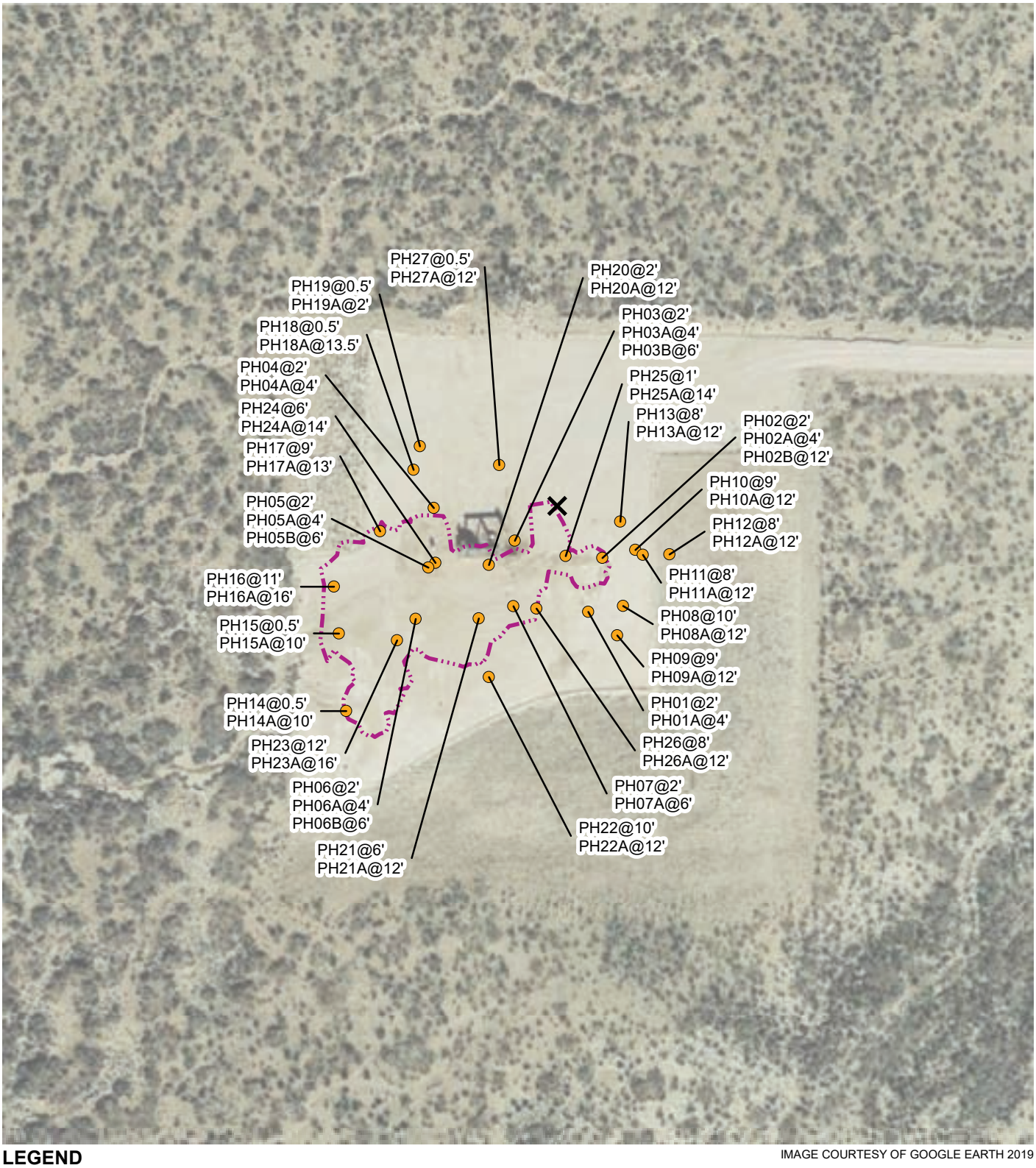
0 100 200

Feet

N

FIGURE 2
SITE MAP
ROSS DRAW UNIT #042
UNIT K SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034820001_RDU 42\034820001_FIG02_ SS_2020_3564_1.mxd



LEGEND

IMAGE COURTESY OF GOOGLE EARTH 2019

- RELEASE LOCATION
- DELINEATION SOIL SAMPLE
- RELEASE EXTENT

0 100 200
Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
ROSS DRAW UNIT 42
UNIT K SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034820001_RDU 42\034820001_FIG03_DELINEATION_2020.mxd

TABLE

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TABLE 1
SOIL ANALYTICAL RESULTS

ROSS DRAW UNIT 42
REMEDIATION PERMIT NUMBER 2RP-3564
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

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)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	1,000	2,500	20,000
PH01	2	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	225
PH01A	4	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	155
PH02	2	05/14/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	7,150
PH02A	4	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	3,060
PH02B	12	05/14/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	265
PH03	2	05/14/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	75.2
PH03A	4	05/14/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	15.4
PH03B	6	05/14/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	46.3
PH04	2	05/14/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	292
PH04A	4	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	99.3
PH05	2	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	4,530
PH05A	4	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	88.9
PH05B	6	05/14/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<14.9	<14.9	<14.9	<14.9	438
PH06	2	05/14/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	9,950
PH06A	4	05/14/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	6,330
PH06B	6	05/14/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	4,580
PH07	2	05/14/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	3,840
PH07A	6	05/14/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	768
PH08	10	02/06/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	359
PH08A	12	02/06/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	109
PH09	9	02/06/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	839
PH09A	12	02/06/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	154
PH10	9	02/06/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	588
PH10A	12	02/06/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	105
PH11	8	02/07/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	799
PH11A	12	02/07/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	149
PH12	8	02/07/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	1,150

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TABLE 1
SOIL ANALYTICAL RESULTS

ROSS DRAW UNIT 42
REMEDIATION PERMIT NUMBER 2RP-3564
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

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)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	**1,000**	**2,500**	**20,000**
PH12A	12	02/07/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	190
PH13	8	02/07/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	196
PH13A	12	02/07/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	74.5
PH14	0.5	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	4,280
PH14A	10	02/10/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	187
PH15	0.5	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	279
PH15A	10	02/10/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	445
PH16	11	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	13,600
PH16A	16	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	495
PH17	9	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	1,610
PH17A	13	02/10/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	226
PH18	0.5	02/10/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	559
PH18A	13.5	02/10/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	115
PH19	0.5	02/10/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	56.2
PH19A	2	02/10/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	41.8
PH20	2	02/13/2020	<0.000486	<0.000529	<0.000407	<0.000404	<0.000404	<13.9	<11.4	<11.4	<11.4	9,460
PH20A	12	02/13/2020	<0.000488	<0.000531	<0.000409	<0.000406	<0.000406	<13.8	<11.4	<11.4	<11.4	171
PH21	6	02/13/2020	<0.000485	<0.000527	<0.000405	<0.000402	<0.000402	<14.0	<11.5	<11.5	<11.5	4,290
PH21A	12	02/13/2020	<0.000486	<0.000528	<0.000406	<0.000403	<0.000403	<13.9	<11.5	<11.5	<11.5	211
PH22	10	02/13/2020	<0.000481	<0.000522	<0.000402	<0.000399	<0.000399	<13.9	<11.5	<11.5	<11.5	220
PH22A	12	02/13/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<13.9	<11.5	<11.5	<11.5	173
PH23	12	02/13/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<13.9	<11.5	<11.5	<11.5	9,160
PH23A	16	02/13/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<13.9	14.1 J	<11.4	14.1 J	319
PH25	1	02/14/2020	<0.000490	<0.000533	<0.000410	<0.000407	<0.000407	<13.8	<11.4	<11.4	<11.4	7,920
PH25A	14	02/14/2020	<0.000485	<0.000527	<0.000405	<0.000402	<0.000402	<13.8	11.9	<11.4	11.9	366

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

TABLE 1
SOIL ANALYTICAL RESULTS

ROSS DRAW UNIT 42
REMEDIATION PERMIT NUMBER 2RP-3564
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

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)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	**1,000**	**2,500**	**20,000**
PH24	6	02/13/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<14.0	<11.5	<11.5	<11.5	11,300
PH24A	14	02/13/2020	<0.000485	<0.000527	<0.000405	<0.000402	<0.000402	<13.9	13.6	<11.5	13.6	211
PH26	8	02/13/2020	<0.000481	<0.000522	<0.000402	<0.000399	<0.000399	<13.9	<11.5	<11.5	<11.5	783
PH26A	12	02/13/2020	<0.000483	<0.000525	<0.000404	<0.000401	<0.000401	<13.9	<11.5	<11.5	<11.5	463
PH27	0.5	02/14/2020	<0.000485	<0.000527	<0.000405	<0.000402	<0.000402	<13.8	<11.4	<11.4	<11.4	341
PH27A	12	02/14/2020	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<13.9	12.9	<11.5	12.9	394

Notes:

bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
DRO - diesel range organics
GRO - gasoline range organics
mg/kg - milligrams per kilogram
MRO - motor oil range organics
NMAC - New Mexico Administrative Code
NMOCD - New Mexico Oil Conservation Divisic
NE - not established
TPH - total petroleum hydrocarbons
Bold - indicates result exceeds the applicable regulatory standard
< - indicates result is below laboratory reporting limits
Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

ATTACHMENT 1: FORM C-141

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

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nAB1605154467 — 246289

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company RKI E&P, LLC	Contact Taylor Jones
Address 210 Park Ave. – Ste. 700, OKC, OK 73102	Telephone No. 539-573-7558
Facility Name: Ross Draw Unit 42	Facility Type : Oil and Gas Well

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-42945

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	22	26S	30E	1980	FSL	1800	FWL	Eddy

Latitude: 32.02600 **Longitude:** -103.87139

NATURE OF RELEASE

Type of Release. Oil and Produced Water	Volume of Release: 13 Bbls	Volume Recovered: 11 Bbls
Source of Release Polish rod Liner	Date and Hour of Occurrence 2/20/16 – 10:00 MT	Date and Hour of Discovery 2/20/16 – 10:00 MT
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? NM OIL CONSERVATION ARTESIA DISTRICT	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	FEB 22 2016

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

RECEIVED

Describe Cause of Problem and Remedial Action Taken.*
Polish Rod liner became loose, allowing the release of crude oil and produced water. Crew shut well in and tightened the liner.

Describe Area Affected and Cleanup Action Taken.*

All fluids remained on well site. Vacuum truck dispatched to recover all free standing fluids. Affected soil on well pad to be dug and hauled to disposal.

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

Signature: Taylor Jones

Printed Name: Taylor Jones

Title: Safety Specialist II

E-mail Address: taylor.jones@wpxenergy.com

Date: 02/22/16 Phone: 539-573-7558

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 2/25/16 Expiration Date: N/A

Conditions of Approval: Attached ☐
Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 3/26/16

2RP-3564

* Attach Additional Sheets If Necessary

State of New Mexico
Oil Conservation Division

Incident ID	NAB1605654667
District RP	2RP-3564
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

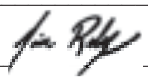
Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAB1605654667
District RP	2RP-3564
Facility ID	
Application ID	

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

Printed Name: Jim Raley Title: Environmental Specialist

Signature:  Date: 4/3/2020

email: james.raley@wpxenergy.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1605654667
District RP	2RP-3564
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jim Raley Title: Environmental Specialist

Signature: _____ Date: 4/3/2020

email: james.raley@wpxenergy.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

ATTACHMENT 2: CAVE AND KARST RESOURCE INVENTORY REPORT



Cave and Karst Resource Inventory Report
Ross Draw Unit 42 Central Tank Battery
Eddy County, New Mexico

Prepared for:

LT Environmental, Inc.

848 East 2nd Avenue

Durango, CO 81301

☐ **Positive for Karst Features – HKOZ remediation process required**

☑ **Negative for Karst Features – MKOZ remediation process may be approved by the Oil Conservation Division**

February 10, 2020

LTE-006-20200130

Published by:

Southwest Geophysical Consulting, LLC
5117 Fairfax Dr. NW
Albuquerque, NM 87114
(505) 585-2550
www.swgeophys.com

Prepared by:

David D. Decker, Ph.D.
Principal, Chief Executive Officer
dave@swgeophys.com

Prepared for:

LT Environmental, Inc.
820 Megan Avenue, Unit B
Rifle, CO 81650

Point of Contact:

Chris McKisson
(970) 285-9985
cmckisson@ltenv.com

MMXX

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1.0 INTRODUCTION

This report was commissioned by LT Environmental, Inc. (hereinafter referred to as "the client") on January 30, 2020 for the purpose of determining what, if any, karst-related surface features are present near the Ross Draw Unit 42 Central Tank Battery site (hereinafter termed “RDU 42”, **Figure 1**) and to provide guidance on the level of remediation required. This study does not include subsurface features, which would require a geophysical survey. The study area that this report covers is in a **MEDIUM** karst occurrence zone and entirely located within Bureau of Land Management – Carlsbad Field Office managed lands (**Figure 2**).

As indicated in section ***1.3 Affected Environment***, the bedrock and overlying soil at the survey site are susceptible to sinkhole development and karst features may be hidden beneath the existing soil stratum. Risk associated with sinkhole formation can be minimized during development with proper foundation design and construction, and the control of site hydrology. The Owner/Developer must recognize, however, that a risk of sinkhole-induced damage to infrastructure does exist. The Owner/Developer must evaluate the risks and attendant costs of performing a geophysical survey prior to development, versus no geophysical survey, and must be willing to accept these risks if it is decided that a surface karst survey is sufficient. Southwest Geophysical Consulting, LLC can provide a geophysical survey. If the decision is made to conduct a geophysical survey, a cost estimate and timeline will be provided upon request.

1.1 Goals of this Study

To provide the client with the location, description, photos, and boundaries of any surface karst-related features within a 200-meter boundary surrounding the pad on the RDU47 project site as provided by the client via e-mail on January 30, 2020.

1.2 Summary of Findings

No surface karst features were located within the pedestrian survey area. However, unknown hidden features may still exist beneath the surface. Caution should be exercised during remediation.

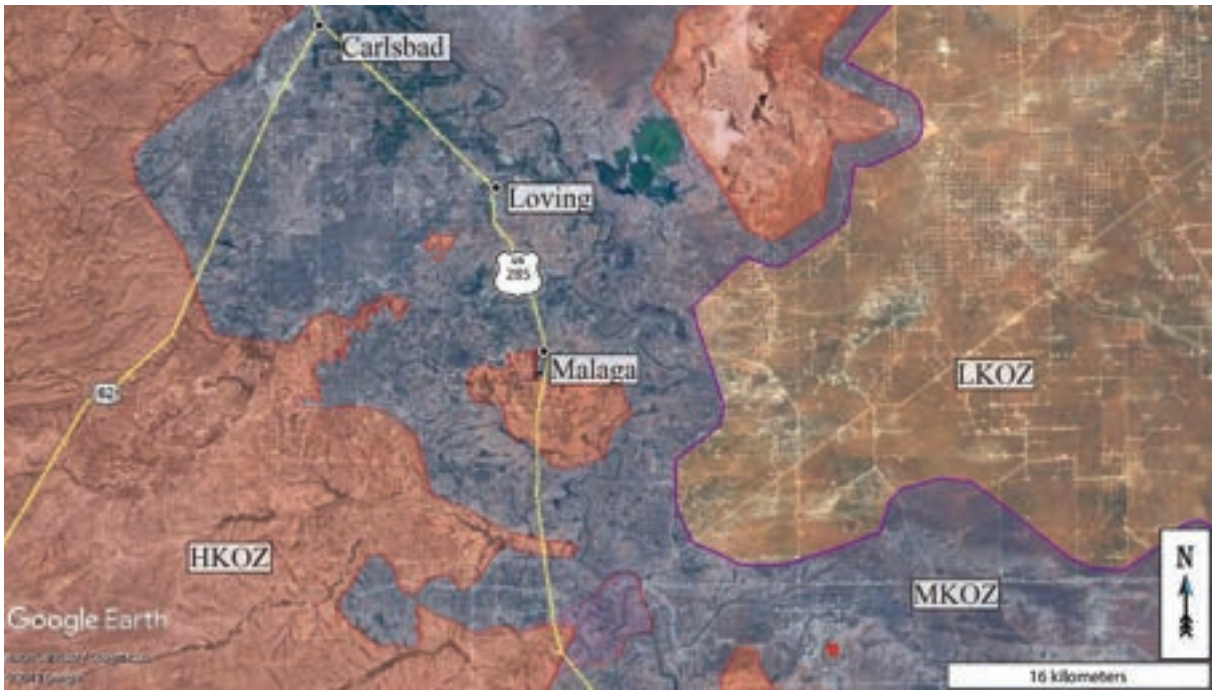


Figure 1: Karst occurrence overview. Red transparent area is a high karst occurrence zone; blue transparent area is a medium karst occurrence zone; no color indicates a low karst occurrence zone. Study area is the red outlined area in the lower-right portion of the image. Background image credit: Google Earth. Image date: February 21, 2019. Datum: WGS-84.

1.3 Affected Environment

The RDU 42 project site is located in evaporite karst terrain, a landform that is characterized by underground drainage through solutionally enlarged conduits. Evaporite karst terrain may contain sinkholes, sinking streams, caves, and springs. Sinkholes leading to underground drainages and voids are common. These karst features, as well as occasional fissures and discontinuities in the bedrock, provide the primary sources for rapid recharge of the groundwater aquifers of the region.

The Bureau of Land Management (BLM) categorizes all areas within the Carlsbad Field Office (CFO) zone of responsibility as having either low, medium, high, or critical cave potential based on geology, occurrence of known caves, density of karst features, and potential impacts to freshwater aquifers. This project occurs within a **MEDIUM** karst occurrence zone[1] (MKOZ, **Figure 1**). A medium karst occurrence zone is defined as an area in known soluble rock types that may have a shallow insoluble overburden. These areas may contain isolated karst features such as caves and sinkholes. Groundwater recharge may not be wholly dependent on karst features, but the karst features still provide the most rapid aquifer recharge in response to surface runoff[2].

An on-site inspection revealed that there are no surface karst features within the pedestrian survey area. However, unknown buried features may exist; therefore, this action is subject to mitigation measures designed to adequately protect known and potential cave/karst resources.

2.0 LOCATION AND DESCRIPTION OF STUDY AREA

2.1 Description of Site

The RDU 42 project site is located in Eddy County, New Mexico, 51 kilometers (31.7 miles) southeast of Carlsbad, New Mexico; 18 kilometers (11 miles) east of US-285, and 2 kilometers (1.2 miles) north of the New Mexico-Texas Border (**Figure 1** and **Figure 2**). The site is located within section 22 of NM T26S R30E. This area is within the Chihuahuan Desert Thornscrub defined by the Southwestern Regional ReGAP Vegetation map[5] and the vegetation consists mostly of areas of grass, sparse creosote, and sparse yucca with very good visibility in most locations. See section ***2.3 Local Geology*** for the geology of the area. The pad and surrounding survey boundary are entirely within a medium karst occurrence zone (**Figure 1**) and are located entirely within BLM-CFO managed lands (**Figure 2**).

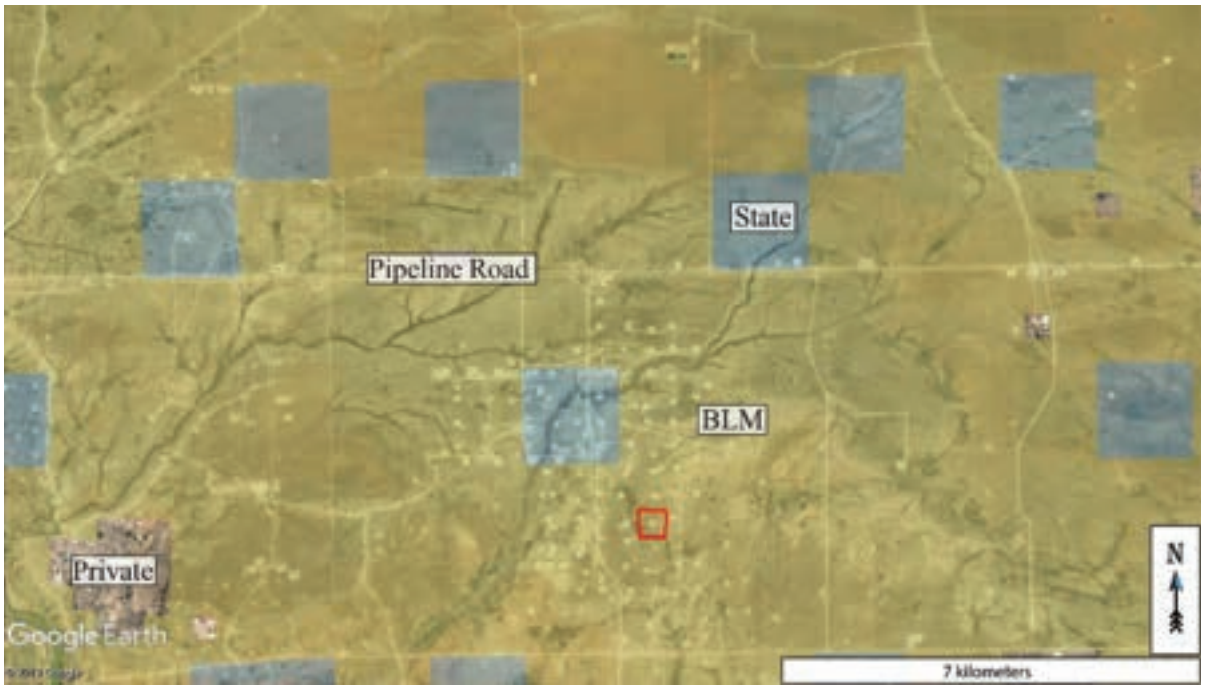


Figure 2: Land ownership overview. Yellow transparent area: BLM-CFO managed land. Blue transparent area: New Mexico State Land Office managed land. No color: Private land. Background image credit: Google Earth. Image date: February 21, 2019. Datum: WGS-84.

