

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

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

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141

Revised August 8, 2011

OCT 10 2014

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

RECEIVED

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	RKI E&P, LLC	Contact	Zack Laird
Address	210 Park Ave. - Ste. 900, OKC, OK 73102	Telephone No.	405-742-2696
Facility Name	Federal G Gas Com #1	Facility Type	Oil and Gas Well
Surface Owner	Federal	Mineral Owner	Federal
		API No.	30-015-20848

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	21	20S	30E		1650 FSL		1900FEL	Eddy

Latitude 32.5561146081723 Longitude -103.974812991781

NATURE OF RELEASE

Type of Release	Oil and Produced Water	Volume of Release	15Bbls	Volume Recovered	14Bbls
Source of Release	Produced Water Tank	Date and Hour of Occurrence	10/09/14 - Unknown	Date and Hour of Discovery	10/09/14 - 0900hrs
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully: * N/A.

Describe Cause of Problem and Remedial Action Taken.*

Produced Water tank developed a hole and allowed PW to leak from tank into secondary containment (earthen). A vacuum truck was used to recover free liquids and empty tank.

Describe Area Affected and Cleanup Action Taken.*

All fluid remained in earthen tank dike, free fluids were recovered with vacuum truck.

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:	OIL CONSERVATION DIVISION		
Printed Name: Zack Laird	Approved by Environmental Specialist:		
Title: Sr. EHS Manager	Approval Date: 10/10/14	Expiration Date: NA	
E-mail Address: ZLaird@rkixp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 10/09/14	Phone: 405-987-2213		

Remediation per O.C.D. Rules & Guidelines

SUBMIT REMEDIATION PROPOSAL NO

LATER THAN:

* Attach Additional Sheets If Necessary


2RP-2542

Incident ID	nAB1428733041
District RP	
Facility ID	
Application ID	

<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p>	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> 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.	
<div style="display: flex; justify-content: space-between;"> <div> Printed Name: _____ Jim Raley _____ Signature:  _____ email: _____ jim.raley@dvn.com _____ </div> <div> Title: _____ Environmental Specialist _____ Date: _____ 7/26/2023 _____ Telephone: _____ 575-689-7597 _____ </div> </div>	
<div style="border: 1px solid black; padding: 5px;"> <u>OCD Only</u> Received by: _____ Date: _____ </div>	

Incident ID	nAB1428733041
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?	<u>93.8</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	nAB1428733041
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: James Raley Title: Environmental Specialist

Signature:  Date: 07/21/2023

email: jim.raley@dm.com Telephone: 575-689-7597

OCD Only

Received by: Shelly Wells Date: 7/27/2023

Incident ID	nAB1428733041
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 Specialist

Signature:  Date: 7/26/2023

email: jim.raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: Shelly Wells Date: 7/27/2023

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: 8/17/2023

Printed Name: Ashley Maxwell Title: Environmental Specialist



CLOSURE REQUEST REPORT

Site Location:

**Federal G Gas Com #1
Eddy County, New Mexico
Incident Number:
nAB1428733041**

July 13, 2023
Ensolum Project No. 03A1987002

Prepared for:

**WPX Energy Permian, LLC
5315 Buena Vista Dr.
Carlsbad, New Mexico 88220
Attention: Jim Raley**

Prepared by:

Ashley N. Giovengo
Senior Engineer

Daniel R. Moir, PG
Senior Managing Geologist

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REFERENCE MATERIALS

FIGURES

Figure 1: Site Receptor Map

Figure 2: Excavation Soil Sample Locations

TABLES

Table 1: Soil Sample Analytical Results – Excavation Floor Soil Samples

Table 2: Soil Sample Analytical Results – Sidewall Soil Samples

APPENDICES

Appendix A: C-141 Form

Appendix B: Groundwater Measurement Form

Appendix C: Vertex's *Spill Assessment Report*, dated April 25, 2018

Appendix D: LT Environmental, Inc. Data

Appendix E: Photographic Log

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

Appendix G: Email Correspondence

1.0 INTRODUCTION

1.1 Site Description

Ensolum, LLC (Ensolum) has prepared this *Closure Request Report* (CRR) to document assessment, corrective actions performed to date, and subsequent soil sampling activities conducted by WPX Energy Permian, LLC (WPX) at the Federal G Gas Com #1 (Site), located in Unit J, Section 21, Township 20 South, Range 30 East, in Eddy County, New Mexico (**Figure 1**). Based on all remedial actions and results of soil sampling events completed for the release of produced water at the Site, WPX respectfully requests no further action (NFA) for Incident Number nAB1428733041.

1.2 Release Background

On October 9, 2014, a produced water tank developed a hole, which resulted in the release of approximately 15 barrels (bbls) of produced water inside the bermed, earthen, tank battery containment. A vacuum truck was immediately dispatched to the Site and recovered 14 bbls of fluid contained from the unbreached containment. The incident was reported to the New Mexico Oil Conservation Division (NMOCD) on a *Release Notification and Corrective Action Form* (Form C-141) on October 9, 2014, by the former operator, RKI E&P, LLC, and was subsequently assigned Incident Number nAB1428733041 (**Appendix A**).

1.3 Site Characterization

The Site was characterized to assess the applicability of 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). Results from the characterization desktop review are presented on page 3 of Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on **Figure 1**.

The New Mexico Office of the State Engineer (NMOSE) indicates the nearest depth to groundwater measurement is 93.8 feet below ground surface (bgs) and the depth to groundwater soil boring, NMOSE file number CP-1937, is located approximately 73 ft northwest of the Site as shown in **Figure 1**. The well log file and record is provided in **Appendix B**. The soil boring was installed on December 29, 2022, and was utilized to determine depth to groundwater beneath the Site and subsequent to groundwater measurement, the soil boring was properly plugged and abandoned and is not considered a potential conduit between the ground surface and shallow groundwater.

The closest continuously flowing or significant watercourse to the Site is an intermittent stream, located approximately 0.56 miles west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from any occupied residence, school, hospital, institution, church, and 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. The Site is not underlain by unstable geology (medium potential karst designation area).

Based on the desktop review of nearby receptors and depth to groundwater determination at the Site, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total Petroleum Hydrocarbon (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg

- TPH: 2,500 mg/kg
- Chloride: 10,000 mg/kg

Per 19.15.29.13 NMAC, a reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the caliche pad that was impacted by the release.

2.0 DELINEATION ACTIVITIES

On August 17, 2017, Vertex Resources Services Inc. (Vertex) assessed the release extent to confirm the presence or absence of impacted soil from the 2014 release. Vertex advanced six soil borings (BH17-01, BH17-03, and BH17-05 through BH17-08) via hand methods (auger and/or shovel) to total depths of 2 feet bgs. The soil samples were submitted to ALS Laboratory Group (ALS) in Holland Michigan for the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8260B, TPH following EPA method 8015, and chloride following National Environmental Methods Index (NEMI) A4500-CL E-97.

Laboratory analytical results from the Vertex sampling event indicated detections of TPH and chloride were present in soil. At the time of sampling, there were no water wells within ½-mile of the Site and the chloride concentration in soil boring BH17-03 indicated the soil could have potentially exceeded the previous Closure Criteria. Vertex's *Spill Assessment Report*, dated April 25, 2018, is included in **Appendix C**.

WPX contracted with LT Environmental, Inc. (LTE) in 2018 to complete additional delineation activities based on the elevated chloride concentration in soil boring BH17-03. On October 12, 2018, LTE advanced seven soil borings (SS01 through SS07) and collected two samples from each location; one sample was collected at 0.5 feet bgs and one was collected at 1-foot or 1.5 feet bgs. The soil samples were submitted to Xenco Laboratories (Xenco) in Midland Texas for analysis of BTEX, TPH, and chloride following EPA Method 300.0.

Laboratory analytical results from LTE's sampling event indicated concentrations of TPH-GRO and TPH-DRO and/or total TPH exceeded the Closure Criteria in soil from soil samples SS03 and SS04, located inside the secondary containment. Based on the laboratory analytical results, remediation of impacted soil appeared warranted. Data available from LTE's sampling event is included in **Appendix D**.

3.0 EXCAVATION ACTIVITIES

3.1 Excavation and Reclamation

Following delineation activities completed by LTE in 2018, follow-up remediation was completed in the form of excavation of TPH-impacted soil. Excavation of impacted soil occurred in January 2019; however, it appears excavation was limited in extent due to the presence of active flow lines, production equipment, and produced water tank. Following completion of excavation activities to the maximum extent practicable (MEP), LTE collected confirmation floor soil samples FS01 through FS05 at depths ranging from 2 feet to 3.5 feet bgs and confirmation sidewall soil samples SW01 through SW03 at depths ranging from the ground surface to 3.5 feet bgs. The soil samples were analyzed for BTEX, TPH, and chloride.

Laboratory analytical results indicated concentrations of TPH-GRO and TPH-DRO exceeded the Closure Criteria in confirmation soil samples FS01 and SS02, located next to the produced water tank, and confirmation soil samples FS04, FS05, and SW03, located next to an active flow line. Due to the safety concerns with excavating the residual impacts around active production equipment and lines, WPX was prepared to defer the remaining remediation until their anticipated plugging and abandonment of the onsite production well. Based on the depth of residual impacts

below the ground surface and the known depth to groundwater to be greater than 50 feet bgs, WPX believed these actions were equally protective of human health, the environment, and groundwater. Data available from LTE's excavation and soil sampling event are presented in **Appendix D**.

The production well was decommissioned and properly plugged and abandoned at the end of 2022. As such, WPX contracted Ensolum to complete remediation activities related to the residual TPH-impacts in soil. From March 9, 2023, through June 13, 2023, Ensolum personnel oversaw the remediation and reclamation of the entire earthen tank battery containment. Excavation activities were directed by referencing laboratory analytical results from previous excavation confirmation and delineation soil sampling results. The excavation was completed with heavy mechanical equipment and soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

Following removal of residual and waste-containing soil, Ensolum personnel collected composite confirmation soil samples at a sampling frequency of every 200 square feet from the floor and from the sidewalls of the exaction. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS26 were collected from the floor of the excavation at depths ranging from 3 feet to 23 feet bgs. Composite sidewall soil samples SW01 through SW25 were collected at depths ranging from the ground surface to 15 feet bgs. The excavation extent and confirmation soil sample locations are presented on **Figure 2**. A photographic log of the excavation is included in **Appendix E**.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures, to Envirotech Laboratory Analysis (Envirotech) in Carlsbad, New Mexico, for analysis BTEX following EPA Method 8021B; TPH; and chloride.

3.2 Waste Handling

The final excavation extent measured approximately 6,658 square feet in areal extent. Approximately 4,000 yards of contaminated soil were removed. All impacted and waste-containing soil was hauled to the R360 Landfill Disposal Facility in Hobbs, New Mexico under WPX-approved manifests.

3.3 Laboratory Analytical Results

Laboratory analytical results for excavation floor samples FS18, through FS20 and sidewall samples SW07, SW12, SW15, SW18, SW21, and SW23 indicated TPH concentrations exceeded the applicable Site Closure Criteria. As a result, the excavation was advanced in those sample locations. Following the removal of impacted soil, Ensolum personnel recollected confirmation samples FS18 through FS20 and sidewall samples SW07, SW12, SW15, SW18, SW21 and SW23 following the same procedures as described above. All confirmation soil samples collected from the floor of the excavation and from the sidewalls were in compliance with the applicable Site Closure Criteria and meet the reclamation requirements in the top 4 feet as set forth in 19.15.29.13 NMAC.

The analytical results are summarized in **Table 1 & Table 2**, the executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix F**. Email correspondence with NMOCD is provided in **Appendix G**.

4.0 CLOSURE REQUEST

The primary objectives of Ensolum's scope of services were to document remediation activities performed at the Site in accordance with the applicable NMOCD regulatory guidelines, specifically remediating residual soil impacts that could not be accessed during the previous excavation activities in 2019. Based on the results documented in this CRR, the following findings and conclusions regarding the subject release are presented:

- The Site has been laterally and vertically delineated to the strictest Closure Criteria per NMOCD Table I.
- Laboratory analytical results for confirmation floor soil samples FS01 through FS27 and sidewall soil samples SW01 through SW25 were in compliance with the Site Closure Criteria and with the reclamation standard.
- The excavation area will be backfilled and reseeded in the fall with a Bureau of Land Management (BLM)-approved seed mixture in order to revegetate the reclaimed Site.

Based on the conclusions presented, WPX believes the remediation activities described above have met the requirements set forth in NMAC 19.15.29.13 to be protective of human health, the environment, and groundwater. As such, WPX respectfully requests closure of Incident Number nAB1428733041.



FIGURES

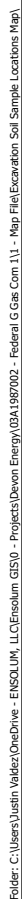


FIGURE 2



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Federal G Gas Com #1
 Devon Energy
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Excavation Floor Soil Samples										
FS01	3/27/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS02	3/27/2023	4	<0.0250	<0.0500	<20.0	391	183	391	574	154
FS03	3/27/2023	4	<0.0250	<0.0500	<20.0	137	53	137	190	78.7
FS04	3/27/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	373
FS05	3/27/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	544
FS06	3/27/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	187
FS07	3/27/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	33.6
FS08	3/29/2023	4	<0.0250	<0.0500	<20.0	99.5	132	99.5	231.5	84.1
FS09	3/29/2023	4	<0.0250	<0.0500	<20.0	334	265	334	299	134
FS10	3/29/2023	4	<0.0250	<0.0500	<20.0	756	463	756	1,219	150
FS11	3/29/2023	15	<0.0250	<0.0500	<20.0	183	<50.0	183	183	43.3
FS12	3/29/2023	15	<0.0250	<0.0500	<20.0	509	85.1	509	594.1	46.4
FS13	3/29/2023	15	<0.0250	<0.0500	<20.0	187	<50.0	187	187	52.1
FS14	3/29/2023	15	<0.0250	<0.0500	<20.0	220	79.2	220	299	49.9
FS15	3/29/2023	6	<0.0250	<0.0500	<20.0	221	187	221	408	66
FS16	3/29/2023	6	<0.0250	<0.0500	<20.0	44.5	<50.0	44.5	44.5	93.2
FS17	3/29/2023	6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	365
FS18 *	3/29/2023	2	<0.0250	<0.0500	<20.0	493	258	493	751	58.9
FS18	6/13/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	235
FS19 *	3/29/2023	2	<0.0250	<0.0500	<20.0	514	293	514	807	51.5
FS19	6/13/2023	6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	145



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS - Continued
 Federal G Gas Com #1
 Devon Energy
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Excavation Floor Soil Samples										
FS20 *	3/29/2023	2	<0.0250	<0.0500	<20.0	430	275	430	705	38.8
FS20 *	6/13/2023	3	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	91.7
FS21	3/29/2023	12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	248
FS22	3/29/2023	12	<0.0250	<0.0500	<20.0	26.4	<50.0	26.4	26.4	232
FS23	3/29/2023	12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	77.7
FS24	3/29/2023	12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	79.2
FS25	3/29/2023	12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	678
FS26	3/29/2023	12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	667
FS27	5/15/2023	15	<0.0250	5.646	418	3030	<50.0	3448	3,448	154
FS27	5/25/2023	23	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	20.5

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

<": Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.

* Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes



TABLE 2
SOIL SAMPLE ANALYTICAL RESULTS
 Federal G Gas Com #1
 Devon Energy
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Sidewall Soil Samples										
SW01 *	3/27/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SW01 *	5/12/2023	0-5.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SW02 *	3/27/2023	0-4	<0.0250	<0.0500	<20.0	45.8	<50.0	45.8	45.8	<20.0
SW02 *	5/12/2023	0-5.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	219
SW03 *	3/27/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	165
SW04 *	3/27/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	139
SW05 *	3/29/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	124
SW06 *	3/29/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	233
SW07 *	3/29/2023	0-4	<0.0250	<0.0500	<20.0	50.3	62.4	50.3	112.7	148
SW07 *	5/12/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	130
SW08	3/29/2023	4-15	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	134
SW09	3/29/2023	4-15	<0.0250	<0.0500	<20.0	34.2	<50.0	34.2	34.2	<20.0
SW10	3/29/2023	4-15	<0.0250	<0.0500	<20.0	47.5	<50.0	47.5	47.5	<20.0
SW11	3/29/2023	4-15	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SW12 *	3/29/2023	0-6	<0.0250	<0.0500	<20.0	83.4	63.1	83.4	146.5	89.2
SW12 *	5/15/2023	0-6	<0.0250	<0.0500	<20.0	50.8	<50.0	50.8	50.8	113
SW13 *	3/29/2023	0-6	<0.0250	<0.0500	<20.0	25.7	<50.0	25.7	25.7	103
SW14 *	3/29/2023	0-6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	35.9



TABLE 2
SOIL SAMPLE ANALYTICAL RESULTS - Continued
 Federal G Gas Com #1
 Devon Energy
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Sidewall Soil Samples										
SW15	3/29/2023	6-15	<0.0250	<0.0500	<20.0	235	237.0	235	472	66.5
SW16	3/29/2023	6-15	<0.0250	<0.0500	<20.0	39.8	<50.0	39.8	39.8	208
SW17	3/29/2023	6-15	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	129
SW18 *	3/29/2023	0-2	<0.0250	<0.0500	<20.0	274	190.0	274	464	274
SW18 *	5/15/2023	0-6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	129
SW19 *	3/29/2023	2-12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	121
SW20 *	3/29/2023	2-12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	136
SW21	3/29/2023	4-12	<0.0250	<0.0500	<20.0	179	82.1	179	261.1	<20.0
SW21	5/15/2023	4-12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	125
SW22	3/29/2023	4-12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	98.3
SW23	3/29/2023	4-12	<0.0250	<0.0500	<20.0	168	99.8	168	267.8	<20.0
SW23	5/15/2023	4-12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	43
SW24 *	3/29/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SW25	3/29/2023	4-12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	327

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

<: Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.

* Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes



APPENDIX A

C-141 Form

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

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

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141

Revised August 8, 2011

OCT 10 2014

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

RECEIVED

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	RKI E&P, LLC	Contact	Zack Laird
Address	210 Park Ave. - Ste. 900, OKC, OK 73102	Telephone No.	405-742-2696
Facility Name	Federal G Gas Com #1	Facility Type	Oil and Gas Well
Surface Owner	Federal	Mineral Owner	Federal
		API No.	30-015-20848

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	21	20S	30E		1650 FSL		1900FEL	Eddy

Latitude 32.5561146081723 Longitude -103.974812991781

NATURE OF RELEASE

Type of Release	Oil and Produced Water	Volume of Release	15Bbls	Volume Recovered	14Bbls
Source of Release	Produced Water Tank	Date and Hour of Occurrence	10/09/14 - Unknown	Date and Hour of Discovery	10/09/14 - 0900hrs
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.* N/A.

Describe Cause of Problem and Remedial Action Taken.*

Produced Water tank developed a hole and allowed PW to leak from tank into secondary containment (earthen). A vacuum truck was used to recover free liquids and empty tank.

Describe Area Affected and Cleanup Action Taken.*

All fluid remained in earthen tank dike, free fluids were recovered with vacuum truck.

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:	OIL CONSERVATION DIVISION		
Printed Name: Zack Laird	Approved by Environmental Specialist:		
Title: Sr. EHS Manager	Approval Date: 10/10/14	Expiration Date: NA	
E-mail Address: ZLaird@rkixp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 10/09/14	Phone: 405-987-2213		

Remediation per O.C.D. Rules & Guidelines

SUBMIT REMEDIATION PROPOSAL NO

LATER THAN:

11/10/14

2RP-2542


* Attach Additional Sheets If Necessary

Incident ID	nAB1428733041
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> 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 Specialist _____ Signature:  _____ Date: 7/26/2023 email: _____ jim.raley@dvn.com _____ Telephone: _____ 575-689-7597 _____
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	nAB1428733041
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?	<u>93.8</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	nAB1428733041
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: James Raley Title: Environmental Specialist

Signature:  Date: 07/21/2023

email: jim.raley@dm.com Telephone: 575-689-7597

OCD Only

Received by: Shelly Wells Date: 7/27/2023

Incident ID	nAB1428733041
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 Specialist

Signature:  Date: 7/26/2023

email: jim.raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: Shelly Wells Date: 7/27/2023

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: _____



APPENDIX B

Groundwater Measurement Form



2904 W 2nd St.
Roswell, NM 88201
voice: 575.624.2420
fax: 575.624.2421
www.atkinseng.com

January 19, 2023

DII-NMOSE
1900 W 2nd Street
Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record CP-1937 Pod-1

To whom it may concern:

Attached please find a well log & record, in duplicate, for a one (1) soil borings, CP-1937 Pod-1.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: as noted above

OSE DTI JAN 19 2023 AM 10:51



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

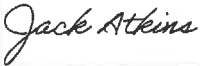
1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-1		WELL TAG ID NO. n/a		OSE FILE NO(S). CP-1937			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 33	SECONDS 22.54	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	58	29.92	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE NW SE Sec. 21 T20S R30E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 12/29/2022	DRILLING ENDED 12/29/2022	DEPTH OF COMPLETED WELL (FT) Soil Boring		BORE HOLE DEPTH (FT) ±101	DEPTH WATER FIRST ENCOUNTERED (FT) n/a		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 93.8	DATE STATIC MEASURED 1/10/2023		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0 101		6.5"	Soil boring	--	--	--	--
	0 81		6.5"	1" PVC SCH 80 temporary material	flush tread 2 TPI	0.935	0.179	--
	81 101		6.5"	1" PVC SCH 80 temporary material	flush tread 2 TPI	0.935	0.179	0.010"
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		

USE DT JAN 13 2023 AM 10:51

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
	0	4	4	Sand, fine-grained, poorly graded, dry, tan	Y	✓ N	
	4	24	20	Caliche, consolidated with fine-grained sand, dry, white/tan	Y	✓ N	
	24	50	26	Sand, fine-grained, poorly graded, witch caliche, dry, tan	Y	✓ N	
	50	55	5	Sand, fine-grained, poorly graded, dry, reddish brown	Y	✓ N	
	55	60	5	Sand, fine-grained, poorly graded, poorly cemented, dry, reddish brown	Y	✓ N	
	60	101	41	Clay, Stiff, (Red Bed) dry, Reddish Brown	✓ Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:				TOTAL ESTIMATED WELL YIELD (gpm): 0.00		
	5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
		MISCELLANEOUS INFORMATION: Temporary boring to determine presence and depth to groundwater. Top of boring and material sealed with bentonite. Temporary well materials to be pulled and boring to be plugged on approximately 02/01/2023, using Type I/II neat cement per OSE approved plugging plan of operations. Plugging record to be filed afterwards."					
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:						
	 SIGNATURE OF DRILLER / PRINT SIGNEE NAME			Jackie D. Atkins DATE			






WR-20 Well Record and Log-forsign

Final Audit Report

2023-01-19

Created:	2023-01-19
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAcBg8HZCMcE_lq-qgyEsg9YTs3DdqnsBU

"WR-20 Well Record and Log-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)
2023-01-19 - 5:13:35 PM GMT- IP address: 64.17.82.146
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2023-01-19 - 5:14:55 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)
2023-01-19 - 5:16:30 PM GMT- IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2023-01-19 - 5:16:50 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.
2023-01-19 - 5:16:50 PM GMT

DSE DTI JAN 19 2023 am10:51



APPENDIX C

Vertex's Spill Assessment Report,
dated April 25, 2018



April 25, 2018

Spill Assessment Report: Federal G Gas Com 001 (Section 21 T20S R 30E)
API: 30-015-20848
Incident Report: 2RP-2542

Prepared For: **WPX Energy Inc.**
5315 Buena Vista
Carlsbad, New Mexico 88220

Mr. Jim Raley,

RKI Exploration, LLC, a subsidiary of WPX Energy Inc., retained Vertex Resource Services Inc. (Vertex) to conduct a Spill Assessment for an uncontrolled release from a produced water tank that developed a hole and allowed produced water to leak from the tank into secondary containment (earthen) on Federal G Gas Com 001, API 30-015-20848 (hereafter referred to as "site"). This letter provides a description of the Spill Assessment conducted to date.

Site Information

The site is located approximately 18 miles northeast of Carlsbad, New Mexico. The legal location for the site is Section 21, Township 20 South and Range 30 East in Eddy County, New Mexico (approximately 32° 33' 22.014"N 103° 58' 29.3268"W). The affected property is leased from the Bureau of Land Management (BLM). An aerial photograph and site schematic are included in Attachment 1.

The Geological Map of New Mexico (New Mexico Bureau of Geology and Mineral Resources, 2014-2017) indicates the site's surface geology is comprised primarily of Calcareous alluvium deposits. This usually includes deposits of lower gradient tributaries, alluvial veneers of the calcareous slope, and alluvial fans. The Natural Resource Conservation Services identifies the local soils as Largo loam soils, 1-5 percent slope (loamy, carbonatic). These soils are typically loamy deep soils and soils that are shallow to the caliche. These descriptions are consistent with observations during the site visit. Site photographs obtained during the Spill Assessment are included in Attachment 2.

Incident Description

The spill, reported October 9, 2014, involved the uncontrolled release of approximately 15 barrels (bbls) of produced water from an aboveground tank. The release was caused by the produced water creating a hole in the storage tank. Approximately 15 bbls of produced water were estimated to have been released; 14 bbls were recovered by a vacuum truck. The initial C-141 Report: 2RP-2542 is included in Attachment 3.

vertex.ca

7223 Empire Central Drive, Houston, Texas 77040, USA | P 832.588.0674

WPX Energy Inc.
Federal G Gas Com 001 API: 30-015-20848

2018 Spill Closure Report
March 2018

Site Assessment

Initial spill response activities included the emptying of the produced water tank and removal of the produced water (14 bbls of 15 bbls) was completed by vacuum truck. The site was delineated using a hand augur and was determined that the spill is contained within the berm of the tank area.

A site visit completed on August 21, 2017, aimed to identify evidence of the spill in and around the location specified in the initial C-141. There was no evidence of crystallization of salts or surface staining. It was noted that there was infrastructure present on the site.

Using hand sampling techniques, soil samples were collected and submitted to ALS Laboratories. All of the collected soil samples from the six (6) sample locations were analyzed for chloride. The laboratory results for chloride are summarized in Table 1 and the complete laboratory reports are included in Attachment 7. Results have not been interpreted as guidelines have not been established for the site.

Table 1 - Chloride Soil Sampling Results August 21, 2017

Sample ID	Depth	Test	Result	Units
BH17-01	0-2'	Chloride	26	mg/Kg- dry
BH17-03	0-2'	Chloride	6600	mg/Kg- dry
BH17-05	0-2'	Chloride	33	mg/Kg- dry
BH17-06	0-2'	Chloride	14	mg/Kg- dry
BH17-07	0-2'	Chloride	ND	mg/Kg- dry
BH17-08	0-2'	Chloride	130	mg/Kg- dry

Sincerely,



Carl Davison, B.Sc.
PROJECT MANAGER

Attachments

- Attachment 1. Aerial Photograph
- Attachment 2. Site Photographs
- Attachment 3. Initial C-141 Report
- Attachment 4. Site Visit Daily Field Report
- Attachment 5. Laboratory Results

WPX Energy Inc.
Federal G Gas Com 001 API: 30-015-20848

2018 Spill Closure Report
March 2018

References

New Mexico Oil Conservation Division. (1993). *Guidelines for Remediation of Leaks, Spills and Releases*. Santa Fe, New Mexico.

New Mexico Water Rights Reporting System. (2010). *Water Column/Average Depth to Water Report*. Retrieved from <http://nmwrrs.ose.state.nm.us/index.html>

New Mexico Water Rights Reporting System. (2010). *Point of Diversion Location Report*. Retrieved from <http://nmwrrs.ose.state.nm.us/index.html>

New Mexico Bureau of Geology and Mineral Resources. (2014-2017). *Interactive Geologic Map*. Retrieved from <http://geoinfo.nmt.edu>

USDA Natural Resources Conservation Service. (2017) *Web Soil Survey*. Retrieved from <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

WPX Energy Inc.
Federal G Gas Com 001 API: 30-015-20848

2018 Spill Closure Report
March 2018

Limitations

This report has been prepared for the sole benefit of WPX Energy Inc. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division, without the express written consent of Vertex Resource Services Inc. (Vertex) and WPX Energy Inc. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

ATTACHMENT 1



Legend

◆ Borehole

0 25 50 100 ft
SCALE 1:1,000

Notes: Aerial Image from Google, 2015



**Site Schematic
with Borehole
Fed G Gas Com #1**



DRAWN: KU	FIGURE: 1
APPROVED: RF	
DATE: OCT 31/17	

VERSATILITY. EXPERTISE.

ATTACHMENT 2

WPX Energy
Fed G Gas Com 001

Spill Assessment
October 2017



Photo 1. Bermed Area where spill occurred

Photo Date: June 30, 2017



Photo 2. Overview of site

Photo Date: June 30, 2017

WPX Energy
Fed G Gas Com 001

Spill Assesment
October 2017



Photo 3. Bermed Area where spill occurred

Photo Date: June 30, 2017



Photo 4. Bermed Area where spill occurred

Photo Date: June 30, 2017

WPX Energy
Fed G Gas Com 001

Spill Assesment
October 2017



Photo 5. Background Sample Location

Photo Date: August 21, 2017 GPS: N: 32.556115° W: 103.974813°



Photo 6. Background Sample Filled in

Photo Date: August 21, 2017 GPS: N: 32.556115° W: 103.974813°

WPX Energy
Fed G Gas Com 001

Spill Assessment
October 2017



Photo 7. Sample 3 Location in bermed area

Photo Date: August 21, 2017 GPS: N: 32.556115° W: 103.974813°



Photo 8. Sample 3 Location in bermed area filled in

Photo Date: August 21, 2017 GPS: N: 32.556115° W: 103.974813°

ATTACHMENT 3

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

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

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141

Revised August 8, 2011

OCT 10 2014

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

RECEIVED

Release Notification and Corrective Action

NAB1428733041

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	RKI E&P, LLC	Contact	Zack Laird
Address	210 Park Ave. - Ste. 900, OKC, OK 73102	Telephone No.	405-742-2696
Facility Name	Federal G Gas Com #1	Facility Type	Oil and Gas Well

Surface Owner	Federal	Mineral Owner	Federal	API No.	30-015-20848
---------------	---------	---------------	---------	---------	--------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	21	20S	30E		1650 FSL		1900FEL	Eddy

Latitude 32.5561146081723 Longitude -103.974812991781

NATURE OF RELEASE

Type of Release	Oil and Produced Water	Volume of Release	15Bbls	Volume Recovered	14Bbls
Source of Release	Produced Water Tank	Date and Hour of Occurrence	10/09/14 - Unknown	Date and Hour of Discovery	10/09/14 - 0900hrs
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*

Produced Water tank developed a hole and allowed PW to leak from tank into secondary containment (earthen). A vacuum truck was used to recover free liquids and empty tank.

Describe Area Affected and Cleanup Action Taken.*

All fluid remained in earthen tank dike, free fluids were recovered with vacuum truck.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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:	OIL CONSERVATION DIVISION		
Printed Name: Zack Laird	Approved by Environmental Specialist:		
Title: Sr. EHS Manager	Approval Date: 10/10/14	Expiration Date: NA	
E-mail Address: ZLaird@rkixp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 10/09/14	Phone: 405-987-2213		

* Attach Additional Sheets If Necessary

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO
LATER THAN: 11/10/14

2RP-2542

ATTACHMENT 4

Daily Field Report

VERTEX

Client:	WPX	Date:	August 21, 2017
Site Location:	Federal G Gas Com 001	Shift:	Day
Field Consultant:	Robyn Fisher	Project #:	17E-00043
Project Manager:	Carl Davison	AFE #:	

Summary of Daily Operations

–Arrived on-site to Hand Augur the proposed locations.
 –Hand Augured the sample locations, field screened and packed samples into jars.
 –Left site and drove back to Carlsbad

Planned Activities and Recommendations

No further Planned activities or Recommendations at this time.