2.2 Description of Survey

For this survey 12 lines were walked in a raster pattern at 50-meter (165 feet) intervals in the designated area, providing 90 to 100% coverage for features greater than 50 centimeters (20 inches) in diameter (**Table 1**).

The survey was completed by Garrett Jorgensen on January 31, 2020. The total distance walked was 5.8 kilometers (3.6 miles) and the total area covered was 0.2 square kilometers (51.9 acres).

Table 1: Survey Track Data Files.

File Name	**Surveyor**	**Date**	**Length** (km/miles)	**Area** (km^2/Ac)
RDXSRV_D1S1.kmz	Jorgensen	01/31/2020	5.81/3.61	0.21/51.9



Figure 3: Survey overview. Light blue wavy lines are the actual survey lines walked. Yellow polygon is the pad site. Red polygon is the 200-meter buffer study area. Background image credit: Google Earth. Image date: February 21, 2019. Datum: WGS-84.

2.3 Local Geology



Figure 4: Geology overview. Red polygon highlights the survey area. Pru: Permian Rustler Formation. Pdl: Permian Dewey Lake Formation. Qa: Quaternary units, locally includes both Qg: Quaternary Gatuna Formation and Qs: Quaternary windblown sand. Geologic Map of New Mexico, scale: 1:500,000 (2003), and Google Earth. Image date: February 21, 2019. Datum: WGS-84.

The area surveyed for the RDU 42 project is located at an elevation of 930 meters (3,050 feet), plus or minus 3 meters (9 feet), within the Quaternary Gatuna Formation (Qg – not shown. Within Qa on map) and Quaternary windblown sand (Qs – not shown. Within Qa on map). The Gatuna Formation is a conglomerate composed of calcite cemented limestone and sandstone cobble derived from the Guadalupe Mountains. The large proportion of calcite that makes up the matrix for this formation allows limited karst formation to occur. The entirety of the survey area is underlain by the Permian Dewey Lake Formation (Pdl), which outcrops in the southernmost section of the survey area, and Permian Rustler (Pru) Formation (which does not outcrop within the survey area). The Dewey Lake Formation is composed of calcite cemented, hematite stained quartz sand grains and is not known for forming karst. The Rustler Formation is composed of alternating layers of gypsum and dolomite, both of which are easily dissolved to form karst features[3, 4]. Two easily accessible geologic maps that cover the survey area are the Geologic Map of New Mexico (2003) at 1:500,000 scale[2], and the Geologic Atlas of Texas - Hobbs Sheet (1976) at 1:250,000 scale.

2.4 Description of Karst Features

No surface karst features were located within the 200-meter boundary of the pedestrian survey area for the RDU 42 project.

3.0 RECOMMENDATIONS

No surface karst features were located during this survey. Based on the above findings, allowing use of medium karst occurrence zone spill remediation procedures may be considered by the Oil Conservation Division within the 200-meter survey area. Confirmation to use a lower remediation level should be received from the Oil Conservation Division before proceeding.

Vigilance during remediation is paramount. If voids are encountered during trenching or digging contact the New Mexico State Oil Conservation Division if on State land, and the Bureau of Land Management – Carlsbad Field Office at (575) 234-5972 if on BLM land and request an onsite investigation from a karst expert. A karst consultant can generally be onsite in Eddy County within five hours.

4.0 REFERENCES

1. Rybacki, K., *Karst Potential Map.* CFO Basemap, 2019.
2. Scholle, P.A., *Geologic Map of New Mexico.* 2003. (1:500,000).
3. Johnson, K.S., *Evaporite Karst in the United States.* Carbonates and Evaporites, 1997. **12(1)**: p. 2-14.
4. Martinez, J.D., K.S. Johnson, and J.T. Neal, *Sinkholes in Evaporite Rocks.* American Scientist, 1998. **86(1-2)**: p. 38-51.
5. Whitehead, W. and C. Flynn, *Plant Utilization in Southeastern New Mexico: Botany, Ethnobotany, and Archaeology.* 2017, Carlsbad, NM: Bureau of Land Management, Carlsbad Field Office.

5.0 GLOSSARY OF TERMS

BLM	Bureau of Land Management
CFO	Carlsbad Field Office
cave	A natural opening at the surface, large enough for a person to enter.
GPS	Global Positioning System
NMSLO	New Mexico State Land Office
playa lake	A natural depression on the surface that collects rainwater. Some contain swallets and/or caves, others do not.
pseudokarst	Karst-like terrain that forms through processes other than dissolution.
swallet	A natural opening in the surface, too small for a person, that drains water to an aquifer. Some are "open," meaning a void can be seen below; some are "closed," meaning they are full of sediment.
WGS	World Geodetic System

ATTACHMENT 3: LABORATORY ANALYTICAL RESULTS

Analytical Report 624492

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 42

34819015

20-MAY-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

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

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-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

20-MAY-19

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

Reference: XENCO Report No(s): **624492**
RDU 42
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) 624492. 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. 624492 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,

Jessica Kramer

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 Cross Reference 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH02B	S	05-14-19 13:25	12 ft	624492-001
PH03B	S	05-14-19 13:45	6 ft	624492-002
PH05B	S	05-14-19 14:20	6 ft	624492-003
PH06B	S	05-14-19 14:40	6 ft	624492-004

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 42

Project ID: *34819015*
Work Order Number(s): *624492*

Report Date: *20-MAY-19*
Date Received: *05/16/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3089541 BTEX by EPA 8021B

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

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 624492

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 34819015
Contact: Chris McKisson
Project Location:

Date Received in Lab: Thu May-16-19 10:58 am
Report Date: 20-MAY-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	624492-001		624492-002		624492-003		624492-004					
	Field Id:	PH02B		PH03B		PH05B		PH06B					
	Depth:	12- ft		6- ft		6- ft		6- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	May-14-19 13:25		May-14-19 13:45		May-14-19 14:20		May-14-19 14:40					
BTEX by EPA 8021B	***Extracted:***	May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45					
	Analyzed:	May-17-19 17:58		May-17-19 18:17		May-17-19 18:37		May-17-19 18:56					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
Toluene		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
Ethylbenzene		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
m,p-Xylenes		<0.00402	0.00402	<0.00403	0.00403	<0.00402	0.00402	<0.00398	0.00398				
o-Xylene		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
Total Xylenes		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
Total BTEX		<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00199	0.00199				
Inorganic Anions by EPA 300	***Extracted:***	May-17-19 16:40		May-17-19 16:40		May-17-19 16:40		May-17-19 16:40					
	Analyzed:	May-18-19 11:00		May-18-19 11:08		May-18-19 11:15		May-18-19 11:22					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		265	5.02	46.3	5.00	438	5.01	4580	24.8				
TPH by SW8015 Mod	***Extracted:***	May-18-19 08:00		May-18-19 08:00		May-18-19 08:00		May-18-19 08:00					
	Analyzed:	May-18-19 23:00		May-18-19 23:20		May-18-19 23:40		May-19-19 00:00					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				
Total GRO-DRO		<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0				

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

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

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-001	Date Collected:	05.14.19 13.25	Sample Depth:	12 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.40	Basis:	Wet Weight
Seq Number:	3089465				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**265**	5.02	mg/kg	05.18.19 11.00		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.18.19 08.00	Basis:	Wet Weight
Seq Number:	3089547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.18.19 23.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.18.19 23.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.18.19 23.00	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.18.19 23.00	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.18.19 23.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.18.19 23.00	
o-Terphenyl	84-15-1	96	%	70-135	05.18.19 23.00	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-001	Date Collected:	05.14.19 13.25	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.17.19 17.58	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.17.19 17.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	05.17.19 17.58	
1,4-Difluorobenzene	540-36-3	101	%	70-130	05.17.19 17.58	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-002	Date Collected:	05.14.19 13.45	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.40	Basis:	Wet Weight
Seq Number:	3089465				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**46.3**	5.00	mg/kg	05.18.19 11.08		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.18.19 08.00	Basis:	Wet Weight
Seq Number:	3089547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.18.19 23.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.18.19 23.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.18.19 23.20	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.18.19 23.20	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.18.19 23.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.18.19 23.20	
o-Terphenyl	84-15-1	100	%	70-135	05.18.19 23.20	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-002	Date Collected:	05.14.19 13.45	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.17.19 18.17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.17.19 18.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.17.19 18.17	
1,4-Difluorobenzene	540-36-3	101	%	70-130	05.17.19 18.17	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-003	Date Collected:	05.14.19 14.20	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.40	Basis:	Wet Weight
Seq Number:	3089465				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**438**	5.01	mg/kg	05.18.19 11.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.18.19 08.00	Basis:	Wet Weight
Seq Number:	3089547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.18.19 23.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	05.18.19 23.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	05.18.19 23.40	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	05.18.19 23.40	U	1
Total GRO-DRO	PHC628	<14.9	14.9	mg/kg	05.18.19 23.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.18.19 23.40	
o-Terphenyl	84-15-1	100	%	70-135	05.18.19 23.40	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-003	Date Collected:	05.14.19 14.20	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.17.19 18.37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.17.19 18.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	05.17.19 18.37	
1,4-Difluorobenzene	540-36-3	104	%	70-130	05.17.19 18.37	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-004	Date Collected:	05.14.19 14.40	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.40	Basis:	Wet Weight
Seq Number:	3089465				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4580**	24.8	mg/kg	05.18.19 11.22		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.18.19 08.00	Basis:	Wet Weight
Seq Number:	3089547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.19.19 00.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.19.19 00.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.19.19 00.00	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.19.19 00.00	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.19.19 00.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	05.19.19 00.00	
o-Terphenyl	84-15-1	103	%	70-135	05.19.19 00.00	

Certificate of Analytical Results 624492

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06B**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624492-004	Date Collected:	05.14.19 14.40	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.17.19 18.56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.17.19 18.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	05.17.19 18.56	
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.17.19 18.56	

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 Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 624492

LT Environmental, Inc.

RDU 42

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089465 — Matrix: Solid — Date Prep: 05.17.19
MB Sample Id: 7678112-1-BLK — LCS Sample Id: 7678112-1-BKS — LCSD Sample Id: 7678112-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	256	102	255	102	90-110	0	20	mg/kg	05.18.19 08:06	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089465 — Matrix: Soil — Date Prep: 05.17.19
Parent Sample Id: 624494-001 — MS Sample Id: 624494-001 S — MSD Sample Id: 624494-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1270	251	1390	48	1390	48	90-110	0	20	mg/kg	05.18.19 15:21	X

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089465 — Matrix: Soil — Date Prep: 05.17.19
Parent Sample Id: 624494-011 — MS Sample Id: 624494-011 S — MSD Sample Id: 624494-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	575	250	786	84	785	84	90-110	0	20	mg/kg	05.18.19 15:36	X

Analytical Method: TPH by SW8015 Mod — Prep Method: TX1005P
Seq Number: 3089547 — Matrix: Solid — Date Prep: 05.18.19
MB Sample Id: 7678172-1-BLK — LCS Sample Id: 7678172-1-BKS — LCSD Sample Id: 7678172-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1090	109	1090	109	70-135	0	20	mg/kg	05.18.19 21:20	
Diesel Range Organics (DRO)	<8.13	1000	1040	104	1040	104	70-135	0	20	mg/kg	05.18.19 21:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		123		128		70-135	%	05.18.19 21:20
o-Terphenyl	112		115		120		70-135	%	05.18.19 21:20

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

Final 1.000

QC Summary 624492

LT Environmental, Inc.

RDU 42

Analytical Method: TPH by SW8015 Mod | Prep Method: TX1005P
Seq Number: 3089547 | Matrix: Soil | Date Prep: 05.18.19
Parent Sample Id: 624491-001 | MS Sample Id: 624491-001 S | MSD Sample Id: 624491-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<7.99	998	1160	116	1160	116	70-135	0	20	mg/kg	05.18.19 22:20	
Diesel Range Organics (DRO)	<8.11	998	1140	114	1140	114	70-135	0	20	mg/kg	05.18.19 22:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		124		70-135	%	05.18.19 22:20
o-Terphenyl	109		114		70-135	%	05.18.19 22:20

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089541 | Matrix: Solid | Date Prep: 05.17.19
MB Sample Id: 7678184-1-BLK | LCS Sample Id: 7678184-1-BKS | LCSD Sample Id: 7678184-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.114	114	0.113	113	70-130	1	35	mg/kg	05.17.19 16:00	
Toluene	<0.000455	0.0998	0.108	108	0.107	107	70-130	1	35	mg/kg	05.17.19 16:00	
Ethylbenzene	<0.000564	0.0998	0.113	113	0.112	112	70-130	1	35	mg/kg	05.17.19 16:00	
m,p-Xylenes	<0.00101	0.200	0.236	118	0.234	118	70-130	1	35	mg/kg	05.17.19 16:00	
o-Xylene	<0.000344	0.0998	0.114	114	0.114	114	70-130	0	35	mg/kg	05.17.19 16:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		104		104		70-130	%	05.17.19 16:00
4-Bromofluorobenzene	81		100		102		70-130	%	05.17.19 16:00

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089541 | Matrix: Soil | Date Prep: 05.17.19
Parent Sample Id: 624492-001 | MS Sample Id: 624492-001 S | MSD Sample Id: 624492-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000433	0.0994	0.105	105	0.0880	88	70-130	18	35	mg/kg	05.17.19 16:40	
Toluene	<0.000453	0.0994	0.0987	99	0.0826	83	70-130	18	35	mg/kg	05.17.19 16:40	
Ethylbenzene	<0.000561	0.0994	0.104	105	0.0864	87	70-130	18	35	mg/kg	05.17.19 16:40	
m,p-Xylenes	<0.00101	0.199	0.216	109	0.180	91	70-130	18	35	mg/kg	05.17.19 16:40	
o-Xylene	0.000523	0.0994	0.105	105	0.0873	87	70-130	18	35	mg/kg	05.17.19 16:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	05.17.19 16:40
4-Bromofluorobenzene	105		101		70-130	%	05.17.19 16:40

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

Page 859 of 1072

Chain of Custody

Work Order No: 620492

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) El Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com Page 1 of 1

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970)285-9985	Email:	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	34819015	Routine	☒
P.O. Number:	2RP-3564	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.5/0.4	Thermometer ID	VE
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
PH02B	S	5/14/2019	13:25	12'	1	X	X	X
PH03B	S		13:45	6'	1	X	X	X
PH05B	S		14:20	6'	1	X	X	X
PH06B	S		14:40	6'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

TAT starts the day received by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			05/15/2019 12:45	2		
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.000
Page 17 of 19



After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 05/16/2019 10:58:00 AM

Work Order #: 624492

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.4
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 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)?	**N/A**
#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: Brianna Teel Date: 05/16/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 05/16/2019

Jessica Kramer

Analytical Report 624493

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 42

34819015

28-MAY-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

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

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-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

28-MAY-19

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

Reference: XENCO Report No(s): **624493**
RDU 42
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) 624493. 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. 624493 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,

Jessica Kramer

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 Cross Reference 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	05-14-19 13:00	2 ft	624493-001
PH01A	S	05-14-19 13:05	4 ft	624493-002
PH02	S	05-14-19 13:15	2 ft	624493-003
PH02A	S	05-14-19 13:20	4 ft	624493-004
PH03	S	05-14-19 13:35	2 ft	624493-005
PH03A	S	05-14-19 13:40	4 ft	624493-006
PH04	S	05-14-19 13:55	2 ft	624493-007
PH04A	S	05-14-19 14:00	4 ft	624493-008
PH05	S	05-14-19 14:10	2 ft	624493-009
PH05A	S	05-14-19 14:15	4 ft	624493-010
PH06	S	05-14-19 14:30	2 ft	624493-011
PH06A	S	05-14-19 14:35	4 ft	624493-012
PH07	S	05-14-19 14:50	2 ft	624493-013
PH07A	S	05-14-19 15:00	6 ft	624493-014

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 42

Project ID: *34819015*
Work Order Number(s): *624493*

Report Date: *28-MAY-19*
Date Received: *05/16/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3089346 Inorganic Anions by EPA 300

Lab Sample ID 624493-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 624493-001, -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-3089541 BTEX by EPA 8021B

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

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 624493

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 34819015
Contact: Chris McKisson
Project Location:

Date Received in Lab: Thu May-16-19 10:58 am
Report Date: 28-MAY-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	624493-001		624493-002		624493-003		624493-004		624493-005		624493-006	
	Field Id:	PH01		PH01A		PH02		PH02A		PH03		PH03A	
	Depth:	2- ft		4- ft		2- ft		4- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-14-19 13:00		May-14-19 13:05		May-14-19 13:15		May-14-19 13:20		May-14-19 13:35		May-14-19 13:40	
BTEX by EPA 8021B	*Extracted:*	May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45	
	Analyzed:	May-17-19 19:15		May-17-19 19:34		May-17-19 19:53		May-17-19 20:12		May-17-19 20:31		May-17-19 20:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
m,p-Xylenes		<0.00399	0.00399	<0.00401	0.00401	<0.00397	0.00397	<0.00401	0.00401	<0.00398	0.00398	<0.00404	0.00404
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202
Inorganic Anions by EPA 300	*Extracted:*	May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30	
	Analyzed:	May-17-19 09:22		May-17-19 09:30		May-17-19 09:37		May-18-19 03:37		May-17-19 10:21		May-17-19 10:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		225	4.99	155	5.00	7150	50.2	3060	25.1	75.2	4.96	15.4	5.05
TPH by SW8015 Mod	*Extracted:*	May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00	
	Analyzed:	May-24-19 19:13		May-24-19 20:13		May-24-19 20:33		May-24-19 20:52		May-24-19 21:12		May-24-19 21:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total GRO-DRO		<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

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

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

Jessica Kramer
Project Assistant

Final 1.000

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 624493

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 34819015
Contact: Chris McKisson
Project Location:

Date Received in Lab: Thu May-16-19 10:58 am
Report Date: 28-MAY-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	624493-007		624493-008		624493-009		624493-010		624493-011		624493-012	
	Field Id:	PH04		PH04A		PH05		PH05A		PH06		PH06A	
	Depth:	2- ft		4- ft		2- ft		4- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-14-19 13:55		May-14-19 14:00		May-14-19 14:10		May-14-19 14:15		May-14-19 14:30		May-14-19 14:35	
BTEX by EPA 8021B	*Extracted:*	May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45		May-17-19 08:45	
	Analyzed:	May-17-19 22:04		May-17-19 22:23		May-17-19 22:42		May-17-19 23:01		May-17-19 23:20		May-17-19 23:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Toluene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Ethylbenzene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
m,p-Xylenes		<0.00397	0.00397	<0.00399	0.00399	<0.00400	0.00400	<0.00400	0.00400	<0.00402	0.00402	<0.00398	0.00398
o-Xylene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Total Xylenes		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Total BTEX		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199
Inorganic Anions by EPA 300	*Extracted:*	May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30		May-16-19 14:30	
	Analyzed:	May-17-19 10:35		May-17-19 10:42		May-17-19 10:50		May-17-19 10:57		May-17-19 11:04		May-17-19 11:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		292	5.00	99.3	5.02	4530	49.8	88.9	4.95	9950	49.5	6330	49.5
TPH by SW8015 Mod	*Extracted:*	May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00		May-24-19 10:00	
	Analyzed:	May-24-19 21:51		May-24-19 22:10		May-24-19 22:30		May-24-19 22:49		May-24-19 23:28		May-24-19 23:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total GRO-DRO		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
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Jessica Kramer
Project Assistant

Final 1.000

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 624493

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 34819015
Contact: Chris McKisson
Project Location:

Date Received in Lab: Thu May-16-19 10:58 am
Report Date: 28-MAY-19
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	624493-013		624493-014					
	Field Id:	PH07		PH07A					
	Depth:	2- ft		6- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	May-14-19 14:50		May-14-19 15:00					
BTEX by EPA 8021B	***Extracted:***	May-17-19 08:45		May-17-19 08:45					
	Analyzed:	May-17-19 23:58		May-18-19 00:17					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00202	0.00202				
Toluene		<0.00200	0.00200	<0.00202	0.00202				
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202				
m,p-Xylenes		<0.00399	0.00399	<0.00403	0.00403				
o-Xylene		<0.00200	0.00200	<0.00202	0.00202				
Total Xylenes		<0.00200	0.00200	<0.00202	0.00202				
Total BTEX		<0.00200	0.00200	<0.00202	0.00202				
Inorganic Anions by EPA 300	***Extracted:***	May-17-19 16:15		May-17-19 16:15					
	Analyzed:	May-18-19 07:30		May-18-19 07:37					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		3840	25.2	768	4.96				
TPH by SW8015 Mod	***Extracted:***	May-24-19 10:00		May-24-19 10:00					
	Analyzed:	May-25-19 00:07		May-25-19 00:26					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0				
Total GRO-DRO		<15.0	15.0	<15.0	15.0				

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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

Final 1.000

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-001	Date Collected:	05.14.19 13.00	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**225**	4.99	mg/kg	05.17.19 09.22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 19.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 19.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 19.13	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 19.13	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 19.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.24.19 19.13	
o-Terphenyl	84-15-1	97	%	70-135	05.24.19 19.13	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH01**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-001	Date Collected:	05.14.19 13.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.17.19 19.15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 19.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	05.17.19 19.15	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.17.19 19.15	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-002	Date Collected:	05.14.19 13.05	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**155**	5.00	mg/kg	05.17.19 09.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	05.24.19 20.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	05.24.19 20.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	05.24.19 20.13	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	05.24.19 20.13	U	1
Total GRO-DRO	PHC628	<14.9	14.9	mg/kg	05.24.19 20.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	05.24.19 20.13	
o-Terphenyl	84-15-1	99	%	70-135	05.24.19 20.13	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH01A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-002	Date Collected:	05.14.19 13.05	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.17.19 19.34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 19.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	05.17.19 19.34	
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.17.19 19.34	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-003	Date Collected:	05.14.19 13.15	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7150**	50.2	mg/kg	05.17.19 09.37		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 20.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 20.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 20.33	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 20.33	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 20.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	05.24.19 20.33	
o-Terphenyl	84-15-1	101	%	70-135	05.24.19 20.33	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-003	Date Collected:	05.14.19 13.15	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.17.19 19.53	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.17.19 19.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.17.19 19.53	
1,4-Difluorobenzene	540-36-3	104	%	70-130	05.17.19 19.53	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-004	Date Collected:	05.14.19 13.20	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3060**	25.1	mg/kg	05.18.19 03.37		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 20.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 20.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 20.52	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 20.52	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 20.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.24.19 20.52	
o-Terphenyl	84-15-1	96	%	70-135	05.24.19 20.52	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH02A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-004	Date Collected:	05.14.19 13.20	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.17.19 20.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 20.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	05.17.19 20.12	
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.17.19 20.12	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-005	Date Collected:	05.14.19 13.35	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**75.2**	4.96	mg/kg	05.17.19 10.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 21.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 21.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 21.12	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 21.12	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 21.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.24.19 21.12	
o-Terphenyl	84-15-1	98	%	70-135	05.24.19 21.12	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-005	Date Collected:	05.14.19 13.35	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.17.19 20.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.17.19 20.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	05.17.19 20.31	
1,4-Difluorobenzene	540-36-3	104	%	70-130	05.17.19 20.31	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-006	Date Collected:	05.14.19 13.40	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.4**	5.05	mg/kg	05.17.19 10.28		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 21.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 21.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 21.31	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 21.31	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 21.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	05.24.19 21.31	
o-Terphenyl	84-15-1	93	%	70-135	05.24.19 21.31	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH03A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-006	Date Collected:	05.14.19 13.40	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	05.17.19 20.50	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.17.19 20.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	05.17.19 20.50	
4-Bromofluorobenzene	460-00-4	110	%	70-130	05.17.19 20.50	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-007	Date Collected:	05.14.19 13.55	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**292**	5.00	mg/kg	05.17.19 10.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 21.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 21.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 21.51	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 21.51	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 21.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.24.19 21.51	
o-Terphenyl	84-15-1	96	%	70-135	05.24.19 21.51	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH04**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-007	Date Collected:	05.14.19 13.55	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.17.19 22.04	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.17.19 22.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.17.19 22.04	
1,4-Difluorobenzene	540-36-3	99	%	70-130	05.17.19 22.04	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-008	Date Collected:	05.14.19 14.00	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.3**	5.02	mg/kg	05.17.19 10.42		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 22.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 22.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 22.10	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 22.10	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 22.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	05.24.19 22.10	
o-Terphenyl	84-15-1	101	%	70-135	05.24.19 22.10	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH04A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-008	Date Collected:	05.14.19 14.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.17.19 22.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 22.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.17.19 22.23	
1,4-Difluorobenzene	540-36-3	100	%	70-130	05.17.19 22.23	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-009	Date Collected:	05.14.19 14.10	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4530**	49.8	mg/kg	05.17.19 10.50		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 22.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 22.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 22.30	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 22.30	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 22.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	05.24.19 22.30	
o-Terphenyl	84-15-1	99	%	70-135	05.24.19 22.30	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-009	Date Collected:	05.14.19 14.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.17.19 22.42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 22.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.17.19 22.42	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.17.19 22.42	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-010	Date Collected:	05.14.19 14.15	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**88.9**	4.95	mg/kg	05.17.19 10.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 22.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 22.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 22.49	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 22.49	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 22.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	05.24.19 22.49	
o-Terphenyl	84-15-1	100	%	70-135	05.24.19 22.49	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH05A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-010	Date Collected:	05.14.19 14.15	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.17.19 23.01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 23.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	05.17.19 23.01	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.17.19 23.01	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-011	Date Collected:	05.14.19 14.30	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9950**	49.5	mg/kg	05.17.19 11.04		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 23.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 23.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 23.28	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 23.28	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 23.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	05.24.19 23.28	
o-Terphenyl	84-15-1	99	%	70-135	05.24.19 23.28	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-011	Date Collected:	05.14.19 14.30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.17.19 23.20	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.17.19 23.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.17.19 23.20	
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.17.19 23.20	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-012	Date Collected:	05.14.19 14.35	Sample Depth:	4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.16.19 14.30	Basis:	Wet Weight
Seq Number:	3089346				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6330**	49.5	mg/kg	05.17.19 11.11		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.24.19 23.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.24.19 23.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.24.19 23.47	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.19 23.47	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.24.19 23.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	05.24.19 23.47	
o-Terphenyl	84-15-1	97	%	70-135	05.24.19 23.47	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH06A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-012	Date Collected:	05.14.19 14.35	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.17.19 23.39	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.17.19 23.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	05.17.19 23.39	
4-Bromofluorobenzene	460-00-4	103	%	70-130	05.17.19 23.39	

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RDU 42

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-013	Date Collected:	05.14.19 14.50	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.15	Basis:	Wet Weight
Seq Number:	3089461				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3840**	25.2	mg/kg	05.18.19 07.30		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.25.19 00.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.25.19 00.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.25.19 00.07	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.25.19 00.07	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.25.19 00.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	05.25.19 00.07	
o-Terphenyl	84-15-1	97	%	70-135	05.25.19 00.07	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH07**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-013	Date Collected:	05.14.19 14.50	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.17.19 23.58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.17.19 23.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.17.19 23.58	
1,4-Difluorobenzene	540-36-3	104	%	70-130	05.17.19 23.58	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-014	Date Collected:	05.14.19 15.00	Sample Depth:	6 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.17.19 16.15	Basis:	Wet Weight
Seq Number:	3089461				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**768**	4.96	mg/kg	05.18.19 07.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.19 10.00	Basis:	Wet Weight
Seq Number:	3090323				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	05.25.19 00.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	05.25.19 00.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	05.25.19 00.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.25.19 00.26	U	1
Total GRO-DRO	PHC628	<15.0	15.0	mg/kg	05.25.19 00.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.25.19 00.26	
o-Terphenyl	84-15-1	96	%	70-135	05.25.19 00.26	

Certificate of Analytical Results 624493

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH07A**	Matrix:	Soil	Date Received:	05.16.19 10.58
Lab Sample Id:	624493-014	Date Collected:	05.14.19 15.00	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	SCM			% Moisture:	
Analyst:	SCM	Date Prep:	05.17.19 08.45	Basis:	Wet Weight
Seq Number:	3089541				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.18.19 00.17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.18.19 00.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	05.18.19 00.17	
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.18.19 00.17	

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 Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 624493

LT Environmental, Inc.

RDU 42

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089346 — Matrix: Solid — Date Prep: 05.16.19
MB Sample Id: 7678025-1-BLK — LCS Sample Id: 7678025-1-BKS — LCSD Sample Id: 7678025-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	255	102	257	103	90-110	1	20	mg/kg	05.16.19 17:23	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089461 — Matrix: Solid — Date Prep: 05.17.19
MB Sample Id: 7678111-1-BLK — LCS Sample Id: 7678111-1-BKS — LCSD Sample Id: 7678111-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.82	250	254	102	254	102	90-110	0	20	mg/kg	05.18.19 04:07	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089346 — Matrix: Soil — Date Prep: 05.16.19
Parent Sample Id: 624487-001 — MS Sample Id: 624487-001 S — MSD Sample Id: 624487-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	135	248	379	98	379	98	90-110	0	20	mg/kg	05.17.19 11:33	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089346 — Matrix: Soil — Date Prep: 05.16.19
Parent Sample Id: 624493-003 — MS Sample Id: 624493-003 S — MSD Sample Id: 624493-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7150	251	9800	1056	10000	1135	90-110	2	20	mg/kg	05.17.19 09:44	X

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3089461 — Matrix: Soil — Date Prep: 05.17.19
Parent Sample Id: 624555-002 — MS Sample Id: 624555-002 S — MSD Sample Id: 624555-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	66.8	250	327	104	321	102	90-110	2	20	mg/kg	05.18.19 04:29	

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

QC Summary 624493

LT Environmental, Inc.

RDU 42

Analytical Method: **Inorganic Anions by EPA 300** Prep Method: E300P
Seq Number: 3089461 Matrix: Soil Date Prep: 05.17.19
Parent Sample Id: 624555-011 MS Sample Id: 624555-011 S MSD Sample Id: 624555-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	66.3	250	328	105	325	103	90-110	1	20	mg/kg	05.18.19 06:10	

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3090323 Matrix: Solid Date Prep: 05.24.19
MB Sample Id: 7678654-1-BLK LCS Sample Id: 7678654-1-BKS LCSD Sample Id: 7678654-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1120	112	1130	113	70-135	1	20	mg/kg	05.24.19 18:33	
Diesel Range Organics (DRO)	8.16	1000	1110	111	1110	111	70-135	0	20	mg/kg	05.24.19 18:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		127		126		70-135	%	05.24.19 18:33
o-Terphenyl	94		106		105		70-135	%	05.24.19 18:33

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P
Seq Number: 3090323 Matrix: Soil Date Prep: 05.24.19
Parent Sample Id: 624493-001 MS Sample Id: 624493-001 S MSD Sample Id: 624493-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	9.79	999	1020	101	1030	102	70-135	1	20	mg/kg	05.24.19 19:33	
Diesel Range Organics (DRO)	<8.12	999	979	98	985	99	70-135	1	20	mg/kg	05.24.19 19:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		122		70-135	%	05.24.19 19:33
o-Terphenyl	122		121		70-135	%	05.24.19 19:33

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

QC Summary 624493

LT Environmental, Inc.

RDU 42

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089541 | Matrix: Solid | Date Prep: 05.17.19
MB Sample Id: 7678184-1-BLK | LCS Sample Id: 7678184-1-BKS | LCSD Sample Id: 7678184-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.114	114	0.113	113	70-130	1	35	mg/kg	05.17.19 16:00	
Toluene	<0.000455	0.0998	0.108	108	0.107	107	70-130	1	35	mg/kg	05.17.19 16:00	
Ethylbenzene	<0.000564	0.0998	0.113	113	0.112	112	70-130	1	35	mg/kg	05.17.19 16:00	
m,p-Xylenes	<0.00101	0.200	0.236	118	0.234	118	70-130	1	35	mg/kg	05.17.19 16:00	
o-Xylene	<0.000344	0.0998	0.114	114	0.114	114	70-130	0	35	mg/kg	05.17.19 16:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		104		104		70-130	%	05.17.19 16:00
4-Bromofluorobenzene	81		100		102		70-130	%	05.17.19 16:00

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3089541 | Matrix: Soil | Date Prep: 05.17.19
Parent Sample Id: 624492-001 | MS Sample Id: 624492-001 S | MSD Sample Id: 624492-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000433	0.0994	0.105	105	0.0880	88	70-130	18	35	mg/kg	05.17.19 16:40	
Toluene	<0.000453	0.0994	0.0987	99	0.0826	83	70-130	18	35	mg/kg	05.17.19 16:40	
Ethylbenzene	<0.000561	0.0994	0.104	105	0.0864	87	70-130	18	35	mg/kg	05.17.19 16:40	
m,p-Xylenes	<0.00101	0.199	0.216	109	0.180	91	70-130	18	35	mg/kg	05.17.19 16:40	
o-Xylene	0.000523	0.0994	0.105	105	0.0873	87	70-130	18	35	mg/kg	05.17.19 16:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	05.17.19 16:40
4-Bromofluorobenzene	105		101		70-130	%	05.17.19 16:40

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

Work Order No: 624493

XENCO LABORATORIES
Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970)285-9985 Email:	Email:	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	34819015	Routine	☒
P.O. Number:	2RP-3564	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.5/0.4	Thermometer ID	
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH01	S	05/14/2019	13:00	2'	1	X	X	X
PH01A	S		13:05	4'	1			
BH02	S		13:15	2'	1			
PH02A	S		13:20	4'	1			
PH03	S		13:35	2'	2			
PH03A	S		13:40	4'	2			
PH04	S		13:55	2'	1			
PH04A	S		14:00	4'	1			
PH05	S		14:10	2'	1			
PH05A	S		14:15	4'	1			

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions 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 $76.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		05/15/2019 12:45	2		5/16/19 1058
3			4		
5			6		

Revised Date 05/14/18 Rev: 2018.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.000
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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com

Work Order No: 602449B

Page 2 of 2

Project Manager:	Chris McKisson	Bill to: (if different)	Chris McKisson
Company Name:	LT Environmental, Inc., Permian office	Company Name:	LT Environmental
Address:	820 Megan Avenue, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970)265-9985 Email:		llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	34819015	Routine	☒
P.O. Number:	2RP-3564	Rush:	
Sampler's Name:	Lynda Laumbach	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	0.5/0.4	Thermometer ID		
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.1	
Sample Custody Seals:	Yes (No) N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
PH06	S	05/14/2019	14:30	2'	1	X	X	X
PH06A	S		14:35	4'	1	X	X	X
PH07	S		14:50	2'	1	X	X	X
PH07A	S		15:00	6'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

TAT starts the day received by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			05/15/2019 12:45	2		5/16/19 1058
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.000
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3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 05/16/2019 10:58:00 AM

Work Order #: 624493

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.4
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 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)?	**N/A**
#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: Brianna Teel Date: 05/16/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 05/16/2019

Jessica Kramer

Analytical Report 651917

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 42

034820001

02-APR-20

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-APR-20

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

Reference: XENCO Report No(s): **651917**
RDU 42
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) 651917. 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. 651917 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,

Jessica Kramer

Jessica Kramer
Project Manager

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 Cross Reference 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH08	S	02-06-20 13:40	10 ft	651917-001
PH08A	S	02-06-20 14:00	12 ft	651917-002
PH09	S	02-06-20 14:50	9 ft	651917-003
PH09A	S	02-06-20 15:20	12 ft	651917-004
PH10	S	02-06-20 16:15	9 ft	651917-005
PH10A	S	02-06-20 16:22	12 ft	651917-006
PH11	S	02-07-20 11:05	8 ft	651917-007
PH11A	S	02-07-20 11:15	12 ft	651917-008
PH12	S	02-07-20 11:57	8 ft	651917-009
PH12A	S	02-07-20 12:05	12 ft	651917-010
PH13	S	02-07-20 13:05	8 ft	651917-011
PH13A	S	02-07-20 13:15	12 ft	651917-012
PH14	S	02-10-20 09:15	0.5 ft	651917-013
PH14A	S	02-10-20 10:05	10 ft	651917-014
PH15	S	02-10-20 10:35	0.5 ft	651917-015
PH15A	S	02-10-20 11:25	10 ft	651917-016
PH16	S	02-10-20 12:37	11 ft	651917-017
PH16A	S	02-10-20 13:30	16 ft	651917-018
PH17	S	02-10-20 14:20	9 ft	651917-020
PH17A	S	02-10-20 14:40	13 ft	651917-021
PH18	S	02-10-20 14:50	0.5 ft	651917-022
PH18A	S	02-10-20 15:25	13.5 ft	651917-023
PH19	S	02-10-20 15:50	0.5 ft	651917-024
PH19A	S	02-10-20 15:52	2 ft	651917-025
PH16B	S	02-10-20 13:40	18 ft	Not Analyzed

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 42

Project ID: *034820001*
Work Order Number(s): *651917*

Report Date: *02-APR-20*
Date Received: *02/11/2020*

Sample receipt non conformances and comments:

V1.001 Revision (client email) Corrected typo on sample name. JK 04/02/20
PH014A TO PH14A
PH015 TO PH15

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3116201 TPH by SW8015 Mod
Surrogate 1-Chlorooctane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 651917-004.