Cost Summary

Vertex

Name	Hours	Rate	Total	Equipment	Units	Rate	Total
Robyn Fisher	12.5		\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
Total:			\$0.00	Total:			\$0.00

Vertex Total:

\$0.00

Laboratory Analysis

Laboratory	Lab Report	Estimate

Third Party Service

Date	Contractor	Work Description	Ticket #	Estimate
Third Party Service Total:				\$0.00

ATTACHMENT 5



01-Sep-2017

Karolina Blaney
WPX Energy
5315 Buena Vista Dr.
Carlsbad, NM 88220

Re: **Federal G Gas Com #1**

Work Order: **17081599**

Dear Karolina,

ALS Environmental received 6 samples on 25-Aug-2017 09:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 17.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ALS Group, USA

Date: 01-Sep-17

Client: WPX Energy
Project: Federal G Gas Com #1
Work Order: 17081599

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
17081599-01	BH17-01 (0-2 ft)	Soil		8/21/2017	8/25/2017 09:00	<input type="checkbox"/>
17081599-02	BH17-03 (0-2 ft)	Soil		8/21/2017	8/25/2017 09:00	<input type="checkbox"/>
17081599-03	BH17-05 (0-2 ft)	Soil		8/21/2017	8/25/2017 09:00	<input type="checkbox"/>
17081599-04	BH17-06 (0-2 ft)	Soil		8/21/2017	8/25/2017 09:00	<input type="checkbox"/>
17081599-05	BH17-07 (0-2 ft)	Soil		8/21/2017	8/25/2017 09:00	<input type="checkbox"/>
17081599-06	BH17-08 (0-2 ft)	Soil		8/21/2017	8/25/2017 09:00	<input type="checkbox"/>

ALS Group, USA

Date: 01-Sep-17

Client: WPX Energy
Project: Federal G Gas Com #1
WorkOrder: 17081599

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group, USA

Date: 01-Sep-17

Client: WPX Energy

Project: Federal G Gas Com #1

Work Order: 17081599

Sample ID: BH17-01 (0-2 ft)

Lab ID: 17081599-01

Collection Date: 8/21/2017

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 8/28/17 13:10	Analyst: KB
DRO (C10-C28)	ND		5.7	mg/Kg-dry	1	8/29/2017 02:56 AM
ORO (C28-C40)	7.8		5.7	mg/Kg-dry	1	8/29/2017 02:56 AM
Surr: 4-Terphenyl-d14	89.1		34-130	%REC	1	8/29/2017 02:56 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 8/29/17 08:56	Analyst: KB
GRO (C6-C10)	ND		6.9	mg/Kg-dry	1	8/30/2017 09:32 AM
Surr: Toluene-d8	91.0		71-123	%REC	1	8/30/2017 09:32 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 8/29/17 08:56	Analyst: EMR
Benzene	ND		0.041	mg/Kg-dry	1	8/31/2017 01:41 PM
Ethylbenzene	ND		0.041	mg/Kg-dry	1	8/31/2017 01:41 PM
m,p-Xylene	ND		0.083	mg/Kg-dry	1	8/31/2017 01:41 PM
o-Xylene	ND		0.041	mg/Kg-dry	1	8/31/2017 01:41 PM
Toluene	ND		0.041	mg/Kg-dry	1	8/31/2017 01:41 PM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	8/31/2017 01:41 PM
Surr: 1,2-Dichloroethane-d4	102		70-130	%REC	1	8/31/2017 01:41 PM
Surr: 4-Bromofluorobenzene	106		70-130	%REC	1	8/31/2017 01:41 PM
Surr: Dibromofluoromethane	93.0		70-130	%REC	1	8/31/2017 01:41 PM
Surr: Toluene-d8	98.8		70-130	%REC	1	8/31/2017 01:41 PM
CHLORIDE						
			A4500-CL E-97		Prep: EXTRACT 8/29/17 21:00	Analyst: ED
Chloride	26		12	mg/Kg-dry	1	8/30/2017 02:55 PM
MOISTURE						
			SW3550C			Analyst: NW
Moisture	16		0.050	% of sample	1	8/30/2017 06:15 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 01-Sep-17

Client: WPX Energy

Project: Federal G Gas Com #1

Work Order: 17081599

Sample ID: BH17-03 (0-2 ft)

Lab ID: 17081599-02

Collection Date: 8/21/2017

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 8/28/17 13:10	Analyst: KB
DRO (C10-C28)	3,200		56	mg/Kg-dry	10	8/29/2017 10:39 AM
ORO (C28-C40)	890		56	mg/Kg-dry	10	8/29/2017 10:39 AM
Surr: 4-Terphenyl-d14	70.1		34-130	%REC	10	8/29/2017 10:39 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 8/29/17 08:56	Analyst: KB
GRO (C6-C10)	93		6.8	mg/Kg-dry	1	8/30/2017 10:02 AM
Surr: Toluene-d8	108		71-123	%REC	1	8/30/2017 10:02 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 8/29/17 08:56	Analyst: EMR
Benzene	ND		0.041	mg/Kg-dry	1	8/31/2017 07:27 AM
Ethylbenzene	ND		0.041	mg/Kg-dry	1	8/31/2017 07:27 AM
m,p-Xylene	ND		0.081	mg/Kg-dry	1	8/31/2017 07:27 AM
o-Xylene	ND		0.041	mg/Kg-dry	1	8/31/2017 07:27 AM
Toluene	ND		0.041	mg/Kg-dry	1	8/31/2017 07:27 AM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	8/31/2017 07:27 AM
Surr: 1,2-Dichloroethane-d4	111		70-130	%REC	1	8/31/2017 07:27 AM
Surr: 4-Bromofluorobenzene	120		70-130	%REC	1	8/31/2017 07:27 AM
Surr: Dibromofluoromethane	97.9		70-130	%REC	1	8/31/2017 07:27 AM
Surr: Toluene-d8	111		70-130	%REC	1	8/31/2017 07:27 AM
CHLORIDE						
			A4500-CL E-97		Prep: EXTRACT 8/29/17 21:00	Analyst: ED
Chloride	6,600		120	mg/Kg-dry	10	8/30/2017 02:55 PM
MOISTURE						
			SW3550C			Analyst: NW
Moisture	15		0.050	% of sample	1	8/30/2017 06:15 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 01-Sep-17

Client: WPX Energy

Project: Federal G Gas Com #1

Work Order: 17081599

Sample ID: BH17-05 (0-2 ft)

Lab ID: 17081599-03

Collection Date: 8/21/2017

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 8/28/17 13:10	Analyst: KB
DRO (C10-C28)	5.7		5.7	mg/Kg-dry	1	8/29/2017 03:54 AM
ORO (C28-C40)	21		5.7	mg/Kg-dry	1	8/29/2017 03:54 AM
Surr: 4-Terphenyl-d14	89.6		34-130	%REC	1	8/29/2017 03:54 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 8/29/17 08:56	Analyst: KB
GRO (C6-C10)	ND		6.4	mg/Kg-dry	1	8/30/2017 10:31 AM
Surr: Toluene-d8	96.1		71-123	%REC	1	8/30/2017 10:31 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 8/29/17 08:56	Analyst: EMR
Benzene	ND		0.038	mg/Kg-dry	1	8/31/2017 07:43 AM
Ethylbenzene	ND		0.038	mg/Kg-dry	1	8/31/2017 07:43 AM
m,p-Xylene	ND		0.076	mg/Kg-dry	1	8/31/2017 07:43 AM
o-Xylene	ND		0.038	mg/Kg-dry	1	8/31/2017 07:43 AM
Toluene	ND		0.038	mg/Kg-dry	1	8/31/2017 07:43 AM
Xylenes, Total	ND		0.11	mg/Kg-dry	1	8/31/2017 07:43 AM
Surr: 1,2-Dichloroethane-d4	107		70-130	%REC	1	8/31/2017 07:43 AM
Surr: 4-Bromofluorobenzene	102		70-130	%REC	1	8/31/2017 07:43 AM
Surr: Dibromofluoromethane	94.4		70-130	%REC	1	8/31/2017 07:43 AM
Surr: Toluene-d8	99.0		70-130	%REC	1	8/31/2017 07:43 AM
CHLORIDE						
			A4500-CL E-97		Prep: EXTRACT 8/29/17 21:00	Analyst: ED
Chloride	33		11	mg/Kg-dry	1	8/30/2017 02:55 PM
MOISTURE						
			SW3550C			Analyst: NW
Moisture	12		0.050	% of sample	1	8/30/2017 06:15 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 01-Sep-17

Client: WPX Energy

Project: Federal G Gas Com #1

Work Order: 17081599

Sample ID: BH17-06 (0-2 ft)

Lab ID: 17081599-04

Collection Date: 8/21/2017

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 8/28/17 13:10	Analyst: KB
DRO (C10-C28)	ND		5.7	mg/Kg-dry	1	8/29/2017 04:52 AM
ORO (C28-C40)	15		5.7	mg/Kg-dry	1	8/29/2017 04:52 AM
Surr: 4-Terphenyl-d14	88.1		34-130	%REC	1	8/29/2017 04:52 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 8/29/17 08:56	Analyst: KB
GRO (C6-C10)	ND		6.8	mg/Kg-dry	1	8/30/2017 11:01 AM
Surr: Toluene-d8	95.8		71-123	%REC	1	8/30/2017 11:01 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 8/29/17 08:56	Analyst: WH
Benzene	ND		0.041	mg/Kg-dry	1	8/31/2017 04:59 AM
Ethylbenzene	ND		0.041	mg/Kg-dry	1	8/31/2017 04:59 AM
m,p-Xylene	ND		0.081	mg/Kg-dry	1	8/31/2017 04:59 AM
o-Xylene	ND		0.041	mg/Kg-dry	1	8/31/2017 04:59 AM
Toluene	ND		0.041	mg/Kg-dry	1	8/31/2017 04:59 AM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	8/31/2017 04:59 AM
Surr: 1,2-Dichloroethane-d4	102		70-130	%REC	1	8/31/2017 04:59 AM
Surr: 4-Bromofluorobenzene	96.3		70-130	%REC	1	8/31/2017 04:59 AM
Surr: Dibromofluoromethane	92.2		70-130	%REC	1	8/31/2017 04:59 AM
Surr: Toluene-d8	95.9		70-130	%REC	1	8/31/2017 04:59 AM
CHLORIDE						
			A4500-CL E-97		Prep: EXTRACT 8/29/17 21:00	Analyst: ED
Chloride	14		12	mg/Kg-dry	1	8/30/2017 02:55 PM
MOISTURE						
			SW3550C			Analyst: NW
Moisture	15		0.050	% of sample	1	8/30/2017 06:15 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 01-Sep-17

Client: WPX Energy

Project: Federal G Gas Com #1

Work Order: 17081599

Sample ID: BH17-07 (0-2 ft)

Lab ID: 17081599-05

Collection Date: 8/21/2017

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 8/28/17 13:10	Analyst: KB
DRO (C10-C28)	13		5.8	mg/Kg-dry	1	8/29/2017 05:21 AM
ORO (C28-C40)	16		5.8	mg/Kg-dry	1	8/29/2017 05:21 AM
Surr: 4-Terphenyl-d14	90.1		34-130	%REC	1	8/29/2017 05:21 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 8/29/17 08:56	Analyst: KB
GRO (C6-C10)	ND		6.9	mg/Kg-dry	1	8/30/2017 11:30 AM
Surr: Toluene-d8	97.8		71-123	%REC	1	8/30/2017 11:30 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 8/29/17 08:56	Analyst: EMR
Benzene	ND		0.041	mg/Kg-dry	1	8/31/2017 07:59 AM
Ethylbenzene	ND		0.041	mg/Kg-dry	1	8/31/2017 07:59 AM
m,p-Xylene	ND		0.083	mg/Kg-dry	1	8/31/2017 07:59 AM
o-Xylene	ND		0.041	mg/Kg-dry	1	8/31/2017 07:59 AM
Toluene	ND		0.041	mg/Kg-dry	1	8/31/2017 07:59 AM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	8/31/2017 07:59 AM
Surr: 1,2-Dichloroethane-d4	106		70-130	%REC	1	8/31/2017 07:59 AM
Surr: 4-Bromofluorobenzene	104		70-130	%REC	1	8/31/2017 07:59 AM
Surr: Dibromofluoromethane	96.0		70-130	%REC	1	8/31/2017 07:59 AM
Surr: Toluene-d8	102		70-130	%REC	1	8/31/2017 07:59 AM
CHLORIDE						
			A4500-CL E-97		Prep: EXTRACT 8/29/17 21:00	Analyst: ED
Chloride	ND		12	mg/Kg-dry	1	8/30/2017 02:55 PM
MOISTURE						
			SW3550C			Analyst: NW
Moisture	16		0.050	% of sample	1	8/30/2017 06:15 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 01-Sep-17

Client: WPX Energy

Project: Federal G Gas Com #1

Work Order: 17081599

Sample ID: BH17-08 (0-2 ft)

Lab ID: 17081599-06

Collection Date: 8/21/2017

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015C		Prep: SW3546 8/28/17 13:10	Analyst: KB
DRO (C10-C28)	8.1		6.1	mg/Kg-dry	1	8/29/2017 05:50 AM
ORO (C28-C40)	9.0		6.1	mg/Kg-dry	1	8/29/2017 05:50 AM
Surr: 4-Terphenyl-d14	77.1		34-130	%REC	1	8/29/2017 05:50 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 8/29/17 08:56	Analyst: KB
GRO (C6-C10)	ND		7.5	mg/Kg-dry	1	8/30/2017 12:00 PM
Surr: Toluene-d8	96.2		71-123	%REC	1	8/30/2017 12:00 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 8/29/17 08:56	Analyst: EMR
Benzene	ND		0.045	mg/Kg-dry	1	8/31/2017 08:15 AM
Ethylbenzene	ND		0.045	mg/Kg-dry	1	8/31/2017 08:15 AM
m,p-Xylene	ND		0.090	mg/Kg-dry	1	8/31/2017 08:15 AM
o-Xylene	ND		0.045	mg/Kg-dry	1	8/31/2017 08:15 AM
Toluene	ND		0.045	mg/Kg-dry	1	8/31/2017 08:15 AM
Xylenes, Total	ND		0.14	mg/Kg-dry	1	8/31/2017 08:15 AM
Surr: 1,2-Dichloroethane-d4	106		70-130	%REC	1	8/31/2017 08:15 AM
Surr: 4-Bromofluorobenzene	103		70-130	%REC	1	8/31/2017 08:15 AM
Surr: Dibromofluoromethane	96.4		70-130	%REC	1	8/31/2017 08:15 AM
Surr: Toluene-d8	102		70-130	%REC	1	8/31/2017 08:15 AM
CHLORIDE						
			A4500-CL E-97		Prep: EXTRACT 8/29/17 21:00	Analyst: ED
Chloride	130		12	mg/Kg-dry	1	8/30/2017 02:55 PM
MOISTURE						
			SW3550C			Analyst: NW
Moisture	20		0.050	% of sample	1	8/30/2017 06:15 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 01-Sep-17

Client: WPX Energy

QC BATCH REPORT

Work Order: 17081599

Project: Federal G Gas Com #1

Batch ID: 106524

Instrument ID GC8

Method: SW8015C

MBLK		Sample ID: DBLKS1-106524-106524				Units: mg/Kg		Analysis Date: 8/28/2017 06:14 PM		
Client ID:		Run ID: GC8_170828A				SeqNo: 4609024		Prep Date: 8/28/2017		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

ND

5.0

ORO (C28-C40)

ND

5.0

Surr: 4-Terphenyl-d14

2.817

0

3.33

0

84.6

34-130

0

LCS		Sample ID: DLCSS1-106524-106524				Units: mg/Kg		Analysis Date: 8/28/2017 06:43 PM		
Client ID:		Run ID: GC8_170828A				SeqNo: 4609025		Prep Date: 8/28/2017		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

315.4

5.0

333

0

94.7

65-122

0

ORO (C28-C40)

349.8

5.0

333

0

105

81-116

0

Surr: 4-Terphenyl-d14

2.9

0

3.33

0

87.1

34-130

0

MS		Sample ID: 17081512-01D MS				Units: mg/Kg		Analysis Date: 8/28/2017 07:12 PM		
Client ID:		Run ID: GC8_170828A				SeqNo: 4609026		Prep Date: 8/28/2017		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

307

5.0

332.5

0.1313

92.3

65-122

0

ORO (C28-C40)

367.2

5.0

332.5

6.629

108

81-116

0

Surr: 4-Terphenyl-d14

2.963

0

3.325

0

89.1

34-130

0

MSD		Sample ID: 17081512-01D MSD				Units: mg/Kg		Analysis Date: 8/28/2017 07:41 PM		
Client ID:		Run ID: GC8_170828A				SeqNo: 4609027		Prep Date: 8/28/2017		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

332.3

4.9

327.1

0.1313

102

65-122

307

7.9

30

ORO (C28-C40)

386.9

4.9

327.1

6.629

116

81-116

367.2

5.23

30

S

Surr: 4-Terphenyl-d14

2.964

0

3.271

0

90.6

34-130

2.963

0.0338

30

The following samples were analyzed in this batch:

17081599-01B	17081599-02B	17081599-03B
17081599-04B	17081599-05B	17081599-06B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 1 of 6

Client: WPX Energy
Work Order: 17081599
Project: Federal G Gas Com #1

QC BATCH REPORT

Batch ID: **106600** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-106600-106600				Units: µg/Kg-dry		Analysis Date: 8/30/2017 04:39 AM		
Client ID:		Run ID: GC9_170829C				SeqNo: 4613383		Prep Date: 8/29/2017		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	5,000								
Surr: Toluene-d8	5008	0	5000	0	100	71-123	0			

LCS		Sample ID: LCS-106600-106600				Units: µg/Kg-dry		Analysis Date: 8/30/2017 03:40 AM		
Client ID:		Run ID: GC9_170829C				SeqNo: 4613382		Prep Date: 8/29/2017		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	513000	5,000	500000	0	103	71-123	0			
Surr: Toluene-d8	4996	0	5000	0	99.9	71-123	0			

MS		Sample ID: 17081512-01C MS				Units: µg/Kg-dry		Analysis Date: 8/30/2017 12:59 PM		
Client ID:		Run ID: GC9_170829C				SeqNo: 4613409		Prep Date: 8/29/2017		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	732300	7,200	679300	0	108	71-123	0			
Surr: Toluene-d8	7640	0	6793	0	112	71-123	0			

MSD		Sample ID: 17081512-01C MSD				Units: µg/Kg-dry		Analysis Date: 8/30/2017 01:29 PM		
Client ID:		Run ID: GC9_170829C				SeqNo: 4613410		Prep Date: 8/29/2017		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	732600	7,200	679300	0	108	71-123	732300	0.046	30	
Surr: Toluene-d8	7269	0	6793	0	107	71-123	7640	4.98	30	

The following samples were analyzed in this batch:

17081599-01A	17081599-02A	17081599-03A
17081599-04A	17081599-05A	17081599-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 2 of 6

Client: WPX Energy
Work Order: 17081599
Project: Federal G Gas Com #1

QC BATCH REPORT

Batch ID: **106599** Instrument ID **VMS7** Method: **SW8260B**

MBLK				Sample ID: MBLK-106599-106599				Units: µg/Kg-dry			Analysis Date: 8/29/2017 12:35 PM			
Client ID:				Run ID: VMS7_170829A				SeqNo: 4610280			Prep Date: 8/29/2017		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Benzene	ND	30												
Ethylbenzene	ND	30												
m,p-Xylene	ND	60												
o-Xylene	ND	30												
Toluene	ND	30												
Xylenes, Total	ND	90												
Surr: 1,2-Dichloroethane-d4	1028	0	1000	0	103	70-130		0						
Surr: 4-Bromofluorobenzene	964.5	0	1000	0	96.4	70-130		0						
Surr: Dibromofluoromethane	975.5	0	1000	0	97.6	70-130		0						
Surr: Toluene-d8	992	0	1000	0	99.2	70-130		0						

LCS				Sample ID: LCS-106599-106599			Units: µg/Kg-dry		Analysis Date: 8/29/2017 11:32 AM		
Client ID:			Run ID: VMS7_170829A		SeqNo: 4610279		Prep Date: 8/29/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1048	30	1000	0	105	75-125	0				
Ethylbenzene	962	30	1000	0	96.2	75-125	0				
m,p-Xylene	1970	60	2000	0	98.5	80-125	0				
o-Xylene	986	30	1000	0	98.6	75-125	0				
Toluene	969.5	30	1000	0	97	70-125	0				
Xylenes, Total	2956	90	3000	0	98.5	75-125	0				
Surr: 1,2-Dichloroethane-d4	1048	0	1000	0	105	70-130	0				
Surr: 4-Bromofluorobenzene	970	0	1000	0	97	70-130	0				
Surr: Dibromofluoromethane	1048	0	1000	0	105	70-130	0				
Surr: Toluene-d8	978	0	1000	0	97.8	70-130	0				

MS				Sample ID: 17081599-04A MS				Units: µg/Kg-dry		Analysis Date: 8/31/2017 09:33 AM	
Client ID: BH17-06 (0-2 ft)			Run ID: VMS7_170830B		SeqNo: 4615109		Prep Date: 8/29/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1431	41	1353	0	106	75-125	0				
Ethylbenzene	1352	41	1353	0	99.9	75-125	0				
m,p-Xylene	2794	81	2706	0	103	80-125	0				
o-Xylene	1410	41	1353	0	104	75-125	0				
Toluene	1319	41	1353	0	97.5	70-125	0				
Xylenes, Total	4204	120	4059	0	104	75-125	0				
Surr: 1,2-Dichloroethane-d4	1406	0	1353	0	104	70-130	0				
Surr: 4-Bromofluorobenzene	1318	0	1353	0	97.4	70-130	0				
Surr: Dibromofluoromethane	1336	0	1353	0	98.8	70-130	0				
Surr: Toluene-d8	1312	0	1353	0	97	70-130	0				

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy
Work Order: 17081599
Project: Federal G Gas Com #1

QC BATCH REPORT

Batch ID: 106599 Instrument ID VMS7 Method: SW8260B

MSD				Sample ID: 17081599-04A MSD			Units: µg/Kg-dry		Analysis Date: 8/31/2017 09:54 AM		
Client ID: BH17-06 (0-2 ft)			Run ID: VMS7_170830B			SeqNo: 4615110		Prep Date: 8/29/2017		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1436	41	1353	0	106	75-125	1431	0.33	30		
Ethylbenzene	1312	41	1353	0	97	75-125	1352	2.95	30		
m,p-Xylene	2740	81	2706	0	101	80-125	2794	1.98	30		
o-Xylene	1398	41	1353	0	103	75-125	1410	0.819	30		
Toluene	1333	41	1353	0	98.6	70-125	1319	1.07	30		
Xylenes, Total	4138	120	4059	0	102	75-125	4204	1.59	30		
Surr: 1,2-Dichloroethane-d4	1406	0	1353	0	104	70-130	1406	0	30		
Surr: 4-Bromofluorobenzene	1360	0	1353	0	101	70-130	1318	3.13	30		
Surr: Dibromofluoromethane	1363	0	1353	0	101	70-130	1336	2.01	30		
Surr: Toluene-d8	1350	0	1353	0	99.8	70-130	1312	2.9	30		

The following samples were analyzed in this batch:	17081599-01A	17081599-02A	17081599-03A
	17081599-04A	17081599-05A	17081599-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy
Work Order: 17081599
Project: Federal G Gas Com #1

QC BATCH REPORT

Batch ID: **106719** Instrument ID **GALLERY** Method: **A4500-CI E-97**

MBLK		Sample ID: MBLK-106719-106719				Units: mg/Kg		Analysis Date: 8/30/2017 02:55 PM		
Client ID:		Run ID: GALLERY_170830C		SeqNo: 4613631		Prep Date: 8/29/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 10

MS		Sample ID: 17081490-01A MS				Units: mg/Kg		Analysis Date: 8/30/2017 02:55 PM		
Client ID:		Run ID: GALLERY_170830C		SeqNo: 4613634		Prep Date: 8/29/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 485.9 10 498 3.547 96.8 75-125 0

MSD		Sample ID: 17081490-01A MSD				Units: mg/Kg		Analysis Date: 8/30/2017 02:55 PM		
Client ID:		Run ID: GALLERY_170830C		SeqNo: 4613635		Prep Date: 8/29/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 498.6 10 498 3.547 99.4 75-125 485.9 2.59 25

LCS1		Sample ID: LCS1-106719-106719				Units: mg/Kg		Analysis Date: 8/30/2017 02:55 PM		
Client ID:		Run ID: GALLERY_170830C		SeqNo: 4613647		Prep Date: 8/29/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 100.1 10 100 0 100 80-120 0

LCS2		Sample ID: LCS2-106719-106719				Units: mg/Kg		Analysis Date: 8/30/2017 02:55 PM		
Client ID:		Run ID: GALLERY_170830C		SeqNo: 4613648		Prep Date: 8/29/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 478.4 10 500 0 95.7 80-120 0

The following samples were analyzed in this batch:

17081599-01B	17081599-02B	17081599-03B
17081599-04B	17081599-05B	17081599-06B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 5 of 6

Client: WPX Energy
Work Order: 17081599
Project: Federal G Gas Com #1

QC BATCH REPORT

Batch ID: **R219046** Instrument ID **MOIST** Method: **SW3550C**

MBLK				Sample ID: WBLKS-R219046				Units: % of sample				Analysis Date: 8/30/2017 06:15 PM											
Client ID:				Run ID: MOIST_170830B				SeqNo: 4614937				Prep Date:				DF: 1							
Analyte				Result		PQL		SPK Val		SPK Ref Value		%REC		Control Limit		RPD Ref Value		%RPD		RPD Limit		Qual	
Moisture				ND		0.050																	

LCS		Sample ID: LCS-R219046				Units: % of sample		Analysis Date: 8/30/2017 06:15 PM		
Client ID:		Run ID: MOIST_170830B			SeqNo: 4614936		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP				Sample ID: 17081629-01B DUP				Units: % of sample			Analysis Date: 8/30/2017 06:15 PM			
Client ID:				Run ID: MOIST_170830B				SeqNo: 4614928			Prep Date:		DF: 1	
Analyte				Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Moisture				14.61	0.050	0	0	0	0-0	13.21	10.1	5	R	

DUP				Sample ID: 17081629-02B DUP				Units: % of sample			Analysis Date: 8/30/2017 06:15 PM			
Client ID:				Run ID: MOIST_170830B				SeqNo: 4614930			Prep Date:		DF: 1	
Analyte				Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Moisture				16.09	0.050	0	0	0	0-0	14.39	11.2	5	R	

The following samples were analyzed in this batch:

17081599-01B	17081599-02B	17081599-03B
17081599-04B	17081599-05B	17081599-06B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 6 of 6



ALS Laboratory Group

HOLLAND, Michigan 48424

Chain-of-Custody

Form 20278

WORKORDER #

17081599

PROJECT NAME		FEDERAL G Gas Com #1		SAMPLER		DATE		24/08/2017		PAGE		1 of 1	
PROJECT No.		17E-00043		SITE ID		FEDERAL G Gas Com #1		TURNAROUND		5 days		DISPOSAL	
COMPANY NAME		WPX Energy		BILL TO COMPANY		WPX Energy		DRO + GRO + GRO					
SEND REPORT TO		Blaney		INVOICE ATTN TO		Karolina Blaney		BTX					
ADDRESS				ADDRESS		5315 Buena Vista Dr		Chloride					
CITY / STATE / ZIP				CITY / STATE / ZIP		Carlsbad, NM 88220							
PHONE				PHONE		970 589 0743							
FAX				FAX									
E-MAIL		Karolina.blaney@wpxenergy.com; james.raley@wpxenergy.com		E-MAIL		Karolina.blaney@wpxenergy.com; James.Raley@wpxenergy.com							
Lab ID	Field ID	Matrix	Sample Date	Sample Time	#	Pres.	QC						
1	BH17-01 (0-2 ft)	S	21/08/2017		3		x	x	x	x			
2	BH17-03 (0-2 ft)	S	21/08/2017		3		x	x	x	x			
3	BH17-05 (0-2 ft)	S	21/08/2017		3		x	x	x	x			
4	BH17-08 (0-2 ft)	S	21/08/2017		3		x	x	x	x			
5	BH17-07 (0-2 ft)	S	21/08/2017		3		x	x	x	x			
6	BH17-08 (0-2 ft)	S	21/08/2017		3		x	x	x	x			

*Time Zone (Circle): EBT CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)	
	X	LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035		

SIGNATURE	PRINTED NAME	DATE	TIME
Karolina Blaney	Karolina Blaney	24/08/2017	18:00
RECEIVED BY	Diane F. Shen	8/25/17	09:00
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			

ALS Group, USA

Sample Receipt Checklist

Client Name: **WPX - NM**Date/Time Received: **25-Aug-17 09:00**Work Order: **17081599**Received by: **DS**

Checklist completed by <u>Diane Shaw</u>	25-Aug-17	Reviewed by: <u>Chad Whelton</u>	25-Aug-17
eSignature	Date	eSignature	Date

Matrices: **Soil**Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>5.2/5.2 c</u> <u>SR2</u>		
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>8/25/2017 10:24:17 AM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

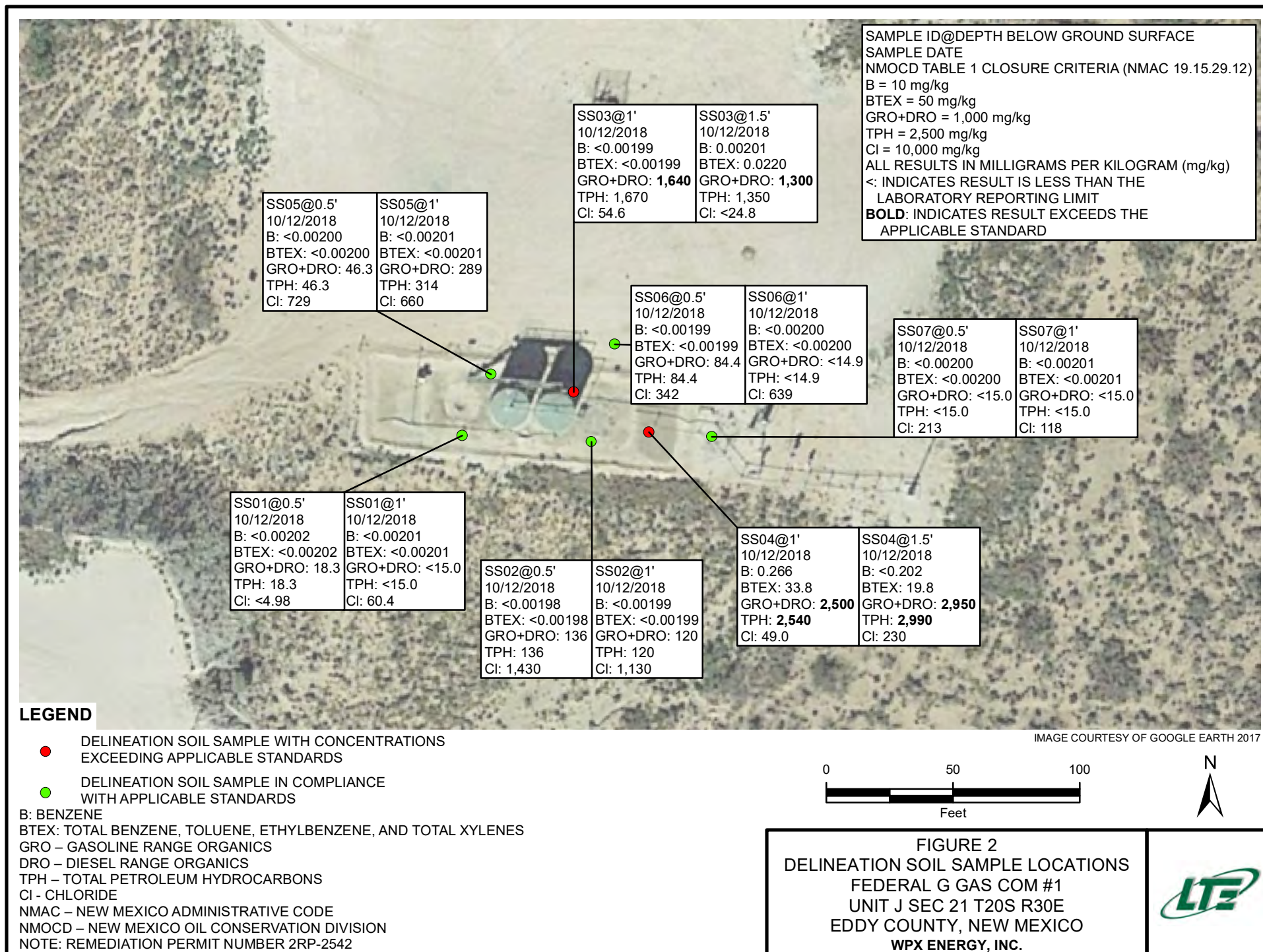
CorrectiveAction:

SRC Page 1 of 1



APPENDIX D

LT Environmental, Inc Data



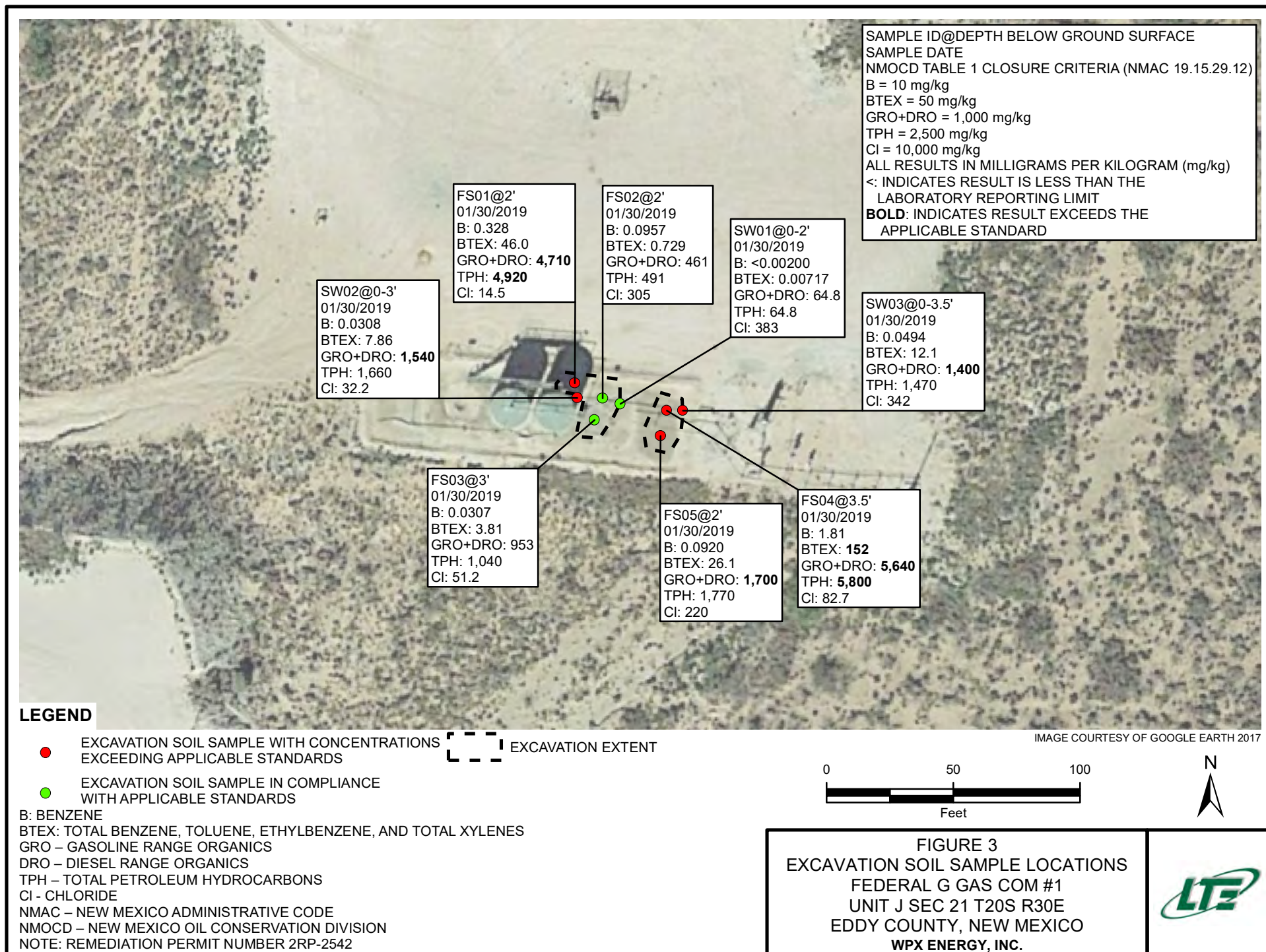


TABLE 1
SOIL ANALYTICAL RESULTS

FEDERAL G GAS COM #1
REMEDATION PERMIT NUMBER 2RP-2542
EDDY COUNTY, NEW MEXICO
WPX ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Sum of GRO + DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
On-Pad Site Soil Samples													
SS01	0.5	10/12/2018	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	18.3	<15.0	18.3	18.3	<4.98
SS01	1	10/12/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	60.4
SS02	0.5	10/12/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	136	<15.0	136	136	1,430
SS02	1	10/12/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	120	<15.0	120	120	1,130
SS03	1	10/12/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	379	1,260	32.0	1,640	1,670	54.6
SS03	1.5	10/12/2018	0.00201	<0.00201	0.00687	0.0131	0.0220	77.8	1,220	49.0	1,300	1,350	<24.8
SS04	1	10/12/2018	0.266	1.90	3.49	28.2	33.8	1,040	1,460	39.7	2,500	2,540	49.0
SS04	1.5	10/12/2018	<0.202	0.580	2.59	16.6	19.8	1,060	1,890	38.2	2,950	2,990	230
SS05	0.5	10/12/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	46.3	<15.0	46.3	46.3	729
SS05	1	10/12/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	289	25.0	289	314	660
SS06	0.5	10/12/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	84.4	<15.0	84.4	84.4	342
SS06	1	10/12/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	639
SS07	0.5	10/12/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	213
SS07	1	10/12/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	118
FS01	2	01/30/2019	0.328	9.29	6.46	30.0	46.0	2,000	2,710	211	4,710	4,920	14.5
FS02	2	01/30/2019	0.0957	0.0557	0.202	0.557	0.729	68.7	392	30.3	461	491	305
FS03	3	01/30/2019	0.0307	0.718	0.0767	2.98	3.81	181	772	83.1	953	1,040	51.2
FS04	3.5	01/30/2019	1.81	28.6	14.9	107	152	3,230	2,410	161	5,640	5,800	82.7
FS05	2	01/30/2019	0.0920	3.18	0.310	22.5	26.1	747	956	69.0	1,700	1,770	220
SW01	0-2	01/30/2019	<0.00200	<0.00200	<0.00200	0.00717	0.00717	<14.9	64.8	<14.9	64.8	64.8	383
SW02	0-3	01/30/2019	0.0308	1.06	0.998	5.77	7.86	359	1,180	122	1,540	1,660	32.2
SW03	0-3.5	01/30/2019	0.0494	2.25	0.328	9.43	12.1	500	897	69.4	1,400	1,470	342
NMOC Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	10,000

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

NMOC - New Mexico Oil Conservation Division

NE - not established

TPH - total petroleum hydrocarbons

Table 1 - Closure Criteria for Soils Impacted by a Release per NMAC 19.15.29 August 2018

< - indicates result is below laboratory detection limit

Bold indicates result exceeds the applicable regulatory standard

Analytical Report 602356

for
LT Environmental, Inc.

Project Manager: Adrian Baker

Federal G Gas Com 1

24-OCT-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)

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-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



24-OCT-18

Project Manager: **Adrian Baker**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **602356**

Federal G Gas Com 1

Project Address: Eddy, NM 2RP-2542

Adrian Baker:

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) 602356. 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. 602356 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,

A handwritten signature in black ink that reads '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 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	10-12-18 09:55	6 In	602356-001
SS01	S	10-12-18 10:00	12 In	602356-002
SS02	S	10-12-18 10:10	6 In	602356-003
SS02	S	10-12-18 10:20	12 In	602356-004
SS03	S	10-12-18 10:50	12 In	602356-005
SS04	S	10-12-18 11:10	12 In	602356-006
SS05	S	10-12-18 11:20	6 In	602356-007
SS05	S	10-12-18 11:25	12 In	602356-008
SS06	S	10-12-18 12:05	6 In	602356-009
SS06	S	10-12-18 12:10	12 In	602356-010
SS07	S	10-12-18 12:20	6 In	602356-011
SS07	S	10-12-18 12:25	12 In	602356-012
SS03	S	10-12-18 13:30	18 In	602356-013
SS04	S	10-12-18 13:35	18 In	602356-014

**CASE NARRATIVE****Client Name: LT Environmental, Inc.****Project Name: Federal G Gas Com 1**

Project ID:
Work Order Number(s): 602356

Report Date: 24-OCT-18
Date Received: 10/13/2018

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3066834 BTEX by EPA 8021B

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

Batch: LBA-3066898 BTEX by EPA 8021B

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

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 602356-005.

Batch: LBA-3067217 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 602356-006.

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

Batch: LBA-3067221 BTEX by EPA 8021B

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

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 602356-014.

Batch: LBA-3067371 BTEX by EPA 8021B

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



Certificate of Analysis Summary 602356

LT Environmental, Inc., Arvada, CO

Project Name: Federal G Gas Com 1



Project Id:

Contact: Adrian Baker

Project Location: Eddy, NM 2RP-2542

Date Received in Lab: Sat Oct-13-18 09:00 am

Report Date: 24-OCT-18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	602356-001	602356-002	602356-003	602356-004	602356-005	602356-006
	<i>Field Id:</i>	SS01	SS01	SS02	SS02	SS03	SS04
	<i>Depth:</i>	6- In	12- In	6- In	12- In	12- In	12- In
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Oct-12-18 09:55	Oct-12-18 10:00	Oct-12-18 10:10	Oct-12-18 10:20	Oct-12-18 10:50	Oct-12-18 11:10
BTEX by EPA 8021B	<i>Extracted:</i>	Oct-23-18 16:00	Oct-18-18 10:00	Oct-18-18 10:00	Oct-18-18 10:00	Oct-18-18 16:00	Oct-22-18 13:00
	<i>Analyzed:</i>	Oct-24-18 05:02	Oct-18-18 19:34	Oct-18-18 19:56	Oct-18-18 20:17	Oct-19-18 04:53	Oct-22-18 19:46
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	0.266 0.199
Toluene		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	0.0124 0.00201	1.90 0.199
Ethylbenzene		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	0.0110 0.00201	3.49 0.199
m,p-Xylenes		<0.00404 0.00404	<0.00402 0.00402	<0.00397 0.00397	<0.00398 0.00398	0.130 0.00402	24.0 0.398
o-Xylene		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	0.0278 0.00201	4.19 0.199
Total Xylenes		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	0.158 0.00201	28.2 0.199
Total BTEX		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	0.181 0.00201	33.8 0.199
Inorganic Anions by EPA 300	<i>Extracted:</i>	Oct-20-18 16:00	Oct-20-18 16:00	Oct-20-18 16:00	Oct-20-18 16:00	Oct-20-18 16:00	Oct-20-18 16:00
	<i>Analyzed:</i>	Oct-20-18 22:02	Oct-20-18 22:08	Oct-20-18 22:13	Oct-20-18 22:18	Oct-20-18 22:24	Oct-20-18 22:29
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<4.98 4.98	60.4 4.99	1430 25.0	1130 25.0	54.6 4.97	49.0 4.99
TPH by SW8015 Mod	<i>Extracted:</i>	Oct-17-18 10:00	Oct-17-18 10:00	Oct-17-18 10:00	Oct-17-18 10:00	Oct-17-18 10:00	Oct-17-18 10:00
	<i>Analyzed:</i>	Oct-17-18 13:34	Oct-17-18 13:53	Oct-17-18 14:12	Oct-17-18 14:32	Oct-17-18 14:52	Oct-17-18 15:12
	<i>Units/RL:</i>	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	379 15.0	1040 15.0
Diesel Range Organics (DRO)		18.3 15.0	<15.0 15.0	136 15.0	120 15.0	1260 15.0	1460 15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	32.0 15.0	39.7 15.0
Total TPH		18.3 15.0	<15.0 15.0	136 15.0	120 15.0	1670 15.0	2540 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 - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.9%

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 602356

LT Environmental, Inc., Arvada, CO

Project Name: Federal G Gas Com 1



Project Id:

Contact: Adrian Baker

Project Location: Eddy, NM 2RP-2542

Date Received in Lab: Sat Oct-13-18 09:00 am

Report Date: 24-OCT-18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	602356-007	602356-008	602356-009	602356-010	602356-011	602356-012
	<i>Field Id:</i>	SS05	SS05	SS06	SS06	SS07	SS07
	<i>Depth:</i>	6- In	12- In	6- In	12- In	6- In	12- In
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Oct-12-18 11:20	Oct-12-18 11:25	Oct-12-18 12:05	Oct-12-18 12:10	Oct-12-18 12:20	Oct-12-18 12:25
BTEX by EPA 8021B	<i>Extracted:</i>	Oct-18-18 10:00	Oct-18-18 10:00	Oct-22-18 16:00	Oct-22-18 16:00	Oct-22-18 13:00	Oct-22-18 13:00
	<i>Analyzed:</i>	Oct-18-18 20:38	Oct-18-18 21:00	Oct-23-18 08:25	Oct-23-18 08:45	Oct-22-18 21:25	Oct-22-18 19:26
	<i>Units/RL:</i>	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	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00401 0.00401	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399	<0.00402 0.00402
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
Inorganic Anions by EPA 300	<i>Extracted:</i>	Oct-20-18 16:00	Oct-20-18 16:00	Oct-20-18 16:00	Oct-20-18 16:00	Oct-20-18 16:00	Oct-20-18 16:00
	<i>Analyzed:</i>	Oct-20-18 22:45	Oct-20-18 22:50	Oct-20-18 23:06	Oct-20-18 23:11	Oct-20-18 23:17	Oct-20-18 23:22
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		729 25.0	660 25.0	342 4.99	639 4.96	213 4.96	118 4.98
TPH by SW8015 Mod	<i>Extracted:</i>	Oct-17-18 10:00	Oct-17-18 10:00	Oct-17-18 10:00	Oct-17-18 10:00	Oct-17-18 10:00	Oct-17-18 10:00
	<i>Analyzed:</i>	Oct-17-18 15:33	Oct-17-18 16:31	Oct-17-18 16:50	Oct-17-18 17:09	Oct-17-18 17:27	Oct-17-18 17:46
	<i>Units/RL:</i>	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	<14.9 14.9	<15.0 15.0	<15.0 15.0
Diesel Range Organics (DRO)		46.3 15.0	289 15.0	84.4 15.0	<14.9 14.9	<15.0 15.0	<15.0 15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0	25.0 15.0	<15.0 15.0	<14.9 14.9	<15.0 15.0	<15.0 15.0
Total TPH		46.3 15.0	314 15.0	84.4 15.0	<14.9 14.9	<15.0 15.0	<15.0 15.0

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Version: 1.9%

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 602356

LT Environmental, Inc., Arvada, CO

Project Name: Federal G Gas Com 1



Project Id:

Contact: Adrian Baker

Project Location: Eddy, NM 2RP-2542

Date Received in Lab: Sat Oct-13-18 09:00 am

Report Date: 24-OCT-18

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	602356-013	602356-014				
	Field Id:	SS03	SS04				
	Depth:	18- In	18- In				
	Matrix:	SOIL	SOIL				
	Sampled:	Oct-12-18 13:30	Oct-12-18 13:35				
BTEX by EPA 8021B	Extracted:	Oct-22-18 13:00	Oct-22-18 16:00				
	Analyzed:	Oct-22-18 21:05	Oct-23-18 09:05				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	0.00201 0.00201	<0.202 0.202				
	Toluene	<0.00201 0.00201	0.580 0.202				
Ethylbenzene		0.00687 0.00201	2.59 0.202				
m,p-Xylenes		0.0131 0.00402	14.4 0.403				
o-Xylene		<0.00201 0.00201	2.22 0.202				
Total Xylenes		0.0131 0.00201	16.6 0.202				
Total BTEX		0.0220 0.00201	19.8 0.202				
Inorganic Anions by EPA 300	Extracted:	Oct-20-18 16:00	Oct-20-18 16:00				
	Analyzed:	Oct-20-18 23:27	Oct-20-18 23:33				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	<24.8 24.8	230 4.97				
TPH by SW8015 Mod	Extracted:	Oct-17-18 10:00	Oct-17-18 10:00				
	Analyzed:	Oct-17-18 18:04	Oct-17-18 18:23				
	Units/RL:	mg/kg RL	mg/kg RL				
	Gasoline Range Hydrocarbons (GRO)	77.8 15.0	1060 15.0				
	Diesel Range Organics (DRO)	1220 15.0	1890 15.0				
Motor Oil Range Hydrocarbons (MRO)		49.0 15.0	38.2 15.0				
Total TPH		1350 15.0	2990 15.0				

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Version: 1.9%

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS01**
 Lab Sample Id: 602356-001

Matrix: Soil
 Date Collected: 10.12.18 09.55

Date Received: 10.13.18 09.00
 Sample Depth: 6 In

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3067142

Date Prep: 10.20.18 16.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	10.20.18 22.02	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3066700

Date Prep: 10.17.18 10.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.17.18 13.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	18.3	15.0	mg/kg	10.17.18 13.34		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.17.18 13.34	U	1
Total TPH	PHC635	18.3	15.0	mg/kg	10.17.18 13.34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.17.18 13.34	
o-Terphenyl	84-15-1	106	%	70-135	10.17.18 13.34	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS01**
 Lab Sample Id: 602356-001

Matrix: Soil
 Date Collected: 10.12.18 09.55

Date Received: 10.13.18 09.00
 Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 10.23.18 16.00

Basis: Wet Weight

Seq Number: 3067371

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.24.18 05.02	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.24.18 05.02	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.24.18 05.02	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	10.24.18 05.02	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.24.18 05.02	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.24.18 05.02	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.24.18 05.02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.24.18 05.02		
1,4-Difluorobenzene	540-36-3	119	%	70-130	10.24.18 05.02		



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS01** Matrix: Soil Date Received: 10.13.18 09.00
 Lab Sample Id: 602356-002 Date Collected: 10.12.18 10.00 Sample Depth: 12 In
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 10.20.18 16.00 Basis: Wet Weight
 Seq Number: 3067142

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	60.4	4.99	mg/kg	10.20.18 22.08		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 10.17.18 10.00 Basis: Wet Weight
 Seq Number: 3066700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.17.18 13.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	10.17.18 13.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.17.18 13.53	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	10.17.18 13.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	10.17.18 13.53	
o-Terphenyl	84-15-1	101	%	70-135	10.17.18 13.53	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS01**
 Lab Sample Id: 602356-002

Matrix: Soil
 Date Collected: 10.12.18 10.00

Date Received: 10.13.18 09.00
 Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 10.18.18 10.00

Basis: Wet Weight

Seq Number: 3066834

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.18.18 19.34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.18.18 19.34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.18.18 19.34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.18.18 19.34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.18.18 19.34	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.18.18 19.34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.18.18 19.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	10.18.18 19.34		
1,4-Difluorobenzene	540-36-3	110	%	70-130	10.18.18 19.34		



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS02**
 Lab Sample Id: 602356-003

Matrix: Soil
 Date Collected: 10.12.18 10.10

Date Received: 10.13.18 09.00
 Sample Depth: 6 In

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3067142

Date Prep: 10.20.18 16.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1430	25.0	mg/kg	10.20.18 22.13		5

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3066700

Date Prep: 10.17.18 10.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.17.18 14.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	136	15.0	mg/kg	10.17.18 14.12		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.17.18 14.12	U	1
Total TPH	PHC635	136	15.0	mg/kg	10.17.18 14.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.17.18 14.12	
o-Terphenyl	84-15-1	108	%	70-135	10.17.18 14.12	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS02**
 Lab Sample Id: 602356-003

Matrix: Soil
 Date Collected: 10.12.18 10.10

Date Received: 10.13.18 09.00
 Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 10.18.18 10.00

Basis: Wet Weight

Seq Number: 3066834

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.18.18 19.56	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.18.18 19.56	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.18.18 19.56	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.18.18 19.56	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.18.18 19.56	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.18.18 19.56	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.18.18 19.56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	10.18.18 19.56		
1,4-Difluorobenzene	540-36-3	110	%	70-130	10.18.18 19.56		



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS02**
 Lab Sample Id: 602356-004

Matrix: Soil
 Date Collected: 10.12.18 10.20

Date Received: 10.13.18 09.00
 Sample Depth: 12 In

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3067142

Date Prep: 10.20.18 16.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1130	25.0	mg/kg	10.20.18 22.18		5

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3066700

Date Prep: 10.17.18 10.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.17.18 14.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	120	15.0	mg/kg	10.17.18 14.32		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.17.18 14.32	U	1
Total TPH	PHC635	120	15.0	mg/kg	10.17.18 14.32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	10.17.18 14.32	
o-Terphenyl	84-15-1	115	%	70-135	10.17.18 14.32	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS02**
 Lab Sample Id: 602356-004

Matrix: Soil
 Date Collected: 10.12.18 10.20

Date Received: 10.13.18 09.00
 Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 10.18.18 10.00

Basis: Wet Weight

Seq Number: 3066834

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.18.18 20.17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.18.18 20.17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.18.18 20.17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.18.18 20.17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.18.18 20.17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.18.18 20.17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.18.18 20.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	78	%	70-130	10.18.18 20.17		
1,4-Difluorobenzene	540-36-3	128	%	70-130	10.18.18 20.17		



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS03** Matrix: Soil Date Received: 10.13.18 09.00
 Lab Sample Id: 602356-005 Date Collected: 10.12.18 10.50 Sample Depth: 12 In
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 10.20.18 16.00 Basis: Wet Weight
 Seq Number: 3067142

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	54.6	4.97	mg/kg	10.20.18 22.24		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 10.17.18 10.00 Basis: Wet Weight
 Seq Number: 3066700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	379	15.0	mg/kg	10.17.18 14.52		1
Diesel Range Organics (DRO)	C10C28DRO	1260	15.0	mg/kg	10.17.18 14.52		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	32.0	15.0	mg/kg	10.17.18 14.52		1
Total TPH	PHC635	1670	15.0	mg/kg	10.17.18 14.52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	10.17.18 14.52	
o-Terphenyl	84-15-1	105	%	70-135	10.17.18 14.52	



Certificate of Analytical Results 602356



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS03**
 Lab Sample Id: 602356-005

Matrix: Soil
 Date Collected: 10.12.18 10.50

Date Received: 10.13.18 09.00
 Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 10.18.18 16.00

Basis: Wet Weight

Seq Number: 3066898

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.19.18 04.53	U	1
Toluene	108-88-3	0.0124	0.00201	mg/kg	10.19.18 04.53		1
Ethylbenzene	100-41-4	0.0110	0.00201	mg/kg	10.19.18 04.53		1
m,p-Xylenes	179601-23-1	0.130	0.00402	mg/kg	10.19.18 04.53		1
o-Xylene	95-47-6	0.0278	0.00201	mg/kg	10.19.18 04.53		1
Total Xylenes	1330-20-7	0.158	0.00201	mg/kg	10.19.18 04.53		1
Total BTEX		0.181	0.00201	mg/kg	10.19.18 04.53		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	196		%	70-130	10.19.18 04.53	**
1,4-Difluorobenzene	540-36-3	127		%	70-130	10.19.18 04.53	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS04**
 Lab Sample Id: 602356-006

Matrix: Soil
 Date Collected: 10.12.18 11.10

Date Received: 10.13.18 09.00
 Sample Depth: 12 In

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3067142

Date Prep: 10.20.18 16.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	49.0	4.99	mg/kg	10.20.18 22.29		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3066700

Date Prep: 10.17.18 10.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1040	15.0	mg/kg	10.17.18 15.12		1
Diesel Range Organics (DRO)	C10C28DRO	1460	15.0	mg/kg	10.17.18 15.12		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	39.7	15.0	mg/kg	10.17.18 15.12		1
Total TPH	PHC635	2540	15.0	mg/kg	10.17.18 15.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	10.17.18 15.12	
o-Terphenyl	84-15-1	102	%	70-135	10.17.18 15.12	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS04**
 Lab Sample Id: 602356-006

Matrix: Soil
 Date Collected: 10.12.18 11.10

Date Received: 10.13.18 09.00
 Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Tech: ALJ

Analyst: ALJ

Seq Number: 3067217

Date Prep: 10.22.18 13.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.266	0.199	mg/kg	10.22.18 19.46		100
Toluene	108-88-3	1.90	0.199	mg/kg	10.22.18 19.46		100
Ethylbenzene	100-41-4	3.49	0.199	mg/kg	10.22.18 19.46		100
m,p-Xylenes	179601-23-1	24.0	0.398	mg/kg	10.22.18 19.46		100
o-Xylene	95-47-6	4.19	0.199	mg/kg	10.22.18 19.46		100
Total Xylenes	1330-20-7	28.2	0.199	mg/kg	10.22.18 19.46		100
Total BTEX		33.8	0.199	mg/kg	10.22.18 19.46		100
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	186	%	70-130	10.22.18 19.46	**	
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.22.18 19.46		



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS05**
 Lab Sample Id: 602356-007

Matrix: Soil
 Date Collected: 10.12.18 11.20

Date Received: 10.13.18 09.00
 Sample Depth: 6 In

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3067142

Date Prep: 10.20.18 16.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	729	25.0	mg/kg	10.20.18 22.45		5

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3066700

Date Prep: 10.17.18 10.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.17.18 15.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	46.3	15.0	mg/kg	10.17.18 15.33		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.17.18 15.33	U	1
Total TPH	PHC635	46.3	15.0	mg/kg	10.17.18 15.33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-135	10.17.18 15.33	
o-Terphenyl	84-15-1	70	%	70-135	10.17.18 15.33	



Certificate of Analytical Results 602356



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS05**
Lab Sample Id: 602356-007

Matrix: Soil
Date Collected: 10.12.18 11.20

Date Received: 10.13.18 09.00
Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Tech: ALJ

Analyst: ALJ

Seq Number: 3066834

Date Prep: 10.18.18 10.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.18.18 20.38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.18.18 20.38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.18.18 20.38	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.18.18 20.38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.18.18 20.38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.18.18 20.38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.18.18 20.38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	120	%	70-130	10.18.18 20.38		
1,4-Difluorobenzene	540-36-3	115	%	70-130	10.18.18 20.38		



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS05** Matrix: Soil Date Received: 10.13.18 09.00
 Lab Sample Id: 602356-008 Date Collected: 10.12.18 11.25 Sample Depth: 12 In
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 10.20.18 16.00 Basis: Wet Weight
 Seq Number: 3067142

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	660	25.0	mg/kg	10.20.18 22.50		5

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 10.17.18 10.00 Basis: Wet Weight
 Seq Number: 3066700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.17.18 16.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	289	15.0	mg/kg	10.17.18 16.31		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	25.0	15.0	mg/kg	10.17.18 16.31		1
Total TPH	PHC635	314	15.0	mg/kg	10.17.18 16.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	10.17.18 16.31	
o-Terphenyl	84-15-1	106	%	70-135	10.17.18 16.31	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS05**
 Lab Sample Id: 602356-008

Matrix: Soil
 Date Collected: 10.12.18 11.25

Date Received: 10.13.18 09.00
 Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 10.18.18 10.00

Basis: Wet Weight

Seq Number: 3066834

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.18.18 21.00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.18.18 21.00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.18.18 21.00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.18.18 21.00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.18.18 21.00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.18.18 21.00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.18.18 21.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.18.18 21.00		
1,4-Difluorobenzene	540-36-3	109	%	70-130	10.18.18 21.00		



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS06** Matrix: Soil Date Received: 10.13.18 09.00
 Lab Sample Id: 602356-009 Date Collected: 10.12.18 12.05 Sample Depth: 6 In
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 10.20.18 16.00 Basis: Wet Weight
 Seq Number: 3067142

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	342	4.99	mg/kg	10.20.18 23.06		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 10.17.18 10.00 Basis: Wet Weight
 Seq Number: 3066700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.17.18 16.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	84.4	15.0	mg/kg	10.17.18 16.50		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.17.18 16.50	U	1
Total TPH	PHC635	84.4	15.0	mg/kg	10.17.18 16.50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	10.17.18 16.50	
o-Terphenyl	84-15-1	99	%	70-135	10.17.18 16.50	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS06**
 Lab Sample Id: 602356-009

Matrix: Soil
 Date Collected: 10.12.18 12.05

Date Received: 10.13.18 09.00
 Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Tech: ALJ

Analyst: ALJ

Seq Number: 3067221

Date Prep: 10.22.18 16.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.23.18 08.25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.23.18 08.25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.23.18 08.25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.23.18 08.25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.23.18 08.25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.23.18 08.25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.23.18 08.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	10.23.18 08.25		
1,4-Difluorobenzene	540-36-3	108	%	70-130	10.23.18 08.25		



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS06** Matrix: Soil Date Received: 10.13.18 09.00
 Lab Sample Id: 602356-010 Date Collected: 10.12.18 12.10 Sample Depth: 12 In
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 10.20.18 16.00 Basis: Wet Weight
 Seq Number: 3067142

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	639	4.96	mg/kg	10.20.18 23.11		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 10.17.18 10.00 Basis: Wet Weight
 Seq Number: 3066700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	10.17.18 17.09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	10.17.18 17.09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	10.17.18 17.09	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	10.17.18 17.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.17.18 17.09	
o-Terphenyl	84-15-1	101	%	70-135	10.17.18 17.09	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS06**
 Lab Sample Id: 602356-010

Matrix: Soil
 Date Collected: 10.12.18 12.10

Date Received: 10.13.18 09.00
 Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 10.22.18 16.00

Basis: Wet Weight

Seq Number: 3067221

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.23.18 08.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.23.18 08.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.23.18 08.45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.23.18 08.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.23.18 08.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.23.18 08.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.23.18 08.45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	10.23.18 08.45		
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.23.18 08.45		



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS07** Matrix: Soil Date Received: 10.13.18 09.00
 Lab Sample Id: 602356-011 Date Collected: 10.12.18 12.20 Sample Depth: 6 In
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 10.20.18 16.00 Basis: Wet Weight
 Seq Number: 3067142

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	213	4.96	mg/kg	10.20.18 23.17		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 10.17.18 10.00 Basis: Wet Weight
 Seq Number: 3066700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.17.18 17.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	10.17.18 17.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.17.18 17.27	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	10.17.18 17.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	10.17.18 17.27	
o-Terphenyl	84-15-1	105	%	70-135	10.17.18 17.27	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS07**
 Lab Sample Id: 602356-011

Matrix: Soil
 Date Collected: 10.12.18 12.20

Date Received: 10.13.18 09.00
 Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 10.22.18 13.00

Basis: Wet Weight

Seq Number: 3067217

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.22.18 21.25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.22.18 21.25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.22.18 21.25	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.22.18 21.25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.22.18 21.25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.22.18 21.25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.22.18 21.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	10.22.18 21.25		
1,4-Difluorobenzene	540-36-3	111	%	70-130	10.22.18 21.25		



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS07** Matrix: Soil Date Received: 10.13.18 09.00
 Lab Sample Id: 602356-012 Date Collected: 10.12.18 12.25 Sample Depth: 12 In
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 10.20.18 16.00 Basis: Wet Weight
 Seq Number: 3067142

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	118	4.98	mg/kg	10.20.18 23.22		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 10.17.18 10.00 Basis: Wet Weight
 Seq Number: 3066700

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	10.17.18 17.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	10.17.18 17.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	10.17.18 17.46	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	10.17.18 17.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	10.17.18 17.46	
o-Terphenyl	84-15-1	101	%	70-135	10.17.18 17.46	



Certificate of Analytical Results 602356

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS07**
 Lab Sample Id: 602356-012

Matrix: Soil
 Date Collected: 10.12.18 12.25

Date Received: 10.13.18 09.00
 Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 10.22.18 13.00

Basis: Wet Weight

Seq Number: 3067217

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.22.18 19.26	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.22.18 19.26	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.22.18 19.26	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.22.18 19.26	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.22.18 19.26	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.22.18 19.26	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.22.18 19.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	10.22.18 19.26		
4-Bromofluorobenzene	460-00-4	99	%	70-130	10.22.18 19.26		



Certificate of Analytical Results 602356



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS03**
Lab Sample Id: 602356-013

Matrix: Soil
Date Collected: 10.12.18 13.30

Date Received: 10.13.18 09.00
Sample Depth: 18 In

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3067142

Date Prep: 10.20.18 16.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<24.8	24.8	mg/kg	10.20.18 23.27	U	5

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3066700

Date Prep: 10.17.18 10.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	77.8	15.0	mg/kg	10.17.18 18.04		1
Diesel Range Organics (DRO)	C10C28DRO	1220	15.0	mg/kg	10.17.18 18.04		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	49.0	15.0	mg/kg	10.17.18 18.04		1
Total TPH	PHC635	1350	15.0	mg/kg	10.17.18 18.04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	10.17.18 18.04	
o-Terphenyl	84-15-1	120	%	70-135	10.17.18 18.04	



Certificate of Analytical Results 602356



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS03**
Lab Sample Id: 602356-013

Matrix: Soil
Date Collected: 10.12.18 13.30

Date Received: 10.13.18 09.00
Sample Depth: 18 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 10.22.18 13.00

Basis: Wet Weight

Seq Number: 3067217

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00201	0.00201	mg/kg	10.22.18 21.05		1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.22.18 21.05	U	1
Ethylbenzene	100-41-4	0.00687	0.00201	mg/kg	10.22.18 21.05		1
m,p-Xylenes	179601-23-1	0.0131	0.00402	mg/kg	10.22.18 21.05		1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.22.18 21.05	U	1
Total Xylenes	1330-20-7	0.0131	0.00201	mg/kg	10.22.18 21.05		1
Total BTEX		0.0220	0.00201	mg/kg	10.22.18 21.05		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.22.18 21.05		
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.22.18 21.05		



Certificate of Analytical Results 602356



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS04**
Lab Sample Id: 602356-014

Matrix: Soil
Date Collected: 10.12.18 13.35

Date Received: 10.13.18 09.00
Sample Depth: 18 In

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3067142

Date Prep: 10.20.18 16.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	230	4.97	mg/kg	10.20.18 23.33		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3066700

Date Prep: 10.17.18 10.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1060	15.0	mg/kg	10.17.18 18.23		1
Diesel Range Organics (DRO)	C10C28DRO	1890	15.0	mg/kg	10.17.18 18.23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	38.2	15.0	mg/kg	10.17.18 18.23		1
Total TPH	PHC635	2990	15.0	mg/kg	10.17.18 18.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	10.17.18 18.23	
o-Terphenyl	84-15-1	125	%	70-135	10.17.18 18.23	



Certificate of Analytical Results 602356



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SS04**
Lab Sample Id: 602356-014

Matrix: Soil
Date Collected: 10.12.18 13.35

Date Received: 10.13.18 09.00
Sample Depth: 18 In

Analytical Method: BTEX by EPA 8021B

Tech: ALJ

Analyst: ALJ

Seq Number: 3067221

Date Prep: 10.22.18 16.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.202	0.202	mg/kg	10.23.18 09.05	U	100
Toluene	108-88-3	0.580	0.202	mg/kg	10.23.18 09.05		100
Ethylbenzene	100-41-4	2.59	0.202	mg/kg	10.23.18 09.05		100
m,p-Xylenes	179601-23-1	14.4	0.403	mg/kg	10.23.18 09.05		100
o-Xylene	95-47-6	2.22	0.202	mg/kg	10.23.18 09.05		100
Total Xylenes	1330-20-7	16.6	0.202	mg/kg	10.23.18 09.05		100
Total BTEX		19.8	0.202	mg/kg	10.23.18 09.05		100
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	170		%	70-130	10.23.18 09.05	**
1,4-Difluorobenzene	540-36-3	94		%	70-130	10.23.18 09.05	



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



LT Environmental, Inc.
Federal G Gas Com 1

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3067142

MB Sample Id: 7664562-1-BLK

Matrix: Solid

LCS Sample Id: 7664562-1-BKS

Prep Method: E300P

Date Prep: 10.20.18

LCSD Sample Id: 7664562-1-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	269	108	264	106	90-110	2	20	mg/kg	10.20.18 21:04	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3067142

Parent Sample Id: 602356-006

Matrix: Soil

MS Sample Id: 602356-006 S

Prep Method: E300P

Date Prep: 10.20.18

MSD Sample Id: 602356-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	49.0	250	322	109	324	110	90-110	1	20	mg/kg	10.20.18 22:34	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3067142

Parent Sample Id: 602463-003

Matrix: Soil

MS Sample Id: 602463-003 S

Prep Method: E300P

Date Prep: 10.20.18

MSD Sample Id: 602463-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1170	252	1380	83	1380	83	90-110	0	20	mg/kg	10.20.18 21:20	X

Analytical Method: TPH by SW8015 Mod

Seq Number: 3066700

MB Sample Id: 7664344-1-BLK

Matrix: Solid

LCS Sample Id: 7664344-1-BKS

Prep Method: TX1005P

Date Prep: 10.17.18

LCSD Sample Id: 7664344-1-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	982	98	986	99	70-135	0	20	mg/kg	10.17.18 11:21	
Diesel Range Organics (DRO)	<8.13	1000	998	100	1000	100	70-135	0	20	mg/kg	10.17.18 11:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		129		128		70-135	%	10.17.18 11:21
o-Terphenyl	111		106		103		70-135	%	10.17.18 11:21

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

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

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

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



LT Environmental, Inc.

Federal G Gas Com 1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3066700

Parent Sample Id: 602230-005

Matrix: Soil

MS Sample Id: 602230-005 S

Prep Method: TX1005P

Date Prep: 10.17.18

MSD Sample Id: 602230-005 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)	<7.99	999	939	94	957	96	70-135	2	20	mg/kg	10.17.18 12:18	
Diesel Range Organics (DRO)	<8.12	999	964	96	980	98	70-135	2	20	mg/kg	10.17.18 12:18	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		128		70-135	%	10.17.18 12:18
o-Terphenyl	98		100		70-135	%	10.17.18 12:18

Analytical Method: BTEX by EPA 8021B

Seq Number: 3066834

MB Sample Id: 7664423-1-BLK

Matrix: Solid

LCS Sample Id: 7664423-1-BKS

Prep Method: SW5030B

Date Prep: 10.18.18

LCSD Sample Id: 7664423-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.124	123	0.126	126	70-130	2	35	mg/kg	10.18.18 12:26	
Toluene	<0.00202	0.101	0.108	107	0.108	108	70-130	0	35	mg/kg	10.18.18 12:26	
Ethylbenzene	<0.00202	0.101	0.117	116	0.120	120	70-130	3	35	mg/kg	10.18.18 12:26	
m,p-Xylenes	<0.00102	0.202	0.247	122	0.238	118	70-130	4	35	mg/kg	10.18.18 12:26	
o-Xylene	<0.00202	0.101	0.123	122	0.126	126	70-130	2	35	mg/kg	10.18.18 12:26	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		127		116		70-130	%	10.18.18 12:26
4-Bromofluorobenzene	90		120		121		70-130	%	10.18.18 12:26

Analytical Method: BTEX by EPA 8021B

Seq Number: 3066898

MB Sample Id: 7664468-1-BLK

Matrix: Solid

LCS Sample Id: 7664468-1-BKS

Prep Method: SW5030B

Date Prep: 10.18.18

LCSD Sample Id: 7664468-1-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	0.0998	0.120	120	0.120	120	70-130	0	35	mg/kg	10.18.18 23:53	
Toluene	<0.00200	0.0998	0.105	105	0.108	108	70-130	3	35	mg/kg	10.18.18 23:53	
Ethylbenzene	<0.00200	0.0998	0.114	114	0.122	122	70-130	7	35	mg/kg	10.18.18 23:53	
m,p-Xylenes	<0.00399	0.200	0.236	118	0.247	124	70-130	5	35	mg/kg	10.18.18 23:53	
o-Xylene	<0.00200	0.0998	0.115	115	0.121	121	70-130	5	35	mg/kg	10.18.18 23:53	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		116		116		70-130	%	10.18.18 23:53
4-Bromofluorobenzene	101		123		127		70-130	%	10.18.18 23:53

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



LT Environmental, Inc.

Federal G Gas Com 1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3067217

MB Sample Id: 7664674-1-BLK

Matrix: Solid

LCS Sample Id: 7664674-1-BKS

Prep Method: SW5030B

Date Prep: 10.22.18

LCSD Sample Id: 7664674-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.125	126	0.120	120	70-130	4	35	mg/kg	10.22.18 14:45	
Toluene	<0.00199	0.0996	0.116	116	0.112	112	70-130	4	35	mg/kg	10.22.18 14:45	
Ethylbenzene	<0.00199	0.0996	0.105	105	0.102	102	70-130	3	35	mg/kg	10.22.18 14:45	
m,p-Xylenes	<0.00398	0.199	0.204	103	0.196	98	70-130	4	35	mg/kg	10.22.18 14:45	
o-Xylene	<0.00199	0.0996	0.0952	96	0.0924	93	70-130	3	35	mg/kg	10.22.18 14:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		90		93		70-130	%	10.22.18 14:45
4-Bromofluorobenzene	86		76		78		70-130	%	10.22.18 14:45

Analytical Method: BTEX by EPA 8021B

Seq Number: 3067221

MB Sample Id: 7664675-1-BLK

Matrix: Solid

LCS Sample Id: 7664675-1-BKS

Prep Method: SW5030B

Date Prep: 10.22.18

LCSD Sample Id: 7664675-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.113	113	0.116	115	70-130	3	35	mg/kg	10.23.18 01:05	
Toluene	<0.00201	0.100	0.105	105	0.108	107	70-130	3	35	mg/kg	10.23.18 01:05	
Ethylbenzene	<0.00201	0.100	0.104	104	0.0964	95	70-130	8	35	mg/kg	10.23.18 01:05	
m,p-Xylenes	<0.00402	0.201	0.187	93	0.182	90	70-130	3	35	mg/kg	10.23.18 01:05	
o-Xylene	<0.00201	0.100	0.0840	84	0.0977	97	70-130	15	35	mg/kg	10.23.18 01:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		89		93		70-130	%	10.23.18 01:05
4-Bromofluorobenzene	79		71		83		70-130	%	10.23.18 01:05

Analytical Method: BTEX by EPA 8021B

Seq Number: 3067371

MB Sample Id: 7664751-1-BLK

Matrix: Solid

LCS Sample Id: 7664751-1-BKS

Prep Method: SW5030B

Date Prep: 10.23.18

LCSD Sample Id: 7664751-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.115	114	0.123	123	70-130	7	35	mg/kg	10.23.18 13:43	
Toluene	<0.00201	0.101	0.0978	97	0.107	107	70-130	9	35	mg/kg	10.23.18 13:43	
Ethylbenzene	<0.00201	0.101	0.117	116	0.129	129	70-130	10	35	mg/kg	10.23.18 13:43	
m,p-Xylenes	<0.00102	0.201	0.234	116	0.255	127	70-130	9	35	mg/kg	10.23.18 13:43	
o-Xylene	<0.00201	0.101	0.110	109	0.120	120	70-130	9	35	mg/kg	10.23.18 13:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	113		103		111		70-130	%	10.23.18 13:43
4-Bromofluorobenzene	108		115		113		70-130	%	10.23.18 13:43

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



LT Environmental, Inc.
Federal G Gas Com 1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3066834

Parent Sample Id: 602569-003

Matrix: Soil

MS Sample Id: 602569-003 S

Prep Method: SW5030B

Date Prep: 10.18.18

MSD Sample Id: 602569-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0845	85	0.0939	94	70-130	11	35	mg/kg	10.18.18 13:09	
Toluene	<0.00200	0.100	0.0751	75	0.0822	82	70-130	9	35	mg/kg	10.18.18 13:09	
Ethylbenzene	<0.00200	0.100	0.0880	88	0.0966	97	70-130	9	35	mg/kg	10.18.18 13:09	
m,p-Xylenes	<0.00400	0.200	0.177	89	0.193	97	70-130	9	35	mg/kg	10.18.18 13:09	
o-Xylene	<0.00200	0.100	0.0868	87	0.0952	95	70-130	9	35	mg/kg	10.18.18 13:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	121		120		70-130	%	10.18.18 13:09
4-Bromofluorobenzene	126		122		70-130	%	10.18.18 13:09

Analytical Method: BTEX by EPA 8021B

Seq Number: 3066898

Parent Sample Id: 602357-002

Matrix: Soil

MS Sample Id: 602357-002 S

Prep Method: SW5030B

Date Prep: 10.18.18

MSD Sample Id: 602357-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0827	83	0.107	106	70-130	26	35	mg/kg	10.19.18 00:35	
Toluene	<0.00201	0.100	0.0736	74	0.0872	86	70-130	17	35	mg/kg	10.19.18 00:35	
Ethylbenzene	<0.00201	0.100	0.0883	88	0.0927	92	70-130	5	35	mg/kg	10.19.18 00:35	
m,p-Xylenes	<0.00402	0.201	0.177	88	0.183	91	70-130	3	35	mg/kg	10.19.18 00:35	
o-Xylene	<0.00201	0.100	0.0840	84	0.0889	88	70-130	6	35	mg/kg	10.19.18 00:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		123		70-130	%	10.19.18 00:35
4-Bromofluorobenzene	118		129		70-130	%	10.19.18 00:35

Analytical Method: BTEX by EPA 8021B

Seq Number: 3067217

Parent Sample Id: 602545-001

Matrix: Soil

MS Sample Id: 602545-001 S

Prep Method: SW5030B

Date Prep: 10.22.18

MSD Sample Id: 602545-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0978	98	0.0914	92	70-130	7	35	mg/kg	10.22.18 15:26	
Toluene	<0.00199	0.0996	0.0838	84	0.0796	80	70-130	5	35	mg/kg	10.22.18 15:26	
Ethylbenzene	<0.00199	0.0996	0.0676	68	0.0667	67	70-130	1	35	mg/kg	10.22.18 15:26	X
m,p-Xylenes	<0.00398	0.199	0.135	68	0.137	69	70-130	1	35	mg/kg	10.22.18 15:26	X
o-Xylene	<0.00199	0.0996	0.0673	68	0.0686	69	70-130	2	35	mg/kg	10.22.18 15:26	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		96		70-130	%	10.22.18 15:26
4-Bromofluorobenzene	79		83		70-130	%	10.22.18 15:26

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



LT Environmental, Inc.