Batch: LBA-3116229 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3116230 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 651917

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Tue Feb-11-20 08:10 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	651917-001		651917-002		651917-003		651917-004		651917-005		651917-006	
	Field Id:	PH08		PH08A		PH09		PH09A		PH10		PH10A	
	Depth:	10- ft		12- ft		9- ft		12- ft		9- ft		12- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-06-20 13:40		Feb-06-20 14:00		Feb-06-20 14:50		Feb-06-20 15:20		Feb-06-20 16:15		Feb-06-20 16:22	
BTEX by EPA 8021B	*Extracted:*	Feb-11-20 10:00		Feb-11-20 10:00		Feb-11-20 10:00		Feb-11-20 10:00		Feb-11-20 10:00		Feb-11-20 10:00	
	Analyzed:	Feb-11-20 18:05		Feb-11-20 18:26		Feb-11-20 18:46		Feb-11-20 19:06		Feb-11-20 19:27		Feb-11-20 19:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Toluene		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Ethylbenzene		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
m,p-Xylenes		<0.00402	0.00402	<0.00398	0.00398	<0.00404	0.00404	<0.00403	0.00403	<0.00397	0.00397	<0.00399	0.00399
o-Xylene		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Xylenes, Total		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Total BTEX		<0.00201	0.00201	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00198	0.00198	<0.00200	0.00200
Chloride by EPA 300	*Extracted:*	Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30		Feb-11-20 10:30	
	Analyzed:	Feb-11-20 12:52		Feb-11-20 12:58		Feb-11-20 13:03		Feb-11-20 13:09		Feb-11-20 13:15		Feb-11-20 13:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		359	10.1	109	10.0	839	10.1	154	9.98	588	9.94	105	10.0
TPH by SW8015 Mod	*Extracted:*	Feb-11-20 09:50		Feb-11-20 09:50		Feb-11-20 09:50		Feb-11-20 09:50		Feb-11-20 09:50		Feb-11-20 09:50	
	Analyzed:	Feb-11-20 13:26		Feb-11-20 13:26		Feb-11-20 13:46		Feb-11-20 13:46		Feb-11-20 14:05		Feb-11-20 14:05	
	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	<50.1	50.1	<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.1	50.1
Diesel Range Organics (DRO)		<50.2	50.2	<50.1	50.1	<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.1	50.1	<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.1	50.1
Total GRO-DRO		<50.2	50.2	<50.1	50.1	<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.1	50.1
Total TPH		<50.2	50.2	<50.1	50.1	<49.9	49.9	<50.0	50.0	<50.3	50.3	<50.1	50.1

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
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Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.%

Jessica Kramer
Project Manager

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 651917

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Tue Feb-11-20 08:10 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	651917-007		651917-008		651917-009		651917-010		651917-011		651917-012	
	Field Id:	PH11		PH11A		PH12		PH12A		PH13		PH13A	
	Depth:	8- ft		12- ft		8- ft		12- ft		8- ft		12- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-07-20 11:05		Feb-07-20 11:15		Feb-07-20 11:57		Feb-07-20 12:05		Feb-07-20 13:05		Feb-07-20 13:15	
BTEX by EPA 8021B	*Extracted:*	Feb-11-20 10:00		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04	
	Analyzed:	Feb-11-20 20:08		Feb-11-20 14:13		Feb-11-20 14:33		Feb-11-20 14:54		Feb-11-20 15:14		Feb-11-20 15:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
m,p-Xylenes		<0.00399	0.00399	<0.00399	0.00399	<0.00404	0.00404	<0.00403	0.00403	<0.00403	0.00403	<0.00402	0.00402
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
Xylenes, Total		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00202	0.00202	<0.00202	0.00202	<0.00201	0.00201
Chloride by EPA 300	*Extracted:*	Feb-11-20 10:30		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09	
	Analyzed:	Feb-11-20 13:26		Feb-11-20 13:59		Feb-11-20 14:16		Feb-11-20 14:22		Feb-11-20 14:27		Feb-11-20 14:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		799	10.1	149	9.96	1150	50.0	190	10.0	196	10.1	74.5	10.0
TPH by SW8015 Mod	*Extracted:*	Feb-11-20 09:50		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05	
	Analyzed:	Feb-11-20 14:25		Feb-11-20 15:05		Feb-11-20 15:45		Feb-11-20 15:45		Feb-11-20 16:04		Feb-11-20 16:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<49.8	49.8	<50.3	50.3	<50.1	50.1	<49.9	49.9	<50.2	50.2
Diesel Range Organics (DRO)		<50.1	50.1	<49.8	49.8	<50.3	50.3	<50.1	50.1	<49.9	49.9	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<49.8	49.8	<50.3	50.3	<50.1	50.1	<49.9	49.9	<50.2	50.2
Total GRO-DRO		<50.1	50.1	<49.8	49.8	<50.3	50.3	<50.1	50.1	<49.9	49.9	<50.2	50.2
Total TPH		<50.1	50.1	<49.8	49.8	<50.3	50.3	<50.1	50.1	<49.9	49.9	<50.2	50.2

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

Version: 1.%

Jessica Kramer
Project Manager

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 651917

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Tue Feb-11-20 08:10 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested		Lab Id:	651917-013		651917-014		651917-015		651917-016		651917-017		651917-018	
		Field Id:	PH14		PH14A		PH15		PH15A		PH16		PH16A	
		Depth:	0.5- ft		10- ft		0.5- ft		10- ft		11- ft		16- ft	
		Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
		Sampled:	Feb-10-20 09:15		Feb-10-20 10:05		Feb-10-20 10:35		Feb-10-20 11:25		Feb-10-20 12:37		Feb-10-20 13:30	
BTEX by EPA 8021B	Extracted:		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 10:00		Feb-11-20 10:00	
	Analyzed:		Feb-11-20 15:55		Feb-11-20 16:15		Feb-11-20 16:35		Feb-11-20 16:56		Feb-11-20 17:24		Feb-11-20 17:45	
	Units/RL:		mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene			<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Toluene			<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene			<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes			<0.00401	0.00401	<0.00402	0.00402	<0.00401	0.00401	<0.00402	0.00402	<0.00399	0.00399	<0.00399	0.00399
o-Xylene			<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Xylenes, Total			<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Total BTEX			<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Chloride by EPA 300	Extracted:		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 10:30		Feb-11-20 10:30	
	Analyzed:		Feb-11-20 14:49		Feb-11-20 14:55		Feb-11-20 15:01		Feb-11-20 15:06		Feb-11-20 12:30		Feb-11-20 12:36	
	Units/RL:		mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride			4280	50.0	187	9.98	279	10.0	445	9.90	13600	198	495	9.94
TPH by SW8015 Mod	Extracted:		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 09:50		Feb-11-20 09:50	
	Analyzed:		Feb-11-20 16:24		Feb-11-20 16:24		Feb-11-20 16:44		Feb-11-20 16:44		Feb-11-20 13:06		Feb-11-20 13:06	
	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	<50.3	50.3	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)			<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)			<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.0	50.0
Total GRO-DRO			<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.0	50.0
Total TPH			<50.3	50.3	<50.3	50.3	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.0	50.0

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Version: 1.%

Jessica Kramer
Project Manager

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 651917

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

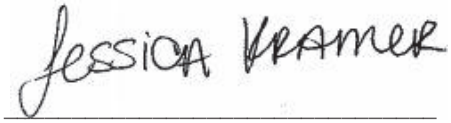
Date Received in Lab: Tue Feb-11-20 08:10 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	651917-020		651917-021		651917-022		651917-023		651917-024		651917-025	
	Field Id:	PH17		PH17A		PH18		PH18A		PH19		PH19A	
	Depth:	9- ft		13- ft		0.5- ft		13.5- ft		0.5- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-10-20 14:20		Feb-10-20 14:40		Feb-10-20 14:50		Feb-10-20 15:25		Feb-10-20 15:50		Feb-10-20 15:52	
BTEX by EPA 8021B	*Extracted:*	Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04		Feb-11-20 11:04	
	Analyzed:	Feb-11-20 18:17		Feb-11-20 18:38		Feb-11-20 18:58		Feb-11-20 19:19		Feb-11-20 19:39		Feb-11-20 19:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00398	0.00398	<0.00398	0.00398	<0.00396	0.00396	<0.00396	0.00396	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
Xylenes, Total		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200
Chloride by EPA 300	*Extracted:*	Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09		Feb-11-20 12:09	
	Analyzed:	Feb-11-20 15:19		Feb-11-20 15:37		Feb-11-20 15:55		Feb-11-20 16:01		Feb-11-20 16:07		Feb-11-20 16:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1610	50.0	226	9.92	559	9.98	115	9.94	56.2	9.90	41.8	9.98
TPH by SW8015 Mod	*Extracted:*	Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05		Feb-11-20 11:05	
	Analyzed:	Feb-11-20 17:24		Feb-11-20 17:24		Feb-11-20 17:43		Feb-11-20 17:43		Feb-11-20 18:03		Feb-11-20 18:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.8	49.8	<50.0	50.0	<49.8	49.8
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.8	49.8	<50.0	50.0	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.8	49.8	<50.0	50.0	<49.8	49.8
Total GRO-DRO		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.8	49.8	<50.0	50.0	<49.8	49.8
Total TPH		<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.8	49.8	<50.0	50.0	<49.8	49.8

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Jessica Kramer
Project Manager

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH08**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-001	Date Collected:	02.06.20 13.40	Sample Depth:	10 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**359**	10.1	mg/kg	02.11.20 12.52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.11.20 13.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.11.20 13.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.11.20 13.26	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.11.20 13.26	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.11.20 13.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	02.11.20 13.26	
o-Terphenyl	84-15-1	102	%	70-135	02.11.20 13.26	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH08**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-001	Date Collected:	02.06.20 13.40	Sample Depth:	10 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.20 18.05	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.20 18.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.11.20 18.05	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.11.20 18.05	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH08A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-002	Date Collected:	02.06.20 14.00	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**109**	10.0	mg/kg	02.11.20 12.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.11.20 13.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.11.20 13.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.11.20 13.26	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.11.20 13.26	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.11.20 13.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	02.11.20 13.26	
o-Terphenyl	84-15-1	123	%	70-135	02.11.20 13.26	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH08A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-002	Date Collected:	02.06.20 14.00	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.20 18.26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.20 18.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.11.20 18.26	
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.11.20 18.26	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH09**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-003	Date Collected:	02.06.20 14.50	Sample Depth:	9 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**839**	10.1	mg/kg	02.11.20 13.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.11.20 13.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.11.20 13.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.11.20 13.46	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.11.20 13.46	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.11.20 13.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	02.11.20 13.46	
o-Terphenyl	84-15-1	134	%	70-135	02.11.20 13.46	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH09**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-003	Date Collected:	02.06.20 14.50	Sample Depth:	9 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.11.20 18.46	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 18.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.11.20 18.46	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.11.20 18.46	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH09A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-004	Date Collected:	02.06.20 15.20	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**154**	9.98	mg/kg	02.11.20 13.09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 13.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 13.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 13.46	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 13.46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 13.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	136	%	70-135	02.11.20 13.46	**
o-Terphenyl	84-15-1	131	%	70-135	02.11.20 13.46	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH09A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-004	Date Collected:	02.06.20 15.20	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.11.20 19.06	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 19.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.11.20 19.06	
1,4-Difluorobenzene	540-36-3	100	%	70-130	02.11.20 19.06	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH10**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-005	Date Collected:	02.06.20 16.15	Sample Depth:	9 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**588**	9.94	mg/kg	02.11.20 13.15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.11.20 14.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.11.20 14.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.11.20 14.05	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.11.20 14.05	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.11.20 14.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	02.11.20 14.05	
o-Terphenyl	84-15-1	126	%	70-135	02.11.20 14.05	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH10**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-005	Date Collected:	02.06.20 16.15	Sample Depth:	9 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.11.20 19.27	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.11.20 19.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	02.11.20 19.27	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.11.20 19.27	

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RDU 42

Sample Id:	**PH10A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-006	Date Collected:	02.06.20 16.22	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**105**	10.0	mg/kg	02.11.20 13.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.11.20 14.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.11.20 14.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.11.20 14.05	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.11.20 14.05	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.11.20 14.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	02.11.20 14.05	
o-Terphenyl	84-15-1	118	%	70-135	02.11.20 14.05	

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RDU 42

Sample Id:	**PH10A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-006	Date Collected:	02.06.20 16.22	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 19.47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 19.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.11.20 19.47	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.11.20 19.47	

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RDU 42

Sample Id:	**PH11**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-007	Date Collected:	02.07.20 11.05	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**799**	10.1	mg/kg	02.11.20 13.26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.11.20 14.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.11.20 14.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.11.20 14.25	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.11.20 14.25	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.11.20 14.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	02.11.20 14.25	
o-Terphenyl	84-15-1	102	%	70-135	02.11.20 14.25	

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RDU 42

Sample Id:	**PH11**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-007	Date Collected:	02.07.20 11.05	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 20.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 20.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.11.20 20.08	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 20.08	

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RDU 42

Sample Id:	**PH11A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-008	Date Collected:	02.07.20 11.15	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**149**	9.96	mg/kg	02.11.20 13.59		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.11.20 15.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.11.20 15.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.11.20 15.05	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.11.20 15.05	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.11.20 15.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	02.11.20 15.05	
o-Terphenyl	84-15-1	100	%	70-135	02.11.20 15.05	

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RDU 42

Sample Id:	**PH11A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-008	Date Collected:	02.07.20 11.15	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 14.13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 14.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	86	%	70-130	02.11.20 14.13	
4-Bromofluorobenzene	460-00-4	86	%	70-130	02.11.20 14.13	

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RDU 42

Sample Id:	**PH12**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-009	Date Collected:	02.07.20 11.57	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1150**	50.0	mg/kg	02.11.20 14.16		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.11.20 15.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.11.20 15.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.11.20 15.45	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.11.20 15.45	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.11.20 15.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	02.11.20 15.45	
o-Terphenyl	84-15-1	129	%	70-135	02.11.20 15.45	

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RDU 42

Sample Id:	**PH12**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-009	Date Collected:	02.07.20 11.57	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.11.20 14.33	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 14.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.11.20 14.33	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 14.33	

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RDU 42

Sample Id:	**PH12A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-010	Date Collected:	02.07.20 12.05	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**190**	10.0	mg/kg	02.11.20 14.22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.11.20 15.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.11.20 15.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.11.20 15.45	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.11.20 15.45	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.11.20 15.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	02.11.20 15.45	
o-Terphenyl	84-15-1	131	%	70-135	02.11.20 15.45	

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RDU 42

Sample Id:	**PH12A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-010	Date Collected:	02.07.20 12.05	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.11.20 14.54	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 14.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.11.20 14.54	
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.11.20 14.54	

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RDU 42

Sample Id:	**PH13**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-011	Date Collected:	02.07.20 13.05	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**196**	10.1	mg/kg	02.11.20 14.27		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.11.20 16.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.11.20 16.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.11.20 16.04	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	02.11.20 16.04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.11.20 16.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	02.11.20 16.04	
o-Terphenyl	84-15-1	100	%	70-135	02.11.20 16.04	

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RDU 42

Sample Id:	**PH13**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-011	Date Collected:	02.07.20 13.05	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.11.20 15.14	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.20 15.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 15.14	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 15.14	

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RDU 42

Sample Id:	**PH13A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-012	Date Collected:	02.07.20 13.15	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**74.5**	10.0	mg/kg	02.11.20 14.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	02.11.20 16.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	02.11.20 16.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	02.11.20 16.04	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	02.11.20 16.04	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	02.11.20 16.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	131	%	70-135	02.11.20 16.04	
o-Terphenyl	84-15-1	122	%	70-135	02.11.20 16.04	

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RDU 42

Sample Id:	**PH13A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-012	Date Collected:	02.07.20 13.15	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.20 15.34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.20 15.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	02.11.20 15.34	
4-Bromofluorobenzene	460-00-4	93	%	70-130	02.11.20 15.34	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH14**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-013	Date Collected:	02.10.20 09.15	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4280**	50.0	mg/kg	02.11.20 14.49		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.11.20 16.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	133	%	70-135	02.11.20 16.24	
o-Terphenyl	84-15-1	131	%	70-135	02.11.20 16.24	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH14**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-013	Date Collected:	02.10.20 09.15	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.11.20 15.55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 15.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 15.55	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.11.20 15.55	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH14A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-014	Date Collected:	02.10.20 10.05	Sample Depth:	10 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**187**	9.98	mg/kg	02.11.20 14.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.11.20 16.24	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.11.20 16.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	02.11.20 16.24	
o-Terphenyl	84-15-1	121	%	70-135	02.11.20 16.24	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH14A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-014	Date Collected:	02.10.20 10.05	Sample Depth:	10 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.20 16.15	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.20 16.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 16.15	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 16.15	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH15**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-015	Date Collected:	02.10.20 10.35	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**279**	10.0	mg/kg	02.11.20 15.01		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 16.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 16.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 16.44	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 16.44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 16.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	02.11.20 16.44	
o-Terphenyl	84-15-1	118	%	70-135	02.11.20 16.44	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH15**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-015	Date Collected:	02.10.20 10.35	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.11.20 16.35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 16.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 16.35	
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.11.20 16.35	

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RDU 42

Sample Id:	**PH15A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-016	Date Collected:	02.10.20 11.25	Sample Depth:	10 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**445**	9.90	mg/kg	02.11.20 15.06		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	02.11.20 16.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	02.11.20 16.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	02.11.20 16.44	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	02.11.20 16.44	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	02.11.20 16.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	131	%	70-135	02.11.20 16.44	
o-Terphenyl	84-15-1	125	%	70-135	02.11.20 16.44	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH15A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-016	Date Collected:	02.10.20 11.25	Sample Depth:	10 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.20 16.56	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.20 16.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 16.56	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.11.20 16.56	

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RDU 42

Sample Id:	**PH16**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-017	Date Collected:	02.10.20 12.37	Sample Depth:	11 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13600**	198	mg/kg	02.11.20 12.30		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 13.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	02.11.20 13.06	
o-Terphenyl	84-15-1	130	%	70-135	02.11.20 13.06	

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RDU 42

Sample Id:	**PH16**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-017	Date Collected:	02.10.20 12.37	Sample Depth:	11 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 17.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 17.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.11.20 17.24	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 17.24	

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RDU 42

Sample Id:	**PH16A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-018	Date Collected:	02.10.20 13.30	Sample Depth:	16 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 10.30	Basis:	Wet Weight
Seq Number:	3116181				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**495**	9.94	mg/kg	02.11.20 12.36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 09.50	Basis:	Wet Weight
Seq Number:	3116201				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 13.06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 13.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	02.11.20 13.06	
o-Terphenyl	84-15-1	123	%	70-135	02.11.20 13.06	

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RDU 42

Sample Id:	**PH16A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-018	Date Collected:	02.10.20 13.30	Sample Depth:	16 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MRB	Date Prep:	02.11.20 10.00	Basis:	Wet Weight
Seq Number:	3116229				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 17.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 17.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	02.11.20 17.45	
4-Bromofluorobenzene	460-00-4	111	%	70-130	02.11.20 17.45	

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RDU 42

Sample Id:	**PH17**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-020	Date Collected:	02.10.20 14.20	Sample Depth:	9 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1610**	50.0	mg/kg	02.11.20 15.19		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 17.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	134	%	70-135	02.11.20 17.24	
o-Terphenyl	84-15-1	131	%	70-135	02.11.20 17.24	

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RDU 42

Sample Id:	**PH17**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-020	Date Collected:	02.10.20 14.20	Sample Depth:	9 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.11.20 18.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 18.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 18.17	
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.11.20 18.17	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH17A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-021	Date Collected:	02.10.20 14.40	Sample Depth:	13 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**226**	9.92	mg/kg	02.11.20 15.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 17.24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 17.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	132	%	70-135	02.11.20 17.24	
o-Terphenyl	84-15-1	128	%	70-135	02.11.20 17.24	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH17A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-021	Date Collected:	02.10.20 14.40	Sample Depth:	13 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.20 18.38	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.20 18.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 18.38	
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.11.20 18.38	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH18**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-022	Date Collected:	02.10.20 14.50	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**559**	9.98	mg/kg	02.11.20 15.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.11.20 17.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	02.11.20 17.43	
o-Terphenyl	84-15-1	128	%	70-135	02.11.20 17.43	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH18**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-022	Date Collected:	02.10.20 14.50	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.20 18.58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.20 18.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 18.58	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 18.58	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH18A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-023	Date Collected:	02.10.20 15.25	Sample Depth:	13.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**115**	9.94	mg/kg	02.11.20 16.01		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.11.20 17.43	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.11.20 17.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	02.11.20 17.43	
o-Terphenyl	84-15-1	123	%	70-135	02.11.20 17.43	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH18A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-023	Date Collected:	02.10.20 15.25	Sample Depth:	13.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.11.20 19.19	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.11.20 19.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 19.19	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.11.20 19.19	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH19**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-024	Date Collected:	02.10.20 15.50	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**56.2**	9.90	mg/kg	02.11.20 16.07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.11.20 18.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.11.20 18.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.11.20 18.03	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	02.11.20 18.03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.11.20 18.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	02.11.20 18.03	
o-Terphenyl	84-15-1	131	%	70-135	02.11.20 18.03	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH19**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-024	Date Collected:	02.10.20 15.50	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.11.20 19.39	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.11.20 19.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 19.39	
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.11.20 19.39	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH19A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-025	Date Collected:	02.10.20 15.52	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 12.09	Basis:	Wet Weight
Seq Number:	3116234				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**41.8**	9.98	mg/kg	02.11.20 16.13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.11.20 11.05	Basis:	Wet Weight
Seq Number:	3116250				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.11.20 18.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.11.20 18.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.11.20 18.03	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	02.11.20 18.03	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.11.20 18.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	132	%	70-135	02.11.20 18.03	
o-Terphenyl	84-15-1	130	%	70-135	02.11.20 18.03	

Certificate of Analytical Results 651917

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH19A**	Matrix:	Soil	Date Received:	02.11.20 08.10
Lab Sample Id:	651917-025	Date Collected:	02.10.20 15.52	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.11.20 11.04	Basis:	Wet Weight
Seq Number:	3116230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.20 19.59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.20 19.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.11.20 19.59	
4-Bromofluorobenzene	460-00-4	96	%	70-130	02.11.20 19.59	

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 Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 651917

LT Environmental, Inc.

RDU 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116181 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696390-1-BLK — LCS Sample Id: 7696390-1-BKS — LCSD Sample Id: 7696390-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	268	107	269	108	90-110	0	20	mg/kg	02.11.20 10:44	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116234 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696405-1-BLK — LCS Sample Id: 7696405-1-BKS — LCSD Sample Id: 7696405-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	350	366	105	364	104	90-110	1	20	mg/kg	02.11.20 13:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116181 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651915-001 — MS Sample Id: 651915-001 S — MSD Sample Id: 651915-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	551	199	793	122	787	117	90-110	1	20	mg/kg	02.11.20 11:01	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116181 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651916-009 — MS Sample Id: 651916-009 S — MSD Sample Id: 651916-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	483	200	707	112	707	111	90-110	0	20	mg/kg	02.11.20 12:19	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116234 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651917-008 — MS Sample Id: 651917-008 S — MSD Sample Id: 651917-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	149	200	365	108	366	109	90-110	0	20	mg/kg	02.11.20 14:05	

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

QC Summary 651917

LT Environmental, Inc.