Federal G Gas Com 1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3067221

Parent Sample Id: 602976-001

Matrix: Soil

MS Sample Id: 602976-001 S

Prep Method: SW5030B

Date Prep: 10.22.18

MSD Sample Id: 602976-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.102	102	0.0910	91	70-130	11	35	mg/kg	10.23.18 01:45	
Toluene	<0.00199	0.0996	0.0911	91	0.0802	80	70-130	13	35	mg/kg	10.23.18 01:45	
Ethylbenzene	<0.00199	0.0996	0.0773	78	0.0674	67	70-130	14	35	mg/kg	10.23.18 01:45	X
m,p-Xylenes	<0.00398	0.199	0.146	73	0.128	64	70-130	13	35	mg/kg	10.23.18 01:45	X
o-Xylene	<0.00199	0.0996	0.0703	71	0.0617	62	70-130	13	35	mg/kg	10.23.18 01:45	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		95		70-130	%	10.23.18 01:45
4-Bromofluorobenzene	80		78		70-130	%	10.23.18 01:45

Analytical Method: BTEX by EPA 8021B

Seq Number: 3067371

Parent Sample Id: 603125-001

Matrix: Soil

MS Sample Id: 603125-001 S

Prep Method: SW5030B

Date Prep: 10.23.18

MSD Sample Id: 603125-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0908	91	0.0871	87	70-130	4	35	mg/kg	10.24.18 01:49	
Toluene	<0.00199	0.0994	0.0764	77	0.0730	73	70-130	5	35	mg/kg	10.24.18 01:49	
Ethylbenzene	<0.00199	0.0994	0.0841	85	0.0797	80	70-130	5	35	mg/kg	10.24.18 01:49	
m,p-Xylenes	<0.00398	0.199	0.171	86	0.159	80	70-130	7	35	mg/kg	10.24.18 01:49	
o-Xylene	<0.00199	0.0994	0.0844	85	0.0779	78	70-130	8	35	mg/kg	10.24.18 01:49	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	118		102		70-130	%	10.24.18 01:49
4-Bromofluorobenzene	106		99		70-130	%	10.24.18 01:49

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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Midland, Texas (432-704-5251)

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Phoenix, Arizona (480-355-0900)

CHAIN OF C STUDY

Page 1 of 2

Client / Reporting Information						Project Information						Analytical Information						Matrix Codes	
Company Name / Branch: LT Environmental Inc.						Project Name/Number: Federal Gas Can 1												W = Water S = Solids/Solid GW = Groundwater DW = Drinking Water P = Product SW = Surface water SL = Sludge OW = Ocean/Sea Water WI = Waste O = Oil WW = Waste Water A = Air	
Company Address: 3300 West St. Building Unit 103 Midway TX 75202						Project Location: EDDY NM													
Email: abaker@ltenv.com						Phone No: (432) 704-5178						Invoice To: LT Environmental - Adrian Baker							
Project Contact: Adrian Baker						PO Number: 34818011													
Sampler's Name: L. Hancock																			

No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	SS01	6"	10/12	9:55	S	1									X
2	SS01	12"	10/12	10:00	S	1									X
3	SS02	6"	10/12	10:20	S	1									X
4	SS02	12"	10/12	10:20	S	1									X
5	SS03	12"	10/12	10:50	S	1									
6	SS04	12"	11/10	11:10	S	1									
7	SS05	6"	11/20	11:20	S	1									
8	SS05	12"	11/25	11:25	S	1									
9	SS06	6"	12/05	12:05	S	1									
10	SS06	12"	12/10	12:10	S	1									

Turnaround Time (Business days)				Data Deliverable Information				Notes:	
<input type="checkbox"/> Same Day TAT	<input type="checkbox"/> 5 Day TAT	<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> Level IV (Full Data Pkg raw data)						
<input type="checkbox"/> Next Day EMERGENCY	<input type="checkbox"/> 7 Day TAT	<input type="checkbox"/> Level III Std QC Forms	<input type="checkbox"/> TRRP Level IV						
<input type="checkbox"/> 2 Day EMERGENCY	<input checked="" type="checkbox"/> Contract TAT	<input type="checkbox"/> Level 3 (CLP Forms)	<input type="checkbox"/> UST / RG 411						
<input type="checkbox"/> 3 Day EMERGENCY		<input type="checkbox"/> TRRP Checklist							

TAT Starts Day received by Lab if received by 5:00 pm

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY				FED-EX / UPS: Tracking #	
Relinquished By Sampler:	Date Time:	Received By:	Date Time:	Relinquished By:	Date Time:
[Signature]	10/12/18 15:10	[Signature]	10/12/18 15:10	[Signature]	10/13/18
Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished By:	Date Time:
Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished By:	Date Time:

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 be responsible for expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75. will apply.

Cooler Temp. [] On Ice [X] Cooler Temp. [] Thermo. Corr. Factor []



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Dallas Texas (214-902-0300)

San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)

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Phoenix, Arizona (480-355-0900)

CHAIN OF C STUDY .
Page 2 of 2

Page 5 of 5

Client / Reporting Information						Project Information						Analytical Information						Matrix Codes					
Company Name / Branch: LT Environmental, Inc.						Project Name/Number: Federal E Gas Con 1																	
Company Address: 3300 W 8th St. Building Unit 103 Midway, TX 77070						Project Location: EDDY NM																	
Email: adrian@ltenv.com						Phone No: (432) 704-5178						Invoice To: BDDI, NM						2RP2542					
Project Contact: Adrian Baker						PO Number: 34818011						Notes: BTX (only BTX) 8021 TPH (DRO, GRO, MPO) 8015 Chloride (300.00)											
Sampler's Name L. Baker																							
No.	Field ID / Point of Collection					Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments				
1	S507					6"	10/12/20	5	1										X				
2	S507					12"	12:25	5	1										X				
3	S503					18"	13:30	5	1										X				
4	S504					18"	13:35	5	1										X				
5																							
6																							
7																							
8																							
9																							
10																							
Turnaround Time (Business days)						Data Deliverable Information						Notes:											
<input type="checkbox"/> Same Day TAT						<input type="checkbox"/> 5 Day TAT						<input type="checkbox"/> Level II Std QC						<input type="checkbox"/> Level IV (Full Data Pkg raw data)					
<input type="checkbox"/> Next Day EMERGENCY						<input type="checkbox"/> 7 Day TAT						<input type="checkbox"/> Level III Std QC+ Forms						<input type="checkbox"/> TRRP Level IV					
<input type="checkbox"/> 2 Day EMERGENCY						<input checked="" type="checkbox"/> Contract TAT						<input type="checkbox"/> Level 3 (CLP Forms)						<input type="checkbox"/> UST / RG 411					
<input type="checkbox"/> 3 Day EMERGENCY												<input type="checkbox"/> TRRP Checklist											
TAT Starts Day received by Lab, if received by 5:00 pm																							
Relinquished by Sampler:						Date Time:						Received By:						Date Time:					
1						10/12/20 15:10						1						10/12/20 15:30					
Relinquished by:						Date Time:						Received By:						Date Time:					
3												3											
Relinquished by:						Date Time:						Received By:						Date Time:					
5												5											
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 sent shall and return.						SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY						FED-EX / UPS Tracking #											
On Ice <input checked="" type="checkbox"/>						Cooler Temp. 0.3						Thermo Corr Factor 101312											



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10/13/2018 09:00:00 AM

Work Order #: 602356

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)?	.3
#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: 10/15/2018

Checklist reviewed by:

Jessica Kramer

Date: 10/15/2018

Analytical Report 613224

for
LT Environmental, Inc.

Project Manager: Adrian Baker

Federal G Gas Com 1

034818011

09-FEB-19

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)

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-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



09-FEB-19

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

Reference: XENCO Report No(s): **613224**
Federal G Gas Com 1
Project Address:

Adrian Baker:

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) 613224. 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. 613224 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,

A handwritten signature in black ink, appearing to read 'Mike Kimmel', on a light-colored background.

Mike Kimmel
Client Services Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

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**Sample Cross Reference 613224****LT Environmental, Inc., Arvada, CO**

Federal G Gas Com 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	01-30-19 11:45	2 ft	613224-001
FS02	S	01-30-19 11:50	2 ft	613224-002
FS03	S	01-30-19 12:10	3 ft	613224-003
SW01	S	01-30-19 12:40	0 - 2 ft	613224-004
FS04	S	01-30-19 16:20	3.5 ft	613224-005
FS03	S	01-30-19 16:30	2 ft	613224-006
SW02	S	01-30-19 16:50	0 - 3 ft	613224-007
SW03	S	01-30-19 17:00	0 - 3.5 ft	613224-008



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *Federal G Gas Com 1*

Project ID: 034818011

Work Order Number(s): 613224

Report Date: 09-FEB-19

Date Received: 02/01/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3078104 TPH by SW8015 Mod

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

Samples affected are: 613224-001.

Batch: LBA-3078557 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 613224-006,613224-003,613224-008,613224-005,613224-001,613224-007.

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



Certificate of Analysis Summary 613224

LT Environmental, Inc., Arvada, CO

Project Name: Federal G Gas Com 1

Project Id: 034818011
Contact: Adrian Baker
Project Location:

Date Received in Lab: Fri Feb-01-19 12:45 pm
Report Date: 09-FEB-19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	613224-001	613224-002	613224-003	613224-004	613224-005	613224-006
	<i>Field Id:</i>	FS01	FS02	FS03	SW01	FS04	FS03
	<i>Depth:</i>	2- ft	2- ft	3- ft	0-2 ft	3.5- ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Jan-30-19 11:45	Jan-30-19 11:50	Jan-30-19 12:10	Jan-30-19 12:40	Jan-30-19 16:20	Jan-30-19 16:30
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-07-19 13:00	Feb-07-19 13:00	Feb-07-19 13:00	Feb-07-19 13:00	Feb-07-19 13:00	Feb-07-19 13:00
	<i>Analyzed:</i>	Feb-08-19 13:15	Feb-08-19 14:09	Feb-08-19 14:28	Feb-08-19 12:56	Feb-08-19 15:44	Feb-08-19 14:47
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		0.328 0.100	0.0957 0.0200	0.0307 0.0200	<0.00200 0.00200	1.81 0.402	0.0920 0.0202
Toluene		9.29 0.100	0.0557 0.0200	0.718 0.0200	<0.00200 0.00200	28.6 0.402	3.18 0.0202
Ethylbenzene		6.46 0.100	0.0202 0.0200	0.0767 0.0200	<0.00200 0.00200	14.9 0.402	0.310 0.0202
m,p-Xylenes		21.8 0.201	0.213 0.0399	2.05 0.0400	0.00717 0.00400	93.6 0.803	19.3 D 0.400
o-Xylene		8.17 0.100	0.344 0.0200	0.931 0.0200	<0.00200 0.00200	13.4 0.402	3.21 0.0202
Total Xylenes		30.0 0.100	0.557 0.0200	2.98 0.0200	0.00717 0.00200	107 0.402	22.5 0.0202
Total BTEX		46.0 0.100	0.729 0.0200	3.81 0.0200	0.00717 0.00200	152 0.402	26.1 0.0202
Inorganic Anions by EPA 300	<i>Extracted:</i>	Feb-06-19 08:30	Feb-06-19 08:30	Feb-06-19 08:30	Feb-06-19 08:30	Feb-06-19 08:30	Feb-06-19 08:30
	<i>Analyzed:</i>	Feb-06-19 09:36	Feb-06-19 10:07	Feb-06-19 11:30	Feb-06-19 10:34	Feb-06-19 10:41	Feb-06-19 10:47
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		14.5 5.00	305 4.98	51.2 4.98	383 4.98	82.7 4.98	220 5.00
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-04-19 17:00	Feb-04-19 17:00	Feb-04-19 17:00	Feb-04-19 17:00	Feb-04-19 17:00	Feb-04-19 17:00
	<i>Analyzed:</i>	Feb-04-19 22:16	Feb-04-19 22:36	Feb-04-19 23:36	Feb-04-19 23:56	Feb-05-19 00:16	Feb-05-19 00:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		2000 15.0	68.7 15.0	181 14.9	<14.9 14.9	3230 15.0	747 15.0
Diesel Range Organics (DRO)		2710 15.0	392 15.0	772 14.9	64.8 14.9	2410 15.0	956 15.0
Motor Oil Range Hydrocarbons (MRO)		211 15.0	30.3 15.0	83.1 14.9	<14.9 14.9	161 15.0	69.0 15.0
Total TPH		4920 15.0	491 15.0	1040 14.9	64.8 14.9	5800 15.0	1770 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.

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Mike Kimmel
Client Services Manager



Certificate of Analysis Summary 613224

LT Environmental, Inc., Arvada, CO

Project Name: Federal G Gas Com 1

Project Id: 034818011
Contact: Adrian Baker
Project Location:

Date Received in Lab: Fri Feb-01-19 12:45 pm
Report Date: 09-FEB-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	613224-007	613224-008				
	Field Id:	SW02	SW03				
	Depth:	0-3 ft	0-3.5 ft				
	Matrix:	SOIL	SOIL				
	Sampled:	Jan-30-19 16:50	Jan-30-19 17:00				
BTEX by EPA 8021B	Extracted:	Feb-07-19 13:00	Feb-07-19 13:00				
	Analyzed:	Feb-08-19 15:06	Feb-08-19 15:25				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		0.0308 0.0200	0.0494 0.0201				
Toluene		1.06 0.0200	2.25 0.0201				
Ethylbenzene		0.998 0.0200	0.328 0.0201				
m,p-Xylenes		4.27 0.0399	6.03 0.0402				
o-Xylene		1.50 0.0200	3.40 0.0201				
Total Xylenes		5.77 0.0200	9.43 0.0201				
Total BTEX		7.86 0.0200	12.1 0.0201				
Inorganic Anions by EPA 300	Extracted:	Feb-06-19 08:30	Feb-06-19 08:30				
	Analyzed:	Feb-06-19 10:53	Feb-06-19 11:05				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		32.2 4.96	342 4.99				
TPH by SW8015 Mod	Extracted:	Feb-05-19 10:00	Feb-05-19 10:00				
	Analyzed:	Feb-05-19 15:15	Feb-05-19 15:35				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		359 14.9	500 15.0				
Diesel Range Organics (DRO)		1180 14.9	897 15.0				
Motor Oil Range Hydrocarbons (MRO)		122 14.9	69.4 15.0				
Total TPH		1660 14.9	1470 15.0				

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Version: 1.9%

Mike Kimmel
Client Services Manager



Certificate of Analytical Results 613224

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **FS01** Matrix: Soil Date Received: 02.01.19 12.45
 Lab Sample Id: 613224-001 Date Collected: 01.30.19 11.45 Sample Depth: 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.06.19 08.30 Basis: Wet Weight
 Seq Number: 3078346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.5	5.00	mg/kg	02.06.19 09.36		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.04.19 17.00 Basis: Wet Weight
 Seq Number: 3078104

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2000	15.0	mg/kg	02.04.19 22.16		1
Diesel Range Organics (DRO)	C10C28DRO	2710	15.0	mg/kg	02.04.19 22.16		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	211	15.0	mg/kg	02.04.19 22.16		1
Total TPH	PHC635	4920	15.0	mg/kg	02.04.19 22.16		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	129	%	70-135	02.04.19 22.16		
o-Terphenyl	84-15-1	157	%	70-135	02.04.19 22.16	**	



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **FS01**
 Lab Sample Id: 613224-001

Matrix: Soil
 Date Collected: 01.30.19 11.45

Date Received: 02.01.19 12.45
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.07.19 13.00

Basis: Wet Weight

Seq Number: 3078557

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.328	0.100	mg/kg	02.08.19 13.15		50
Toluene	108-88-3	9.29	0.100	mg/kg	02.08.19 13.15		50
Ethylbenzene	100-41-4	6.46	0.100	mg/kg	02.08.19 13.15		50
m,p-Xylenes	179601-23-1	21.8	0.201	mg/kg	02.08.19 13.15		50
o-Xylene	95-47-6	8.17	0.100	mg/kg	02.08.19 13.15		50
Total Xylenes	1330-20-7	30.0	0.100	mg/kg	02.08.19 13.15		50
Total BTEX		46.0	0.100	mg/kg	02.08.19 13.15		50
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	02.08.19 13.15		
4-Bromofluorobenzene	460-00-4	247	%	70-130	02.08.19 13.15	**	



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **FS02**
Lab Sample Id: 613224-002

Matrix: Soil
Date Collected: 01.30.19 11.50

Date Received: 02.01.19 12.45
Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078346

Date Prep: 02.06.19 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	305	4.98	mg/kg	02.06.19 10.07		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078104

Date Prep: 02.04.19 17.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	68.7	15.0	mg/kg	02.04.19 22.36		1
Diesel Range Organics (DRO)	C10C28DRO	392	15.0	mg/kg	02.04.19 22.36		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	30.3	15.0	mg/kg	02.04.19 22.36		1
Total TPH	PHC635	491	15.0	mg/kg	02.04.19 22.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.04.19 22.36	
o-Terphenyl	84-15-1	98	%	70-135	02.04.19 22.36	



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **FS02**
Lab Sample Id: 613224-002

Matrix: Soil
Date Collected: 01.30.19 11.50

Date Received: 02.01.19 12.45
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.07.19 13.00

Basis: Wet Weight

Seq Number: 3078557

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0957	0.0200	mg/kg	02.08.19 14.09		10
Toluene	108-88-3	0.0557	0.0200	mg/kg	02.08.19 14.09		10
Ethylbenzene	100-41-4	0.0202	0.0200	mg/kg	02.08.19 14.09		10
m,p-Xylenes	179601-23-1	0.213	0.0399	mg/kg	02.08.19 14.09		10
o-Xylene	95-47-6	0.344	0.0200	mg/kg	02.08.19 14.09		10
Total Xylenes	1330-20-7	0.557	0.0200	mg/kg	02.08.19 14.09		10
Total BTEX		0.729	0.0200	mg/kg	02.08.19 14.09		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	127	%	70-130	02.08.19 14.09		
4-Bromofluorobenzene	460-00-4	118	%	70-130	02.08.19 14.09		



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **FS03**
Lab Sample Id: 613224-003

Matrix: Soil
Date Collected: 01.30.19 12.10

Date Received: 02.01.19 12.45
Sample Depth: 3 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078346

Date Prep: 02.06.19 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	51.2	4.98	mg/kg	02.06.19 11.30		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078104

Date Prep: 02.04.19 17.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	181	14.9	mg/kg	02.04.19 23.36		1
Diesel Range Organics (DRO)	C10C28DRO	772	14.9	mg/kg	02.04.19 23.36		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	83.1	14.9	mg/kg	02.04.19 23.36		1
Total TPH	PHC635	1040	14.9	mg/kg	02.04.19 23.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	02.04.19 23.36	
o-Terphenyl	84-15-1	110	%	70-135	02.04.19 23.36	



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **FS03**
Lab Sample Id: 613224-003

Matrix: Soil
Date Collected: 01.30.19 12.10

Date Received: 02.01.19 12.45
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.07.19 13.00

Basis: Wet Weight

Seq Number: 3078557

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0307	0.0200	mg/kg	02.08.19 14.28		10
Toluene	108-88-3	0.718	0.0200	mg/kg	02.08.19 14.28		10
Ethylbenzene	100-41-4	0.0767	0.0200	mg/kg	02.08.19 14.28		10
m,p-Xylenes	179601-23-1	2.05	0.0400	mg/kg	02.08.19 14.28		10
o-Xylene	95-47-6	0.931	0.0200	mg/kg	02.08.19 14.28		10
Total Xylenes	1330-20-7	2.98	0.0200	mg/kg	02.08.19 14.28		10
Total BTEX		3.81	0.0200	mg/kg	02.08.19 14.28		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	122	%	70-130	02.08.19 14.28		
4-Bromofluorobenzene	460-00-4	181	%	70-130	02.08.19 14.28	**	



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SW01**
Lab Sample Id: 613224-004

Matrix: Soil
Date Collected: 01.30.19 12.40

Date Received: 02.01.19 12.45
Sample Depth: 0 - 2 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078346

Date Prep: 02.06.19 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	383	4.98	mg/kg	02.06.19 10.34		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078104

Date Prep: 02.04.19 17.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	02.04.19 23.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	64.8	14.9	mg/kg	02.04.19 23.56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	02.04.19 23.56	U	1
Total TPH	PHC635	64.8	14.9	mg/kg	02.04.19 23.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	02.04.19 23.56	
o-Terphenyl	84-15-1	106	%	70-135	02.04.19 23.56	



Certificate of Analytical Results 613224

LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SW01**
 Lab Sample Id: 613224-004

Matrix: Soil
 Date Collected: 01.30.19 12.40

Date Received: 02.01.19 12.45
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078557

Date Prep: 02.07.19 13.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.08.19 12.56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.08.19 12.56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.08.19 12.56	U	1
m,p-Xylenes	179601-23-1	0.00717	0.00400	mg/kg	02.08.19 12.56		1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.08.19 12.56	U	1
Total Xylenes	1330-20-7	0.00717	0.00200	mg/kg	02.08.19 12.56		1
Total BTEX		0.00717	0.00200	mg/kg	02.08.19 12.56		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	115	%	70-130	02.08.19 12.56		
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.08.19 12.56		



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **FS04**
Lab Sample Id: 613224-005

Matrix: Soil
Date Collected: 01.30.19 16.20

Date Received: 02.01.19 12.45
Sample Depth: 3.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078346

Date Prep: 02.06.19 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	82.7	4.98	mg/kg	02.06.19 10.41		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078104

Date Prep: 02.04.19 17.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	3230	15.0	mg/kg	02.05.19 00.16		1
Diesel Range Organics (DRO)	C10C28DRO	2410	15.0	mg/kg	02.05.19 00.16		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	161	15.0	mg/kg	02.05.19 00.16		1
Total TPH	PHC635	5800	15.0	mg/kg	02.05.19 00.16		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	02.05.19 00.16	
o-Terphenyl	84-15-1	129	%	70-135	02.05.19 00.16	



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **FS04**
Lab Sample Id: 613224-005

Matrix: Soil
Date Collected: 01.30.19 16.20

Date Received: 02.01.19 12.45
Sample Depth: 3.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078557

Date Prep: 02.07.19 13.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	1.81	0.402	mg/kg	02.08.19 15.44		200
Toluene	108-88-3	28.6	0.402	mg/kg	02.08.19 15.44		200
Ethylbenzene	100-41-4	14.9	0.402	mg/kg	02.08.19 15.44		200
m,p-Xylenes	179601-23-1	93.6	0.803	mg/kg	02.08.19 15.44		200
o-Xylene	95-47-6	13.4	0.402	mg/kg	02.08.19 15.44		200
Total Xylenes	1330-20-7	107	0.402	mg/kg	02.08.19 15.44		200
Total BTEX		152	0.402	mg/kg	02.08.19 15.44		200
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	158	%	70-130	02.08.19 15.44	**	
1,4-Difluorobenzene	540-36-3	117	%	70-130	02.08.19 15.44		



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **FS03**
Lab Sample Id: 613224-006

Matrix: Soil
Date Collected: 01.30.19 16.30

Date Received: 02.01.19 12.45
Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078346

Date Prep: 02.06.19 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	220	5.00	mg/kg	02.06.19 10.47		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078104

Date Prep: 02.04.19 17.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	747	15.0	mg/kg	02.05.19 00.36		1
Diesel Range Organics (DRO)	C10C28DRO	956	15.0	mg/kg	02.05.19 00.36		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	69.0	15.0	mg/kg	02.05.19 00.36		1
Total TPH	PHC635	1770	15.0	mg/kg	02.05.19 00.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	02.05.19 00.36	
o-Terphenyl	84-15-1	105	%	70-135	02.05.19 00.36	



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **FS03**
Lab Sample Id: 613224-006

Matrix: Soil
Date Collected: 01.30.19 16.30

Date Received: 02.01.19 12.45
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.07.19 13.00

Basis: Wet Weight

Seq Number: 3078557

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0920	0.0202	mg/kg	02.08.19 14.47		10
Toluene	108-88-3	3.18	0.0202	mg/kg	02.08.19 14.47		10
Ethylbenzene	100-41-4	0.310	0.0202	mg/kg	02.08.19 14.47		10
m,p-Xylenes	179601-23-1	19.3	0.400	mg/kg	02.08.19 16.03	D	100
o-Xylene	95-47-6	3.21	0.0202	mg/kg	02.08.19 14.47		10
Total Xylenes	1330-20-7	22.5	0.0202	mg/kg	02.08.19 16.03		100
Total BTEX		26.1	0.0202	mg/kg	02.08.19 16.03		100
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	377	%	70-130	02.08.19 14.47	**	
1,4-Difluorobenzene	540-36-3	123	%	70-130	02.08.19 14.47		



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SW02**
Lab Sample Id: 613224-007

Matrix: Soil
Date Collected: 01.30.19 16.50

Date Received: 02.01.19 12.45
Sample Depth: 0 - 3 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078346

Date Prep: 02.06.19 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32.2	4.96	mg/kg	02.06.19 10.53		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078222

Date Prep: 02.05.19 10.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	359	14.9	mg/kg	02.05.19 15.15		1
Diesel Range Organics (DRO)	C10C28DRO	1180	14.9	mg/kg	02.05.19 15.15		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	122	14.9	mg/kg	02.05.19 15.15		1
Total TPH	PHC635	1660	14.9	mg/kg	02.05.19 15.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	02.05.19 15.15	
o-Terphenyl	84-15-1	118	%	70-135	02.05.19 15.15	



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SW02**
 Lab Sample Id: 613224-007

Matrix: Soil
 Date Collected: 01.30.19 16.50

Date Received: 02.01.19 12.45
 Sample Depth: 0 - 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.07.19 13.00

Basis: Wet Weight

Seq Number: 3078557

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0308	0.0200	mg/kg	02.08.19 15.06		10
Toluene	108-88-3	1.06	0.0200	mg/kg	02.08.19 15.06		10
Ethylbenzene	100-41-4	0.998	0.0200	mg/kg	02.08.19 15.06		10
m,p-Xylenes	179601-23-1	4.27	0.0399	mg/kg	02.08.19 15.06		10
o-Xylene	95-47-6	1.50	0.0200	mg/kg	02.08.19 15.06		10
Total Xylenes	1330-20-7	5.77	0.0200	mg/kg	02.08.19 15.06		10
Total BTEX		7.86	0.0200	mg/kg	02.08.19 15.06		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	121	%	70-130	02.08.19 15.06		
4-Bromofluorobenzene	460-00-4	226	%	70-130	02.08.19 15.06	**	



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SW03**
Lab Sample Id: 613224-008

Matrix: Soil
Date Collected: 01.30.19 17.00

Date Received: 02.01.19 12.45
Sample Depth: 0 - 3.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078346

Date Prep: 02.06.19 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	342	4.99	mg/kg	02.06.19 11.05		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078222

Date Prep: 02.05.19 10.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	500	15.0	mg/kg	02.05.19 15.35		1
Diesel Range Organics (DRO)	C10C28DRO	897	15.0	mg/kg	02.05.19 15.35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	69.4	15.0	mg/kg	02.05.19 15.35		1
Total TPH	PHC635	1470	15.0	mg/kg	02.05.19 15.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	02.05.19 15.35	
o-Terphenyl	84-15-1	128	%	70-135	02.05.19 15.35	



Certificate of Analytical Results 613224



LT Environmental, Inc., Arvada, CO

Federal G Gas Com 1

Sample Id: **SW03**
Lab Sample Id: 613224-008

Matrix: Soil
Date Collected: 01.30.19 17.00

Date Received: 02.01.19 12.45
Sample Depth: 0 - 3.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.07.19 13.00

Basis: Wet Weight

Seq Number: 3078557

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0494	0.0201	mg/kg	02.08.19 15.25		10
Toluene	108-88-3	2.25	0.0201	mg/kg	02.08.19 15.25		10
Ethylbenzene	100-41-4	0.328	0.0201	mg/kg	02.08.19 15.25		10
m,p-Xylenes	179601-23-1	6.03	0.0402	mg/kg	02.08.19 15.25		10
o-Xylene	95-47-6	3.40	0.0201	mg/kg	02.08.19 15.25		10
Total Xylenes	1330-20-7	9.43	0.0201	mg/kg	02.08.19 15.25		10
Total BTEX		12.1	0.0201	mg/kg	02.08.19 15.25		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	122	%	70-130	02.08.19 15.25		
4-Bromofluorobenzene	460-00-4	287	%	70-130	02.08.19 15.25	**	



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



LT Environmental, Inc.

Federal G Gas Com 1

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078346

MB Sample Id: 7671131-1-BLK

Matrix: Solid

LCS Sample Id: 7671131-1-BKS

Prep Method: E300P

Date Prep: 02.06.19

LCSD Sample Id: 7671131-1-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	237	95	229	92	90-110	3	20	mg/kg	02.06.19 09:23	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078346

Parent Sample Id: 613224-001

Matrix: Soil

MS Sample Id: 613224-001 S

Prep Method: E300P

Date Prep: 02.06.19

MSD Sample Id: 613224-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	14.5	250	264	100	250	94	90-110	5	20	mg/kg	02.06.19 09:42	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078346

Parent Sample Id: 613224-008

Matrix: Soil

MS Sample Id: 613224-008 S

Prep Method: E300P

Date Prep: 02.06.19

MSD Sample Id: 613224-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	342	250	574	93	605	105	90-110	5	20	mg/kg	02.06.19 11:11	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078104

MB Sample Id: 7671082-1-BLK

Matrix: Solid

LCS Sample Id: 7671082-1-BKS

Prep Method: TX1005P

Date Prep: 02.04.19

LCSD Sample Id: 7671082-1-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	826	83	878	88	70-135	6	20	mg/kg	02.04.19 21:37	
Diesel Range Organics (DRO)	<8.13	1000	924	92	972	97	70-135	5	20	mg/kg	02.04.19 21:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		119		126		70-135	%	02.04.19 21:37
o-Terphenyl	123		106		121		70-135	%	02.04.19 21:37

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



LT Environmental, Inc.

Federal G Gas Com 1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078222

MB Sample Id: 7671160-1-BLK

Matrix: Solid

LCS Sample Id: 7671160-1-BKS

Prep Method: TX1005P

Date Prep: 02.05.19

LCSD Sample Id: 7671160-1-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	851	85	878	88	70-135	3	20	mg/kg	02.05.19 12:29	
Diesel Range Organics (DRO)	<8.13	1000	953	95	978	98	70-135	3	20	mg/kg	02.05.19 12:29	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	91		123		127		70-135	%	02.05.19 12:29			
o-Terphenyl	93		119		122		70-135	%	02.05.19 12:29			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078104

Parent Sample Id: 613224-002

Matrix: Soil

MS Sample Id: 613224-002 S

Prep Method: TX1005P

Date Prep: 02.04.19

MSD Sample Id: 613224-002 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)	68.7	997	934	87	954	89	70-135	2	20	mg/kg	02.04.19 22:56	
Diesel Range Organics (DRO)	392	997	1270	88	1240	85	70-135	2	20	mg/kg	02.04.19 22:56	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane			126		128		70-135	%	02.04.19 22:56			
o-Terphenyl			125		126		70-135	%	02.04.19 22:56			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078222

Parent Sample Id: 613229-021

Matrix: Soil

MS Sample Id: 613229-021 S

Prep Method: TX1005P

Date Prep: 02.05.19

MSD Sample Id: 613229-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<7.99	999	927	93	923	92	70-135	0	20	mg/kg	02.05.19 13:54	
Diesel Range Organics (DRO)	<8.12	999	1070	107	1060	106	70-135	1	20	mg/kg	02.05.19 13:54	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane			121		130		70-135	%	02.05.19 13:54			
o-Terphenyl			124		127		70-135	%	02.05.19 13:54			

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. = $\text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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



LT Environmental, Inc.