RDU 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116234 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651917-020 — MS Sample Id: 651917-020 S — MSD Sample Id: 651917-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1610	200	1830	110	1830	109	90-110	0	20	mg/kg	02.11.20 15:25	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116201 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696392-1-BLK — LCS Sample Id: 7696392-1-BKS — LCSD Sample Id: 7696392-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	978	98	886	89	70-135	10	35	mg/kg	02.11.20 10:24	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	974	97	70-135	11	35	mg/kg	02.11.20 10:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		131		128		70-135	%	02.11.20 10:24
o-Terphenyl	111		120		102		70-135	%	02.11.20 10:24

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116250 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696428-1-BLK — LCS Sample Id: 7696428-1-BKS — LCSD Sample Id: 7696428-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	887	89	845	85	70-135	5	35	mg/kg	02.11.20 14:45	
Diesel Range Organics (DRO)	<50.0	1000	797	80	915	92	70-135	14	35	mg/kg	02.11.20 14:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		113		120		70-135	%	02.11.20 14:45
o-Terphenyl	120		103		116		70-135	%	02.11.20 14:45

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116201 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696392-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.11.20 10:04	

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

QC Summary 651917

LT Environmental, Inc.

RDU 42

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116250 | Matrix: Solid | Date Prep: 02.11.20
MB Sample Id: 7696428-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.11.20 14:45	

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116201 | Matrix: Soil | Date Prep: 02.11.20
Parent Sample Id: 651915-001 | MS Sample Id: 651915-001 S | MSD Sample Id: 651915-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	888	89	972	97	70-135	9	35	mg/kg	02.11.20 10:48	
Diesel Range Organics (DRO)	<49.9	998	981	98	1070	107	70-135	9	35	mg/kg	02.11.20 10:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	133		132		70-135	%	02.11.20 10:48
o-Terphenyl	123		122		70-135	%	02.11.20 10:48

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116250 | Matrix: Soil | Date Prep: 02.11.20
Parent Sample Id: 651917-008 | MS Sample Id: 651917-008 S | MSD Sample Id: 651917-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	829	83	938	94	70-135	12	35	mg/kg	02.11.20 15:25	
Diesel Range Organics (DRO)	<49.9	997	895	90	1050	105	70-135	16	35	mg/kg	02.11.20 15:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		131		70-135	%	02.11.20 15:25
o-Terphenyl	123		135		70-135	%	02.11.20 15:25

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

QC Summary 651917

LT Environmental, Inc.

RDU 42

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116229 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696394-1-BLK — LCS Sample Id: 7696394-1-BKS — LCSD Sample Id: 7696394-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.110	110	0.110	110	70-130	0	35	mg/kg	02.11.20 11:17	
Toluene	<0.00200	0.100	0.106	106	0.105	105	70-130	1	35	mg/kg	02.11.20 11:17	
Ethylbenzene	<0.00200	0.100	0.101	101	0.100	100	71-129	1	35	mg/kg	02.11.20 11:17	
m,p-Xylenes	<0.00400	0.200	0.208	104	0.204	102	70-135	2	35	mg/kg	02.11.20 11:17	
o-Xylene	<0.00200	0.100	0.104	104	0.103	103	71-133	1	35	mg/kg	02.11.20 11:17	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		105		105		70-130	%	02.11.20 11:17
4-Bromofluorobenzene	96		94		95		70-130	%	02.11.20 11:17

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116230 — Matrix: Solid — Date Prep: 02.11.20
MB Sample Id: 7696403-1-BLK — LCS Sample Id: 7696403-1-BKS — LCSD Sample Id: 7696403-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.122	122	0.122	122	70-130	0	35	mg/kg	02.11.20 12:31	
Toluene	<0.00200	0.100	0.112	112	0.111	111	70-130	1	35	mg/kg	02.11.20 12:31	
Ethylbenzene	<0.00200	0.100	0.108	108	0.107	107	71-129	1	35	mg/kg	02.11.20 12:31	
m,p-Xylenes	<0.00400	0.200	0.211	106	0.209	105	70-135	1	35	mg/kg	02.11.20 12:31	
o-Xylene	<0.00200	0.100	0.106	106	0.105	105	71-133	1	35	mg/kg	02.11.20 12:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		108		108		70-130	%	02.11.20 12:31
4-Bromofluorobenzene	96		91		91		70-130	%	02.11.20 12:31

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116229 — Matrix: Soil — Date Prep: 02.11.20
Parent Sample Id: 651915-001 — MS Sample Id: 651915-001 S — MSD Sample Id: 651915-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.118	119	0.114	115	70-130	3	35	mg/kg	02.11.20 11:58	
Toluene	<0.00198	0.0992	0.115	116	0.111	112	70-130	4	35	mg/kg	02.11.20 11:58	
Ethylbenzene	<0.00198	0.0992	0.112	113	0.107	108	71-129	5	35	mg/kg	02.11.20 11:58	
m,p-Xylenes	<0.00397	0.198	0.230	116	0.221	112	70-135	4	35	mg/kg	02.11.20 11:58	
o-Xylene	<0.00198	0.0992	0.114	115	0.109	110	71-133	4	35	mg/kg	02.11.20 11:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		105		70-130	%	02.11.20 11:58
4-Bromofluorobenzene	96		96		70-130	%	02.11.20 11:58

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

QC Summary 651917

LT Environmental, Inc.

RDU 42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3116230 Matrix: Soil Date Prep: 02.11.20

Parent Sample Id: 651917-008 MS Sample Id: 651917-008 S MSD Sample Id: 651917-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.123	123	0.121	121	70-130	2	35	mg/kg	02.11.20 13:12	
Toluene	<0.00199	0.0996	0.124	124	0.111	111	70-130	11	35	mg/kg	02.11.20 13:12	
Ethylbenzene	<0.00199	0.0996	0.119	119	0.108	108	71-129	10	35	mg/kg	02.11.20 13:12	
m,p-Xylenes	<0.00398	0.199	0.234	118	0.211	106	70-135	10	35	mg/kg	02.11.20 13:12	
o-Xylene	<0.00199	0.0996	0.118	118	0.106	106	71-133	11	35	mg/kg	02.11.20 13:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		109		70-130	%	02.11.20 13:12
4-Bromofluorobenzene	94		94		70-130	%	02.11.20 13:12

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

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Chain of Custody

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 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 651917

Project Manager:	Chris McKissen	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	820 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970) 285-9985	Email:	cmckissen@ltenv.com & abyers@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	034B20001	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	2.0	Thermometer ID	TNM007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	85

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH08	S	2/6/20	1340	16'	1				
	PH08A		2/6/20	1400	12'	1				
	PH09		2/6/20	1450	9'	1				
	PH09A		2/6/20	1520	12'	1				
	PH10		2/6/20	1615	9'	1				
	PH10A		2/6/20	1622	12'	1				
	PH11		2/7/20	1105	8'	1				
	PH11A		2/7/20	1115	12'	1				
	PH12		2/7/20	1157	8'	1				
	PH12A		2/7/20	1205	12'	1				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	Elliot Loy	2/11/20 7:30am	2 Elliot Loy		2/11/20 08:10
			4		
			6		

Revised Date 02/2019 Rev. 2019.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.001
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Chain of Custody

XENCO LABORATORIES

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Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

Work Order No: 451917

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Project Manager:	Chris McKissen	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	920 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	970 285 9985	Email:	cmckissen@ltenv.com & abyers@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	~~03482[illegible]~~ 034820001	Routine ☒	
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):		Thermometer ID	
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Preservative Codes: MeOH: Me; None: NO; HNO3: HN; H2SO4: H2; HCL: HL; NaOH: Na; Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH13	S	2/7/20	1310	8'	1				
	PH13A		2/7/20	1315	12	1				
	PH14		2/10/20	0915	0.5'	1				
	PH14A			1005	10'	1				
	PH15			1035	0.5'	1				
	PH15A			1120	10'	1				
	PH16			1237	11'	1				24 HR RUSH
	PH16A			1330	16'	1				
	PH16B			1340	18'	1				on hold for PH16A
	PH17	↓	↓	1420	9'	1				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	[signature]	2/11/20 7:30am	[signature]	[signature]	2/11/20 08:10

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
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Chain of Custody

Work Order No: 651917

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Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Project Manager:	Chris McKissen	Bill to: (if different)	→
Company Name:	LT Environmental	Company Name:	→
Address:	820 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	(970) 285-9985	Email:	cmckissen@ltenv.com + abyers@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	034820001	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):		Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
	PH17A	S	2/10/20	1440	13'	1			
	PH18			1450	0.5'	1			
	PH18A			1525	13.5'	1			
	PH19			1550	0.5'	1			
	PH19A	↓	↓	1552	2'	1			

ANALYSIS REQUEST

Preservative Codes
MeOH: Me
None: NO
HNO3: HN
H2SO4: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	Elliot Hay	2/11/20 7:30am	Elliot Hay		2/11/20 08:10

Revised Date 052019 Rev. 2019.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.001
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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02.11.2020 08.10.00 AM

Work Order #: 651917

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2
#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 Date: 02.11.2020

Checklist reviewed by: Jessica Kramer Date: 02.11.2020

Jessica Kramer

Analytical Report 652450

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 42

034820001

02-APR-20

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-APR-20

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

Reference: XENCO Report No(s): **652450**
RDU 42
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) 652450. 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. 652450 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,

Jessica Kramer

Jessica Kramer
Project Manager

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 Cross Reference 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH20	S	02-13-20 09:40	2 ft	652450-001
PH20A	S	02-13-20 10:15	12 ft	652450-002
PH21	S	02-13-20 11:25	6 ft	652450-003
PH21A	S	02-13-20 11:40	12 ft	652450-004
PH22	S	02-13-20 13:55	10 ft	652450-005
PH22A	S	02-13-20 14:00	12 ft	652450-006
PH23	S	02-13-20 15:05	12 ft	652450-007
PH23A	S	02-13-20 15:15	16 ft	652450-008
PH24	S	02-13-20 16:00	6 ft	652450-009
PH24A	S	02-13-20 16:20	14 ft	652450-010
PH26	S	02-13-20 13:15	8 ft	652450-011
PH26A	S	02-13-20 13:25	12 ft	652450-012
PH20B	S	02-13-20 10:30	13 ft	Not Analyzed
PH24B	S	02-13-20 16:25	16 ft	Not Analyzed

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 42

Project ID: *034820001*
Work Order Number(s): *652450*

Report Date: *02-APR-20*
Date Received: *02/14/2020*

Sample receipt non conformances and comments:

V1.001 Revision - (client email) Corrected typo on Sample 012 from PH6 to PH26 JK 04/02/20

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3116662 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3116666 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 652450

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Fri Feb-14-20 10:30 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652450-001		652450-002		652450-003		652450-004		652450-005		652450-006	
	Field Id:	PH20		PH20A		PH21		PH21A		PH22		PH22A	
	Depth:	2- ft		12- ft		6- ft		12- ft		10- ft		12- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-20 09:40		Feb-13-20 10:15		Feb-13-20 11:25		Feb-13-20 11:40		Feb-13-20 13:55		Feb-13-20 14:00	
BTEX by EPA 8021B	***Extracted:***	Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00	
	Analyzed:	Feb-15-20 05:39		Feb-15-20 05:59		Feb-15-20 06:20		Feb-15-20 06:40		Feb-15-20 07:01		Feb-15-20 07:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000486	0.000486	<0.000488	0.000488	<0.000485	0.000485	<0.000486	0.000486	<0.000481	0.000481	<0.000484	0.000484
Toluene		<0.000529	0.000529	<0.000531	0.000531	<0.000527	0.000527	<0.000528	0.000528	<0.000522	0.000522	<0.000526	0.000526
Ethylbenzene		<0.000407	0.000407	<0.000409	0.000409	<0.000405	0.000405	<0.000406	0.000406	<0.000402	0.000402	<0.000405	0.000405
m,p-Xylenes		<0.000755	0.000755	<0.000758	0.000758	<0.000752	0.000752	<0.000754	0.000754	<0.000746	0.000746	<0.000751	0.000751
o-Xylene		<0.000404	0.000404	<0.000406	0.000406	<0.000402	0.000402	<0.000403	0.000403	<0.000399	0.000399	<0.000401	0.000401
Total Xylenes		<0.000404	0.000404	<0.000406	0.000406	<0.000402	0.000402	<0.000403	0.000403	<0.000399	0.000399	<0.000401	0.000401
Total BTEX		<0.000404	0.000404	<0.000406	0.000406	<0.000402	0.000402	<0.000403	0.000403	<0.000399	0.000399	<0.000401	0.000401
Chloride by EPA 300	***Extracted:***	Feb-14-20 16:30		Feb-14-20 16:30		Feb-14-20 16:30		Feb-14-20 16:30		Feb-14-20 20:00		Feb-14-20 20:00	
	Analyzed:	Feb-14-20 22:05		Feb-14-20 22:11		Feb-14-20 22:17		Feb-14-20 22:23		Feb-15-20 00:17		Feb-15-20 00:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9460	3.53	171	0.353	4290	3.54	211	0.353	220	1.77	173	1.75
TPH by SW8015 Mod	***Extracted:***	Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:15		Feb-14-20 17:15	
	Analyzed:	Feb-15-20 00:17		Feb-15-20 00:17		Feb-15-20 00:36		Feb-15-20 00:36		Feb-15-20 01:55		Feb-15-20 02:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<13.9	13.9	<13.8	13.8	<14.0	14.0	<13.9	13.9	<13.9	13.9	<13.9	13.9
Diesel Range Organics (DRO)		<11.4	11.4	<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5
Motor Oil Range Hydrocarbons (MRO)		<11.4	11.4	<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5
Total TPH		<11.4	11.4	<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5

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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Version: 1.%

Jessica Kramer
Project Manager

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 652450

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 034820001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Fri Feb-14-20 10:30 am
Report Date: 02-APR-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652450-007		652450-008		652450-009		652450-010		652450-011		652450-012	
	Field Id:	PH23		PH23A		PH24		PH24A		PH26		PH26A	
	Depth:	12- ft		16- ft		6- ft		14- ft		8- ft		12- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-13-20 15:05		Feb-13-20 15:15		Feb-13-20 16:00		Feb-13-20 16:20		Feb-13-20 13:15		Feb-13-20 13:25	
BTEX by EPA 8021B	***Extracted:***	Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:00		Feb-14-20 17:09		Feb-14-20 17:09	
	Analyzed:	Feb-15-20 07:42		Feb-15-20 08:02		Feb-15-20 08:22		Feb-15-20 08:43		Feb-15-20 00:35		Feb-15-20 00:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000484	0.000484	<0.000484	0.000484	<0.000484	0.000484	<0.000485	0.000485	<0.000481	0.000481	<0.000483	0.000483
Toluene		<0.000526	0.000526	<0.000526	0.000526	<0.000526	0.000526	<0.000527	0.000527	<0.000522	0.000522	<0.000525	0.000525
Ethylbenzene		<0.000405	0.000405	<0.000405	0.000405	<0.000405	0.000405	<0.000405	0.000405	<0.000402	0.000402	<0.000404	0.000404
m,p-Xylenes		<0.000751	0.000751	<0.000751	0.000751	<0.000751	0.000751	<0.000752	0.000752	<0.000746	0.000746	<0.000749	0.000749
o-Xylene		<0.000401	0.000401	<0.000401	0.000401	<0.000401	0.000401	<0.000402	0.000402	<0.000399	0.000399	<0.000401	0.000401
Total Xylenes		<0.000401	0.000401	<0.000401	0.000401	<0.000401	0.000401	<0.000402	0.000402	<0.000399	0.000399	<0.000401	0.000401
Total BTEX		<0.000401	0.000401	<0.000401	0.000401	<0.000401	0.000401	<0.000402	0.000402	<0.000399	0.000399	<0.000401	0.000401
Chloride by EPA 300	***Extracted:***	Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00	
	Analyzed:	Feb-14-20 23:00		Feb-14-20 23:20		Feb-14-20 23:26		Feb-14-20 23:32		Feb-14-20 23:39		Feb-14-20 23:58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9160	3.53	319	0.353	11300	3.53	211	0.352	783	0.353	463	0.353
TPH by SW8015 Mod	***Extracted:***	Feb-14-20 17:15		Feb-14-20 17:15		Feb-14-20 17:15		Feb-14-20 17:15		Feb-14-20 17:15		Feb-14-20 17:15	
	Analyzed:	Feb-15-20 02:34		Feb-15-20 02:54		Feb-15-20 02:54		Feb-15-20 03:14		Feb-15-20 03:14		Feb-15-20 03:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<13.9	13.9	<13.9	13.9	<14.0	14.0	<13.9	13.9	<13.9	13.9	<13.9	13.9
Diesel Range Organics (DRO)		<11.5	11.5	14.1 J	11.5	<11.5	11.5	13.6 J	11.5	<11.5	11.5	<11.5	11.5
Motor Oil Range Hydrocarbons (MRO)		<11.5	11.5	<11.4	11.4	<11.5	11.5	<11.5	11.5	<11.5	11.5	<11.5	11.5
Total TPH		<11.5	11.5	14.1 J	11.4	<11.5	11.5	13.6 J	11.5	<11.5	11.5	<11.5	11.5

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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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Version: 1.%