Federal G Gas Com 1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3078557

MB Sample Id: 7671351-1-BLK

Matrix: Solid

LCS Sample Id: 7671351-1-BKS

Prep Method: SW5030B

Date Prep: 02.07.19

LCSD Sample Id: 7671351-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000387	0.101	0.114	113	0.110	110	70-130	4	35	mg/kg	02.08.19 05:43	
Toluene	<0.000458	0.101	0.0986	98	0.0950	95	70-130	4	35	mg/kg	02.08.19 05:43	
Ethylbenzene	<0.000568	0.101	0.0943	93	0.0900	90	70-130	5	35	mg/kg	02.08.19 05:43	
m,p-Xylenes	<0.00102	0.201	0.185	92	0.176	88	70-130	5	35	mg/kg	02.08.19 05:43	
o-Xylene	<0.000346	0.101	0.0945	94	0.0905	91	70-130	4	35	mg/kg	02.08.19 05:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		108		70-130	%	02.08.19 05:43
4-Bromofluorobenzene	105		104		105		70-130	%	02.08.19 05:43

Analytical Method: BTEX by EPA 8021B

Seq Number: 3078557

Parent Sample Id: 613319-001

Matrix: Soil

MS Sample Id: 613319-001 S

Prep Method: SW5030B

Date Prep: 02.07.19

MSD Sample Id: 613319-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000561	0.0998	0.0587	58	0.0531	52	70-130	10	35	mg/kg	02.08.19 06:22	X
Toluene	0.0107	0.0998	0.0293	19	0.0232	12	70-130	23	35	mg/kg	02.08.19 06:22	X
Ethylbenzene	0.00492	0.0998	0.0430	38	0.0490	44	70-130	13	35	mg/kg	02.08.19 06:22	X
m,p-Xylenes	0.00865	0.200	0.0404	16	0.0379	14	70-130	6	35	mg/kg	02.08.19 06:22	X
o-Xylene	0.0452	0.0998	0.0466	1	0.0553	10	70-130	17	35	mg/kg	02.08.19 06:22	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		106		70-130	%	02.08.19 06:22
4-Bromofluorobenzene	113		120		70-130	%	02.08.19 06:22

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

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

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

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



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) 565-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (480-365-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-575-3392-7550)
Hobbs, NM (575-392-7550)

Chain of Custody

Work Order No:

013274

1

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Page

of _____

Project Manager:	Adrian Baker	Bill to: (if different)	<i>Send Adrian Baker</i>
Company Name:	LT Environmental, Inc., Permian office	Company Name:	<i>LT Environmental, Inc</i>
Address:	3300 North A Street	Address:	<i>3300 N A St.</i>
City, State ZIP:	Midland, TX 79705	City, State ZIP:	<i>Midland, Tx 79705</i>
Phone:	432.704.5178	Email:	<i>adrianbaker@ltenv.com</i>

Work Order Comments									
Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Brownfields <input type="checkbox"/> C <input type="checkbox"/> Fund <input type="checkbox"/>									
State of Project:									
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>									
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:									

Project Name:	Federal Gas Can	Turn Around	ANALYSIS REQUEST						Work Order Notes
Project Number:	034818011	Routine <input checked="" type="checkbox"/>							
P.O. Number:		Rush: <i>S' Day</i>							
Sampler's Name:	Lynnda Lambrecht	Due Date: 12/10/07							

SAMPLE RECEIPT			
Temp Blank:	Yes	No	Wet Ice:
Yes	No	Yes	No
Temperature (°C):	3.6	3.5	Thermometer ID
Received Intact:	Yes	No	pg
Cooler Custody Seals:	Yes	No	Correction Factor:
Sample Custody Seals:	Yes	No	N/A
			Total Containers:
			-0.1

of Containers

(A 8015)

(PA 8021)

(EPA 300.0)

TAT starts the day received by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EP)	BTEX (E)	Chloride
F501	S	6/30/29	11:45	2'	1	X	X	X
F502	S		11:58	2'	1	X	X	X
F503	S		12:10	3'	1	X	X	X
SW01	S		12:45	0-2'	1	X	X	X
F504	S		16:20	3.5'	1	X	X	X
F505	S		16:38	2'	1	X	X	X
SW02	S		16:50	0-3'	1	X	X	X
SW03	S		17:00	0-3.5'	1	X	X	X

Total	200.7 / 6010	200.8 / 6020:
<i>Circle Method(s) and Metal(s) to be analyzed</i>	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti 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	[Signature]	1/31/99 930	2	[Signature]	1/31/99 1245
3	[Signature]	1/31/99 1245	4	[Signature]	1/31/99 1245
5			6		



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02/01/2019 12:45:00 PM

Work Order #: 613224

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)?	3.5
#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)?	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:

Katie Lowe

Date: 02/01/2019

Checklist reviewed by:

Jessica Kramer

Date: 02/01/2019



APPENDIX E

Photographic Log



Photographic Log

WPX Energy Permian, LLC

Federal G Gas Com #1

Incident Number nAB1428733041



Photograph 9

Date: NA

Description: Original Signage

View: South

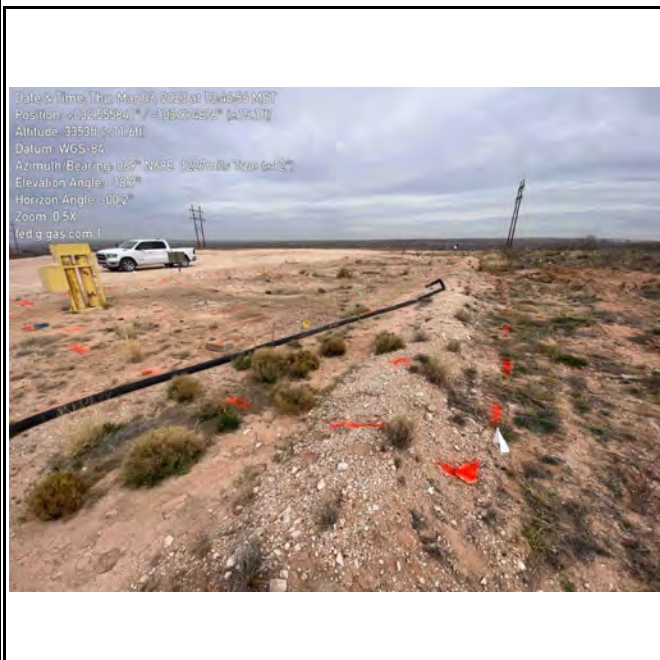


Photograph 10

Date: 3/9/23

Description: Excavation Area

View: Southeast

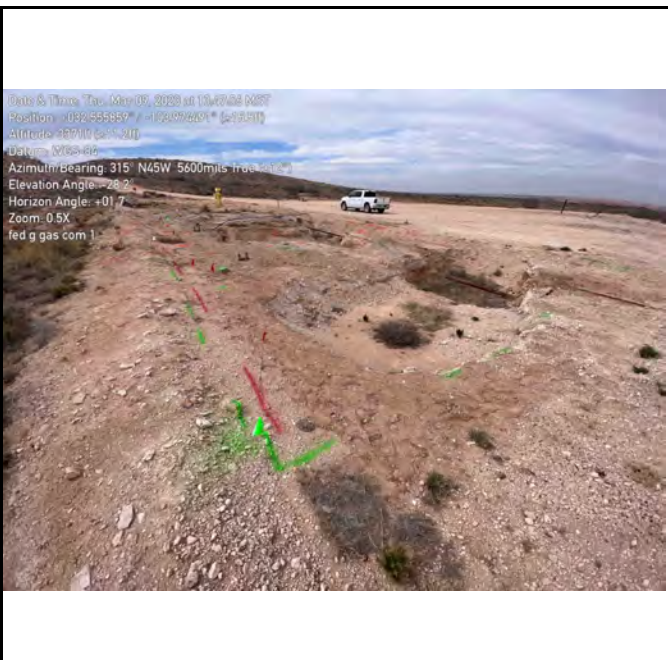


Photograph 11

Date: 3/9/23

Description: Excavation Area

View: East



Photograph 12

Date: 3/9/23

Description: Excavation Area

View: West



Photographic Log

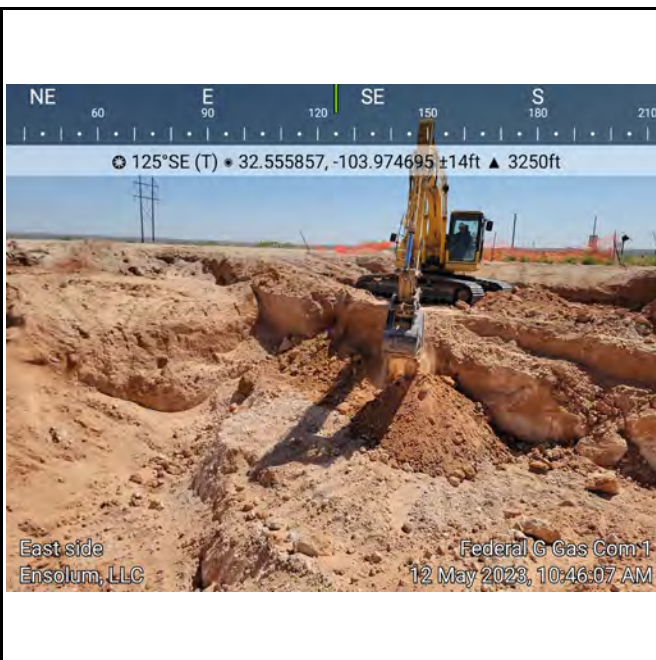
WPX Energy Permian, LLC

Federal G Gas Com #1

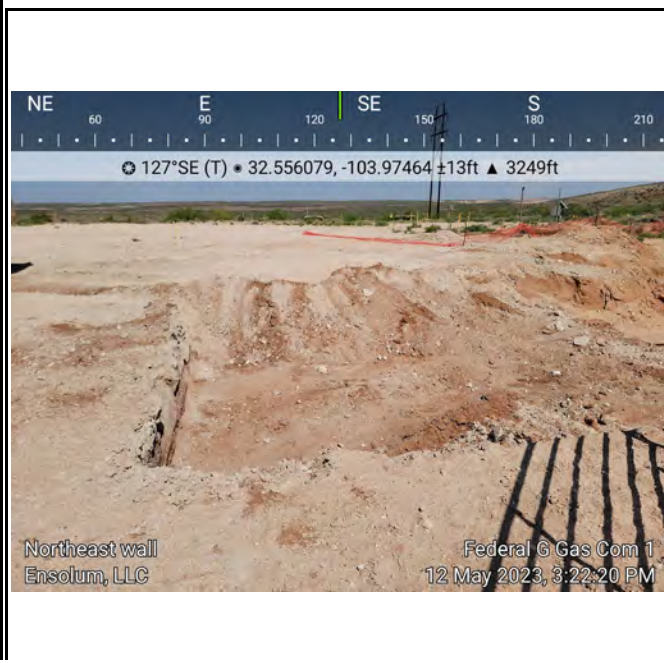
Incident Number nAB1428733041



Photograph 13 Date:5/12/23
Description: Excavation & Soil Sampling
View: West



Photograph 14 Date:5/12/23
Description: Excavation & Soil Sampling
View: Southeast



Photograph 15 Date:5/12/23
Description: Excavation & Soil Sampling
View: Southeast



Photograph 16 Date:5/12/23
Description: Contaminated Soil Removal
View: Northeast



Photographic Log

WPX Energy Permian, LLC

Federal G Gas Com #1

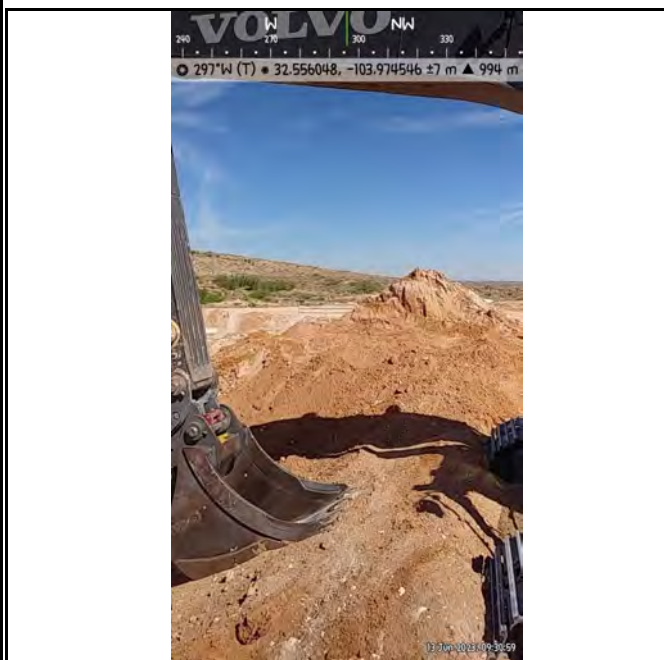
Incident Number nAB1428733041



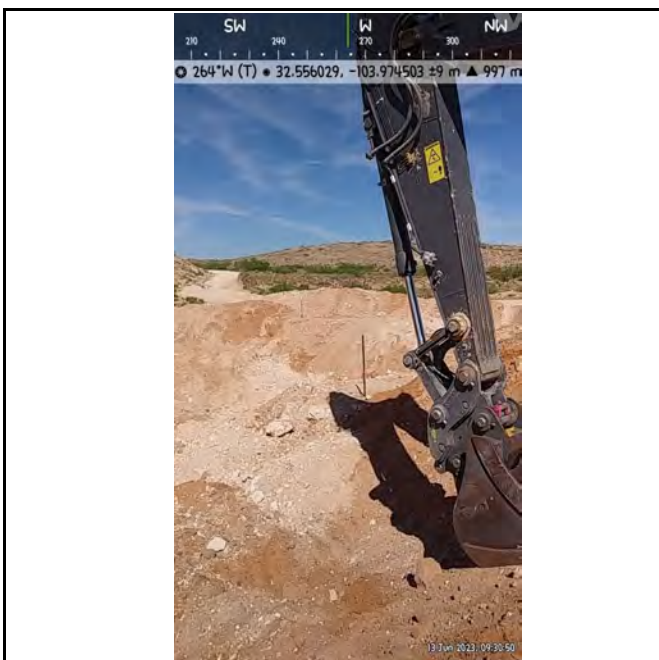
Photograph 17 Date: 5/15/23
Description: Excavation & Soil Sampling
View: Southwest



Photograph 18 Date: 5/15/23
Description: Excavation & Soil Sampling
View: North



Photograph 19 Date: 6/13/23
Description: Excavation & Soil Sampling
View: West



Photograph 20 Date: 6/13/23
Description: Excavation & Soil Sampling
View: West



APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation

Report to:
Gilbert Moreno



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303118

Job Number: 01058-0007

Received: 3/29/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/4/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/4/23



Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Federal G Gas Com #001
Workorder: E303118
Date Received: 3/29/2023 6:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/29/2023 6:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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

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Cell: 505-320-4759
ljjarboe@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:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/04/23 10:07

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW01 0 - 4'	E303118-01A	Solid	03/27/23	03/29/23	Glass Jar, 2 oz.
SW02 0 - 4'	E303118-02A	Soil	03/27/23	03/29/23	Glass Jar, 2 oz.
SW03 0 - 4'	E303118-03A	Soil	03/27/23	03/29/23	Glass Jar, 2 oz.
SW04 0 - 4'	E303118-04A	Soil	03/27/23	03/29/23	Glass Jar, 2 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/4/2023 10:07:45AM

SW01 0 - 4'

E303118-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313031
Benzene	ND	0.0250	1	03/29/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/29/23	03/30/23	
Toluene	ND	0.0250	1	03/29/23	03/30/23	
o-Xylene	ND	0.0250	1	03/29/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/29/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/29/23	03/30/23	
<i>Surrogate: Bromofluorobenzene</i>	96.6 %	70-130		03/29/23	03/30/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	109 %	70-130		03/29/23	03/30/23	
<i>Surrogate: Toluene-d8</i>	105 %	70-130		03/29/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313031
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/29/23	03/30/23	
<i>Surrogate: Bromofluorobenzene</i>	96.6 %	70-130		03/29/23	03/30/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	109 %	70-130		03/29/23	03/30/23	
<i>Surrogate: Toluene-d8</i>	105 %	70-130		03/29/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313038
Diesel Range Organics (C10-C28)	ND	25.0	1	03/29/23	03/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/29/23	03/30/23	
<i>Surrogate: n-Nonane</i>	100 %	50-200		03/29/23	03/30/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313041
Chloride	ND	20.0	1	03/29/23	03/30/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/4/2023 10:07:45AM

SW02 0 - 4'

E303118-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313031
Benzene	ND	0.0250	1	03/29/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/29/23	03/30/23	
Toluene	ND	0.0250	1	03/29/23	03/30/23	
o-Xylene	ND	0.0250	1	03/29/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/29/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/29/23	03/30/23	
Surrogate: Bromofluorobenzene	98.0 %	70-130		03/29/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	110 %	70-130		03/29/23	03/30/23	
Surrogate: Toluene-d8	105 %	70-130		03/29/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313031
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/29/23	03/30/23	
Surrogate: Bromofluorobenzene	98.0 %	70-130		03/29/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	110 %	70-130		03/29/23	03/30/23	
Surrogate: Toluene-d8	105 %	70-130		03/29/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313038
Diesel Range Organics (C10-C28)	45.8	25.0	1	03/29/23	03/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/29/23	03/30/23	
Surrogate: n-Nonane	105 %	50-200		03/29/23	03/30/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313041
Chloride	ND	20.0	1	03/29/23	03/30/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/4/2023 10:07:45AM

SW03 0 - 4'

E303118-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313031
Benzene	ND	0.0250	1	03/29/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/29/23	03/30/23	
Toluene	ND	0.0250	1	03/29/23	03/30/23	
o-Xylene	ND	0.0250	1	03/29/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/29/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/29/23	03/30/23	
Surrogate: Bromofluorobenzene	98.5 %	70-130		03/29/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		03/29/23	03/30/23	
Surrogate: Toluene-d8	106 %	70-130		03/29/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313031
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/29/23	03/30/23	
Surrogate: Bromofluorobenzene	98.5 %	70-130		03/29/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		03/29/23	03/30/23	
Surrogate: Toluene-d8	106 %	70-130		03/29/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313038
Diesel Range Organics (C10-C28)	ND	25.0	1	03/29/23	03/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/29/23	03/30/23	
Surrogate: n-Nonane	106 %	50-200		03/29/23	03/30/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313041
Chloride	165	20.0	1	03/29/23	03/30/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/4/2023 10:07:45AM

SW04 0 - 4'

E303118-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313031
Benzene	ND	0.0250	1	03/29/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/29/23	03/30/23	
Toluene	ND	0.0250	1	03/29/23	03/30/23	
o-Xylene	ND	0.0250	1	03/29/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/29/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/29/23	03/30/23	
Surrogate: Bromofluorobenzene	98.9 %	70-130		03/29/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	106 %	70-130		03/29/23	03/30/23	
Surrogate: Toluene-d8	106 %	70-130		03/29/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313031
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/29/23	03/30/23	
Surrogate: Bromofluorobenzene	98.9 %	70-130		03/29/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	106 %	70-130		03/29/23	03/30/23	
Surrogate: Toluene-d8	106 %	70-130		03/29/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313038
Diesel Range Organics (C10-C28)	ND	25.0	1	03/29/23	03/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/29/23	03/30/23	
Surrogate: n-Nonane	106 %	50-200		03/29/23	03/30/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313041
Chloride	139	20.0	1	03/29/23	03/30/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/4/2023 10:07:45AM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313031-BLK1)

Prepared: 03/29/23 Analyzed: 03/29/23

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: Bromofluorobenzene	0.488		0.500		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.549		0.500		110	70-130			
Surrogate: Toluene-d8	0.520		0.500		104	70-130			

LCS (2313031-BS1)

Prepared: 03/29/23 Analyzed: 03/29/23

Benzene	2.31	0.0250	2.50		92.3	70-130			
Ethylbenzene	2.31	0.0250	2.50		92.2	70-130			
Toluene	2.36	0.0250	2.50		94.3	70-130			
o-Xylene	2.35	0.0250	2.50		93.8	70-130			
p,m-Xylene	4.65	0.0500	5.00		93.0	70-130			
Total Xylenes	7.00	0.0250	7.50		93.3	70-130			
Surrogate: Bromofluorobenzene	0.525		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.562		0.500		112	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

LCS Dup (2313031-BSD1)

Prepared: 03/29/23 Analyzed: 03/29/23

Benzene	2.33	0.0250	2.50		93.2	70-130	0.992	23	
Ethylbenzene	2.36	0.0250	2.50		94.6	70-130	2.55	27	
Toluene	2.42	0.0250	2.50		96.7	70-130	2.53	24	
o-Xylene	2.38	0.0250	2.50		95.3	70-130	1.50	27	
p,m-Xylene	4.76	0.0500	5.00		95.2	70-130	2.31	27	
Total Xylenes	7.14	0.0250	7.50		95.2	70-130	2.04	27	
Surrogate: Bromofluorobenzene	0.538		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.580		0.500		116	70-130			
Surrogate: Toluene-d8	0.512		0.500		102	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/4/2023 10:07:45AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313031-BLK1)

Prepared: 03/29/23 Analyzed: 03/29/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.488		0.500		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.549		0.500		110	70-130			
Surrogate: Toluene-d8	0.520		0.500		104	70-130			

LCS (2313031-BS2)

Prepared: 03/29/23 Analyzed: 03/29/23

Gasoline Range Organics (C6-C10)	50.2	20.0	50.0		100	70-130			
Surrogate: Bromofluorobenzene	0.510		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.568		0.500		114	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS Dup (2313031-BSD2)

Prepared: 03/29/23 Analyzed: 03/29/23

Gasoline Range Organics (C6-C10)	48.4	20.0	50.0		96.7	70-130	3.80	20	
Surrogate: Bromofluorobenzene	0.516		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.574		0.500		115	70-130			
Surrogate: Toluene-d8	0.525		0.500		105	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/4/2023 10:07:45AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313038-BLK1)

Prepared: 03/29/23 Analyzed: 03/29/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	54.5		50.0		109	50-200			

LCS (2313038-BS1)

Prepared: 03/29/23 Analyzed: 03/29/23

Diesel Range Organics (C10-C28)	174	25.0	250		69.5	38-132			
Surrogate: <i>n</i> -Nonane	50.5		50.0		101	50-200			

Matrix Spike (2313038-MS1)

Source: E303114-02

Prepared: 03/29/23 Analyzed: 03/29/23

Diesel Range Organics (C10-C28)	186	25.0	250	ND	74.2	38-132			
Surrogate: <i>n</i> -Nonane	49.4		50.0		98.7	50-200			

Matrix Spike Dup (2313038-MSD1)

Source: E303114-02

Prepared: 03/29/23 Analyzed: 03/29/23

Diesel Range Organics (C10-C28)	171	25.0	250	ND	68.3	38-132	8.32	20	
Surrogate: <i>n</i> -Nonane	50.1		50.0		100	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/4/2023 10:07:45AM

Anions by EPA 300.0/9056A

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 (2313041-BLK1)					Prepared: 03/29/23 Analyzed: 03/30/23				
Chloride	ND	20.0							
LCS (2313041-BS1)					Prepared: 03/29/23 Analyzed: 03/30/23				
Chloride	255	20.0	250		102	90-110			
Matrix Spike (2313041-MS1)					Source: E303109-21		Prepared: 03/29/23 Analyzed: 03/30/23		
Chloride	285	20.0	250	22.4	105	80-120			
Matrix Spike Dup (2313041-MSD1)					Source: E303109-21		Prepared: 03/29/23 Analyzed: 03/30/23		
Chloride	282	20.0	250	22.4	104	80-120	0.923	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:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/04/23 10:07

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

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

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



Client: WPX Permian Energy, LLC				Bill To				Lab Use Only				TAT				EPA Program				
Project: Federal G Gas Com #001				Attention: Jim Raley				Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA			
Project Manager: Gilbert Moreno				Address: 5315 Buena Vista Dr.				E 303118		010580007					5 Day TAT					
Address: 3122 National Parks HWY				City, State, Zip: Carlsbad, NM, 88220				Analysis and Method										RCRA		
City, State, Zip: Carlsbad, NM, 88220				Phone: 575-885-7502				Depth(ft)	TPH GRO/DRO/ORO by 8015	BTX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	State				
Phone: 832-541-7719				Email: jim.raley@dmv.com												NM	CO	UT	AZ	TX
Email: devon-team@ensolum.com				Cost Center: 1061164701																
Collected by: Gilbert Moreno				Incident ID: nAB1428733041																

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft)	TPH GRO/DRO/ORO by 8015	BTX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
15:00	3.27.23	S	1	SW01	1	0-4'						X		
15:10	3.27.23	S	1	SW02	2	0-4'						X		
15:20	3.27.23	S	1	SW03	3	0-4'						X		
15:30	3.27.23	S	1	SW04	4	0-4'						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: Gilbert Moreno

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) <i>Gilbert Moreno</i>	Date 3-28-23	Time 09:00	Received by: (Signature) <i>Michelle Gungor</i>	Date 3-28-23	Time 0900	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4.0</u>
Relinquished by: (Signature) <i>Michelle Gungor</i>	Date 3-28-23	Time 1600	Received by: (Signature) <i>Lorenz</i>	Date 3-28-23	Time 1700	
Relinquished by: (Signature) <i>Lorenz</i>	Date 3-28-23	Time 2300	Received by: (Signature) <i>Drew Jbn</i>	Date 03/29/23	Time 6:45	

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: 3/29/2023 9:00:33AM

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:	03/29/23 06:45	Work Order ID:	E303118
Phone:	(539) 573-4018	Date Logged In:	03/28/23 15:02	Logged In By:	Caitlin Christian
Email:	devon-team@ensolum.com	Due Date:	04/04/23 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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.

Envirotech Analytical Laboratory

Printed: 3/30/2023 10:33:32AM

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:	03/30/23 07:00	Work Order ID:	E303127
Phone:	(539) 573-4018	Date Logged In:	03/29/23 15:11	Logged In By:	Caitlin Christian
Email:	devon-team@ensolum.com	Due Date:	04/05/23 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303127

Job Number: 01058-0007

Received: 3/30/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/5/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/5/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303127
Date Received: 3/30/2023 7:00:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/30/2023 7:00:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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
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Alexa Michaels
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labadmin@envirotech-inc.com

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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 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Federal G Gas Com #001 Project Number: 01058-0007 Project Manager: Gilbert Moreno	Reported: 04/05/23 08:51
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS01 4'	E303127-01A	Soil	03/27/23	03/30/23	Glass Jar, 4 oz.
FS02 4'	E303127-02A	Soil	03/27/23	03/30/23	Glass Jar, 4 oz.
FS03 4'	E303127-03A	Soil	03/27/23	03/30/23	Glass Jar, 4 oz.
FS04 4'	E303127-04A	Soil	03/27/23	03/30/23	Glass Jar, 4 oz.
FS05 4'	E303127-05A	Soil	03/27/23	03/30/23	Glass Jar, 4 oz.
FS06 4'	E303127-06A	Soil	03/27/23	03/30/23	Glass Jar, 2 oz.
FS07 4'	E303127-07A	Soil	03/27/23	03/30/23	Glass Jar, 2 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/5/2023 8:51:33AM

FS01 4'

E303127-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Benzene	ND	0.0250	1	03/30/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/30/23	
Toluene	ND	0.0250	1	03/30/23	03/30/23	
o-Xylene	ND	0.0250	1	03/30/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/30/23	
<i>Surrogate: Bromofluorobenzene</i>	91.5 %	70-130		03/30/23	03/30/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	96.9 %	70-130		03/30/23	03/30/23	
<i>Surrogate: Toluene-d8</i>	104 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/30/23	
<i>Surrogate: Bromofluorobenzene</i>	91.5 %	70-130		03/30/23	03/30/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	96.9 %	70-130		03/30/23	03/30/23	
<i>Surrogate: Toluene-d8</i>	104 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313051
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	04/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	04/01/23	
<i>Surrogate: n-Nonane</i>	98.5 %	50-200		03/30/23	04/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313060
Chloride	ND	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/5/2023 8:51:33AM

FS02 4'

E303127-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Benzene	ND	0.0250	1	03/30/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/30/23	
Toluene	ND	0.0250	1	03/30/23	03/30/23	
o-Xylene	ND	0.0250	1	03/30/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	90.8 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	97.6 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	102 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	90.8 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	97.6 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	102 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313051
Diesel Range Organics (C10-C28)	391	25.0	1	03/30/23	04/01/23	
Oil Range Organics (C28-C36)	183	50.0	1	03/30/23	04/01/23	
Surrogate: n-Nonane	107 %	50-200		03/30/23	04/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313060
Chloride	154	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/5/2023 8:51:33AM

FS03 4'

E303127-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Benzene	ND	0.0250	1	03/30/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/30/23	
Toluene	ND	0.0250	1	03/30/23	03/30/23	
o-Xylene	ND	0.0250	1	03/30/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	93.0 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	95.5 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	104 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	93.0 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	95.5 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	104 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313051
Diesel Range Organics (C10-C28)	137	25.0	1	03/30/23	04/01/23	
Oil Range Organics (C28-C36)	53.0	50.0	1	03/30/23	04/01/23	
Surrogate: n-Nonane	105 %	50-200		03/30/23	04/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313060
Chloride	78.7	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/5/2023 8:51:33AM

FS04 4'

E303127-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Benzene	ND	0.0250	1	03/30/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/30/23	
Toluene	ND	0.0250	1	03/30/23	03/30/23	
o-Xylene	ND	0.0250	1	03/30/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	90.9 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	94.6 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	103 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	90.9 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	94.6 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	103 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313051
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	04/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	04/01/23	
Surrogate: n-Nonane	104 %	50-200		03/30/23	04/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313060
Chloride	373	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/5/2023 8:51:33AM

FS05 4'

E303127-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Benzene	ND	0.0250	1	03/30/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/30/23	
Toluene	ND	0.0250	1	03/30/23	03/30/23	
o-Xylene	ND	0.0250	1	03/30/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	91.3 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	93.1 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	105 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	91.3 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	93.1 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	105 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313051
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	04/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	04/01/23	
Surrogate: n-Nonane	104 %	50-200		03/30/23	04/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313060
Chloride	544	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/5/2023 8:51:33AM

FS06 4'

E303127-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Benzene	ND	0.0250	1	03/30/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/30/23	
Toluene	ND	0.0250	1	03/30/23	03/30/23	
o-Xylene	ND	0.0250	1	03/30/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	89.5 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	95.0 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	105 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	89.5 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	95.0 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	105 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313051
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	04/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	04/01/23	
Surrogate: n-Nonane	106 %	50-200		03/30/23	04/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313060
Chloride	187	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/5/2023 8:51:33AM

FS07 4'

E303127-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Benzene	ND	0.0250	1	03/30/23	03/30/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/30/23	
Toluene	ND	0.0250	1	03/30/23	03/30/23	
o-Xylene	ND	0.0250	1	03/30/23	03/30/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/30/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	91.7 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	93.6 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	105 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313052
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/30/23	
Surrogate: Bromofluorobenzene	91.7 %	70-130		03/30/23	03/30/23	
Surrogate: 1,2-Dichloroethane-d4	93.6 %	70-130		03/30/23	03/30/23	
Surrogate: Toluene-d8	105 %	70-130		03/30/23	03/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313051
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	04/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	04/01/23	
Surrogate: n-Nonane	104 %	50-200		03/30/23	04/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313060
Chloride	33.6	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/5/2023 8:51:33AM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2313052-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.461		0.500		92.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313052-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.18	0.0250	2.50		87.4	70-130			
Ethylbenzene	2.25	0.0250	2.50		90.2	70-130			
Toluene	2.32	0.0250	2.50		92.8	70-130			
o-Xylene	2.29	0.0250	2.50		91.6	70-130			
p,m-Xylene	4.58	0.0500	5.00		91.6	70-130			
Total Xylenes	6.87	0.0250	7.50		91.6	70-130			
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.8	70-130			
Surrogate: Toluene-d8	0.520		0.500		104	70-130			

Matrix Spike (2313052-MS1)

Source: E303125-01

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.23	0.0250	2.50	ND	89.3	48-131			
Ethylbenzene	2.28	0.0250	2.50	ND	91.3	45-135			
Toluene	2.28	0.0250	2.50	ND	91.2	48-130			
o-Xylene	2.30	0.0250	2.50	ND	91.9	43-135			
p,m-Xylene	4.56	0.0500	5.00	ND	91.2	43-135			
Total Xylenes	6.86	0.0250	7.50	ND	91.4	43-135			
Surrogate: Bromofluorobenzene	0.490		0.500		97.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.480		0.500		95.9	70-130			
Surrogate: Toluene-d8	0.516		0.500		103	70-130			

Matrix Spike Dup (2313052-MSD1)

Source: E303125-01

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.14	0.0250	2.50	ND	85.4	48-131	4.42	23	
Ethylbenzene	2.19	0.0250	2.50	ND	87.7	45-135	4.00	27	
Toluene	2.20	0.0250	2.50	ND	87.8	48-130	3.71	24	
o-Xylene	2.19	0.0250	2.50	ND	87.7	43-135	4.65	27	
p,m-Xylene	4.38	0.0500	5.00	ND	87.6	43-135	4.04	27	
Total Xylenes	6.57	0.0250	7.50	ND	87.6	43-135	4.24	27	
Surrogate: Bromofluorobenzene	0.491		0.500		98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.483		0.500		96.6	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/5/2023 8:51:33AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313052-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.461		0.500		92.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313052-BS2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	51.4	20.0	50.0		103	70-130			
Surrogate: Bromofluorobenzene	0.484		0.500		96.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.477		0.500		95.3	70-130			
Surrogate: Toluene-d8	0.523		0.500		105	70-130			

Matrix Spike (2313052-MS2)

Source: E303125-01

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	54.1	20.0	50.0	ND	108	70-130			
Surrogate: Bromofluorobenzene	0.485		0.500		96.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.7	70-130			
Surrogate: Toluene-d8	0.523		0.500		105	70-130			

Matrix Spike Dup (2313052-MSD2)

Source: E303125-01

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	48.4	20.0	50.0	ND	96.8	70-130	11.1	20	
Surrogate: Bromofluorobenzene	0.479		0.500		95.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.4	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/5/2023 8:51:33AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313051-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	52.0		50.0		104	50-200			

LCS (2313051-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	51.6		50.0		103	50-200			

Matrix Spike (2313051-MS1)

Source: E303119-05

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	250	25.0	250	ND	100	38-132			
Surrogate: n-Nonane	49.5		50.0		99.0	50-200			

Matrix Spike Dup (2313051-MSD1)

Source: E303119-05

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	246	25.0	250	ND	98.4	38-132	1.67	20	
Surrogate: n-Nonane	49.8		50.0		99.5	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/5/2023 8:51:33AM

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 (2313060-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313060-BS1)					Prepared: 03/30/23 Analyzed: 04/03/23				
Chloride	257	20.0	250		103	90-110			
Matrix Spike (2313060-MS1)					Source: E303127-01		Prepared: 03/30/23 Analyzed: 04/03/23		
Chloride	263	20.0	250	ND	105	80-120			
Matrix Spike Dup (2313060-MSD1)					Source: E303127-01		Prepared: 03/30/23 Analyzed: 04/03/23		
Chloride	264	20.0	250	ND	106	80-120	0.512	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:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/05/23 08:51

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

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

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



Client: WPX Permian Energy, LLC		Bill To		Lab Use Only		TAT			EPA Program				
Project: Federal G Gas Com #001		Attention: Jim Raley		Lab WO# E303127		Job Number 01058-0007		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Gilbert Moreno		Address: 5315 Buena Vista Dr.									5 Day TAT		
Address: 3122 National Parks HWY		City, State, Zip: Carlsbad, NM, 88220											RCRA
City, State, Zip: Carlsbad, NM, 88220		Phone: 575-885-7502											
Phone: 832-541-7719		Email: jim.raley@dmv.com											
Email: devon-team@ensolum.com		Cost Center: 1061164701											
Collected by: Gilbert Moreno		Incident ID: nAB1428733041											

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	BGDOC TX	Remarks
15:40	3.27.23	S	1	FS01	1	4'						X		
15:50	3.27.23	S	1	FS02	2	4'						X		
16:00	3.27.23	S	1	FS03	3	4'						X		
16:10	3.27.23	S	1	FS04	4	4'						X		
16:20	3.27.23	S	1	FS05	5	4'						X		
16:30	3.27.23	S	1	FS06	6	4'						X		
16:40	3.27.23	S	1	FS07	7	4'						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: Gilbert Moreno

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) <i>Culbert</i>	Date 3.28.23	Time 09:00	Received by: (Signature) <i>Michelle Gonzalez</i>	Date 3-29-23	Time 0900	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4.0</u>
Relinquished by: (Signature) <i>Michelle Gonzalez</i>	Date 3-29-23	Time 1715	Received by: (Signature) <i>Lorenzo</i>	Date 3-29-23	Time 1730	
Relinquished by: (Signature) <i>Lorenzo</i>	Date 3-29-23	Time 2315	Received by: (Signature) <i>Jane</i>	Date 03/30/23	Time 7:00	

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: 3/30/2023 10:33:32AM

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:	03/30/23 07:00	Work Order ID:	E303127
Phone:	(539) 573-4018	Date Logged In:	03/29/23 15:11	Logged In By:	Caitlin Christian
Email:	devon-team@ensolum.com	Due Date:	04/05/23 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303136

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303136
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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
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Office: 505-632-1881
labadmin@envirotech-inc.com

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West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:44

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW25 4-12'	E303136-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:44:10PM

SW25 4-12'

E303136-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		100 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		108 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		102 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		100 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		108 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		102 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		84.5 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	327	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:44:10PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.54	0.0250	2.50		102	70-130			
Ethylbenzene	2.40	0.0250	2.50		95.9	70-130			
Toluene	2.48	0.0250	2.50		99.2	70-130			
o-Xylene	2.58	0.0250	2.50		103	70-130			
p,m-Xylene	4.91	0.0500	5.00		98.2	70-130			
Total Xylenes	7.49	0.0250	7.50		99.9	70-130			
Surrogate: Bromofluorobenzene	0.455		0.500		90.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.8	70-130			

LCS Dup (2313071-BSD1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.46	0.0250	2.50		98.5	70-130	3.12	23	
Ethylbenzene	2.39	0.0250	2.50		95.5	70-130	0.439	27	
Toluene	2.46	0.0250	2.50		98.4	70-130	0.830	24	
o-Xylene	2.55	0.0250	2.50		102	70-130	1.21	27	
p,m-Xylene	4.90	0.0500	5.00		97.9	70-130	0.306	27	
Total Xylenes	7.45	0.0250	7.50		99.3	70-130	0.616	27	
Surrogate: Bromofluorobenzene	0.470		0.500		93.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.2	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:44:10PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	48.2	20.0	50.0		96.3	70-130			
Surrogate: Bromofluorobenzene	0.451		0.500		90.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			

LCS Dup (2313071-BSD2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.5	70-130	2.25	20	
Surrogate: Bromofluorobenzene	0.453		0.500		90.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:44:10PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313068-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.7		50.0		103	50-200			

LCS (2313068-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: n-Nonane	50.7		50.0		101	50-200			

Matrix Spike (2313068-MS1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	471	25.0	250	183	115	38-132			
Surrogate: n-Nonane	48.8		50.0		97.5	50-200			

Matrix Spike Dup (2313068-MSD1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	449	25.0	250	183	107	38-132	4.73	20	
Surrogate: n-Nonane	50.7		50.0		101	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:44:10PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313075-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313075-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	244	20.0	250		97.7	90-110			
Matrix Spike (2313075-MS1)					Source: E303136-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	565	20.0	250	327	95.4	80-120			
Matrix Spike Dup (2313075-MSD1)					Source: E303136-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	588	20.0	250	327	105	80-120	3.94	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:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:44

- 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.