Jessica Kramer
Project Manager

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH20**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-001	Date Collected:	02.13.20 09.40	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 16.30	Basis:	Wet Weight
Seq Number:	3116675				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9460**	99.8	3.53	mg/kg	02.14.20 22.05		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116690				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	49.9	13.9	mg/kg	02.15.20 00.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.9	11.4	mg/kg	02.15.20 00.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.9	11.4	mg/kg	02.15.20 00.17	U	1
Total TPH	PHC635	<11.4	49.9	11.4	mg/kg	02.15.20 00.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	02.15.20 00.17	
o-Terphenyl	84-15-1	99	%	70-135	02.15.20 00.17	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH20**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-001	Date Collected:	02.13.20 09.40	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	02.15.20 05.39	U	1
Toluene	108-88-3	<0.000529	0.00200	0.000529	mg/kg	02.15.20 05.39	U	1
Ethylbenzene	100-41-4	<0.000407	0.00200	0.000407	mg/kg	02.15.20 05.39	U	1
m,p-Xylenes	179601-23-1	<0.000755	0.00401	0.000755	mg/kg	02.15.20 05.39	U	1
o-Xylene	95-47-6	<0.000404	0.00200	0.000404	mg/kg	02.15.20 05.39	U	1
Total Xylenes	1330-20-7	<0.000404	0.00200	0.000404	mg/kg	02.15.20 05.39	U	1
Total BTEX		<0.000404	0.00200	0.000404	mg/kg	02.15.20 05.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.15.20 05.39	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.15.20 05.39	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH20A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-002	Date Collected:	02.13.20 10.15	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 16.30	Basis:	Wet Weight
Seq Number:	3116675				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**171**	9.98	0.353	mg/kg	02.14.20 22.11		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116690				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	02.15.20 00.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.8	11.4	mg/kg	02.15.20 00.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	02.15.20 00.17	U	1
Total TPH	PHC635	<11.4	49.8	11.4	mg/kg	02.15.20 00.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	02.15.20 00.17	
o-Terphenyl	84-15-1	106	%	70-135	02.15.20 00.17	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH20A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-002	Date Collected:	02.13.20 10.15	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000488	0.00201	0.000488	mg/kg	02.15.20 05.59	U	1
Toluene	108-88-3	<0.000531	0.00201	0.000531	mg/kg	02.15.20 05.59	U	1
Ethylbenzene	100-41-4	<0.000409	0.00201	0.000409	mg/kg	02.15.20 05.59	U	1
m,p-Xylenes	179601-23-1	<0.000758	0.00402	0.000758	mg/kg	02.15.20 05.59	U	1
o-Xylene	95-47-6	<0.000406	0.00201	0.000406	mg/kg	02.15.20 05.59	U	1
Total Xylenes	1330-20-7	<0.000406	0.00201	0.000406	mg/kg	02.15.20 05.59	U	1
Total BTEX		<0.000406	0.00201	0.000406	mg/kg	02.15.20 05.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.15.20 05.59	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.15.20 05.59	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH21**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-003	Date Collected:	02.13.20 11.25	Sample Depth:	6 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 16.30	Basis:	Wet Weight
Seq Number:	3116675				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4290**	100	3.54	mg/kg	02.14.20 22.17		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116690				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	02.15.20 00.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.3	11.5	mg/kg	02.15.20 00.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	02.15.20 00.36	U	1
Total TPH	PHC635	<11.5	50.3	11.5	mg/kg	02.15.20 00.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	02.15.20 00.36	
o-Terphenyl	84-15-1	94	%	70-135	02.15.20 00.36	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH21**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-003	Date Collected:	02.13.20 11.25	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	02.15.20 06.20	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	02.15.20 06.20	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	02.15.20 06.20	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	02.15.20 06.20	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	02.15.20 06.20	U	1
Total Xylenes	1330-20-7	<0.000402	0.00200	0.000402	mg/kg	02.15.20 06.20	U	1
Total BTEX		<0.000402	0.00200	0.000402	mg/kg	02.15.20 06.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	02.15.20 06.20	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.15.20 06.20	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH21A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-004	Date Collected:	02.13.20 11.40	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 16.30	Basis:	Wet Weight
Seq Number:	3116675				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**211**	9.98	0.353	mg/kg	02.14.20 22.23		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116690				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	02.15.20 00.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	02.15.20 00.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	02.15.20 00.36	U	1
Total TPH	PHC635	<11.5	50.1	11.5	mg/kg	02.15.20 00.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.15.20 00.36	
o-Terphenyl	84-15-1	102	%	70-135	02.15.20 00.36	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH21A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-004	Date Collected:	02.13.20 11.40	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	02.15.20 06.40	U	1
Toluene	108-88-3	<0.000528	0.00200	0.000528	mg/kg	02.15.20 06.40	U	1
Ethylbenzene	100-41-4	<0.000406	0.00200	0.000406	mg/kg	02.15.20 06.40	U	1
m,p-Xylenes	179601-23-1	<0.000754	0.00400	0.000754	mg/kg	02.15.20 06.40	U	1
o-Xylene	95-47-6	<0.000403	0.00200	0.000403	mg/kg	02.15.20 06.40	U	1
Total Xylenes	1330-20-7	<0.000403	0.00200	0.000403	mg/kg	02.15.20 06.40	U	1
Total BTEX		<0.000403	0.00200	0.000403	mg/kg	02.15.20 06.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	02.15.20 06.40	
1,4-Difluorobenzene	540-36-3	94	%	70-130	02.15.20 06.40	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH22**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-005	Date Collected:	02.13.20 13.55	Sample Depth:	10 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**220**	50.1	1.77	mg/kg	02.15.20 00.17		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	02.15.20 01.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.2	11.5	mg/kg	02.15.20 01.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	02.15.20 01.55	U	1
Total TPH	PHC635	<11.5	50.2	11.5	mg/kg	02.15.20 01.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	02.15.20 01.55	
o-Terphenyl	84-15-1	113	%	70-135	02.15.20 01.55	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH22**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-005	Date Collected:	02.13.20 13.55	Sample Depth:	10 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000481	0.00198	0.000481	mg/kg	02.15.20 07.01	U	1
Toluene	108-88-3	<0.000522	0.00198	0.000522	mg/kg	02.15.20 07.01	U	1
Ethylbenzene	100-41-4	<0.000402	0.00198	0.000402	mg/kg	02.15.20 07.01	U	1
m,p-Xylenes	179601-23-1	<0.000746	0.00396	0.000746	mg/kg	02.15.20 07.01	U	1
o-Xylene	95-47-6	<0.000399	0.00198	0.000399	mg/kg	02.15.20 07.01	U	1
Total Xylenes	1330-20-7	<0.000399	0.00198	0.000399	mg/kg	02.15.20 07.01	U	1
Total BTEX		<0.000399	0.00198	0.000399	mg/kg	02.15.20 07.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.15.20 07.01	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.15.20 07.01	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH22A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-006	Date Collected:	02.13.20 14.00	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**173**	49.4	1.75	mg/kg	02.15.20 00.24		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	02.15.20 02.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.2	11.5	mg/kg	02.15.20 02.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	02.15.20 02.34	U	1
Total TPH	PHC635	<11.5	50.2	11.5	mg/kg	02.15.20 02.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	02.15.20 02.34	
o-Terphenyl	84-15-1	119	%	70-135	02.15.20 02.34	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH22A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-006	Date Collected:	02.13.20 14.00	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	02.15.20 07.21	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	02.15.20 07.21	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	02.15.20 07.21	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	02.15.20 07.21	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.21	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.21	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	92	%	70-130	02.15.20 07.21	
4-Bromofluorobenzene	460-00-4	89	%	70-130	02.15.20 07.21	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH23**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-007	Date Collected:	02.13.20 15.05	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9160**	99.6	3.53	mg/kg	02.14.20 23.00		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	02.15.20 02.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	02.15.20 02.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	02.15.20 02.34	U	1
Total TPH	PHC635	<11.5	50.0	11.5	mg/kg	02.15.20 02.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	02.15.20 02.34	
o-Terphenyl	84-15-1	109	%	70-135	02.15.20 02.34	

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RDU 42

Sample Id:	**PH23**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-007	Date Collected:	02.13.20 15.05	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	02.15.20 07.42	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	02.15.20 07.42	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	02.15.20 07.42	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	02.15.20 07.42	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.42	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.42	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.15.20 07.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	02.15.20 07.42	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.15.20 07.42	

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RDU 42

Sample Id:	**PH23A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-008	Date Collected:	02.13.20 15.15	Sample Depth:	16 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**319**	9.96	0.353	mg/kg	02.14.20 23.20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	02.15.20 02.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	**14.1**	50.0	11.5	mg/kg	02.15.20 02.54	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	50.0	11.4	mg/kg	02.15.20 02.54	U	1
Total TPH	PHC635	**14.1**	50.0	11.4	mg/kg	02.15.20 02.54	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	02.15.20 02.54	
o-Terphenyl	84-15-1	111	%	70-135	02.15.20 02.54	

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LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH23A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-008	Date Collected:	02.13.20 15.15	Sample Depth:	16 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	02.15.20 08.02	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	02.15.20 08.02	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	02.15.20 08.02	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	02.15.20 08.02	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.02	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.02	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.15.20 08.02	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.15.20 08.02	

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RDU 42

Sample Id:	**PH24**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-009	Date Collected:	02.13.20 16.00	Sample Depth:	6 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11300**	99.8	3.53	mg/kg	02.14.20 23.26		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	02.15.20 02.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.3	11.5	mg/kg	02.15.20 02.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	02.15.20 02.54	U	1
Total TPH	PHC635	<11.5	50.3	11.5	mg/kg	02.15.20 02.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	02.15.20 02.54	
o-Terphenyl	84-15-1	111	%	70-135	02.15.20 02.54	

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RDU 42

Sample Id:	**PH24**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-009	Date Collected:	02.13.20 16.00	Sample Depth:	6 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	02.15.20 08.22	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	02.15.20 08.22	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	02.15.20 08.22	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	02.15.20 08.22	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.22	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.22	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.15.20 08.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.15.20 08.22	
1,4-Difluorobenzene	540-36-3	101	%	70-130	02.15.20 08.22	

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RDU 42

Sample Id:	**PH24A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-010	Date Collected:	02.13.20 16.20	Sample Depth:	14 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**211**	9.94	0.352	mg/kg	02.14.20 23.32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	02.15.20 03.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	**13.6**	50.0	11.5	mg/kg	02.15.20 03.14	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	02.15.20 03.14	U	1
Total TPH	PHC635	**13.6**	50.0	11.5	mg/kg	02.15.20 03.14	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.15.20 03.14	
o-Terphenyl	84-15-1	112	%	70-135	02.15.20 03.14	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH24A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-010	Date Collected:	02.13.20 16.20	Sample Depth:	14 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.00	Basis:	Wet Weight
Seq Number:	3116662				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	02.15.20 08.43	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	02.15.20 08.43	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	02.15.20 08.43	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	02.15.20 08.43	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	02.15.20 08.43	U	1
Total Xylenes	1330-20-7	<0.000402	0.00200	0.000402	mg/kg	02.15.20 08.43	U	1
Total BTEX		<0.000402	0.00200	0.000402	mg/kg	02.15.20 08.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.15.20 08.43	
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.15.20 08.43	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH26**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-011	Date Collected:	02.13.20 13.15	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**783**	9.98	0.353	mg/kg	02.14.20 23.39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	02.15.20 03.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	02.15.20 03.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	02.15.20 03.14	U	1
Total TPH	PHC635	<11.5	50.1	11.5	mg/kg	02.15.20 03.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	02.15.20 03.14	
o-Terphenyl	84-15-1	108	%	70-135	02.15.20 03.14	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH26**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-011	Date Collected:	02.13.20 13.15	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.09	Basis:	Wet Weight
Seq Number:	3116666				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000481	0.00198	0.000481	mg/kg	02.15.20 00.35	U	1
Toluene	108-88-3	<0.000522	0.00198	0.000522	mg/kg	02.15.20 00.35	U	1
Ethylbenzene	100-41-4	<0.000402	0.00198	0.000402	mg/kg	02.15.20 00.35	U	1
m,p-Xylenes	179601-23-1	<0.000746	0.00396	0.000746	mg/kg	02.15.20 00.35	U	1
o-Xylene	95-47-6	<0.000399	0.00198	0.000399	mg/kg	02.15.20 00.35	U	1
Total Xylenes	1330-20-7	<0.000399	0.00198	0.000399	mg/kg	02.15.20 00.35	U	1
Total BTEX		<0.000399	0.00198	0.000399	mg/kg	02.15.20 00.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.15.20 00.35	
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.15.20 00.35	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH26A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-012	Date Collected:	02.13.20 13.25	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**463**	9.98	0.353	mg/kg	02.14.20 23.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.14.20 17.15	Basis:	Wet Weight
Seq Number:	3116693				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	02.15.20 03.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	02.15.20 03.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	02.15.20 03.33	U	1
Total TPH	PHC635	<11.5	50.0	11.5	mg/kg	02.15.20 03.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	02.15.20 03.33	
o-Terphenyl	84-15-1	109	%	70-135	02.15.20 03.33	

Certificate of Analytical Results 652450

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH26A**	Matrix:	Soil	Date Received:	02.14.20 10.30
Lab Sample Id:	652450-012	Date Collected:	02.13.20 13.25	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 17.09	Basis:	Wet Weight
Seq Number:	3116666				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000483	0.00199	0.000483	mg/kg	02.15.20 00.55	U	1
Toluene	108-88-3	<0.000525	0.00199	0.000525	mg/kg	02.15.20 00.55	U	1
Ethylbenzene	100-41-4	<0.000404	0.00199	0.000404	mg/kg	02.15.20 00.55	U	1
m,p-Xylenes	179601-23-1	<0.000749	0.00398	0.000749	mg/kg	02.15.20 00.55	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.15.20 00.55	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.15.20 00.55	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.15.20 00.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	02.15.20 00.55	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.15.20 00.55	

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 Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

Released to Imaging: 4/30/2024 8:02:03 AM

QC Summary 652450

LT Environmental, Inc.

RDU 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116675 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696717-1-BLK — LCS Sample Id: 7696717-1-BKS — LCSD Sample Id: 7696717-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	250	259	104	259	104	90-110	0	20	mg/kg	02.14.20 19:30	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116669 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696728-1-BLK — LCS Sample Id: 7696728-1-BKS — LCSD Sample Id: 7696728-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	250	261	104	261	104	90-110	0	20	mg/kg	02.14.20 22:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116675 — Matrix: Soil — Date Prep: 02.14.20
Parent Sample Id: 652447-009 — MS Sample Id: 652447-009 S — MSD Sample Id: 652447-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5910	202	6090	89	6110	99	90-110	0	20	mg/kg	02.14.20 20:59	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116675 — Matrix: Soil — Date Prep: 02.14.20
Parent Sample Id: 652491-001 — MS Sample Id: 652491-001 S — MSD Sample Id: 652491-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.5	200	224	104	226	105	90-110	1	20	mg/kg	02.14.20 19:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116669 — Matrix: Soil — Date Prep: 02.14.20
Parent Sample Id: 652450-007 — MS Sample Id: 652450-007 S — MSD Sample Id: 652450-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9160	200	9380	110	9360	99	90-110	0	20	mg/kg	02.14.20 23:07	

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

QC Summary 652450

LT Environmental, Inc.

RDU 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116669 — Matrix: Soil — Date Prep: 02.14.20
Parent Sample Id: 652513-001 — MS Sample Id: 652513-001 S — MSD Sample Id: 652513-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	279	199	486	104	488	105	90-110	0	20	mg/kg	02.15.20 00:49	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116690 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696775-1-BLK — LCS Sample Id: 7696775-1-BKS — LCSD Sample Id: 7696775-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.9	1000	890	89	882	88	70-135	1	35	mg/kg	02.14.20 21:00	
Diesel Range Organics (DRO)	<11.5	1000	942	94	1020	102	70-135	8	35	mg/kg	02.14.20 21:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		106		112		70-135	%	02.14.20 21:00
o-Terphenyl	100		105		107		70-135	%	02.14.20 21:00

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116693 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696789-1-BLK — LCS Sample Id: 7696789-1-BKS — LCSD Sample Id: 7696789-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.9	1000	944	94	827	83	70-135	13	35	mg/kg	02.15.20 01:35	
Diesel Range Organics (DRO)	<11.5	1000	1030	103	873	87	70-135	17	35	mg/kg	02.15.20 01:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	81		118		100		70-135	%	02.15.20 01:35
o-Terphenyl	88		112		100		70-135	%	02.15.20 01:35

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116690 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696775-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<11.5	mg/kg	02.17.20 10:51	

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

QC Summary 652450

LT Environmental, Inc.

RDU 42

Analytical Method: TPH by SW8015 Mod
Seq Number: 3116693
Matrix: Solid
MB Sample Id: 7696789-1-BLK
Prep Method: SW8015P
Date Prep: 02.14.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<11.5	mg/kg	02.15.20 01:35	

Analytical Method: TPH by SW8015 Mod
Seq Number: 3116690
Parent Sample Id: 652491-001
Matrix: Soil
MS Sample Id: 652491-001 S
MSD Sample Id: 652491-001 SD
Prep Method: SW8015P
Date Prep: 02.14.20

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.8	997	926	93	905	91	70-135	2	35	mg/kg	02.14.20 21:19	
Diesel Range Organics (DRO)	<11.4	997	1050	105	995	100	70-135	5	35	mg/kg	02.14.20 21:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		109		70-135	%	02.14.20 21:19
o-Terphenyl	111		115		70-135	%	02.14.20 21:19

Analytical Method: TPH by SW8015 Mod
Seq Number: 3116693
Parent Sample Id: 652450-005
Matrix: Soil
MS Sample Id: 652450-005 S
MSD Sample Id: 652450-005 SD
Prep Method: SW8015P
Date Prep: 02.14.20

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.8	997	897	90	985	99	70-135	9	35	mg/kg	02.15.20 02:15	
Diesel Range Organics (DRO)	<11.4	997	961	96	1090	109	70-135	13	35	mg/kg	02.15.20 02:15	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		124		70-135	%	02.15.20 02:15
o-Terphenyl	110		118		70-135	%	02.15.20 02:15

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

QC Summary 652450

LT Environmental, Inc.

RDU 42

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116662 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696732-1-BLK — LCS Sample Id: 7696732-1-BKS — LCSD Sample Id: 7696732-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.102	102	0.0998	100	70-130	2	35	mg/kg	02.14.20 23:52	
Toluene	<0.000528	0.100	0.0982	98	0.0957	96	70-130	3	35	mg/kg	02.14.20 23:52	
Ethylbenzene	<0.000406	0.100	0.0938	94	0.0911	91	71-129	3	35	mg/kg	02.14.20 23:52	
m,p-Xylenes	<0.000754	0.200	0.193	97	0.187	94	70-135	3	35	mg/kg	02.14.20 23:52	
o-Xylene	<0.000403	0.100	0.0969	97	0.0942	94	71-133	3	35	mg/kg	02.14.20 23:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		105		104		70-130	%	02.14.20 23:52
4-Bromofluorobenzene	96		95		94		70-130	%	02.14.20 23:52

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116666 — Matrix: Solid — Date Prep: 02.14.20
MB Sample Id: 7696733-1-BLK — LCS Sample Id: 7696733-1-BKS — LCSD Sample Id: 7696733-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.109	109	0.106	106	70-130	3	35	mg/kg	02.14.20 23:13	
Toluene	<0.000528	0.100	0.0984	98	0.0970	97	70-130	1	35	mg/kg	02.14.20 23:13	
Ethylbenzene	<0.000406	0.100	0.0934	93	0.0922	92	71-129	1	35	mg/kg	02.14.20 23:13	
m,p-Xylenes	<0.000754	0.200	0.182	91	0.180	90	70-135	1	35	mg/kg	02.14.20 23:13	
o-Xylene	<0.000403	0.100	0.0929	93	0.0919	92	71-133	1	35	mg/kg	02.14.20 23:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		108		109		70-130	%	02.14.20 23:13
4-Bromofluorobenzene	94		90		90		70-130	%	02.14.20 23:13

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3116662 — Matrix: Soil — Date Prep: 02.14.20
Parent Sample Id: 652447-007 — MS Sample Id: 652447-007 S — MSD Sample Id: 652447-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000487	0.100	0.116	116	0.0907	91	70-130	24	35	mg/kg	02.15.20 00:33	
Toluene	<0.000530	0.100	0.110	110	0.0863	86	70-130	24	35	mg/kg	02.15.20 00:33	
Ethylbenzene	<0.000408	0.100	0.102	102	0.0788	79	71-129	26	35	mg/kg	02.15.20 00:33	
m,p-Xylenes	<0.000757	0.201	0.213	106	0.169	85	70-135	23	35	mg/kg	02.15.20 00:33	
o-Xylene	<0.000405	0.100	0.109	109	0.0875	88	71-133	22	35	mg/kg	02.15.20 00:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	02.15.20 00:33
4-Bromofluorobenzene	96		94		70-130	%	02.15.20 00:33

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

QC Summary 652450

LT Environmental, Inc.

RDU 42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3116666 Matrix: Soil Date Prep: 02.14.20

Parent Sample Id: 652450-011 MS Sample Id: 652450-011 S MSD Sample Id: 652450-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000483	0.0994	0.115	116	0.105	105	70-130	9	35	mg/kg	02.14.20 23:54	
Toluene	<0.000525	0.0994	0.106	107	0.0972	97	70-130	9	35	mg/kg	02.14.20 23:54	
Ethylbenzene	<0.000404	0.0994	0.102	103	0.0938	94	71-129	8	35	mg/kg	02.14.20 23:54	
m,p-Xylenes	<0.000749	0.199	0.199	100	0.183	92	70-135	8	35	mg/kg	02.14.20 23:54	
o-Xylene	<0.000401	0.0994	0.101	102	0.0940	94	71-133	7	35	mg/kg	02.14.20 23:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	02.14.20 23:54
4-Bromofluorobenzene	93		94		70-130	%	02.14.20 23:54

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

Page 1007 of 1072

Chain of Custody

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 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 652450

Page 1 of 2

Project Manager:	Chris McKissen	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	820 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	970 285 9985	Email:	cmckissen@ltenv.com, abyers

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDO ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	034820001	Routine	☑
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT

Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	0.6	Thermometer ID	TH1007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	14

ANALYSIS REQUEST

Preservative Codes: MeOH: Me; None: NO; HNO3: HN; H2SO4: H2; HCL: HL; NaOH: Na; Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH20	S	2/13/20	0940	2'	1				
	PH20A			1015	12'	1				
	PH21			1125	6'	1				
	PH21A			1140	12'	1				
	PH22			1355	10'	1				
	PH22A			1400	12'	1				
	PH23			1505	12'	1				
	PH23A			1515	16'	1				
	PH24			1600	6'	1				
	PH24A	↓	↓	1620	14'	1				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

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

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		2/14/20/10:00am			2/14/20 10:30

Revised Date 082019 Rev: 2019.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.002
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Chain of Custody

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 Carlsbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-5701
www.xenco.com

Work Order No: 652450

Page 2 of 2

Project Manager:	Chris McKissen	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	820 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	970 285 9985	Email:	cmckissen@ltenv.com, abyers@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	ROU 42	Turn Around	
Project Number:	03482000 1	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT				
Temperature (°C):		Temp Blank:	Yes No	Wet Ice: Yes No
Received Intact:	Yes No	Thermometer ID		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH26	S	2/13/20	1315	8'	1	X	X	X	
	PH26A	S	2/13/20	1325	12'	1	X	X	X	
	PH20B	S	2/13/20	1035	13'	1	X	X	X	
	PH24B ok per	S	2/13/20	1625	16'	1	X	X	X	HOLD for PH20A HOLD for PH24A

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2SO4: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

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

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		2/14/20 10:00am			2/14/20 10:30

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Final 1.002
Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM

Analytical Report 652515

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDU 42

03482001

18-FEB-20

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)

Released to Imaging: 4/30/2024 8:02:03 AM

18-FEB-20

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

Reference: XENCO Report No(s): **652515**
RDU 42
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) 652515. 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. 652515 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,

Jessica Kramer

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 Cross Reference 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH25	S	02-14-20 09:17	1 ft	652515-001
PH25A	S	02-14-20 09:53	14 ft	652515-002
PH27	S	02-14-20 10:10	0.5 ft	652515-003
PH27A	S	02-14-20 10:50	12 ft	652515-004
PH25b	S	02-14-20 09:55	16 ft	Not Analyzed

CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: RDU 42

Project ID: *03482001*
Work Order Number(s): *652515*

Report Date: *18-FEB-20*
Date Received: *02/14/2020*

Sample receipt non conformances and comments:

V1.001 - Revision corrected project name from RDV 42 to RDU 42

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3116798 BTEX by EPA 8021B

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

Released to Imaging: 4/30/2024 8:02:03 AM

Received by OCD: 4/25/2024 9:24:00 AM

Certificate of Analysis Summary 652515

LT Environmental, Inc., Arvada, CO

Project Name: RDU 42

Project Id: 03482001
Contact: Chris McKisson
Project Location: Rural Eddy County

Date Received in Lab: Fri Feb-14-20 04:35 pm
Report Date: 18-FEB-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652515-001		652515-002		652515-003		652515-004					
	Field Id:	PH25		PH25A		PH27		PH27A					
	Depth:	1- ft		14- ft		0.5- ft		12- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Feb-14-20 09:17		Feb-14-20 09:53		Feb-14-20 10:10		Feb-14-20 10:50					
BTEX by EPA 8021B	***Extracted:***	Feb-17-20 14:23		Feb-17-20 14:23		Feb-17-20 14:23		Feb-17-20 14:23					
	Analyzed:	Feb-17-20 17:34		Feb-17-20 17:55		Feb-17-20 18:15		Feb-17-20 18:35					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.000490	0.000490	<0.000485	0.000485	<0.000485	0.000485	<0.000484	0.000484				
Toluene		<0.000533	0.000533	<0.000527	0.000527	<0.000527	0.000527	<0.000526	0.000526				
Ethylbenzene		<0.000410	0.000410	<0.000405	0.000405	<0.000405	0.000405	<0.000405	0.000405				
m,p-Xylenes		<0.000761	0.000761	<0.000752	0.000752	<0.000752	0.000752	<0.000751	0.000751				
o-Xylene		<0.000407	0.000407	<0.000402	0.000402	<0.000402	0.000402	<0.000401	0.000401				
Total Xylenes		<0.000407	0.000407	<0.000402	0.000402	<0.000402	0.000402	<0.000401	0.000401				
Total BTEX		<0.000407	0.000407	<0.000402	0.000402	<0.000402	0.000402	<0.000401	0.000401				
Chloride by EPA 300	***Extracted:***	Feb-17-20 11:00		Feb-17-20 11:00		Feb-17-20 11:00		Feb-17-20 11:00					
	Analyzed:	Feb-17-20 14:18		Feb-17-20 14:24		Feb-17-20 14:30		Feb-17-20 14:36					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		7920	1.77	366	0.351	341	0.353	394	0.353				
TPH by SW8015 Mod	***Extracted:***	Feb-17-20 12:15		Feb-17-20 12:15		Feb-17-20 12:15		Feb-17-20 12:15					
	Analyzed:	Feb-17-20 14:13		Feb-17-20 14:34		Feb-17-20 14:34		Feb-17-20 14:54					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<13.8	13.8	<13.8	13.8	<13.8	13.8	<13.9	13.9				
Diesel Range Organics (DRO)		<11.4	11.4	11.9 J	11.4	<11.4	11.4	12.9 J	11.5				
Motor Oil Range Hydrocarbons (MRO)		<11.4	11.4	<11.4	11.4	<11.4	11.4	<11.5	11.5				
Total TPH		<11.4	11.4	11.9 J	11.4	<11.4	11.4	12.9 J	11.5				

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.%

Jessica Kramer
Project Assistant

Page 1013 of 1072

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH25**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-001	Date Collected:	02.14.20 09.17	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 11.00	Basis:	Wet Weight
Seq Number:	3116743				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7920**	49.9	1.77	mg/kg	02.17.20 14.18		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 12.15	Basis:	Wet Weight
Seq Number:	3116742				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	02.17.20 14.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.8	11.4	mg/kg	02.17.20 14.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	02.17.20 14.13	U	1
Total TPH	PHC635	<11.4	49.8	11.4	mg/kg	02.17.20 14.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.17.20 14.13	
o-Terphenyl	84-15-1	102	%	70-135	02.17.20 14.13	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH25**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-001	Date Collected:	02.14.20 09.17	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 14.23	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000490	0.00202	0.000490	mg/kg	02.17.20 17.34	U	1
Toluene	108-88-3	<0.000533	0.00202	0.000533	mg/kg	02.17.20 17.34	U	1
Ethylbenzene	100-41-4	<0.000410	0.00202	0.000410	mg/kg	02.17.20 17.34	U	1
m,p-Xylenes	179601-23-1	<0.000761	0.00404	0.000761	mg/kg	02.17.20 17.34	U	1
o-Xylene	95-47-6	<0.000407	0.00202	0.000407	mg/kg	02.17.20 17.34	U	1
Total Xylenes	1330-20-7	<0.000407	0.00202	0.000407	mg/kg	02.17.20 17.34	U	1
Total BTEX		<0.000407	0.00202	0.000407	mg/kg	02.17.20 17.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.17.20 17.34	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.17.20 17.34	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH25A**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-002	Date Collected:	02.14.20 09.53	Sample Depth:	14 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 11.00	Basis:	Wet Weight
Seq Number:	3116743				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**366**	9.92	0.351	mg/kg	02.17.20 14.24		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 12.15	Basis:	Wet Weight
Seq Number:	3116742				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	02.17.20 14.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	**11.9**	49.8	11.4	mg/kg	02.17.20 14.34	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	02.17.20 14.34	U	1
Total TPH	PHC635	**11.9**	49.8	11.4	mg/kg	02.17.20 14.34	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.17.20 14.34	
o-Terphenyl	84-15-1	110	%	70-135	02.17.20 14.34	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id: **PH25A**
Lab Sample Id: 652515-002

Matrix: Soil
Date Collected: 02.14.20 09.53

Date Received:02.14.20 16.35
Sample Depth: 14 ft

Analytical Method: BTEX by EPA 8021B
Tech: MAB
Analyst: MAB
Seq Number: 3116798

Date Prep: 02.17.20 14.23

Prep Method: SW5030B
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	02.17.20 17.55	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	02.17.20 17.55	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	02.17.20 17.55	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	02.17.20 17.55	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	02.17.20 17.55	U	1
Total Xylenes	1330-20-7	<0.000402	0.00200	0.000402	mg/kg	02.17.20 17.55	U	1
Total BTEX		<0.000402	0.00200	0.000402	mg/kg	02.17.20 17.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91	%	70-130	02.17.20 17.55	
4-Bromofluorobenzene	460-00-4	87	%	70-130	02.17.20 17.55	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH27**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-003	Date Collected:	02.14.20 10.10	Sample Depth:	0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 11.00	Basis:	Wet Weight
Seq Number:	3116743				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**341**	9.96	0.353	mg/kg	02.17.20 14.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 12.15	Basis:	Wet Weight
Seq Number:	3116742				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.9	13.8	mg/kg	02.17.20 14.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.9	11.4	mg/kg	02.17.20 14.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.9	11.4	mg/kg	02.17.20 14.34	U	1
Total TPH	PHC635	<11.4	49.9	11.4	mg/kg	02.17.20 14.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	02.17.20 14.34	
o-Terphenyl	84-15-1	103	%	70-135	02.17.20 14.34	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH27**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-003	Date Collected:	02.14.20 10.10	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 14.23	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	02.17.20 18.15	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	02.17.20 18.15	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	02.17.20 18.15	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	02.17.20 18.15	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	02.17.20 18.15	U	1
Total Xylenes	1330-20-7	<0.000402	0.00200	0.000402	mg/kg	02.17.20 18.15	U	1
Total BTEX		<0.000402	0.00200	0.000402	mg/kg	02.17.20 18.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.17.20 18.15	
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.17.20 18.15	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH27A**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-004	Date Collected:	02.14.20 10.50	Sample Depth:	12 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 11.00	Basis:	Wet Weight
Seq Number:	3116743				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**394**	9.98	0.353	mg/kg	02.17.20 14.36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 12.15	Basis:	Wet Weight
Seq Number:	3116742				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	02.17.20 14.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	**12.9**	50.1	11.5	mg/kg	02.17.20 14.54	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	02.17.20 14.54	U	1
Total TPH	PHC635	**12.9**	50.1	11.5	mg/kg	02.17.20 14.54	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.17.20 14.54	
o-Terphenyl	84-15-1	110	%	70-135	02.17.20 14.54	

Certificate of Analytical Results 652515

LT Environmental, Inc., Arvada, CO

RDU 42

Sample Id:	**PH27A**	Matrix:	Soil	Date Received:	02.14.20 16.35
Lab Sample Id:	652515-004	Date Collected:	02.14.20 10.50	Sample Depth:	12 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 14.23	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	02.17.20 18.35	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	02.17.20 18.35	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	02.17.20 18.35	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	02.17.20 18.35	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	02.17.20 18.35	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	02.17.20 18.35	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	02.17.20 18.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.17.20 18.35	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.17.20 18.35	

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 Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 652515

LT Environmental, Inc.

RDU 42

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116743 — Matrix: Solid — Date Prep: 02.17.20
MB Sample Id: 7696809-1-BLK — LCS Sample Id: 7696809-1-BKS — LCSD Sample Id: 7696809-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	250	255	102	255	102	90-110	0	20	mg/kg	02.17.20 11:54	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116743 — Matrix: Soil — Date Prep: 02.17.20
Parent Sample Id: 652519-010 — MS Sample Id: 652519-010 S — MSD Sample Id: 652519-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	23.3	200	232	104	232	104	90-110	0	20	mg/kg	02.17.20 13:27	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116743 — Matrix: Soil — Date Prep: 02.17.20
Parent Sample Id: 652566-001 — MS Sample Id: 652566-001 S — MSD Sample Id: 652566-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	733	200	948	108	953	110	90-110	1	20	mg/kg	02.17.20 12:10	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116742 — Matrix: Solid — Date Prep: 02.17.20
MB Sample Id: 7696815-1-BLK — LCS Sample Id: 7696815-1-BKS — LCSD Sample Id: 7696815-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.9	1000	797	80	837	84	70-135	5	35	mg/kg	02.17.20 12:52	
Diesel Range Organics (DRO)	<11.5	1000	870	87	920	92	70-135	6	35	mg/kg	02.17.20 12:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		110		119		70-135	%	02.17.20 12:52
o-Terphenyl	97		97		104		70-135	%	02.17.20 12:52

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116742 — Matrix: Solid — Date Prep: 02.17.20
MB Sample Id: 7696815-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<11.5	mg/kg	02.17.20 12:32	

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

QC Summary 652515

LT Environmental, Inc.

RDU 42

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116742 | Matrix: Soil | Date Prep: 02.17.20
Parent Sample Id: 652566-001 | MS Sample Id: 652566-001 S | MSD Sample Id: 652566-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<13.9	998	846	85	809	81	70-135	4	35	mg/kg	02.17.20 13:12	
Diesel Range Organics (DRO)	<11.4	998	953	95	894	90	70-135	6	35	mg/kg	02.17.20 13:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		99		70-135	%	02.17.20 13:12
o-Terphenyl	106		100		70-135	%	02.17.20 13:12

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3116798 | Matrix: Solid | Date Prep: 02.17.20
MB Sample Id: 7696814-1-BLK | LCS Sample Id: 7696814-1-BKS | LCSD Sample Id: 7696814-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.114	114	0.109	109	70-130	4	35	mg/kg	02.17.20 15:52	
Toluene	<0.000528	0.100	0.104	104	0.101	101	70-130	3	35	mg/kg	02.17.20 15:52	
Ethylbenzene	<0.000406	0.100	0.0990	99	0.0963	96	71-129	3	35	mg/kg	02.17.20 15:52	
m,p-Xylenes	<0.000754	0.200	0.193	97	0.188	94	70-135	3	35	mg/kg	02.17.20 15:52	
o-Xylene	<0.000403	0.100	0.0977	98	0.0952	95	71-133	3	35	mg/kg	02.17.20 15:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		108		107		70-130	%	02.17.20 15:52
4-Bromofluorobenzene	96		89		90		70-130	%	02.17.20 15:52

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3116798 | Matrix: Soil | Date Prep: 02.17.20
Parent Sample Id: 652515-001 | MS Sample Id: 652515-001 S | MSD Sample Id: 652515-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000485	0.0998	0.129	129	0.121	121	70-130	6	35	mg/kg	02.17.20 16:33	
Toluene	<0.000527	0.0998	0.119	119	0.121	121	70-130	2	35	mg/kg	02.17.20 16:33	
Ethylbenzene	<0.000405	0.0998	0.115	115	0.115	115	71-129	0	35	mg/kg	02.17.20 16:33	
m,p-Xylenes	<0.000752	0.200	0.225	113	0.222	111	70-135	1	35	mg/kg	02.17.20 16:33	
o-Xylene	<0.000402	0.0998	0.113	113	0.111	111	71-133	2	35	mg/kg	02.17.20 16:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	02.17.20 16:33
4-Bromofluorobenzene	94		92		70-130	%	02.17.20 16:33

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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Chain of Custody

Work Order No: 652515

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 Crailbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Project Manager:	Chris McKissen	Bill to: (if different)	
Company Name:	LT Environmental	Company Name:	
Address:	920 Megan Ave, Unit B	Address:	
City, State ZIP:	Rifle, CO 81650	City, State ZIP:	
Phone:	970 285 9985	Email:	cmckissen@ltenv.com, abyers@ltenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	RDU 42	Turn Around	
Project Number:	034826001	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	0.8	Thermometer ID	TNH007
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	5

ANALYSIS REQUEST

Preservative Codes
MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	PH25	S	2/14/20	0917	0 & 1'	1				
	PH25A	S		0953	14'	1				
	PH27	S		1010	0.5'	1				
	PH27A	S		1050	12'	1				
	PH26B 0 & 1'	S		0955	16'	1				HOLD for PH25A results

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		2/14/20 16:35	3		
			4		
			5		

Revised Date 022819 Rev. 2019.1

Received by OCD: 4/25/2024 9:24:00 AM
Released to Imaging: 4/30/2024 8:02:03 AM
Final 1.001
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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02.14.2020 04.35.00 PM

Work Order #: 652515

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

Temperature Measuring device used : TNM 007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.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?	**No**
#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: Martha Castro Date: 02.14.2020

Checklist reviewed by: Jessica Kramer Date: 02.18.2020

Jessica Kramer

ATTACHMENT 4: PHOTOGRAPHIC LOG

Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

PHOTOGRAPHIC LOG



Photograph 1: View of the Site facing northeast.



Photograph 2: View of the Site facing north.



Photograph 3: View of the Site facing east.



Photograph 4: View of the Site facing south.

Ross Draw Unit 42
32.026123308, -103.8718851
Photographs Taken: October 31, 2016 though February 14, 2020

A proud member of WSP

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Released to Imaging: 4/30/2024 8:02:03 AM
Received by OCD: 4/25/2024 9:24:00 AM

PHOTOGRAPHIC LOG



Photograph 5: Northeast view of the Site during delineation events.



Photograph 6: Northwest view of the Site during delineation events.



Photograph 7: West view of the Site during delineation events.



Photograph 8: Northwest view of the Site during delineation events.

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ATTACHMENT 5: SOIL SAMPLING LOGS

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier:	Date:
PH01	05/14/2019
Project Name:	**RP Number:**
RDU 42	2RP 3564
Logged By: L. Lawdanski	**Method:** backhoe
Lat/Long:	**Field Screening:** chlorides
Hole Diameter: 1.5'	**Total Depth:** 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche pad ~0.5'
M	<192		N	PH01	1		SM	Sand, silts, brown, moist, poor, no plastic, moldable/easily broken, moist
					2'			
					3			
M	<192		N	PH01A	4'			
					5			deepest depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220
Compliance · Engineering · Remediation

Identifier: PH2	Date: 05/19/2019
Project Name: RDU 42	AP Number: 2RP-3564
Logged By: [illegible]	Method: auger
Hole Diameter: 15"	Total Depth: 12'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:
Field Screening: chlorides
Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology Remarks
					0			caliche pad (~0.5')
					1		SM	Sand, silty, brown, dry, no odor, no visible hydrocarbons,
M	(9.2) 24102		N	PH2	2			
					3			
M	(9.2) 24102		N	PH2A	4			
					5			
D	(8.8) 24102		N		6		SP-SM	Sand, poorly graded, salt & sand flats
					7			
					8			
					9		SC	low plasticity clayey sand, w/ 1/4" rocks
D	(7.8) 958		N		10			
					11			
D	C192 (K1)		N	PH2B	12'		SP	light tan sand, fine, high density, well poorly graded



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Identifier: PH03	Date: 05/14/2019
Project Name: RDU 42	RP Number: 2RP 3564
Logged By: L. Lambert	Method: backhoe
Lat/Long:	Field Screening: chlorides
Hole Diameter: 1.5'	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche ~0.5'
M	CH2 (C1)		N	PH03	1		SM	Sand, Red, brown, moist,
					2			No odor, no Plastic
					3			No ribbon
M	CH2 (C1)		N	PH03	4'			
					5			Deepest depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier:	Date:
PH-4	05/14/2019
Project Name:	**RP Number:**
RDU 42	2RP 3564
Logged By: L Lambert	**Method:** backhoe
Lat/Long:	**Field Screening:** chlorides
Hole Diameter: 1.5'	**Total Depth:** 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche pad ~0.5'
M	<192		N	PH04	1 2'		SM	Sad, silts, brown, non plastic, mild dense, no odor
M	<192		N	PH04A	3 4'			deepest depth
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier:	Date:
PH05	05/14/2019
Project Name:	RP Number:
RDU 42	2RP 3564
Logged By: L. Lambach	Method: backhoe
Hole Diameter: 1.5'	Total Depth: 6'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:
Field Screening: chlorides

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche pad ~ 0.5'
					1		SM	Sand, silty, brown, moist
M	>4102 (8.8)		N	PH05	2'			N odor
					3			mod dbble, non plastic
M	1318 (4.8)		N	PH05A	4'			non gritty
					5			
M	858 (3.8)		N	PH05B	6'		SP/SM	50/50 sand silty, brown
					7			N odor
					8			deepest depth
					9			
					10			
					11			
					12			

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Identifier	Date
PH-6	05/14/2019
Project Name: RDU 42	PO Number: 2RP 3564
Logged By: L. Lambert	Method: backhoe
Hole Diameter: 15'	Total Depth: 6'
Lab/Lang:	Field Screening:

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil Rock Type	Lithology/Remarks
					0			caliche
					1		SM	Sand fines, brown, moist
M	74102 (9.0)		N	PH-6	2			N odor
								mottled - non plastic - easily broken
M					3			
			N	PH-6A	4			
							SP/SM	light brn, SP/SM sand /fines
M					5			
			N	PH-6B	6			
								deepest depth
					7			
					8			
					9			
					10			
					11			
					12			

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Identifier:	Date:
PH07	05/14/2019
Project Name:	**RP Number:**
RDU 42	2RP3564
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: L. Lamb Method: backhoe
Lat/Long:	Field Screening: chlorides Hole Diameter: 1.5' Total Depth: 6'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0			caliche
					1			
M			N	PH07	2		SM	brown sand moist
					3			
					4			
					5			
M			N	PH07	6		SP/SM	light tan sand nodules
					7			deepest depth
					8			
					9			
					10			
					11			
					12			

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BH or PH Name: PH08	Date: 2/6/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564 & 1-6-2020 Release
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	156		N		0.5	0.5	Caliche	
D	128		N		1	1	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-sorted, trace organics
D	156		N		2	2	SP-SM	Brown sand w/ silt. Med grained, no odor, no plasticity, poorly-sorted, trace organics
D	BDL		N		3	3	SP-SM	Brown sand w/ silt. Med grained, no odor, no plasticity, poorly-sorted, trace organics
D	BDL		N		4	4	SP-SM	Brown sand w/ silt. Med grained, no odor, no plasticity, poorly-sorted, trace organics
D	BDL		N		5	5	SP-SM	Brown sand w/ silt. Med grained, no odor, no plasticity, poorly-sorted, trace organics
D	128		N		6	6	SP-SM	Lt. brown sand w/ silt and gravel.
D	276		N		7	7	SP-SM	Lt. brown medium grained sand w/ silt. No plasticity, poorly sorted
D	312		N		8	8	SP-SM	Lt. brown medium grained sand w/ silt. No plasticity, poorly sorted. Clumped, easily broken.
D	352		N		9	9	SP-SM	Fine Sand w/ silt, compact, hard to break w/ fingers. Lt brown w/ gravel
D	980		N		10	10	SP	Pink, fine grained sand, no plasticity, compact, clumped
					11			
D	BDL		N		12	12	SP	Fine sand, no plasticity, well sorted. Lt pink/ brown