[illegible]

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: Gilbert Moreno

Sampled by: Gilbert Moreno

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) <i>[Signature]</i>	Date 03/30/23	Time 09:00	Received by: (Signature) <i>Michelle Gonzales</i>	Date 3-30-23	Time 0900	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <i>Michelle Gonzales</i>	Date 3-30-23	Time 1730	Received by: (Signature) <i>Lawrence Leri</i>	Date 3-30-23	Time 1730	
Relinquished by: (Signature) <i>Lawrence Leri</i>	Date 3-30-23	Time 2315	Received by: (Signature) <i>[Signature]</i>	Date 3-31-23	Time 545	
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: 3/31/2023 9:40:27AM

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:	03/31/23 05:46	Work Order ID:	E303136
Phone:	(539) 573-4018	Date Logged In:	03/30/23 13:46	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303137

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303137
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:45

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW21 4-12'	E303137-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW22 4-12'	E303137-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW23 4-12'	E303137-03A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:45:56PM

SW21 4-12'

E303137-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		101 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		112 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		101 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		101 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		112 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		101 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	179	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	82.1	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		94.7 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	ND	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:45:56PM

SW22 4-12'

E303137-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		101 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		111 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		103 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		101 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		111 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		103 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		95.9 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	98.3	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:45:56PM

SW23 4-12'

E303137-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		103 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		116 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		103 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		103 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		116 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		103 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	168	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	99.8	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		96.9 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	ND	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:45:56PM

Volatile Organic Compounds by EPA 8260B

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 (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.54	0.0250	2.50		102	70-130			
Ethylbenzene	2.40	0.0250	2.50		95.9	70-130			
Toluene	2.48	0.0250	2.50		99.2	70-130			
o-Xylene	2.58	0.0250	2.50		103	70-130			
p,m-Xylene	4.91	0.0500	5.00		98.2	70-130			
Total Xylenes	7.49	0.0250	7.50		99.9	70-130			
Surrogate: Bromofluorobenzene	0.455		0.500		90.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.8	70-130			

LCS Dup (2313071-BSD1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.46	0.0250	2.50		98.5	70-130	3.12	23	
Ethylbenzene	2.39	0.0250	2.50		95.5	70-130	0.439	27	
Toluene	2.46	0.0250	2.50		98.4	70-130	0.830	24	
o-Xylene	2.55	0.0250	2.50		102	70-130	1.21	27	
p,m-Xylene	4.90	0.0500	5.00		97.9	70-130	0.306	27	
Total Xylenes	7.45	0.0250	7.50		99.3	70-130	0.616	27	
Surrogate: Bromofluorobenzene	0.470		0.500		93.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.2	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:45:56PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	48.2	20.0	50.0		96.3	70-130			
Surrogate: Bromofluorobenzene	0.451		0.500		90.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			

LCS Dup (2313071-BSD2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.5	70-130	2.25	20	
Surrogate: Bromofluorobenzene	0.453		0.500		90.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:45:56PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313068-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.7		50.0		103	50-200			

LCS (2313068-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: n-Nonane	50.7		50.0		101	50-200			

Matrix Spike (2313068-MS1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	471	25.0	250	183	115	38-132			
Surrogate: n-Nonane	48.8		50.0		97.5	50-200			

Matrix Spike Dup (2313068-MSD1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	449	25.0	250	183	107	38-132	4.73	20	
Surrogate: n-Nonane	50.7		50.0		101	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:45:56PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313075-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313075-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	244	20.0	250		97.7	90-110			
Matrix Spike (2313075-MS1)					Source: E303136-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	565	20.0	250	327	95.4	80-120			
Matrix Spike Dup (2313075-MSD1)					Source: E303136-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	588	20.0	250	327	105	80-120	3.94	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:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:45

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

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

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



Client: WPX Permian Energy, LLC				Bill To				Lab Use Only				TAT				EPA Program			
Project: Federal G Gas Com #001				Attention: Jim Raley				Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA		
Project Manager: Gilbert Moreno				Address: 5315 Buena Vista Dr.				E363137		01058-0007		X			5-Day TAT				
Address: 3122 National Parks HWY				City, State, Zip: Carlsbad, NM, 88220				Analysis and Method											RCRA
City, State, Zip: Carlsbad, NM, 88220				Phone: 575-885-7502				Depth (ft)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX				
Phone: 832-541-7719				Email: jim.raley@dv.com															
Email: devon-team@ensolum.com				Cost Center: 1061164701															
Collected by: Yocoly Edyte Konan				Incident ID: nAB1428733041															
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number													Remarks	
11:40	3.29.23	S	1	SW21	1	4-12'								X					
11:50	3.29.23	S	1	SW22	2	4-12'								X					
12:00	3.29.23	S	1	SW23	3	4-12'								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: Gilbert Moreno

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	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<i>[Signature]</i>	03/30/23	09:00	<i>Miguel Cuzco</i>	03-30-23	0900	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Miguel Cuzco</i>	3-30-23	1730	<i>[Signature]</i>	3-30-23	1730	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>[Signature]</i>	3-30-23	23:5	<i>[Signature]</i>	3-31-23	5:45	

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 Analytical Laboratory

Printed: 3/31/2023 9:46:31AM

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:	03/31/23 05:45	Work Order ID:	E303137
Phone:	(539) 573-4018	Date Logged In:	03/30/23 13:52	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush.
Sample SW23 depth on the COC is 4-12ft,
the physical jar is labeled 4-8ft.

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303138

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303138
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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
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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported: 04/03/23 15:47
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS08 4'	E303138-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS09 4'	E303138-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS10 4'	E303138-03A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:47:27PM

FS08 4'

E303138-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>	89.1 %	70-130		03/31/23	03/31/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	94.8 %	70-130		03/31/23	03/31/23	
<i>Surrogate: Toluene-d8</i>	98.1 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>	89.1 %	70-130		03/31/23	03/31/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	94.8 %	70-130		03/31/23	03/31/23	
<i>Surrogate: Toluene-d8</i>	98.1 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	99.5	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	132	50.0	1	03/30/23	03/31/23	
<i>Surrogate: n-Nonane</i>	92.1 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	84.1	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:47:27PM

FS09 4'

E303138-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	89.3 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	95.8 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	98.7 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	89.3 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	95.8 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	98.7 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	334	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	265	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	101 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	134	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:47:27PM

FS10 4'

E303138-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	90.5 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	98.8 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	99.0 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	90.5 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	98.8 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	99.0 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	756	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	463	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	108 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	150	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:47:27PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.54	0.0250	2.50		102	70-130			
Ethylbenzene	2.40	0.0250	2.50		95.9	70-130			
Toluene	2.48	0.0250	2.50		99.2	70-130			
o-Xylene	2.58	0.0250	2.50		103	70-130			
p,m-Xylene	4.91	0.0500	5.00		98.2	70-130			
Total Xylenes	7.49	0.0250	7.50		99.9	70-130			
Surrogate: Bromofluorobenzene	0.455		0.500		90.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.8	70-130			

LCS Dup (2313071-BSD1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.46	0.0250	2.50		98.5	70-130	3.12	23	
Ethylbenzene	2.39	0.0250	2.50		95.5	70-130	0.439	27	
Toluene	2.46	0.0250	2.50		98.4	70-130	0.830	24	
o-Xylene	2.55	0.0250	2.50		102	70-130	1.21	27	
p,m-Xylene	4.90	0.0500	5.00		97.9	70-130	0.306	27	
Total Xylenes	7.45	0.0250	7.50		99.3	70-130	0.616	27	
Surrogate: Bromofluorobenzene	0.470		0.500		93.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.2	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:47:27PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	48.2	20.0	50.0		96.3	70-130			
Surrogate: Bromofluorobenzene	0.451		0.500		90.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			

LCS Dup (2313071-BSD2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.5	70-130	2.25	20	
Surrogate: Bromofluorobenzene	0.453		0.500		90.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:47:27PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313068-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.7		50.0		103	50-200			

LCS (2313068-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: n-Nonane	50.7		50.0		101	50-200			

Matrix Spike (2313068-MS1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	471	25.0	250	183	115	38-132			
Surrogate: n-Nonane	48.8		50.0		97.5	50-200			

Matrix Spike Dup (2313068-MSD1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	449	25.0	250	183	107	38-132	4.73	20	
Surrogate: n-Nonane	50.7		50.0		101	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:47:27PM

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 (2313075-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313075-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	244	20.0	250		97.7	90-110			
Matrix Spike (2313075-MS1)					Source: E303136-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	565	20.0	250	327	95.4	80-120			
Matrix Spike Dup (2313075-MSD1)					Source: E303136-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	588	20.0	250	327	105	80-120	3.94	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:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:47

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

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

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



[illegible]

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.						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.
Sampled by: Gilbert Moreno						
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<i>[Signature]</i>	03/30/23	09:00	<i>Michelle Gonzalez</i>	3-30-23	09:00	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Michelle Gonzalez</i>	3-30-23	1730	<i>Horacio Leni</i>	3-30-23	1730	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Horacio Leni</i>	3-30-23	23:15	<i>[Signature]</i>	3-31-23	5:45	
Sample Matrix: <u>S</u> - Soil, <u>Sd</u> - Solid, <u>Sg</u> - Sludge, <u>A</u> - Aqueous, <u>O</u> - Other _____				Container Type: <u>g</u> - glass, <u>p</u> - poly/plastic, <u>ag</u> - amber glass, <u>v</u> - 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 Analytical Laboratory

Printed: 3/31/2023 9:49:24AM

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:	03/31/23 05:45	Work Order ID:	E303138
Phone:	(539) 573-4018	Date Logged In:	03/30/23 13:56	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303139

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303139
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Federal G Gas Com #001 Project Number: 01058-0007 Project Manager: Gilbert Moreno	Reported: 04/03/23 15:49
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS21 12'	E303139-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS22 12'	E303139-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS23 12'	E303139-03A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS24 12'	E303139-04A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS25 12'	E303139-05A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS26 12'	E303139-06A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:49:18PM

FS21 12'

E303139-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>	<i>90.4 %</i>	<i>70-130</i>		<i>03/31/23</i>	<i>03/31/23</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>100 %</i>	<i>70-130</i>		<i>03/31/23</i>	<i>03/31/23</i>	
<i>Surrogate: Toluene-d8</i>	<i>100 %</i>	<i>70-130</i>		<i>03/31/23</i>	<i>03/31/23</i>	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>	<i>90.4 %</i>	<i>70-130</i>		<i>03/31/23</i>	<i>03/31/23</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>100 %</i>	<i>70-130</i>		<i>03/31/23</i>	<i>03/31/23</i>	
<i>Surrogate: Toluene-d8</i>	<i>100 %</i>	<i>70-130</i>		<i>03/31/23</i>	<i>03/31/23</i>	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
<i>Surrogate: n-Nonane</i>	<i>96.3 %</i>	<i>50-200</i>		<i>03/30/23</i>	<i>03/31/23</i>	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	248	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:49:18PM

FS22 12'

E303139-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	89.7 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	97.2 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	98.5 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	89.7 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	97.2 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	98.5 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	26.4	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	96.5 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	232	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:49:18PM

FS23 12'

E303139-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	88.3 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	98.9 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	100 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	88.3 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	98.9 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	100 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	94.0 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	77.7	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:49:18PM

FS24 12'

E303139-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	91.3 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	97.1 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	99.6 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	91.3 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	97.1 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	99.6 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	96.2 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	79.2	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:49:18PM

FS25 12'

E303139-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	89.4 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	99.6 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	99.0 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	89.4 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	99.6 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	99.0 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	97.0 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	678	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:49:18PM

FS26 12'

E303139-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	89.4 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	99.1 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	97.6 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene	89.4 %	70-130		03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	99.1 %	70-130		03/31/23	03/31/23	
Surrogate: Toluene-d8	97.6 %	70-130		03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	94.2 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	667	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:49:18PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.54	0.0250	2.50		102	70-130			
Ethylbenzene	2.40	0.0250	2.50		95.9	70-130			
Toluene	2.48	0.0250	2.50		99.2	70-130			
o-Xylene	2.58	0.0250	2.50		103	70-130			
p,m-Xylene	4.91	0.0500	5.00		98.2	70-130			
Total Xylenes	7.49	0.0250	7.50		99.9	70-130			
Surrogate: Bromofluorobenzene	0.455		0.500		90.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.8	70-130			

LCS Dup (2313071-BSD1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.46	0.0250	2.50		98.5	70-130	3.12	23	
Ethylbenzene	2.39	0.0250	2.50		95.5	70-130	0.439	27	
Toluene	2.46	0.0250	2.50		98.4	70-130	0.830	24	
o-Xylene	2.55	0.0250	2.50		102	70-130	1.21	27	
p,m-Xylene	4.90	0.0500	5.00		97.9	70-130	0.306	27	
Total Xylenes	7.45	0.0250	7.50		99.3	70-130	0.616	27	
Surrogate: Bromofluorobenzene	0.470		0.500		93.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.2	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:49:18PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	48.2	20.0	50.0		96.3	70-130			
Surrogate: Bromofluorobenzene	0.451		0.500		90.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			

LCS Dup (2313071-BSD2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.5	70-130	2.25	20	
Surrogate: Bromofluorobenzene	0.453		0.500		90.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:49:18PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313068-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.7		50.0		103	50-200			

LCS (2313068-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: n-Nonane	50.7		50.0		101	50-200			

Matrix Spike (2313068-MS1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	471	25.0	250	183	115	38-132			
Surrogate: n-Nonane	48.8		50.0		97.5	50-200			

Matrix Spike Dup (2313068-MSD1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	449	25.0	250	183	107	38-132	4.73	20	
Surrogate: n-Nonane	50.7		50.0		101	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:49:18PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313075-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313075-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	244	20.0	250		97.7	90-110			
Matrix Spike (2313075-MS1)					Source: E303136-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	565	20.0	250	327	95.4	80-120			
Matrix Spike Dup (2313075-MSD1)					Source: E303136-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	588	20.0	250	327	105	80-120	3.94	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:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:49

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

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

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

Client: WPX Permian Energy, LLC		Bill To		Lab Use Only		TAT		EPA Program					
Project: Federal G Gas Com #001		Attention: Jim Raley		Lab WO# E303139		Job Number 010580007		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Gilbert Moreno		Address: 5315 Buena Vista Dr.						X			5 Day TAT		
Address: 3122 National Parks HWY		City, State, Zip: Carlsbad, NM, 88220											RCRA
City, State, Zip: Carlsbad, NM, 88220		Phone: 575-885-7502											
Phone: 832-541-7719		Email: jim.raley@dvn.com											
Email: devon-team@ensolum.com		Cost Center: 1061164701											
Collected by: Yocoly Edyte Konan		Incident ID: nAB1428733041											

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	BGDOC TX	Remarks
14:40	3.29.23	S	1	FS21	1	12'						X		
14:50	3.29.23	S	1	FS22	2	12'						X		
15:00	3.29.23	S	1	FS23	3	12'						X		
15:10	3.29.23	S	1	FS24	4	12'						X		
15:20	3.29.23	S	1	FS25	5	12'						X		
15:30	3.29.23	S	1	FS26	6	12'						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: Gilbert Moreno

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	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<i>[Signature]</i>	03/30/23	0800	<i>Michelle Gonzales</i>	3-30-23	0900	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Michelle Gonzales</i>	3-30-23	1730	<i>Rosemary Leis</i>	3-30-23	1730	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Rosemary Leis</i>	3-30-23	2315	<i>[Signature]</i>	3-31-23	0545	

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 Analytical Laboratory

Printed: 3/31/2023 9:50:05AM

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:	03/31/23 05:45	Work Order ID:	E303139
Phone:	(539) 573-4018	Date Logged In:	03/30/23 13:59	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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.

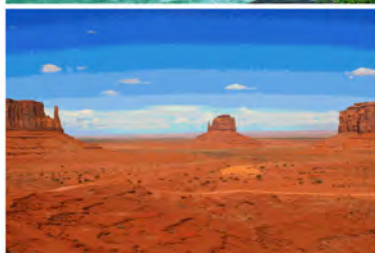
Date



envirotech Inc.

Report to:

Gilbert Moreno



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303140

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303140
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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
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Technical Representative
Office: 505-421-LABS(5227)

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:54

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS11 15'	E303140-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS12 15'	E303140-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS13 15'	E303140-03A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS14 15'	E303140-04A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:54:21PM

FS11 15'

E303140-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		105 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		114 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		101 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		105 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		114 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		101 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	183	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		101 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	43.3	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:54:21PM

FS12 15'

E303140-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		101 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		110 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		102 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		101 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		110 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		102 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	509	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	85.1	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		99.1 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	46.4	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:54:21PM

FS13 15'

E303140-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		107 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		116 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		102 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		107 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		116 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		102 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	187	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		97.8 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	52.1	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:54:21PM

FS14 15'

E303140-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		102 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		110 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		101 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		102 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		110 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		101 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	220	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	79.2	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		97.4 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313075
Chloride	49.9	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:54:21PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.54	0.0250	2.50		102	70-130			
Ethylbenzene	2.40	0.0250	2.50		95.9	70-130			
Toluene	2.48	0.0250	2.50		99.2	70-130			
o-Xylene	2.58	0.0250	2.50		103	70-130			
p,m-Xylene	4.91	0.0500	5.00		98.2	70-130			
Total Xylenes	7.49	0.0250	7.50		99.9	70-130			
Surrogate: Bromofluorobenzene	0.455		0.500		90.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.8	70-130			

LCS Dup (2313071-BSD1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.46	0.0250	2.50		98.5	70-130	3.12	23	
Ethylbenzene	2.39	0.0250	2.50		95.5	70-130	0.439	27	
Toluene	2.46	0.0250	2.50		98.4	70-130	0.830	24	
o-Xylene	2.55	0.0250	2.50		102	70-130	1.21	27	
p,m-Xylene	4.90	0.0500	5.00		97.9	70-130	0.306	27	
Total Xylenes	7.45	0.0250	7.50		99.3	70-130	0.616	27	
Surrogate: Bromofluorobenzene	0.470		0.500		93.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.2	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:54:21PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	48.2	20.0	50.0		96.3	70-130			
Surrogate: Bromofluorobenzene	0.451		0.500		90.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			

LCS Dup (2313071-BSD2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.5	70-130	2.25	20	
Surrogate: Bromofluorobenzene	0.453		0.500		90.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:54:21PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313068-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.7		50.0		103	50-200			

LCS (2313068-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: n-Nonane	50.7		50.0		101	50-200			

Matrix Spike (2313068-MS1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	471	25.0	250	183	115	38-132			
Surrogate: n-Nonane	48.8		50.0		97.5	50-200			

Matrix Spike Dup (2313068-MSD1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	449	25.0	250	183	107	38-132	4.73	20	
Surrogate: n-Nonane	50.7		50.0		101	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:54:21PM

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 (2313075-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313075-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	244	20.0	250		97.7	90-110			
Matrix Spike (2313075-MS1)					Source: E303136-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	565	20.0	250	327	95.4	80-120			
Matrix Spike Dup (2313075-MSD1)					Source: E303136-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	588	20.0	250	327	105	80-120	3.94	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:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:54

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

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

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



Client: WPX Permian Energy, LLC	Bill To	Lab Use Only		TAT			EPA Program		
Project: Federal G Gas Com #001	Attention: Jim Raley	Lab WO#	Job Number	1D	2D	3D	Standard	CWA	SDWA
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.	E303140	01058-0007X				5 Day TAT		
Address: 3122 National Parks HWY	City, State, Zip: Carlsbad, NM, 88220	Analysis and Method							RCRA
City, State, Zip: Carlsbad, NM, 88220	Phone: 575-885-7502								
Phone: 832-541-7719	Email: jim.raley@dv.com								
Email: devon-team@ensolum.com	Cost Center: 1061164701								
Collected by: Yocoly Edyte Konan	Incident ID: nAB1428733041								

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	BGDOC TX	State	Remarks
13:00	3.29.23	S	1	FS11	1	15'						X			
13:10	3.29.23	S	1	FS12	2	15'						X			
13:20	3.29.23	S	1	FS13	3	15'						X			
13:30	3.29.23	S	1	FS14	4	15'						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: Gilbert Moreno

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	Lab Use Only Received on ice: Y / N T1 T2 T3 AVG Temp °C
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

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 Analytical Laboratory

Printed: 3/31/2023 9:50:35AM

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:	03/31/23 05:45	Work Order ID:	E303140
Phone:	(539) 573-4018	Date Logged In:	03/30/23 14:04	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/Resolution

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303141

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303141
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:55

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW05 0-4'	E303141-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW06 0-4'	E303141-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW07 0-4'	E303141-03A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:55:57PM

SW05 0-4'

E303141-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		102 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		114 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		103 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		102 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		114 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		103 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		105 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	124	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:55:57PM

SW06 0-4'

E303141-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		102 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		116 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		101 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		102 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		116 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		101 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		106 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	233	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:55:57PM

SW07 0-4'

E303141-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Benzene	ND	0.0250	1	03/31/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/31/23	03/31/23	
Toluene	ND	0.0250	1	03/31/23	03/31/23	
o-Xylene	ND	0.0250	1	03/31/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/31/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		103 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		112 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		105 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313071
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/31/23	03/31/23	
Surrogate: Bromofluorobenzene		103 %	70-130	03/31/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		112 %	70-130	03/31/23	03/31/23	
Surrogate: Toluene-d8		105 %	70-130	03/31/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313068
Diesel Range Organics (C10-C28)	50.3	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	62.4	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		108 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	148	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:55:57PM

Volatile Organic Compounds by EPA 8260B

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 (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.54	0.0250	2.50		102	70-130			
Ethylbenzene	2.40	0.0250	2.50		95.9	70-130			
Toluene	2.48	0.0250	2.50		99.2	70-130			
o-Xylene	2.58	0.0250	2.50		103	70-130			
p,m-Xylene	4.91	0.0500	5.00		98.2	70-130			
Total Xylenes	7.49	0.0250	7.50		99.9	70-130			
Surrogate: Bromofluorobenzene	0.455		0.500		90.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.8	70-130			

LCS Dup (2313071-BSD1)

Prepared: 03/31/23 Analyzed: 03/31/23

Benzene	2.46	0.0250	2.50		98.5	70-130	3.12	23	
Ethylbenzene	2.39	0.0250	2.50		95.5	70-130	0.439	27	
Toluene	2.46	0.0250	2.50		98.4	70-130	0.830	24	
o-Xylene	2.55	0.0250	2.50		102	70-130	1.21	27	
p,m-Xylene	4.90	0.0500	5.00		97.9	70-130	0.306	27	
Total Xylenes	7.45	0.0250	7.50		99.3	70-130	0.616	27	
Surrogate: Bromofluorobenzene	0.470		0.500		93.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.2	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:55:57PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313071-BLK1)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.447		0.500		89.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.500		0.500		100	70-130			

LCS (2313071-BS2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	48.2	20.0	50.0		96.3	70-130			
Surrogate: Bromofluorobenzene	0.451		0.500		90.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			

LCS Dup (2313071-BSD2)

Prepared: 03/31/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.5	70-130	2.25	20	
Surrogate: Bromofluorobenzene	0.453		0.500		90.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:55:57PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313068-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	51.7		50.0		103	50-200			

LCS (2313068-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: <i>n</i> -Nonane	50.7		50.0		101	50-200			

Matrix Spike (2313068-MS1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	471	25.0	250	183	115	38-132			
Surrogate: <i>n</i> -Nonane	48.8		50.0		97.5	50-200			

Matrix Spike Dup (2313068-MSD1)

Source: E303140-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	449	25.0	250	183	107	38-132	4.73	20	
Surrogate: <i>n</i> -Nonane	50.7		50.0		101	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:55:57PM

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 (2313076-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313076-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2313076-MS1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	371	20.0	250	124	99.0	80-120			
Matrix Spike Dup (2313076-MSD1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	384	20.0	250	124	104	80-120	3.22	20	

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:55

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

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

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



Client: WPX Permian Energy, LLC				Bill To				Lab Use Only				TAT				EPA Program					
Project: Federal G Gas Com #001				Attention: Jim Raley				Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA				
Project Manager: Gilbert Moreno				Address: 5315 Buena Vista Dr.				E303141		01058-0007		X			5 Day TAT						
Address: 3122 National Parks HWY				City, State, Zip: Carlsbad, NM, 88220				Analysis and Method											RCRA		
City, State, Zip: Carlsbad, NM, 88220				Phone: 575-885-7502				Depth (ft)		TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	State				
Phone: 832-541-7719				Email: jim.raley@dmv.com													NM	CO	UT	AZ	TX
Email: devon-team@ensolum.com				Cost Center: 1061164701																	
Collected by: Yocoly Edyte Konan				Incident ID: nAB1428733041																	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number												Remarks				
9:00	3.29.23	S	1	SW05	1	0-4'								X							
9:10	3.29.23	S	1	SW06	2	0-4'								X							
9:20	3.29.23	S	1	SW07	3	0-4'								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: Gilbert Moreno

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	Lab Use Only Received on ice: Y / N T1 T2 T3 AVG Temp °C 4
<i>[Signature]</i>	03/30/23	09:00	<i>Michelle Gonzalez</i>	3-30-23	0900	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Michelle Gonzalez</i>	3-30-23	1730	<i>[Signature]</i>	3-30-23	1730	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>[Signature]</i>	3-30-23	2315	<i>[Signature]</i>	3-31-23	5:45	

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 Analytical Laboratory

Printed: 3/31/2023 9:51:51AM

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:	03/31/23 05:45	Work Order ID:	E303141
Phone:	(539) 573-4018	Date Logged In:	03/30/23 14:09	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303142

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303142
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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
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Technical Representative
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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 16:00

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS15 6'	E303142-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS16 6'	E303142-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS17 6'	E303142-03A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 4:00:39PM

FS15 6'

E303142-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene		113 %	70-130	03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	03/30/23	03/31/23	
Surrogate: Toluene-d8		97.6 %	70-130	03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene		113 %	70-130	03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	03/30/23	03/31/23	
Surrogate: Toluene-d8		97.6 %	70-130	03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	221	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	187	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		111 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	66.0	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 4:00:39PM

FS16 6'

E303142-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene		100 %	70-130	03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	03/30/23	03/31/23	
Surrogate: Toluene-d8		108 %	70-130	03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene		100 %	70-130	03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	03/30/23	03/31/23	
Surrogate: Toluene-d8		108 %	70-130	03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	44.5	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		107 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	93.2	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 4:00:39PM

FS17 6'

E303142-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene		126 %	70-130	03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		98.9 %	70-130	03/30/23	03/31/23	
Surrogate: Toluene-d8		99.7 %	70-130	03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene		126 %	70-130	03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4		98.9 %	70-130	03/30/23	03/31/23	
Surrogate: Toluene-d8		99.7 %	70-130	03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane		106 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	365	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:00:39PM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.12	0.0250	2.50		84.9	70-130			
Ethylbenzene	2.19	0.0250	2.50		87.6	70-130			
Toluene	2.16	0.0250	2.50		86.5	70-130			
o-Xylene	2.23	0.0250	2.50		89.2	70-130			
p,m-Xylene	4.41	0.0500	5.00		88.2	70-130			
Total Xylenes	6.64	0.0250	7.50		88.5	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

LCS Dup (2313072-BSD1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.19	0.0250	2.50		87.6	70-130	3.22	23	
Ethylbenzene	2.31	0.0250	2.50		92.3	70-130	5.29	27	
Toluene	2.26	0.0250	2.50		90.3	70-130	4.34	24	
o-Xylene	2.32	0.0250	2.50		92.6	70-130	3.74	27	
p,m-Xylene	4.60	0.0500	5.00		91.9	70-130	4.14	27	
Total Xylenes	6.91	0.0250	7.50		92.1	70-130	4.01	27	
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:00:39PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.6	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

LCS Dup (2313072-BSD2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	50.9	20.0	50.0		102	70-130	3.16	20	
Surrogate: Bromofluorobenzene	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:00:39PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313069-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	51.0		50.0		102	50-200			

LCS (2313069-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	245	25.0	250		98.1	38-132			
Surrogate: <i>n</i> -Nonane	47.6		50.0		95.1	50-200			

Matrix Spike (2313069-MS1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	475	25.0	250	235	95.8	38-132			
Surrogate: <i>n</i> -Nonane	46.5		50.0		93.1	50-200			

Matrix Spike Dup (2313069-MSD1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	492	25.0	250	235	103	38-132	3.55	20	
Surrogate: <i>n</i> -Nonane	45.9		50.0		91.8	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:00:39PM

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 (2313076-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313076-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2313076-MS1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	371	20.0	250	124	99.0	80-120			
Matrix Spike Dup (2313076-MSD1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	384	20.0	250	124	104	80-120	3.22	20	

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 16:00

- 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.



Client: WPX Permian Energy, LLC				Bill To				Lab Use Only				TAT				EPA Program				
Project: Federal G Gas Com #001				Attention: Jim Raley				Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA			
Project Manager: Gilbert Moreno				Address: 5315 Buena Vista Dr.				E303142		01058-0007		X			5 Day TAT					
Address: 3122 National Parks HWY				City, State, Zip: Carlsbad, NM, 88220				Analysis and Method										RCRA		
City, State, Zip: Carlsbad, NM, 88220				Phone: 575-885-7502				Depth(ft)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	State				
Phone: 832-541-7719				Email: jim.raley@dvn.com												NM	CO	UT	AZ	TX
Email: devon-team@ensolum.com				Cost Center: 1061164701																
Collected by: Yocoly Edyte Konan				Incident ID: nAB1428733041																
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number											Remarks				
13:40	3.29.23	S	1	FS15	1	6'								X						
13:50	3.29.23	S	1	FS16	2	6'								X						
14:00	3.29.23	S	1	FS17	3	6'								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: Gilbert Moreno

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	Lab Use Only Received on ice: Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C 4
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
	03/30/23	09:00	Michelle Cuzco	3-30-23	0900	
	3-30-23	1730	Lorena Lira	3-30-23	1730	
	3-30-23	2318	Allyssa	3-31-23	5:45	

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 Analytical Laboratory

Printed: 3/31/2023 9:53:28AM

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:	03/31/23 05:45	Work Order ID:	E303142
Phone:	(539) 573-4018	Date Logged In:	03/30/23 14:13	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303143

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303143
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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
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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 16:02

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW15 6-15'	E303143-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW16 6-15'	E303143-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW17 6-15'	E303143-03A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 4:02:20PM

SW15 6-15'

E303143-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	92.8 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	100 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	104 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	92.8 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	100 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	104 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	235	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	237	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	97.4 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	65.5	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 4:02:20PM

SW16 6-15'

E303143-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	92.4 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	103 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	92.4 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	103 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	39.8	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	94.9 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	208	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 4:02:20PM

SW17 6-15'

E303143-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	91.7 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	103 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	91.7 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	103 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	97.4 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	129	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:02:20PM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.12	0.0250	2.50		84.9	70-130			
Ethylbenzene	2.19	0.0250	2.50		87.6	70-130			
Toluene	2.16	0.0250	2.50		86.5	70-130			
o-Xylene	2.23	0.0250	2.50		89.2	70-130			
p,m-Xylene	4.41	0.0500	5.00		88.2	70-130			
Total Xylenes	6.64	0.0250	7.50		88.5	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

LCS Dup (2313072-BSD1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.19	0.0250	2.50		87.6	70-130	3.22	23	
Ethylbenzene	2.31	0.0250	2.50		92.3	70-130	5.29	27	
Toluene	2.26	0.0250	2.50		90.3	70-130	4.34	24	
o-Xylene	2.32	0.0250	2.50		92.6	70-130	3.74	27	
p,m-Xylene	4.60	0.0500	5.00		91.9	70-130	4.14	27	
Total Xylenes	6.91	0.0250	7.50		92.1	70-130	4.01	27	
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:02:20PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.6	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

LCS Dup (2313072-BSD2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	50.9	20.0	50.0		102	70-130	3.16	20	
Surrogate: Bromofluorobenzene	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:02:20PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313069-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	51.0		50.0		102	50-200			

LCS (2313069-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	245	25.0	250		98.1	38-132			
Surrogate: <i>n</i> -Nonane	47.6		50.0		95.1	50-200			

Matrix Spike (2313069-MS1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	475	25.0	250	235	95.8	38-132			
Surrogate: <i>n</i> -Nonane	46.5		50.0		93.1	50-200			

Matrix Spike Dup (2313069-MSD1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	492	25.0	250	235	103	38-132	3.55	20	
Surrogate: <i>n</i> -Nonane	45.9		50.0		91.8	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:02:20PM

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 (2313076-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313076-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2313076-MS1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	371	20.0	250	124	99.0	80-120			
Matrix Spike Dup (2313076-MSD1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	384	20.0	250	124	104	80-120	3.22	20	

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 16:02

- 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.



Page 13 of 14

Sampled by: Gilbert Moreno

Lab Use Only

Received on ice: Y / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4



Envirotech Analytical Laboratory

Printed: 3/31/2023 9:54:37AM

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:	03/31/23 05:45	Work Order ID:	E303143
Phone:	(539) 573-4018	Date Logged In:	03/30/23 14:17	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303144

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303144
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 16:01

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW18 0-2'	E303144-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 4:01:23PM

SW18 0-2'

E303144-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>	99.6 %	70-130		03/30/23	03/31/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	97.4 %	70-130		03/30/23	03/31/23	
<i>Surrogate: Toluene-d8</i>	100 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>	99.6 %	70-130		03/30/23	03/31/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	97.4 %	70-130		03/30/23	03/31/23	
<i>Surrogate: Toluene-d8</i>	100 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	274	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	190	50.0	1	03/30/23	03/31/23	
<i>Surrogate: n-Nonane</i>	98.5 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	274	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:01:23PM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.12	0.0250	2.50		84.9	70-130			
Ethylbenzene	2.19	0.0250	2.50		87.6	70-130			
Toluene	2.16	0.0250	2.50		86.5	70-130			
o-Xylene	2.23	0.0250	2.50		89.2	70-130			
p,m-Xylene	4.41	0.0500	5.00		88.2	70-130			
Total Xylenes	6.64	0.0250	7.50		88.5	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

LCS Dup (2313072-BSD1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.19	0.0250	2.50		87.6	70-130	3.22	23	
Ethylbenzene	2.31	0.0250	2.50		92.3	70-130	5.29	27	
Toluene	2.26	0.0250	2.50		90.3	70-130	4.34	24	
o-Xylene	2.32	0.0250	2.50		92.6	70-130	3.74	27	
p,m-Xylene	4.60	0.0500	5.00		91.9	70-130	4.14	27	
Total Xylenes	6.91	0.0250	7.50		92.1	70-130	4.01	27	
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:01:23PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.6	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

LCS Dup (2313072-BSD2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	50.9	20.0	50.0		102	70-130	3.16	20	
Surrogate: Bromofluorobenzene	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:01:23PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313069-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.0		50.0		102	50-200			

LCS (2313069-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	245	25.0	250		98.1	38-132			
Surrogate: n-Nonane	47.6		50.0		95.1	50-200			

Matrix Spike (2313069-MS1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	475	25.0	250	235	95.8	38-132			
Surrogate: n-Nonane	46.5		50.0		93.1	50-200			

Matrix Spike Dup (2313069-MSD1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	492	25.0	250	235	103	38-132	3.55	20	
Surrogate: n-Nonane	45.9		50.0		91.8	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:01:23PM

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 (2313076-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313076-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2313076-MS1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	371	20.0	250	124	99.0	80-120			
Matrix Spike Dup (2313076-MSD1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	384	20.0	250	124	104	80-120	3.22	20	

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 16:01

- 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.