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BH or PH Name: PH09	Date: 2/6/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 12'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		Surface Layer Caliche
D	BDL		N		0.5	0.5	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-graded.
D	BDL		N		1	1	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-graded.
D	BDL		N		2	2	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-graded.
D	BDL		N		3	3	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-graded. Trace organics
D	BDL		N		4	4	SP-SM	Brown sand w/ silt. Med-coarse grained, no odor, no plasticity, poorly-graded. Trace organics
D	BDL		N		5	5	SP-SM	Brown, poorly grade silt sand (fine) w/ gravel, no plasticity, no odor
D	BDL		N		6	6	SM	Brown, poorly grade silt sand (fine), compact, no plasticity
D	BDL		N		7	7	SM	Brown, poorly grade silt sand (fine), compact, no plasticity
D	244		N		8	8	SP-SM	Lt. brown silty sand (fine) w/ gravel. Poorly graded
D	768		N		9	9	SP-SM	Lt. brown silty sand. Compact. Poorly graded
D	592		N		10	10	SP-SM	Lt. pink/ yellow, poorly graded silt sand (fine)
D	708		N		11	11	SM	Lt. brown poorly graded silt sand (fine)
D	180		N		12	12	SP	Lt. brown/ pink sand (med)

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BH or PH Name: PH10	Date: 2/6/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
D	244		N		0.5	0.5	SM	Brown, poorly-graded silt sand(fine)
D	212		N		1	1	SM	Brown, poorly-graded silt sand(fine)
D	BDL		N		2	2	SM	Brown, poorly-graded silt sand(fine)
D	BDL		N		3	3	SM	Brown, poorly-graded silt sand(fine)
D	BDL		N		4	4	SM	Brown, poorly-graded silt sand(fine)
D	BDL		N		5	5	SP-SM	Lt. brown sand w/ silt and gravel
D	128		N		6	6	SP-SM	Lt. brown compact, silt sand w/ gravel
D	212		N		7	7	SP-SM	Lt. brown compact, silt sand w/ gravel
D	348		N		8	8	SM	Lt. brown compact, silt sand w/ gravel
D	608		N		9	9	SM	Lt. Pink/brown-yellow silt sand (fine)
D	424		N		10	10	SP	Lt. pink fine sand, compact
D	280		N		11	11	SP	Lt. pink/ brown sand (med)
D	BDL		N		12	12	SP	Lt. pink/ brown sand (med)

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BH or PH Name: PH11	Date: 2/7/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		Caliche
D	280		N		0.5	0.5	SM	Brown, poorly-graded silt sand(fine) with trace of caliche
D	196		N		1	1	SM	Brown, poorly-graded silt sand(fine), no plasticity, organics
D	196		N		2	2	SM	Brown, poorly-graded silt sand(fine), no plasticity, organics
D	148		N		3	3	SM	Brown, poorly-graded silt sand(fine), no plasticity, organics
D	BDL		N		4	4	SP-SM	Silt-sand w/ gravel
						5		
D	664		N		6	6	SP	Compact fine grained sand w/ silt. Lt brown-yellow, poorly graded
						7		
D	720		N		8	8	SM	Compact fine grained sand w/ silt. Modules of white fine grained sand, various sizes, breakable by hand, some yellow fines
D	556		N		9	9	SM	Lt. pink/brown fine sile-sand, compact
D	384		N		10	10	SM	Lt. pink/brown fine sile-sand, compact-difficult to crush by hand
					11			
D	168		N		12	12	SP	Black, red, white, brown sand (med)

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BH or PH Name: PH12	Date: 2/7/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
D	148		N		0.5	0.5	SM	Silt sand, poorly graded, traces of caliche
D	168		N		1	1	SM	Silt sand, poorly graded
D	196		N		2	2	SM	Silt sand, poorly graded, organics
D	196		N		3	3	SM	Poorly-graded, brown silt sand (fine)
D	148		N		4	4	SP-SM	Silt sand w/ gravel
						5		
D	280		N		6	6	SM	Lt. Brown, compact, fine grained silt sand
						7		
M	988		N		8	8	SM	Moist, compact silt sand, clumped white and brown
D	848		N		9	9	SM	Lt. pink silt sand (fine)
D	384		N		10	10	SM	Lt. pink silt sand (fine)
						11		
D	196		N		12	12	SP	Sand(med)

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BH or PH Name: PH13	Date: 2/7/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	BDL		N		0.5	0.5	SM	SM w/ gravel, moist, brown
D	168		N		1	1	SM	SM w/ gravel, moist, brown
D	148		N		2	2	SM	SM w/ gravel, moist, brown
D	124		N		3	3	SM	SM w/ gravel, moist, brown
D	124		N		4	4	SM	SM w/ gravel, moist, brown
						5		
D	BDL		N		6	6	SM	Compact, SM, Lt. brown (fine)
D						7		
M	196		N		8	8	SM	Compact! Difficult to break w/ hand. Fine SM
D	168		N		9	9	SM	Compact Lt. pink silt sand (fine)
D	124		N		10	10	SP	(fine-med) poorly graded
						11		
D	BDL		N		12	12	SP	(med) poorly graded

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BH or PH Name: PH14	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 12'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	BDL		N		0.5	0.5	SM	SM w/ gravel, moist, brown
D	168		N		1	1	SM	SM w/ gravel, moist, brown
D	148		N		2	2	SM	SM w/ gravel, moist, brown
D	124		N		3	3	SM	SM w/ gravel, moist, brown
D	124		N		4	4	SM	SM w/ gravel, moist, brown
						5		
D	BDL		N		6	6	SM	Compact, SM, Lt. brown (fine)
						7		
M	196		N		8	8	SM	Compact! Difficult to break w/ hand. Fine SM
D	168		N		9	9	SM	Compact Lt. pink silt sand (fine)
D	124		N		10	10	SP	(fine-med) poorly graded
						11		
						12		

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BH or PH Name: PH15	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit Mouth of Fluid Drainage to Pasture

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	220		N		0.5	0.5	SM	Brown, poorly graded silt sand (fine)
M	196		N		1	1	SM	Brown, poorly graded silt sand (fine)
M	BDL		N		2	2	SM	Brown, poorly graded silt sand (fine)
D	BDL		N		3	3	SM	Brown, poorly graded silt sand (fine)
D	BDL		N		4	4	SM	Brown, poorly graded silt sand (fine)
D	220		N		5	5	SM	Brown, poorly graded silt sand (fine)
D	148		N		6	6	SM	Brown, poorly graded silt sand (fine)
D	BDL		N		7	7	SM	Lt. brown, fine grained silt sand, poorly graded
D	348		N		8	8	SM	Lt. brown, fine grained silt sand, poorly graded
D	916		N		9	9	SM	Lt. brown, fine grained silt sand, poorly graded
D	312		N		10	10	SM	Lt. brown, fine grained silt sand, poorly graded
						11		
						12		

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BH or PH Name: PH16	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 18'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	3,600		N		0.5	0.5	SW-SM	Poorly-sorted, well-graded
M	384		N		1	1	SM	Organics, poorly-graded
M	664		N		2	2	SM	Organics, poorly-graded
M	780		N		3	3	SM	Organics, poorly-graded
M	780		N		4	4	SW-SM	Silt sand w/ gravel
M	1,228		N		5	5	SW-SM	Silt sand w/ gravel
M	424		N		6	6	SW-SM	Silt sand w/ gravel
M	720		N		7	7	SW-SM	Silt sand w/ gravel
M	464		N		8	8	SW-SM	Silt sand w/ gravel
M	1,320		N		9	9	SW-SM	Silt sand w/ gravel
M	3,600		N		10	10	SW-SM	Silt sand w/ gravel
M	11,232		Y		11	11	SW-SM	Compact, moist, yellow staining
M	8,060		N		12	12	SM	Compact, moist, fine, poorly graded

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BH or PH Name: PH16	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 18'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	8,060		N		12	12	SM	Compact, moist, fine, poorly graded
M	10,432		N		13	13	SM	Moist, mod. Plasticity clayey sand (fine)
M	8,060		N		14	14	SM	Compact, clayey sand, mod. Plastic, layering
D	4,148		N		15	15	SM	Dry, fine, Lt. brown-pink, poorly-graded
D	384		N		16	16	SP	Sand (Med)
D	348		N		17	17	SP	Sand (Med)
D	248		N		18	18	SP	Sand (Med)
								TD at 18'. Max reach
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH17	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 13'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	1,144		N		0.5	0.5	SW-	Brown, well graded sand w/ silt
D	848		N		1	1	SM	Brown, poorly-graded silt sand(fine)
D	608		N		2	2	SM	Brown, poorly-graded silt sand(fine)
M	508		N		3	3	SM	Brown, poorly-graded silt sand(fine)
M	464		N		4	4	SM	Brown, poorly-graded silt sand(fine)
D	664		N		5	5	SW-SM	Brown, well graded sand w/ silt and gravel
D	664		N		6	6	SW-SM	Brown, well graded sand w/ silt and gravel
D	780		N		7	7	SM	Med. Sand w/ gravel, white clayey clasts, mod plastic
D	1,320		N		8	8	SC	Clayey sand(fine), compact, dry clay, mod plastic
D	1,520		N		9	9	SM	(dry clay clasts, red) Silty sand, compact (fin), lt brown/ pink
D	508		N		10	10	SM	Compact silt sand, Lt. pink/brown (fine)
D	664		N		11	11	SM	Compact silt sand, Lt. pink/brown (fine)
D	464		N		12	12	SM	Compact silt sand, Lt. pink/brown (fine)

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BH or PH Name: PH17	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 13'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	464		N		12	12	SM	Compact silt sand, Lt. pink/brown (fine)
D	196		N		13	13	SP	Poorly graded sand
						14		
						15		
						16		
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH18	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 13.5'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	556		N		0.5	0.5	SW-	Well graded sand w/ silt
D	348		N		1	1	SM	Silty sand
D	168		N		2	2	SM	Silty sand
M	BDL		N		3	3	SM	Silty sand
M	BDL		N		4	4	SM	Lt. brown, compact silty sand
						5		
D	BDL		N		6	6	SM	Compact, Lt pink silty sand
						7		
D	384		N		8	8	SM	Grey-lt. pink silty sand
						9		
D	348		N		10	10	SM	Compact, pink, silty sand
						11		
D	280		N		12	12	SM	Compact, pink, silty sand

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BH or PH Name: PH18	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564 &
LTE Job Number:	34820001
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: AB / Track Hoe
Lat/Long: 32.026123308, -103.8718851 / Field Screening: Chloride	Hole Diameter: NA / Total Depth: 13.5'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	280		N		12	12	SM	Compact, pink silty sand
D	124		N		13	13	SP	Poorly graded sand
						14		
						15		
						16		
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH19	Date: 2/10/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 2'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	BDL		N		0.5		SM	Silty sand
D	BDL		N		1	1	SM	Silty sand
D	BDL		N		2	2	SM	Silty sand
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

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BH or PH Name: PH20	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 13'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	5,420		N		0.5	0.5	SP-SM	Brown, poorly-grade silt sand (med), low plasticity, trace organics
M	6,352		N		1	1	SP-SM	Brown, poorly-grade silt sand (med), low plasticity, trace organics
M	8,060		N		2	2	SP-SM	Brown, poorly-grade silt sand (med), low plasticity, trace organics
M	7,440		N		3	3	SP-SM	Brown, poorly-grade silt sand (med), low plasticity, trace organics
M	4,256		N		4	4	SP-SM	Brown, poorly-grade silt sand (med), low plasticity, trace organics
						5		
D	5,420		N		6	6	SP-SM	Lt brown, poorly-graded silt sand (fine) no plasticity
						7		
D	580		N		8	8	SM	Lt. brown and white silt-sand (fine), poorly-graded, no plasticity and clumped
						9		
D	268		N		10	10	SP	Reddish brown, compact poorly-graded sand (fine)
						11		
D	480		N		12	12	SP	Yellow-brown sand (coarse), poorly-graded

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BH or PH Name: PH20	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 13'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	480		N		12	12	SP	Yellow-brown sand (coarse), poorly-graded
D	148		N		13	13	SP	Yellow-brown sand (coarse), poorly-graded, compact-clumped
						14		
						15		
						16		
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH21	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	1,608		N		0.5	0.5	SP-SM	Brown, poorly-graded sand (fine) w/ silt
M	1,036		N		1	1	SP-SM	Brown, poorly-graded sand (fine) w/ silt
M	388		N		2	2	SP-SM	Brown, poorly-graded sand (fine) w/ silt
M	888		N		3	3	SP-SM	Brown, poorly-graded sand (fine) w/ silt
M	1,588		N		4	4	SP-SM	Brown, poorly-graded sand (fine) w/ silt
						5		
M	3,600		N		6	6	SP-SM	Lt brown, sand w/ silt mod plastic
						7		
M	820		N		8	8	SP-SM	Lt brown, sand w/ silt mod plastic
						9		
D	480		N		10	10	SP-SM	Compact sand(fine) w/ silt, lt. pink-brown. Clumped in distinguishable layers
						11		
D	204		N		12	12	SP	Sand (coarse)

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BH or PH Name: PH22	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 12'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	BDL		N		0.5		SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		1	1	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		2	2	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		3	3	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		4	4	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no odor, low plasticity
						5		
D	BDL		N		6	6	SP-SM	Lt brown, poorly-graded sand (fine) with gravel, no plasticity, no odor
						7		
D	BDL		N		8	8	SP-SM	Lt brown, poorly-graded sand (fine) with white gravel, no plasticity, no odor
						9		
D	BDL		N		10	10	SP	Poorly-graded sand, compact, light pink to brown
						11		
D	BDL		N		12	12	SP	Poorly-graded sand, compact, light pink to brown

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BH or PH Name: PH23	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 16'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	BDL		N		0.5	0.5	SP-SM	Brown, poorly-graded sand (med) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		1	1	SP-SM	Brown, poorly-graded sand (med) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		2	2	SP-SM	Brown, poorly-graded sand (med) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		3	3	SP-SM	Brown, poorly-graded sand (med) w/ silt. Trace organics, no odor, low plasticity
M	BDL		N		4	4	SP-SM	Brown, poorly-graded sand (med) w/ silt. Trace organics, no odor, low plasticity
						5		
M	BDL		N		6	6	SP-SM	Brown, poorly-graded sand (med) w/ silt and caliche clasts. Trace organics, no odor, low plasticity
						7		
M	2,710		N		8	8	SP-SM	Brown, poorly-graded sand (med) w/ silt and caliche clasts. Trace organics, no odor, low plasticity
						9		
M	4,388		N		10	10	SP-SM	Brown, poorly-graded sand (med) w/ silt and caliche clasts. Trace organics, no odor, low plasticity
						11		
M	5,760		N		12	12	SC	Grey and red clay

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BH or PH Name: PH23	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 16'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	5,760		N		12	12	SC	Grey and Red clay
						13		
D	720		N		14	14	SP	Poorly graded sand. No plasticity
						15		
D	BDL		N		16	16	SP	Poorly graded sand. No plasticity
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH24	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 16'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	2,452		N		0.5		SP-SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	3,130		N		1	1	SP-SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	2,088		N		2	2	SP-SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	2,452		N		3	3	SP-SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	3,398		N		4	4	SP-SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
						5		
M	9,684		N		6	6	SP-SM	Lt. brown poorly graded sand (m) w/ silt, no plasticity
						7		
D	2,262		N		8	8	SP-SM	Lt. brown and white poorly graded sand (f) w/ silt, no plasticity
						9		
D	1,064		N		10	10	SM	Reddish brown silty sand
						11		
D	2,452		N		12	12	SM	Pink brown silty sand

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BH or PH Name: PH24	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001
Logged By: AB	Track Hoe
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride
Hole Diameter: NA	Total Depth: 16'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	1,164		N		12	12	SM	Pink brown silty sand
						13		
D	BDL		N		14	14	SP	Poorly graded sand. (med)
						15		
D	BDL		N		16	16	SP	Yellow Poorly graded sand. (med)
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH25	Date: 2/14/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 16'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
M	3,696		N		0.5	0.5	SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	7,764		N		1	1	SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	7,764		N		2	2	SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	5,248		N		3	3	SM	Brown, poorly-graded sand (med) w/ silt. Organics, low plasticity
M	3,696		N		4	4	SP-SM	Brown, poorly-graded sand (med) w/ silt and gravel. Organics, low plasticity
						5		
M	3,696		N		6	6	SP-SM	Lt. brown, poorly-graded sand (med) w/ silt.
						7		
D	646		N		8	8	SP-SM	Yellow brown, poorly-graded sand (med) w/ silt.
						9		
D	970		N		10	10	SP-SM	Reddish brown, poorly-graded sand (fine) w/ silt.
						11		
D	882		N		12	12	SP-SM	Lt. pink/ brown poorly-graded sand (fine) w/ silt

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BH or PH Name: PH25	Date: 2/14/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 16'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	882		N		12	12	SP-SM	Lt. pink/ brown poorly-graded sand (fine) w/ silt
						13		
D	BDL		N		14	14	SLTS	Silt Stone. yellow, pink, white
						15		
D	BDL		N		16	16	SP	Lt. pink, poorly graded sand. (med)
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

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BH or PH Name: PH26	Date: 2/13/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
D	204		N		0.5	0.5	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no plasticity
D	204		N		1	1	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no plasticity
D	BDL		N		2	2	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no plasticity
D	BDL		N		3	3	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no plasticity
D	BDL		N		4	4	SP-SM	Brown, poorly-graded sand (fine) w/ silt. Trace organics, no plasticity
						5		
D	344		N		6	6	SP-SM	Lt. brown, poorly-graded sand (fine) w/ silt. No platicity, no odor.
						7		
D	756		N		8	8	SP-SM	Lt. brown/white, poorly-graded sand (fine) w/ silt. No platicity, no odor.
						9		
D	580		N		10	10	SP-SC	Lt. brown, poorly-graded, compact sand w/ clay. Red, dry clay clasts
						11		
D	304		N		12	12	SP	Poorly graded sand(med), no plasticity.

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BH or PH Name: PH27	Date: 2/14/2020
Site Name:	RDU-42
RP or Incident Number:	2RP-3564
LTE Job Number:	34820001

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AB	Track Hoe		
Lat/Long: 32.026123308, -103.8718851	Field Screening: Chloride	Hole Diameter: NA	Total Depth: 12'

Comments:
BDL-Below Detection Limit

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CHE	Pad Caliche
D	BDL		N		0.5		SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
D	BDL		N		1	1	SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
D	BDL		N		2	2	SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
D	BDL		N		3	3	SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
D	BDL		N		4	4	SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
						5		
D	BDL		N		6	6	SP-SM	Brown, poorly-graded sand (fine-med) w/ gravel. No odor, no plasticity
						7		
D	BDL		N		8	8	SP	Poorly graded sand (med)
						9		
D	BDL		N		10	10	SP	Poorly graded sand (med)
						11		
D	BDL		N		12	12	SP	Poorly graded sand (med)

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 337554

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 337554
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAB1605654667**
Incident Name	**NAB1605654667 ROSS DRAW UNIT #042 @ 30-015-42945**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-015-42945] ROSS DRAW UNIT #042**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	ROSS DRAW UNIT #042
Date Release Discovered	02/20/2016
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	Cause: Equipment Failure | Other (Specify) | Crude Oil | Released: 3 BBL | Recovered: 2 BBL | Lost: 1 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure | Other (Specify) | Produced Water | Released: 10 BBL | Recovered: 9 BBL | Lost: 1 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 (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 337554
	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 safety 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
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation 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.	

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: 04/25/2024

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QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 337554
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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 and 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	Greater than 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 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the 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 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 milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	13600
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	2190
GRO+DRO (EPA SW-846 Method 8015M)	1340
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 efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	03/20/2024
On what date will (or did) the final sampling or liner inspection occur	02/29/2024
On what date will (or was) the remediation complete(d)	03/20/2024
What is the estimated surface area (in square feet) that will be reclaimed	12869
What is the estimated volume (in cubic yards) that will be reclaimed	1906
What is the estimated surface area (in square feet) that will be remediated	12869
What is the estimated volume (in cubic yards) that will be remediated	1906
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
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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QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 337554
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
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 efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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: 04/25/2024
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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QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 337554
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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	No

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QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 337554
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**323582**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**03/20/2024**
What was the (estimated) number of samples that were to be gathered	**20**
What was the sampling surface area in square feet	**23622**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all 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	16926
What was the total volume (cubic yards) remediated	157
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	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	The Site was remediated according to Site Closure Criteria and has been backfilled with clean, locally sourced material.

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 04/25/2024

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QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 337554
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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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CONDITIONS

Action 337554

CONDITIONS

Operator:	OGRID:
WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	246289
	Action Number: 337554
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation closure approved.	4/30/2024
amaxwell	• The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	4/30/2024