Envirotech Analytical Laboratory

Printed: 3/31/2023 9:55:41AM

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:	03/31/23 05:45	Work Order ID:	E303144
Phone:	(539) 573-4018	Date Logged In:	03/30/23 14:21	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303145

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23



Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Federal G Gas Com #001
Workorder: E303145
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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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Office: 505-632-1881
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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:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 16:00

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW24 0-4'	E303145-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 4:00:17PM

SW24 0-4'

E303145-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	110 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	99.7 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	99.8 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	110 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	99.7 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	99.8 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	106 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	ND	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:00:17PM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.12	0.0250	2.50		84.9	70-130			
Ethylbenzene	2.19	0.0250	2.50		87.6	70-130			
Toluene	2.16	0.0250	2.50		86.5	70-130			
o-Xylene	2.23	0.0250	2.50		89.2	70-130			
p,m-Xylene	4.41	0.0500	5.00		88.2	70-130			
Total Xylenes	6.64	0.0250	7.50		88.5	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

LCS Dup (2313072-BSD1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.19	0.0250	2.50		87.6	70-130	3.22	23	
Ethylbenzene	2.31	0.0250	2.50		92.3	70-130	5.29	27	
Toluene	2.26	0.0250	2.50		90.3	70-130	4.34	24	
o-Xylene	2.32	0.0250	2.50		92.6	70-130	3.74	27	
p,m-Xylene	4.60	0.0500	5.00		91.9	70-130	4.14	27	
Total Xylenes	6.91	0.0250	7.50		92.1	70-130	4.01	27	
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:00:17PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.6	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

LCS Dup (2313072-BSD2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	50.9	20.0	50.0		102	70-130	3.16	20	
Surrogate: Bromofluorobenzene	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:00:17PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313069-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.0		50.0		102	50-200			

LCS (2313069-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	245	25.0	250		98.1	38-132			
Surrogate: n-Nonane	47.6		50.0		95.1	50-200			

Matrix Spike (2313069-MS1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	475	25.0	250	235	95.8	38-132			
Surrogate: n-Nonane	46.5		50.0		93.1	50-200			

Matrix Spike Dup (2313069-MSD1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	492	25.0	250	235	103	38-132	3.55	20	
Surrogate: n-Nonane	45.9		50.0		91.8	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 4:00:17PM

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 (2313076-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313076-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2313076-MS1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	371	20.0	250	124	99.0	80-120			
Matrix Spike Dup (2313076-MSD1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	384	20.0	250	124	104	80-120	3.22	20	

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 16:00

- 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.



[illegible]

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.						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.	
Sampled by: <u>Gilbert Moreno</u>							
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>03/30/23</u>	Time <u>09:00</u>	Received by: (Signature) <u>Michelle Gonzalez</u>	Date <u>3-30-23</u>	Time <u>09:00</u>	<div>Lab Use Only</div> <div>Received on ice: <u>Y</u> / N</div> <div>T1 _____ T2 _____ T3 _____</div> <div>AVG Temp °C <u>4</u></div>	
Relinquished by: (Signature) <u>Michelle Gonzalez</u>	Date <u>3-30-23</u>	Time <u>1730</u>	Received by: (Signature) <u>Lorena Lee</u>	Date <u>3-30-23</u>	Time <u>1730</u>		
Relinquished by: (Signature) <u>Lorena Lee</u>	Date <u>3-30-23</u>	Time <u>2315</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>3-31-23</u>	Time <u>5:45</u>		
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 Analytical Laboratory

Printed: 3/31/2023 9:56:36AM

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:	03/31/23 05:45	Work Order ID:	E303145
Phone:	(539) 573-4018	Date Logged In:	03/30/23 14:24	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/Resolution

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303146

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303146
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:59

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW12 0-6'	E303146-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW13 0-6'	E303146-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW14 0-6'	E303146-03A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:59:07PM

SW12 0-6'

E303146-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>	95.0 %	70-130		03/30/23	03/31/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	99.3 %	70-130		03/30/23	03/31/23	
<i>Surrogate: Toluene-d8</i>	105 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>	95.0 %	70-130		03/30/23	03/31/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	99.3 %	70-130		03/30/23	03/31/23	
<i>Surrogate: Toluene-d8</i>	105 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	83.4	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	63.1	50.0	1	03/30/23	03/31/23	
<i>Surrogate: n-Nonane</i>	108 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	89.2	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:59:07PM

SW13 0-6'

E303146-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	93.7 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	103 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	93.7 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	103 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	25.7	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	108 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	103	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:59:07PM

SW14 0-6'

E303146-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	94.5 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	104 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	94.5 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	104 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	109 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	35.9	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:59:07PM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.12	0.0250	2.50		84.9	70-130			
Ethylbenzene	2.19	0.0250	2.50		87.6	70-130			
Toluene	2.16	0.0250	2.50		86.5	70-130			
o-Xylene	2.23	0.0250	2.50		89.2	70-130			
p,m-Xylene	4.41	0.0500	5.00		88.2	70-130			
Total Xylenes	6.64	0.0250	7.50		88.5	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

LCS Dup (2313072-BSD1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.19	0.0250	2.50		87.6	70-130	3.22	23	
Ethylbenzene	2.31	0.0250	2.50		92.3	70-130	5.29	27	
Toluene	2.26	0.0250	2.50		90.3	70-130	4.34	24	
o-Xylene	2.32	0.0250	2.50		92.6	70-130	3.74	27	
p,m-Xylene	4.60	0.0500	5.00		91.9	70-130	4.14	27	
Total Xylenes	6.91	0.0250	7.50		92.1	70-130	4.01	27	
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:59:07PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.6	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

LCS Dup (2313072-BSD2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	50.9	20.0	50.0		102	70-130	3.16	20	
Surrogate: Bromofluorobenzene	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:59:07PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313069-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.0		50.0		102	50-200			

LCS (2313069-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	245	25.0	250		98.1	38-132			
Surrogate: n-Nonane	47.6		50.0		95.1	50-200			

Matrix Spike (2313069-MS1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	475	25.0	250	235	95.8	38-132			
Surrogate: n-Nonane	46.5		50.0		93.1	50-200			

Matrix Spike Dup (2313069-MSD1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	492	25.0	250	235	103	38-132	3.55	20	
Surrogate: n-Nonane	45.9		50.0		91.8	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:59:07PM

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 (2313076-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313076-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2313076-MS1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	371	20.0	250	124	99.0	80-120			
Matrix Spike Dup (2313076-MSD1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	384	20.0	250	124	104	80-120	3.22	20	

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:59

- 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.



[illegible]

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: Gilbert Moreno

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) <i>[Signature]</i>	Date 03/30/23	Time 09:00	Received by: (Signature) <i>Michelle Gonzales</i>	Date 3-30-23	Time 0900	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <i>Michelle Gonzales</i>	Date 3-30-23	Time 1730	Received by: (Signature) <i>Josueo Lei</i>	Date 3-30-23	Time 1730	
Relinquished by: (Signature) <i>Josueo Lei</i>	Date 3-30-23	Time 2335	Received by: (Signature) <i>[Signature]</i>	Date 3-31-23	Time 5:45	
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 Analytical Laboratory

Printed: 3/31/2023 9:57:35AM

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:	03/31/23 05:45	Work Order ID:	E303146
Phone:	(539) 573-4018	Date Logged In:	03/30/23 14:26	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303147

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303147
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:57

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW19 2-12'	E303147-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW20 2-12'	E303147-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:57:35PM

SW19 2-12'

E303147-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>		101 %	70-130	03/30/23	03/31/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	03/30/23	03/31/23	
<i>Surrogate: Toluene-d8</i>		101 %	70-130	03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>		101 %	70-130	03/30/23	03/31/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	03/30/23	03/31/23	
<i>Surrogate: Toluene-d8</i>		101 %	70-130	03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
<i>Surrogate: n-Nonane</i>		107 %	50-200	03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	121	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:57:35PM

SW20 2-12'

E303147-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	99.3 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	99.3 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	110 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313076
Chloride	136	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:57:35PM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.12	0.0250	2.50		84.9	70-130			
Ethylbenzene	2.19	0.0250	2.50		87.6	70-130			
Toluene	2.16	0.0250	2.50		86.5	70-130			
o-Xylene	2.23	0.0250	2.50		89.2	70-130			
p,m-Xylene	4.41	0.0500	5.00		88.2	70-130			
Total Xylenes	6.64	0.0250	7.50		88.5	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

LCS Dup (2313072-BSD1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.19	0.0250	2.50		87.6	70-130	3.22	23	
Ethylbenzene	2.31	0.0250	2.50		92.3	70-130	5.29	27	
Toluene	2.26	0.0250	2.50		90.3	70-130	4.34	24	
o-Xylene	2.32	0.0250	2.50		92.6	70-130	3.74	27	
p,m-Xylene	4.60	0.0500	5.00		91.9	70-130	4.14	27	
Total Xylenes	6.91	0.0250	7.50		92.1	70-130	4.01	27	
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:57:35PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.6	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

LCS Dup (2313072-BSD2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	50.9	20.0	50.0		102	70-130	3.16	20	
Surrogate: Bromofluorobenzene	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:57:35PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313069-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	51.0		50.0		102	50-200			

LCS (2313069-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	245	25.0	250		98.1	38-132			
Surrogate: <i>n</i> -Nonane	47.6		50.0		95.1	50-200			

Matrix Spike (2313069-MS1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	475	25.0	250	235	95.8	38-132			
Surrogate: <i>n</i> -Nonane	46.5		50.0		93.1	50-200			

Matrix Spike Dup (2313069-MSD1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	492	25.0	250	235	103	38-132	3.55	20	
Surrogate: <i>n</i> -Nonane	45.9		50.0		91.8	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:57:35PM

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 (2313076-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313076-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2313076-MS1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	371	20.0	250	124	99.0	80-120			
Matrix Spike Dup (2313076-MSD1)					Source: E303141-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	384	20.0	250	124	104	80-120	3.22	20	

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:57

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

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

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

Client: WPX Permian Energy, LLC				Bill To				Lab Use Only				TAT				EPA Program			
Project: Federal G Gas Com #001				Attention: Jim Raley				Lab WO# E303147		Job Number 01058-0057-X		1D	2D	3D	Standard	CWA	SDWA		
Project Manager: Gilbert Moreno				Address: 5315 Buena Vista Dr.				Analysis and Method										RCRA	
Address: 3122 National Parks HWY				City, State, Zip: Carlsbad, NM, 88220															
City, State, Zip: Carlsbad, NM, 88220				Phone: 575-885-7502															
Phone: 832-541-7719				Email: jim.raley@dm.com															
Email: devon-team@ensolum.com				Cost Center: 1061164701														State	
Collected by: Yocoly Edyte Konan				Incident ID: nAB1428733041															
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	BGDOC TX						
11:20	3.29.23	S	1	SW19	1	2-12'						X							
11:30	3.29.23	S	1	SW20	2	2-12'						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: Gilbert Moreno

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	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<i>[Signature]</i>	03/30/23	09:00	<i>Michelle Gonzales</i>	3-30-23	0900	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Michelle Gonzales</i>	3-30-23	1730	<i>Lorenzo Lei</i>	3-30-23	1730	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Lorenzo Lei</i>	3-30-23	2315	<i>[Signature]</i>	3-31-23	5:45	

Sample Matrix: S - Soil, Sd - Sblid, 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 Analytical Laboratory

Printed: 3/31/2023 9:58:32AM

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:	03/31/23 05:45	Work Order ID:	E303147
Phone:	(539) 573-4018	Date Logged In:	03/30/23 14:29	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/Resolution

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303148

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303148
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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
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Alexa Michaels
Sample Custody Officer
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West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:55

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW08 4-15'	E303148-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW09 4-15'	E303148-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW10 4-15'	E303148-03A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
SW11 4-15'	E303148-04A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:55:50PM

SW08 4-15'

E303148-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	93.5 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	103 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	93.5 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	103 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	108 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313077
Chloride	134	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:55:50PM

SW09 4-15'

E303148-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	93.0 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	104 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	93.0 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	104 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	34.2	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	112 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313077
Chloride	ND	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:55:50PM

SW10 4-15'

E303148-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	94.0 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	97.6 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	104 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	94.0 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	97.6 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	104 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	47.5	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	110 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313077
Chloride	ND	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:55:50PM

SW11 4-15'

E303148-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	93.2 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	99.6 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	105 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2313072
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	93.2 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	99.6 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	105 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313069
Diesel Range Organics (C10-C28)	ND	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	109 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313077
Chloride	ND	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:55:50PM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.12	0.0250	2.50		84.9	70-130			
Ethylbenzene	2.19	0.0250	2.50		87.6	70-130			
Toluene	2.16	0.0250	2.50		86.5	70-130			
o-Xylene	2.23	0.0250	2.50		89.2	70-130			
p,m-Xylene	4.41	0.0500	5.00		88.2	70-130			
Total Xylenes	6.64	0.0250	7.50		88.5	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

LCS Dup (2313072-BSD1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.19	0.0250	2.50		87.6	70-130	3.22	23	
Ethylbenzene	2.31	0.0250	2.50		92.3	70-130	5.29	27	
Toluene	2.26	0.0250	2.50		90.3	70-130	4.34	24	
o-Xylene	2.32	0.0250	2.50		92.6	70-130	3.74	27	
p,m-Xylene	4.60	0.0500	5.00		91.9	70-130	4.14	27	
Total Xylenes	6.91	0.0250	7.50		92.1	70-130	4.01	27	
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:55:50PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313072-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.466		0.500		93.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2313072-BS2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	49.3	20.0	50.0		98.6	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

LCS Dup (2313072-BSD2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	50.9	20.0	50.0		102	70-130	3.16	20	
Surrogate: Bromofluorobenzene	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.8	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:55:50PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313069-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.0		50.0		102	50-200			

LCS (2313069-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	245	25.0	250		98.1	38-132			
Surrogate: n-Nonane	47.6		50.0		95.1	50-200			

Matrix Spike (2313069-MS1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	475	25.0	250	235	95.8	38-132			
Surrogate: n-Nonane	46.5		50.0		93.1	50-200			

Matrix Spike Dup (2313069-MSD1)

Source: E303143-01

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	492	25.0	250	235	103	38-132	3.55	20	
Surrogate: n-Nonane	45.9		50.0		91.8	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:55:50PM

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 (2313077-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313077-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	248	20.0	250		99.0	90-110			
Matrix Spike (2313077-MS1)					Source: E303148-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	388	20.0	250	134	101	80-120			
Matrix Spike Dup (2313077-MSD1)					Source: E303148-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	390	20.0	250	134	102	80-120	0.585	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:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:55

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

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

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



Client: WPX Permian Energy, LLC	Bill To	Lab Use Only		TAT			EPA Program			
Project: Federal G Gas Com #001	Attention: Jim Raley	Lab WO# E303148	Job Number 01058-0007	1D X	2D	3D	Standard 5 Day TAT	CWA	SDWA	
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.									
Address: 3122 National Parks HWY	City, State, Zip: Carlsbad, NM, 88220	Analysis and Method								RCRA
City, State, Zip: Carlsbad, NM, 88220	Phone: 575-885-7502									
Phone: 832-541-7719	Email: jim.raley@divn.com									
Email: devon-team@ensolum.com	Cost Center: 1061164701									
Collected by: Yocoly Edyte Konan	Incident ID: nAB1428733041									

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	BGDOC TX	Remarks
9:30	3.29.23	S	1	SW08	1	4-15'						X		
9:40	3.29.23	S	1	SW09	2	4-15'						X		
9:50	3.29.23	S	1	SW10	3	4-15'						X		
10:00	3.29.23	S	1	SW11	4	4-15'						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: Gilbert Moreno

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) <i>[Signature]</i>	Date 03/30/23	Time 09:00	Received by: (Signature) <i>[Signature]</i>	Date 3-30-23	Time 0900	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 T2 T3 AVG Temp °C 4
Relinquished by: (Signature) <i>[Signature]</i>	Date 3-30-23	Time 1730	Received by: (Signature) <i>[Signature]</i>	Date 3-30-23	Time 1730	
Relinquished by: (Signature) <i>[Signature]</i>	Date 3-30-23	Time 2315	Received by: (Signature) <i>[Signature]</i>	Date 3-31-23	Time 5:45	

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 Analytical Laboratory

Printed: 3/31/2023 9:59:38AM

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:	03/31/23 05:45	Work Order ID:	E303148
Phone:	(539) 573-4018	Date Logged In:	03/30/23 14:33	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: Federal G Gas Com #001

Work Order: E303150

Job Number: 01058-0007

Received: 3/31/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/3/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 4/3/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: Federal G Gas Com #001
Workorder: E303150
Date Received: 3/31/2023 5:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/31/2023 5:45:00AM, under the Project Name: Federal G Gas Com #001.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com #001 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 regarding 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:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:50

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS18 2'	E303150-01A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS19 2'	E303150-02A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.
FS20 2'	E303150-03A	Soil	03/29/23	03/31/23	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:50:36PM

FS18 2'

E303150-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313073
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>	89.2 %	70-130		03/30/23	03/31/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	98.5 %	70-130		03/30/23	03/31/23	
<i>Surrogate: Toluene-d8</i>	98.6 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313073
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
<i>Surrogate: Bromofluorobenzene</i>	89.2 %	70-130		03/30/23	03/31/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	98.5 %	70-130		03/30/23	03/31/23	
<i>Surrogate: Toluene-d8</i>	98.6 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313070
Diesel Range Organics (C10-C28)	493	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	258	50.0	1	03/30/23	03/31/23	
<i>Surrogate: n-Nonane</i>	109 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313077
Chloride	58.9	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:50:36PM

FS19 2'

E303150-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313073
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	89.1 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	97.8 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313073
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	89.1 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	97.8 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313070
Diesel Range Organics (C10-C28)	514	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	293	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	101 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313077
Chloride	51.5	20.0	1	03/30/23	03/31/23	



Sample Data

WPX Energy - Carlsbad
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Federal G Gas Com #001
Project Number: 01058-0007
Project Manager: Gilbert Moreno

Reported:
4/3/2023 3:50:36PM

FS20 2'

E303150-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313073
Benzene	ND	0.0250	1	03/30/23	03/31/23	
Ethylbenzene	ND	0.0250	1	03/30/23	03/31/23	
Toluene	ND	0.0250	1	03/30/23	03/31/23	
o-Xylene	ND	0.0250	1	03/30/23	03/31/23	
p,m-Xylene	ND	0.0500	1	03/30/23	03/31/23	
Total Xylenes	ND	0.0250	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	91.5 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	99.9 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	99.0 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2313073
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/30/23	03/31/23	
Surrogate: Bromofluorobenzene	91.5 %	70-130		03/30/23	03/31/23	
Surrogate: 1,2-Dichloroethane-d4	99.9 %	70-130		03/30/23	03/31/23	
Surrogate: Toluene-d8	99.0 %	70-130		03/30/23	03/31/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2313070
Diesel Range Organics (C10-C28)	430	25.0	1	03/30/23	03/31/23	
Oil Range Organics (C28-C36)	275	50.0	1	03/30/23	03/31/23	
Surrogate: n-Nonane	102 %	50-200		03/30/23	03/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2313077
Chloride	38.8	20.0	1	03/30/23	03/31/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:50:36PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313073-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

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: Bromofluorobenzene	0.514		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.554		0.500		111	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			

LCS (2313073-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.47	0.0250	2.50		99.0	70-130			
Ethylbenzene	2.57	0.0250	2.50		103	70-130			
Toluene	2.60	0.0250	2.50		104	70-130			
o-Xylene	2.59	0.0250	2.50		104	70-130			
p,m-Xylene	5.14	0.0500	5.00		103	70-130			
Total Xylenes	7.73	0.0250	7.50		103	70-130			
Surrogate: Bromofluorobenzene	0.531		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.575		0.500		115	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			

LCS Dup (2313073-BSD1)

Prepared: 03/30/23 Analyzed: 03/31/23

Benzene	2.49	0.0250	2.50		99.6	70-130	0.685	23	
Ethylbenzene	2.51	0.0250	2.50		100	70-130	2.27	27	
Toluene	2.57	0.0250	2.50		103	70-130	1.16	24	
o-Xylene	2.55	0.0250	2.50		102	70-130	1.71	27	
p,m-Xylene	5.04	0.0500	5.00		101	70-130	1.91	27	
Total Xylenes	7.58	0.0250	7.50		101	70-130	1.84	27	
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.553		0.500		111	70-130			
Surrogate: Toluene-d8	0.512		0.500		102	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:50:36PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313073-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.514		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.554		0.500		111	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.8	70-130			

LCS (2313073-BS2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	55.1	20.0	50.0		110	70-130			
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.539		0.500		108	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS Dup (2313073-BSD2)

Prepared: 03/30/23 Analyzed: 03/31/23

Gasoline Range Organics (C6-C10)	54.2	20.0	50.0		108	70-130	1.57	20	
Surrogate: Bromofluorobenzene	0.521		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.559		0.500		112	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:50:36PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2313070-BLK1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	51.6		50.0		103	50-200			

LCS (2313070-BS1)

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	268	25.0	250		107	38-132			
Surrogate: <i>n</i> -Nonane	49.2		50.0		98.4	50-200			

Matrix Spike (2313070-MS1)

Source: E303150-03

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	712	25.0	250	430	113	38-132			
Surrogate: <i>n</i> -Nonane	50.2		50.0		100	50-200			

Matrix Spike Dup (2313070-MSD1)

Source: E303150-03

Prepared: 03/30/23 Analyzed: 03/31/23

Diesel Range Organics (C10-C28)	750	25.0	250	430	128	38-132	5.10	20	
Surrogate: <i>n</i> -Nonane	50.2		50.0		100	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	Federal G Gas Com #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	4/3/2023 3:50:36PM

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 (2313077-BLK1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	ND	20.0							
LCS (2313077-BS1)					Prepared: 03/30/23 Analyzed: 03/31/23				
Chloride	248	20.0	250		99.0	90-110			
Matrix Spike (2313077-MS1)					Source: E303148-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	388	20.0	250	134	101	80-120			
Matrix Spike Dup (2313077-MSD1)					Source: E303148-01		Prepared: 03/30/23 Analyzed: 03/31/23		
Chloride	390	20.0	250	134	102	80-120	0.585	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:	Federal G Gas Com #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	04/03/23 15:50

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

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

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



Client: WPX Permian Energy, LLC		Bill To		Lab Use Only				TAT				EPA Program				
Project: Federal G Gas Com #001		Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA			
Project Manager: Gilbert Moreno		Address: 5315 Buena Vista Dr.		E303150		01058-0057X					5 Day TAT					
Address: 3122 National Parks HWY		City, State, Zip: Carlsbad, NM, 88220		Analysis and Method												
City, State, Zip: Carlsbad, NM, 88220		Phone: 575-885-7502		Depth(ft)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	State				
Phone: 832-541-7719		Email: jim.raley@dv.com										NM	CO	UT	AZ	TX
Email: devon-team@ensolum.com		Cost Center: 1061164701														
Collected by: Yocoly Edyte Konan		Incident ID: nAB1428733041														

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	BGDOC TX	Remarks
14:10	3.29.23	S	1	FS18	1	2'						X		
14:20	3.29.23	S	1	FS19	2	2'						X		
14:30	3.29.23	S	1	FS20	3	2'						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: Gilbert Moreno

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	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<i>[Signature]</i>	03/30/23	0900	<i>[Signature]</i>	3-30-23	0900	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>[Signature]</i>	3-30-23	1730	<i>[Signature]</i>	3-30-23	1730	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>[Signature]</i>	3-30-23	2315	<i>[Signature]</i>	3-31-23	5:45	

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: 3/31/2023 10:02:59AM

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:	03/31/23 05:45	Work Order ID:	E303150
Phone:	(539) 573-4018	Date Logged In:	03/30/23 14:40	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	03/31/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution**

Client has changed the TAT to 24hr rush

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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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:

Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Ensolum, LLC

Project Name: Federal G Gas Com 1

Work Order: E305092

Job Number: 01058-0007

Received: 5/16/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
5/19/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
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Date Reported: 5/19/23

Ashley Giovengo
3122 National Parks Hwy
Carlsbad, NM 88220



Project Name: Federal G Gas Com 1
Workorder: E305092
Date Received: 5/16/2023 8:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/16/2023 8:30:00AM, under the Project Name: Federal G Gas Com 1.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 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 regarding 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

Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Federal G Gas Com 1 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 05/19/23 09:50
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW01 - 0-5.5'	E305092-01A	Soil	05/12/23	05/16/23	Glass Jar, 2 oz.
SW02 - 0-5.5'	E305092-02A	Soil	05/12/23	05/16/23	Glass Jar, 2 oz.
SW07 - 0-4'	E305092-03A	Soil	05/12/23	05/16/23	Glass Jar, 2 oz.
SW21 - 4-12'	E305092-04A	Soil	05/12/23	05/16/23	Glass Jar, 2 oz.
SW23 - 4-12'	E305092-05A	Soil	05/12/23	05/16/23	Glass Jar, 2 oz.
SW18 - 0-6'	E305092-06A	Soil	05/12/23	05/16/23	Glass Jar, 2 oz.



Sample Data

Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Federal G Gas Com 1 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 5/19/2023 9:50:46AM
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SW01 - 0-5.5'

E305092-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
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Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: SL		Batch: 2320030	
Benzene	ND	0.0250	1	05/16/23	05/16/23	
Ethylbenzene	ND	0.0250	1	05/16/23	05/16/23	
Toluene	ND	0.0250	1	05/16/23	05/16/23	
o-Xylene	ND	0.0250	1	05/16/23	05/16/23	
p,m-Xylene	ND	0.0500	1	05/16/23	05/16/23	
Total Xylenes	ND	0.0250	1	05/16/23	05/16/23	
<i>Surrogate: Bromofluorobenzene</i>		101 %	70-130	05/16/23	05/16/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	05/16/23	05/16/23	
<i>Surrogate: Toluene-d8</i>		98.5 %	70-130	05/16/23	05/16/23	

Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2320030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/16/23	05/16/23	
<i>Surrogate: Bromofluorobenzene</i>		101 %	70-130	05/16/23	05/16/23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	05/16/23	05/16/23	
<i>Surrogate: Toluene-d8</i>		98.5 %	70-130	05/16/23	05/16/23	

Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2320061	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/17/23	05/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/17/23	05/18/23	
<i>Surrogate: n-Nonane</i>		84.9 %	50-200	05/17/23	05/18/23	

Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS		Batch: 2320037	
Chloride	ND	20.0	1	05/16/23	05/17/23	



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
5/19/2023 9:50:46AM

SW02 - 0-5.5'

E305092-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2320030
Benzene	ND	0.0250	1	05/16/23	05/16/23	
Ethylbenzene	ND	0.0250	1	05/16/23	05/16/23	
Toluene	ND	0.0250	1	05/16/23	05/16/23	
o-Xylene	ND	0.0250	1	05/16/23	05/16/23	
p,m-Xylene	ND	0.0500	1	05/16/23	05/16/23	
Total Xylenes	ND	0.0250	1	05/16/23	05/16/23	
Surrogate: Bromofluorobenzene		103 %	70-130	05/16/23	05/16/23	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	05/16/23	05/16/23	
Surrogate: Toluene-d8		98.8 %	70-130	05/16/23	05/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2320030
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/16/23	05/16/23	
Surrogate: Bromofluorobenzene		103 %	70-130	05/16/23	05/16/23	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	05/16/23	05/16/23	
Surrogate: Toluene-d8		98.8 %	70-130	05/16/23	05/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2320061
Diesel Range Organics (C10-C28)	ND	25.0	1	05/17/23	05/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/17/23	05/18/23	
Surrogate: n-Nonane		87.0 %	50-200	05/17/23	05/18/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2320037
Chloride	219	20.0	1	05/16/23	05/17/23	



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
5/19/2023 9:50:46AM

SW07 - 0-4'

E305092-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2320030
Benzene	ND	0.0250	1	05/16/23	05/16/23	
Ethylbenzene	ND	0.0250	1	05/16/23	05/16/23	
Toluene	ND	0.0250	1	05/16/23	05/16/23	
o-Xylene	ND	0.0250	1	05/16/23	05/16/23	
p,m-Xylene	ND	0.0500	1	05/16/23	05/16/23	
Total Xylenes	ND	0.0250	1	05/16/23	05/16/23	
Surrogate: Bromofluorobenzene		101 %	70-130	05/16/23	05/16/23	
Surrogate: 1,2-Dichloroethane-d4		108 %	70-130	05/16/23	05/16/23	
Surrogate: Toluene-d8		98.4 %	70-130	05/16/23	05/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2320030
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/16/23	05/16/23	
Surrogate: Bromofluorobenzene		101 %	70-130	05/16/23	05/16/23	
Surrogate: 1,2-Dichloroethane-d4		108 %	70-130	05/16/23	05/16/23	
Surrogate: Toluene-d8		98.4 %	70-130	05/16/23	05/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2320061
Diesel Range Organics (C10-C28)	ND	25.0	1	05/17/23	05/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/17/23	05/18/23	
Surrogate: n-Nonane		87.3 %	50-200	05/17/23	05/18/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2320037
Chloride	130	20.0	1	05/16/23	05/17/23	



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
5/19/2023 9:50:46AM

SW21 - 4-12'

E305092-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2320030
Benzene	ND	0.0250	1	05/16/23	05/16/23	
Ethylbenzene	ND	0.0250	1	05/16/23	05/16/23	
Toluene	ND	0.0250	1	05/16/23	05/16/23	
o-Xylene	ND	0.0250	1	05/16/23	05/16/23	
p,m-Xylene	ND	0.0500	1	05/16/23	05/16/23	
Total Xylenes	ND	0.0250	1	05/16/23	05/16/23	
Surrogate: Bromofluorobenzene		101 %	70-130	05/16/23	05/16/23	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	05/16/23	05/16/23	
Surrogate: Toluene-d8		98.3 %	70-130	05/16/23	05/16/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2320030
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/16/23	05/16/23	
Surrogate: Bromofluorobenzene		101 %	70-130	05/16/23	05/16/23	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	05/16/23	05/16/23	
Surrogate: Toluene-d8		98.3 %	70-130	05/16/23	05/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2320061
Diesel Range Organics (C10-C28)	ND	25.0	1	05/17/23	05/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/17/23	05/18/23	
Surrogate: n-Nonane		83.7 %	50-200	05/17/23	05/18/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2320037
Chloride	125	20.0	1	05/16/23	05/17/23	



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
5/19/2023 9:50:46AM

SW23 - 4-12'

E305092-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2320030
Benzene	ND	0.0250	1	05/16/23	05/17/23	
Ethylbenzene	ND	0.0250	1	05/16/23	05/17/23	
Toluene	ND	0.0250	1	05/16/23	05/17/23	
o-Xylene	ND	0.0250	1	05/16/23	05/17/23	
p,m-Xylene	ND	0.0500	1	05/16/23	05/17/23	
Total Xylenes	ND	0.0250	1	05/16/23	05/17/23	
Surrogate: Bromofluorobenzene		103 %	70-130	05/16/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-130	05/16/23	05/17/23	
Surrogate: Toluene-d8		99.6 %	70-130	05/16/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2320030
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/16/23	05/17/23	
Surrogate: Bromofluorobenzene		103 %	70-130	05/16/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-130	05/16/23	05/17/23	
Surrogate: Toluene-d8		99.6 %	70-130	05/16/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2320061
Diesel Range Organics (C10-C28)	ND	25.0	1	05/17/23	05/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/17/23	05/18/23	
Surrogate: n-Nonane		86.1 %	50-200	05/17/23	05/18/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2320037
Chloride	43.0	20.0	1	05/16/23	05/17/23	



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
5/19/2023 9:50:46AM

SW18 - 0-6'

E305092-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2320030
Benzene	ND	0.0250	1	05/16/23	05/17/23	
Ethylbenzene	ND	0.0250	1	05/16/23	05/17/23	
Toluene	ND	0.0250	1	05/16/23	05/17/23	
o-Xylene	ND	0.0250	1	05/16/23	05/17/23	
p,m-Xylene	ND	0.0500	1	05/16/23	05/17/23	
Total Xylenes	ND	0.0250	1	05/16/23	05/17/23	
Surrogate: Bromofluorobenzene		103 %	70-130	05/16/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-130	05/16/23	05/17/23	
Surrogate: Toluene-d8		99.9 %	70-130	05/16/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2320030
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/16/23	05/17/23	
Surrogate: Bromofluorobenzene		103 %	70-130	05/16/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-130	05/16/23	05/17/23	
Surrogate: Toluene-d8		99.9 %	70-130	05/16/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2320061
Diesel Range Organics (C10-C28)	ND	25.0	1	05/17/23	05/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/17/23	05/18/23	
Surrogate: n-Nonane		86.0 %	50-200	05/17/23	05/18/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2320037
Chloride	129	20.0	1	05/16/23	05/17/23	



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/19/2023 9:50:46AM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320030-BLK1)

Prepared: 05/16/23 Analyzed: 05/16/23

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: Bromofluorobenzene	0.505		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.533		0.500		107	70-130			
Surrogate: Toluene-d8	0.501		0.500		100	70-130			

LCS (2320030-BS1)

Prepared: 05/16/23 Analyzed: 05/16/23

Benzene	2.58	0.0250	2.50		103	70-130			
Ethylbenzene	2.53	0.0250	2.50		101	70-130			
Toluene	2.47	0.0250	2.50		98.7	70-130			
o-Xylene	2.39	0.0250	2.50		95.4	70-130			
p,m-Xylene	4.59	0.0500	5.00		91.8	70-130			
Total Xylenes	6.98	0.0250	7.50		93.0	70-130			
Surrogate: Bromofluorobenzene	0.470		0.500		93.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.520		0.500		104	70-130			
Surrogate: Toluene-d8	0.489		0.500		97.7	70-130			

Matrix Spike (2320030-MS1)

Source: E305090-01

Prepared: 05/16/23 Analyzed: 05/16/23

Benzene	5.04	0.0500	5.00	ND	101	48-131			
Ethylbenzene	4.97	0.0500	5.00	ND	99.4	45-135			
Toluene	4.91	0.0500	5.00	ND	98.1	48-130			
o-Xylene	4.74	0.0500	5.00	ND	94.7	43-135			
p,m-Xylene	9.13	0.100	10.0	ND	91.3	43-135			
Total Xylenes	13.9	0.0500	15.0	ND	92.4	43-135			
Surrogate: Bromofluorobenzene	0.970		1.00		97.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	1.02		1.00		102	70-130			
Surrogate: Toluene-d8	1.00		1.00		100	70-130			

Matrix Spike Dup (2320030-MSD1)

Source: E305090-01

Prepared: 05/16/23 Analyzed: 05/16/23

Benzene	5.43	0.0500	5.00	ND	108	48-131	7.40	23	
Ethylbenzene	5.32	0.0500	5.00	ND	106	45-135	6.79	27	
Toluene	5.28	0.0500	5.00	ND	105	48-130	7.25	24	
o-Xylene	5.18	0.0500	5.00	ND	104	43-135	8.99	27	
p,m-Xylene	10.0	0.100	10.0	ND	100	43-135	9.57	27	
Total Xylenes	15.2	0.0500	15.0	ND	102	43-135	9.38	27	
Surrogate: Bromofluorobenzene	0.958		1.00		95.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	1.05		1.00		105	70-130			
Surrogate: Toluene-d8	0.979		1.00		97.9	70-130			



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/19/2023 9:50:46AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320030-BLK1)

Prepared: 05/16/23 Analyzed: 05/16/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.505		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.533		0.500		107	70-130			
Surrogate: Toluene-d8	0.501		0.500		100	70-130			

LCS (2320030-BS2)

Prepared: 05/16/23 Analyzed: 05/16/23

Gasoline Range Organics (C6-C10)	53.0	20.0	50.0		106	70-130			
Surrogate: Bromofluorobenzene	0.497		0.500		99.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.498		0.500		99.5	70-130			

Matrix Spike (2320030-MS2)

Source: E305090-01

Prepared: 05/16/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	114	40.0	100	ND	114	70-130			
Surrogate: Bromofluorobenzene	1.01		1.00		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	1.02		1.00		102	70-130			
Surrogate: Toluene-d8	1.01		1.00		101	70-130			

Matrix Spike Dup (2320030-MSD2)

Source: E305090-01

Prepared: 05/16/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	127	40.0	100	ND	127	70-130	11.4	20	
Surrogate: Bromofluorobenzene	0.992		1.00		99.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	1.06		1.00		106	70-130			
Surrogate: Toluene-d8	1.01		1.00		101	70-130			



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/19/2023 9:50:46AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320061-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	43.9		50.0		87.8	50-200			

LCS (2320061-BS1)

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	233	25.0	250		93.2	38-132			
Surrogate: <i>n</i> -Nonane	42.6		50.0		85.1	50-200			

Matrix Spike (2320061-MS1)

Source: E305092-05

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	230	25.0	250	ND	92.1	38-132			
Surrogate: <i>n</i> -Nonane	42.5		50.0		85.0	50-200			

Matrix Spike Dup (2320061-MSD1)

Source: E305092-05

Prepared: 05/17/23 Analyzed: 05/18/23

Diesel Range Organics (C10-C28)	228	25.0	250	ND	91.2	38-132	0.926	20	
Surrogate: <i>n</i> -Nonane	42.7		50.0		85.4	50-200			



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/19/2023 9:50:46AM

Anions by EPA 300.0/9056A

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 (2320037-BLK1)					Prepared: 05/16/23 Analyzed: 05/16/23				
Chloride	ND	20.0							
LCS (2320037-BS1)					Prepared: 05/16/23 Analyzed: 05/16/23				
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2320037-MS1)					Source: E305083-21		Prepared: 05/16/23 Analyzed: 05/16/23		
Chloride	257	20.0	250	ND	103	80-120			
Matrix Spike Dup (2320037-MSD1)					Source: E305083-21		Prepared: 05/16/23 Analyzed: 05/16/23		
Chloride	256	20.0	250	ND	102	80-120	0.247	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

Ensolum, LLC	Project Name:	Federal G Gas Com 1	
3122 National Parks Hwy	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	05/19/23 09:50

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

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

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

Client: Ensolum, LLC.					Bill To		Lab Use Only				TAT				EPA Program			
Project: Federal G Gas Com 1					Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA		
Project Manager: Ashley Giovengo					Address: 5315 Buena Vista Dr		E305092		01058-0007					x				
Address: 3122 National Parks Hwy					City, State, Zip: Carlsbad NM, 88220		Analysis and Method								RCRA			
City, State, Zip: Carlsbad NM, 88220					Phone: (575)689-7597		TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	State				
Email: agiovengo@ensolum.com					Email: jim.raley@dvn.com									NM	CO	UT	AZ	TX
Report due by:																		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number											Remarks		
9:19	5/12/2023	Soil	1 Jar	SW01 - 0-5.5'	1													
9:15	5/12/2023	Soil	1 Jar	SW02 - 0-5.5'	2													
10:52	5/12/2023	Soil	1 Jar	SW07 - 0-4'	3													
10:49	5/12/2023	Soil	1 Jar	SW21 - 4-12'	4													
12:47	5/12/2023	Soil	1 Jar	SW23 - 4-12'	5													
15:27	5/12/2023	Soil	1 Jar	SW18 - 0-6'	6													

Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dvn.com

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:

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) <i>Michelle Gonzales</i>	Date 5-15-23	Time 2:56	Received by: (Signature) <i>Michelle Gonzales</i>	Date 5-15-23	Time 1456
Relinquished by: (Signature) <i>Michelle Gonzales</i>	Date 5-15-23	Time 1715	Received by: (Signature) <i>Andrew Marr</i>	Date 5-15-23	Time 1730
Relinquished by: (Signature) <i>Andrew Marr</i>	Date 5-15-23	Time 2330	Received by: (Signature) <i>Andrew Marr</i>	Date 5/16/23	Time 8:30

Lab Use Only		
Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> 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: 5/17/2023 1:14:52PM

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:	Ensolum, LLC	Date Received:	05/16/23 08:30	Work Order ID:	E305092
Phone:	(575) 988-0055	Date Logged In:	05/15/23 16:45	Logged In By:	Caitlin Mars
Email:	a.giovengo@ensolum.com	Due Date:	05/22/23 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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? No
 - 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 filtration 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:
Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Ensolum, LLC

Project Name: Federal G Gas Com 1

Work Order: E305097

Job Number: 01058-0007

Received: 5/17/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
5/18/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 5/18/23

Ashley Giovengo
3122 National Parks Hwy
Carlsbad, NM 88220



Project Name: Federal G Gas Com 1
Workorder: E305097
Date Received: 5/17/2023 7:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/17/2023 7:00:00AM, under the Project Name: Federal G Gas Com 1.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 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 regarding 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
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ljjarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

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Sample Summary

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported: 05/18/23 15:49
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS27 - 15'	E305097-01A	Soil	05/15/23	05/17/23	Glass Jar, 2 oz.
SW12 - 0 - 6'	E305097-02A	Soil	05/15/23	05/17/23	Glass Jar, 2 oz.



Case Narrative:

Project Name: Federal G Gas Com 1

Workorder:E305097

Date Received: 05/17/23 07:00

Laboratory mislabeled samples on original COC. Client brought this issue to our attention over the phone after a preliminary report had been sent.

Lab made an updated (green) COC to show the corrected sample identification per client request.

The final report reflects the updated (green) COC.

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

Respectfully,

Walter Hinchman



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
5/18/2023 3:49:05PM

FS27 - 15'

E305097-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2320047
Benzene	ND	0.0250	1	05/17/23	05/17/23	
Ethylbenzene	ND	0.0250	1	05/17/23	05/17/23	
Toluene	0.400	0.0250	1	05/17/23	05/17/23	
o-Xylene	0.336	0.0250	1	05/17/23	05/17/23	
p,m-Xylene	2.29	0.0500	1	05/17/23	05/17/23	
Total Xylenes	2.62	0.0250	1	05/17/23	05/17/23	
Surrogate: Bromofluorobenzene	76.6 %	70-130		05/17/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		05/17/23	05/17/23	
Surrogate: Toluene-d8	115 %	70-130		05/17/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2320047
Gasoline Range Organics (C6-C10)	418	20.0	1	05/17/23	05/17/23	
Surrogate: Bromofluorobenzene	76.6 %	70-130		05/17/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		05/17/23	05/17/23	
Surrogate: Toluene-d8	115 %	70-130		05/17/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2320045
Diesel Range Organics (C10-C28)	3030	25.0	1	05/17/23	05/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/17/23	05/17/23	
Surrogate: n-Nonane	243 %	50-200		05/17/23	05/17/23	S5
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2320049
Chloride	154	20.0	1	05/17/23	05/17/23	



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
5/18/2023 3:49:05PM

SW12 - 0 - 6'

E305097-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2320047
Benzene	ND	0.0250	1	05/17/23	05/17/23	
Ethylbenzene	ND	0.0250	1	05/17/23	05/17/23	
Toluene	ND	0.0250	1	05/17/23	05/17/23	
o-Xylene	ND	0.0250	1	05/17/23	05/17/23	
p,m-Xylene	ND	0.0500	1	05/17/23	05/17/23	
Total Xylenes	ND	0.0250	1	05/17/23	05/17/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		05/17/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		05/17/23	05/17/23	
Surrogate: Toluene-d8	99.0 %	70-130		05/17/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2320047
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/17/23	05/17/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		05/17/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		05/17/23	05/17/23	
Surrogate: Toluene-d8	99.0 %	70-130		05/17/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2320045
Diesel Range Organics (C10-C28)	50.8	25.0	1	05/17/23	05/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/17/23	05/17/23	
Surrogate: n-Nonane	89.7 %	50-200		05/17/23	05/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2320049
Chloride	113	20.0	1	05/17/23	05/17/23	



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:49:05PM

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 (2320047-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			

LCS (2320047-BS1)

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.33	0.0250	2.50		93.2	70-130			
Ethylbenzene	2.48	0.0250	2.50		99.0	70-130			
Toluene	2.48	0.0250	2.50		99.4	70-130			
o-Xylene	2.70	0.0250	2.50		108	70-130			
p,m-Xylene	5.35	0.0500	5.00		107	70-130			
Total Xylenes	8.05	0.0250	7.50		107	70-130			
Surrogate: Bromofluorobenzene	0.545		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.508		0.500		102	70-130			
Surrogate: Toluene-d8	0.542		0.500		108	70-130			

Matrix Spike (2320047-MS1)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.41	0.0250	2.50	ND	96.4	48-131			
Ethylbenzene	2.57	0.0250	2.50	ND	103	45-135			
Toluene	2.57	0.0250	2.50	ND	103	48-130			
o-Xylene	2.77	0.0250	2.50	ND	111	43-135			
p,m-Xylene	5.50	0.0500	5.00	ND	110	43-135			
Total Xylenes	8.27	0.0250	7.50	ND	110	43-135			
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.3	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			

Matrix Spike Dup (2320047-MSD1)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.48	0.0250	2.50	ND	99.3	48-131	2.94	23	
Ethylbenzene	2.62	0.0250	2.50	ND	105	45-135	1.98	27	
Toluene	2.64	0.0250	2.50	ND	106	48-130	2.82	24	
o-Xylene	2.88	0.0250	2.50	ND	115	43-135	3.91	27	
p,m-Xylene	5.73	0.0500	5.00	ND	115	43-135	4.05	27	
Total Xylenes	8.61	0.0250	7.50	ND	115	43-135	4.00	27	
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.486		0.500		97.1	70-130			
Surrogate: Toluene-d8	0.536		0.500		107	70-130			



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:49:05PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320047-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			

LCS (2320047-BS2)

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	59.8	20.0	50.0		120	70-130			
Surrogate: Bromofluorobenzene	0.553		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.547		0.500		109	70-130			

Matrix Spike (2320047-MS2)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	55.6	20.0	50.0	ND	111	70-130			
Surrogate: Bromofluorobenzene	0.548		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	70-130			

Matrix Spike Dup (2320047-MSD2)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	57.5	20.0	50.0	ND	115	70-130	3.40	20	
Surrogate: Bromofluorobenzene	0.546		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:49:05PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320045-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.9		50.0		91.8	50-200			

LCS (2320045-BS1)

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	263	25.0	250		105	38-132			
Surrogate: n-Nonane	38.5		50.0		77.1	50-200			

Matrix Spike (2320045-MS1)

Source: E305097-01

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	3500	25.0	250	3030	189	38-132			M4
Surrogate: n-Nonane	136		50.0		272	50-200			S5

Matrix Spike Dup (2320045-MSD1)

Source: E305097-01

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	3210	25.0	250	3030	74.7	38-132	8.53	20	
Surrogate: n-Nonane	118		50.0		235	50-200			S5



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:49:05PM

Anions by EPA 300.0/9056A

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 (2320049-BLK1)					Prepared: 05/17/23 Analyzed: 05/17/23				
Chloride	ND	20.0							
LCS (2320049-BS1)					Prepared: 05/17/23 Analyzed: 05/17/23				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2320049-MS1)					Source: E305096-21		Prepared: 05/17/23 Analyzed: 05/17/23		
Chloride	255	20.0	250	ND	102	80-120			
Matrix Spike Dup (2320049-MSD1)					Source: E305096-21		Prepared: 05/17/23 Analyzed: 05/17/23		
Chloride	259	20.0	250	ND	104	80-120	1.54	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

Ensolum, LLC	Project Name:	Federal G Gas Com 1	
3122 National Parks Hwy	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	05/18/23 15:49

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.

S5 Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Client: Ensolum, LLC.		Bill To		Lab Use Only		TAT		EPA Program	
Project: Federal G Gas Com 1		Attention: Jim Raley		Lab WO#		1D 2D 3D Standard		CWA SDWA	
Project Manager: Ashley Gioveno		Address: 5315 Buena Vista Dr		E305097		Job Number		01058-0007	
Address: 3122 National Parks Hwy		City, State, Zip: Carlsbad NM, 88220						X	
City, State, Zip: Carlsbad NM, 88220		Phone: (575)689-7597							
Phone: 575-988-0055		Email: jim.raley@dv.com							
Email: agioveno@ensolum.com									
Report due by:									

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDGC TX	Remarks
11:49	5/15/2023	Soil	1 Jar	SW12 - 0-6'	1						X		
13:22	5/15/2023	Soil	1 Jar	FS27 - 15'	2						X		

Additional Instructions: Please CC: cburton@ensolum.com, agioveno@ensolum.com, jim.raley@dv.com

I, (field sample), 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.						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) <i>[Signature]</i>						Relinquished by: (Signature) <i>[Signature]</i>					
Date: 05/16/23		Time: 08:39am		Received by: (Signature) <i>[Signature]</i>		Date: 5-16-23		Time: 839		Lab Use Only	
Date: 5-16-23		Time: 1015		Received by: (Signature) <i>[Signature]</i>		Date: 5-16-23		Time: 1800		Received on ice: Y / N	
Date: 5-16-23		Time: 2400		Received by: (Signature) <i>[Signature]</i>		Date: 5/17/23		Time: 0700		T1 T2 T3	
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: 5/17/2023 1:43:05PM

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:	Ensolum, LLC	Date Received:	05/17/23 07:00	Work Order ID:	E305097
Phone:	(575) 988-0055	Date Logged In:	05/16/23 17:01	Logged In By:	Keyliegh Hall
Email:	a.giovengo@ensolum.com	Due Date:	05/17/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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.

Project Information

Chain of Custody

Page 1 of 1

Client: Ensolum, LLC.				Bill To		Lab Use Only				TAT				EPA Program					
Project: Federal G Gas Com 1				Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA				
Project Manager: Ashley Giovengo				Address: 5315 Buena Vista Dr		E305097		01058-0057		X									
Address: 3122 National Parks Hwy				City, State, Zip: Carlsbad NM, 88220		Analysis and Method									RCRA				
City, State, Zip: Carlsbad NM, 88220				Phone: (575)689-7597		TPH GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC NM	GDOC TX	State				
Phone: 575-988-0055				Email: jim.raley@dmv.com											NM	CO	UT	AZ	TX
Email: agiovengo@ensolum.com																			
Report due by:																			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number										Remarks				
11:49	5/15/2023	Soil	1 Jar	SW12-0-6' FS27-15'	1								X		Samples were mislabeled by sample login. Changes made per Cole Burton 5/17/23 CM				
13:22	5/15/2023	Soil	1 Jar	FS27-15' SW12-0-6'	2								X						

Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dmv.com

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:

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	Lab Use Only Received on ice: 0 / N T1 _____ T2 _____ T3 _____ AVG Temp °C 4
Michelle Gungor	05/16/23	08:39am	Michelle Gungor	5-16-23	839	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Andrew Messa	5-16-23	1015	Andrew Messa	5-16-23	1800	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Andrew Messa	5-16-23	2400	Kayla Q Hall	5/17/23	0700	

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

Report to:

Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Ensolum, LLC

Project Name: Federal G Gas Com 1

Work Order: E305098

Job Number: 01058-0007

Received: 5/17/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
5/18/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 5/18/23

Ashley Giovengo
3122 National Parks Hwy
Carlsbad, NM 88220



Project Name: Federal G Gas Com 1
Workorder: E305098
Date Received: 5/17/2023 7:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/17/2023 7:00:00AM, under the Project Name: Federal G Gas Com 1.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 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 regarding 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
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labadmin@envirotech-inc.com

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West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	05/18/23 15:51

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS27 - 16"	E305098-01A	Soil	05/15/23	05/17/23	Glass Jar, 2 oz.



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
5/18/2023 3:51:33PM

FS27 - 16"

E305098-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2320047
Benzene	ND	0.125	5	05/17/23	05/17/23	
Ethylbenzene	ND	0.125	5	05/17/23	05/17/23	
Toluene	1.96	0.125	5	05/17/23	05/17/23	
o-Xylene	0.988	0.125	5	05/17/23	05/17/23	
p,m-Xylene	7.02	0.250	5	05/17/23	05/17/23	
Total Xylenes	8.01	0.125	5	05/17/23	05/17/23	
Surrogate: Bromofluorobenzene	88.0 %	70-130		05/17/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4	106 %	70-130		05/17/23	05/17/23	
Surrogate: Toluene-d8	110 %	70-130		05/17/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2320047
Gasoline Range Organics (C6-C10)	1110	100	5	05/17/23	05/17/23	
Surrogate: Bromofluorobenzene	88.0 %	70-130		05/17/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4	106 %	70-130		05/17/23	05/17/23	
Surrogate: Toluene-d8	110 %	70-130		05/17/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2320045
Diesel Range Organics (C10-C28)	4960	25.0	1	05/17/23	05/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/17/23	05/17/23	
Surrogate: n-Nonane	469 %	50-200		05/17/23	05/17/23	S5
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2320049
Chloride	128	20.0	1	05/17/23	05/17/23	



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:51:33PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320047-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			

LCS (2320047-BS1)

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.33	0.0250	2.50		93.2	70-130			
Ethylbenzene	2.48	0.0250	2.50		99.0	70-130			
Toluene	2.48	0.0250	2.50		99.4	70-130			
o-Xylene	2.70	0.0250	2.50		108	70-130			
p,m-Xylene	5.35	0.0500	5.00		107	70-130			
Total Xylenes	8.05	0.0250	7.50		107	70-130			
Surrogate: Bromofluorobenzene	0.545		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.508		0.500		102	70-130			
Surrogate: Toluene-d8	0.542		0.500		108	70-130			

Matrix Spike (2320047-MS1)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.41	0.0250	2.50	ND	96.4	48-131			
Ethylbenzene	2.57	0.0250	2.50	ND	103	45-135			
Toluene	2.57	0.0250	2.50	ND	103	48-130			
o-Xylene	2.77	0.0250	2.50	ND	111	43-135			
p,m-Xylene	5.50	0.0500	5.00	ND	110	43-135			
Total Xylenes	8.27	0.0250	7.50	ND	110	43-135			
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.3	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			

Matrix Spike Dup (2320047-MSD1)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.48	0.0250	2.50	ND	99.3	48-131	2.94	23	
Ethylbenzene	2.62	0.0250	2.50	ND	105	45-135	1.98	27	
Toluene	2.64	0.0250	2.50	ND	106	48-130	2.82	24	
o-Xylene	2.88	0.0250	2.50	ND	115	43-135	3.91	27	
p,m-Xylene	5.73	0.0500	5.00	ND	115	43-135	4.05	27	
Total Xylenes	8.61	0.0250	7.50	ND	115	43-135	4.00	27	
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.486		0.500		97.1	70-130			
Surrogate: Toluene-d8	0.536		0.500		107	70-130			



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:51:33PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320047-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			

LCS (2320047-BS2)

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	59.8	20.0	50.0		120	70-130			
Surrogate: Bromofluorobenzene	0.553		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.547		0.500		109	70-130			

Matrix Spike (2320047-MS2)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	55.6	20.0	50.0	ND	111	70-130			
Surrogate: Bromofluorobenzene	0.548		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	70-130			

Matrix Spike Dup (2320047-MSD2)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	57.5	20.0	50.0	ND	115	70-130	3.40	20	
Surrogate: Bromofluorobenzene	0.546		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:51:33PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320045-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.9		50.0		91.8	50-200			

LCS (2320045-BS1)

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	263	25.0	250		105	38-132			
Surrogate: n-Nonane	38.5		50.0		77.1	50-200			

Matrix Spike (2320045-MS1)

Source: E305097-01

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	3500	25.0	250	3030	189	38-132			M4
Surrogate: n-Nonane	136		50.0		272	50-200			S5

Matrix Spike Dup (2320045-MSD1)

Source: E305097-01

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	3210	25.0	250	3030	74.7	38-132	8.53	20	
Surrogate: n-Nonane	118		50.0		235	50-200			S5



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:51:33PM

Anions by EPA 300.0/9056A

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 (2320049-BLK1)					Prepared: 05/17/23 Analyzed: 05/17/23				
Chloride	ND	20.0							
LCS (2320049-BS1)					Prepared: 05/17/23 Analyzed: 05/17/23				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2320049-MS1)					Source: E305096-21		Prepared: 05/17/23 Analyzed: 05/17/23		
Chloride	255	20.0	250	ND	102	80-120			
Matrix Spike Dup (2320049-MSD1)					Source: E305096-21		Prepared: 05/17/23 Analyzed: 05/17/23		
Chloride	259	20.0	250	ND	104	80-120	1.54	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

Ensolum, LLC	Project Name:	Federal G Gas Com 1	
3122 National Parks Hwy	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	05/18/23 15:51

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

S5 Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Project Information

Chain of Custody

Page 1 of 1

Client: Ensolum, LLC.		Bill To		Lab Use Only		TAT		EPA Program	
Project: Federal G Gas Com 1		Attention: Jim Raley		Lab WO#		1D 2D 3D		CWA SDWA	
Project Manager: Ashley Giovengo		Address: 5315 Buena Vista Dr		E 305098		Job Number		9058-0007	
Address: 3122 National Parks Hwy		City, State, Zip: Carlsbad NM, 88220							
City, State, Zip: Carlsbad NM, 88220		Phone: (575)689-7597							
Phone: 575-988-0055		Email: jim.raley@dm.com							
Email: agiovengo@ensolum.com									
Report due by:									

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC	TX	Remarks
14:09	5/15/2023	Soil	1 Jar	FS27 - 16"	1						X		

Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dm.com

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:

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	Lab Use Only Received on ice: Y/ N T1 T2 T3 AVG Temp °C 4
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
Michelle Gungl	5/16/23	08:40am	Michelle Gungl	5-16-23	840	
Michelle Gungl	5-16-23	1015	Andrew McGo	5-16-23	1800	
Andrew McGo	5-16-23	2400	Kayleigh D Hall	5/17/23	0700	

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: 5/17/2023 1:46:53PM

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:	Ensolum, LLC	Date Received:	05/17/23 07:00	Work Order ID:	E305098
Phone:	(575) 988-0055	Date Logged In:	05/16/23 17:05	Logged In By:	Caitlin Mars
Email:	a.giovengo@ensolum.com	Due Date:	05/17/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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:
Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Ensolum, LLC

Project Name: Federal G Gas Com 1

Work Order: E305099

Job Number: 01058-0007

Received: 5/17/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
5/18/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 5/18/23

Ashley Giovengo
3122 National Parks Hwy
Carlsbad, NM 88220



Project Name: Federal G Gas Com 1
Workorder: E305099
Date Received: 5/17/2023 7:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/17/2023 7:00:00AM, under the Project Name: Federal G Gas Com 1.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 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 regarding 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
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rainaschwanz@envirotech-inc.com

Alexa Michaels
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labadmin@envirotech-inc.com

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ljjarboe@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

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	05/18/23 15:15

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS27 - 19"	E305099-01A	Soil	05/15/23	05/17/23	Glass Jar, 2 oz.



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
5/18/2023 3:15:59PM

FS27 - 19"

E305099-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2320047
Benzene	ND	0.125	5	05/17/23	05/17/23	
Ethylbenzene	ND	0.125	5	05/17/23	05/17/23	
Toluene	3.65	0.125	5	05/17/23	05/17/23	
o-Xylene	1.30	0.125	5	05/17/23	05/17/23	
p,m-Xylene	10.0	0.250	5	05/17/23	05/17/23	
Total Xylenes	11.3	0.125	5	05/17/23	05/17/23	
Surrogate: Bromofluorobenzene	89.6 %	70-130		05/17/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		05/17/23	05/17/23	
Surrogate: Toluene-d8	109 %	70-130		05/17/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2320047
Gasoline Range Organics (C6-C10)	1080	100	5	05/17/23	05/17/23	
Surrogate: Bromofluorobenzene	89.6 %	70-130		05/17/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		05/17/23	05/17/23	
Surrogate: Toluene-d8	109 %	70-130		05/17/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2320045
Diesel Range Organics (C10-C28)	7550	125	5	05/17/23	05/17/23	
Oil Range Organics (C28-C36)	ND	250	5	05/17/23	05/17/23	
Surrogate: n-Nonane	678 %	50-200		05/17/23	05/17/23	S5
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2320049
Chloride	172	20.0	1	05/17/23	05/17/23	



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:15:59PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320047-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			

LCS (2320047-BS1)

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.33	0.0250	2.50		93.2	70-130			
Ethylbenzene	2.48	0.0250	2.50		99.0	70-130			
Toluene	2.48	0.0250	2.50		99.4	70-130			
o-Xylene	2.70	0.0250	2.50		108	70-130			
p,m-Xylene	5.35	0.0500	5.00		107	70-130			
Total Xylenes	8.05	0.0250	7.50		107	70-130			
Surrogate: Bromofluorobenzene	0.545		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.508		0.500		102	70-130			
Surrogate: Toluene-d8	0.542		0.500		108	70-130			

Matrix Spike (2320047-MS1)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.41	0.0250	2.50	ND	96.4	48-131			
Ethylbenzene	2.57	0.0250	2.50	ND	103	45-135			
Toluene	2.57	0.0250	2.50	ND	103	48-130			
o-Xylene	2.77	0.0250	2.50	ND	111	43-135			
p,m-Xylene	5.50	0.0500	5.00	ND	110	43-135			
Total Xylenes	8.27	0.0250	7.50	ND	110	43-135			
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.3	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			

Matrix Spike Dup (2320047-MSD1)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.48	0.0250	2.50	ND	99.3	48-131	2.94	23	
Ethylbenzene	2.62	0.0250	2.50	ND	105	45-135	1.98	27	
Toluene	2.64	0.0250	2.50	ND	106	48-130	2.82	24	
o-Xylene	2.88	0.0250	2.50	ND	115	43-135	3.91	27	
p,m-Xylene	5.73	0.0500	5.00	ND	115	43-135	4.05	27	
Total Xylenes	8.61	0.0250	7.50	ND	115	43-135	4.00	27	
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.486		0.500		97.1	70-130			
Surrogate: Toluene-d8	0.536		0.500		107	70-130			



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:15:59PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320047-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			

LCS (2320047-BS2)

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	59.8	20.0	50.0		120	70-130			
Surrogate: Bromofluorobenzene	0.553		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.547		0.500		109	70-130			

Matrix Spike (2320047-MS2)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	55.6	20.0	50.0	ND	111	70-130			
Surrogate: Bromofluorobenzene	0.548		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	70-130			

Matrix Spike Dup (2320047-MSD2)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	57.5	20.0	50.0	ND	115	70-130	3.40	20	
Surrogate: Bromofluorobenzene	0.546		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			



QC Summary Data

Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: Federal G Gas Com 1 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 5/18/2023 3:15:59PM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320045-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.9		50.0		91.8	50-200			

LCS (2320045-BS1)

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	263	25.0	250		105	38-132			
Surrogate: n-Nonane	38.5		50.0		77.1	50-200			

Matrix Spike (2320045-MS1)

Source: E305097-01

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	3500	25.0	250	3030	189	38-132			M4
Surrogate: n-Nonane	136		50.0		272	50-200			S5

Matrix Spike Dup (2320045-MSD1)

Source: E305097-01

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	3210	25.0	250	3030	74.7	38-132	8.53	20	
Surrogate: n-Nonane	118		50.0		235	50-200			S5



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:15:59PM

Anions by EPA 300.0/9056A

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 (2320049-BLK1)					Prepared: 05/17/23 Analyzed: 05/17/23				
Chloride	ND	20.0							
LCS (2320049-BS1)					Prepared: 05/17/23 Analyzed: 05/17/23				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2320049-MS1)					Source: E305096-21		Prepared: 05/17/23 Analyzed: 05/17/23		
Chloride	255	20.0	250	ND	102	80-120			
Matrix Spike Dup (2320049-MSD1)					Source: E305096-21		Prepared: 05/17/23 Analyzed: 05/17/23		
Chloride	259	20.0	250	ND	104	80-120	1.54	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

Ensolum, LLC	Project Name:	Federal G Gas Com 1	
3122 National Parks Hwy	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	05/18/23 15:15

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.

S5 Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.

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.



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 Analytical Laboratory

Printed: 5/17/2023 1:50:50PM

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:	Ensolum, LLC	Date Received:	05/17/23 07:00	Work Order ID:	E305099
Phone:	(575) 988-0055	Date Logged In:	05/16/23 17:06	Logged In By:	Caitlin Mars
Email:	a.giovengo@ensolum.com	Due Date:	05/17/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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:

Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Ensolum, LLC

Project Name: Federal G Gas Com 1

Work Order: E305100

Job Number: 01058-0007

Received: 5/17/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
5/18/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 5/18/23

Ashley Giovengo
3122 National Parks Hwy
Carlsbad, NM 88220



Project Name: Federal G Gas Com 1
Workorder: E305100
Date Received: 5/17/2023 7:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/17/2023 7:00:00AM, under the Project Name: Federal G Gas Com 1.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 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 regarding 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
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Office: 505-632-1881
labadmin@envirotech-inc.com

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Technical Representative/Client Services
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Cell: 505-320-4759
ljjarboe@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

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported: 05/18/23 15:30
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS27 - 21"	E305100-01A	Soil	05/15/23	05/17/23	Glass Jar, 2 oz.



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
5/18/2023 3:30:52PM

FS27 - 21"

E305100-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2320047
Benzene	ND	0.125	5	05/17/23	05/17/23	
Ethylbenzene	ND	0.125	5	05/17/23	05/17/23	
Toluene	2.28	0.125	5	05/17/23	05/17/23	
o-Xylene	0.775	0.125	5	05/17/23	05/17/23	
p,m-Xylene	6.01	0.250	5	05/17/23	05/17/23	
Total Xylenes	6.79	0.125	5	05/17/23	05/17/23	
Surrogate: Bromofluorobenzene	92.3 %	70-130		05/17/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		05/17/23	05/17/23	
Surrogate: Toluene-d8	107 %	70-130		05/17/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2320047
Gasoline Range Organics (C6-C10)	906	100	5	05/17/23	05/17/23	
Surrogate: Bromofluorobenzene	92.3 %	70-130		05/17/23	05/17/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		05/17/23	05/17/23	
Surrogate: Toluene-d8	107 %	70-130		05/17/23	05/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2320045
Diesel Range Organics (C10-C28)	6190	250	10	05/17/23	05/17/23	
Oil Range Organics (C28-C36)	ND	500	10	05/17/23	05/17/23	
Surrogate: n-Nonane	554 %	50-200		05/17/23	05/17/23	S5
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2320049
Chloride	71.6	20.0	1	05/17/23	05/17/23	



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:30:52PM

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 (2320047-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			

LCS (2320047-BS1)

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.33	0.0250	2.50		93.2	70-130			
Ethylbenzene	2.48	0.0250	2.50		99.0	70-130			
Toluene	2.48	0.0250	2.50		99.4	70-130			
o-Xylene	2.70	0.0250	2.50		108	70-130			
p,m-Xylene	5.35	0.0500	5.00		107	70-130			
Total Xylenes	8.05	0.0250	7.50		107	70-130			
Surrogate: Bromofluorobenzene	0.545		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.508		0.500		102	70-130			
Surrogate: Toluene-d8	0.542		0.500		108	70-130			

Matrix Spike (2320047-MS1)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.41	0.0250	2.50	ND	96.4	48-131			
Ethylbenzene	2.57	0.0250	2.50	ND	103	45-135			
Toluene	2.57	0.0250	2.50	ND	103	48-130			
o-Xylene	2.77	0.0250	2.50	ND	111	43-135			
p,m-Xylene	5.50	0.0500	5.00	ND	110	43-135			
Total Xylenes	8.27	0.0250	7.50	ND	110	43-135			
Surrogate: Bromofluorobenzene	0.533		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.3	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			

Matrix Spike Dup (2320047-MSD1)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Benzene	2.48	0.0250	2.50	ND	99.3	48-131	2.94	23	
Ethylbenzene	2.62	0.0250	2.50	ND	105	45-135	1.98	27	
Toluene	2.64	0.0250	2.50	ND	106	48-130	2.82	24	
o-Xylene	2.88	0.0250	2.50	ND	115	43-135	3.91	27	
p,m-Xylene	5.73	0.0500	5.00	ND	115	43-135	4.05	27	
Total Xylenes	8.61	0.0250	7.50	ND	115	43-135	4.00	27	
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.486		0.500		97.1	70-130			
Surrogate: Toluene-d8	0.536		0.500		107	70-130			



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:30:52PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320047-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			

LCS (2320047-BS2)

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	59.8	20.0	50.0		120	70-130			
Surrogate: Bromofluorobenzene	0.553		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.547		0.500		109	70-130			

Matrix Spike (2320047-MS2)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	55.6	20.0	50.0	ND	111	70-130			
Surrogate: Bromofluorobenzene	0.548		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	70-130			

Matrix Spike Dup (2320047-MSD2)

Source: E305096-24

Prepared: 05/17/23 Analyzed: 05/17/23

Gasoline Range Organics (C6-C10)	57.5	20.0	50.0	ND	115	70-130	3.40	20	
Surrogate: Bromofluorobenzene	0.546		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:30:52PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2320045-BLK1)

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.9		50.0		91.8	50-200			

LCS (2320045-BS1)

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	263	25.0	250		105	38-132			
Surrogate: n-Nonane	38.5		50.0		77.1	50-200			

Matrix Spike (2320045-MS1)

Source: E305097-01

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	3500	25.0	250	3030	189	38-132			M4
Surrogate: n-Nonane	136		50.0		272	50-200			S5

Matrix Spike Dup (2320045-MSD1)

Source: E305097-01

Prepared: 05/17/23 Analyzed: 05/17/23

Diesel Range Organics (C10-C28)	3210	25.0	250	3030	74.7	38-132	8.53	20	
Surrogate: n-Nonane	118		50.0		235	50-200			S5



QC Summary Data

Ensolum, LLC	Project Name:	Federal G Gas Com 1	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	5/18/2023 3:30:52PM

Anions by EPA 300.0/9056A

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 (2320049-BLK1)					Prepared: 05/17/23 Analyzed: 05/17/23				
Chloride	ND	20.0							
LCS (2320049-BS1)					Prepared: 05/17/23 Analyzed: 05/17/23				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2320049-MS1)					Source: E305096-21		Prepared: 05/17/23 Analyzed: 05/17/23		
Chloride	255	20.0	250	ND	102	80-120			
Matrix Spike Dup (2320049-MSD1)					Source: E305096-21		Prepared: 05/17/23 Analyzed: 05/17/23		
Chloride	259	20.0	250	ND	104	80-120	1.54	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

Ensolum, LLC	Project Name:	Federal G Gas Com 1	
3122 National Parks Hwy	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	05/18/23 15:30

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.

S5 Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Client: Ensolum, LLC.		Bill To		Lab Use Only		TAT				EPA Program			
Project: Federal G Gas Com 1		Attention: Jim Raley		Lab WO# E305100		Job Number 01058-0007		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Ashley Giovengo		Address: 5315 Buena Vista Dr		City, State, Zip: Carlsbad NM, 88220		Analysis and Method							
Address: 3122 National Parks Hwy		Phone: (575)689-7597		Email: jim.raley@dvn.com									RCRA
City, State, Zip: Carlsbad NM, 88220													
Phone: 575-988-0055													
Email: agiovengo@ensolum.com													
Report due by:													

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	Remarks
15:09	5/15/2023	Soil	1 Jar	FS27 - 21"	1						X		

Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dvn.com

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:

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 5°C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<i>Michelle Guyp</i>	05/16/23	08:40am	<i>Michelle Guyp</i>	5-16-23	840	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Michelle Guyp</i>	5-16-23	1015	<i>Andrew</i>	5.16.23	1800	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>Andrew</i>	5.16.23	2400	<i>Kevin R Hall</i>	5/17/23	0700	

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: 5/17/2023 2:18:40PM

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:	Ensolum, LLC	Date Received:	05/17/23 07:00	Work Order ID:	E305100
Phone:	(575) 988-0055	Date Logged In:	05/16/23 17:07	Logged In By:	Caitlin Mars
Email:	a.giovengo@ensolum.com	Due Date:	05/17/23 17:00 (0 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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:

Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: Federal G Gas Com 1

Work Order: E305174

Job Number: 01058-0007

Received: 5/26/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/1/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 6/1/23

Ashley Giovengo
6488 7 Rivers Hwy
Artesia, NM 88210



Project Name: Federal G Gas Com 1
Workorder: E305174
Date Received: 5/26/2023 8:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/26/2023 8:30:00AM, under the Project Name: Federal G Gas Com 1.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 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 regarding 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

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/01/23 13:58

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS27-23'	E305174-01A	Soil	05/25/23	05/26/23	Glass Jar, 2 oz.



Sample Data

Devon Energy - Carlsbad
6488 7 Rivers Hwy
Artesia NM, 88210

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
6/1/2023 1:58:34PM

FS27-23'

E305174-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321090
Benzene	ND	0.0250	1	05/26/23	05/27/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/27/23	
Toluene	ND	0.0250	1	05/26/23	05/27/23	
o-Xylene	ND	0.0250	1	05/26/23	05/27/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/27/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/27/23	
Surrogate: Bromofluorobenzene	107 %	70-130		05/26/23	05/27/23	
Surrogate: 1,2-Dichloroethane-d4	98.0 %	70-130		05/26/23	05/27/23	
Surrogate: Toluene-d8	107 %	70-130		05/26/23	05/27/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321090
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/27/23	
Surrogate: Bromofluorobenzene	107 %	70-130		05/26/23	05/27/23	
Surrogate: 1,2-Dichloroethane-d4	98.0 %	70-130		05/26/23	05/27/23	
Surrogate: Toluene-d8	107 %	70-130		05/26/23	05/27/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2322016
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/23	06/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/23	06/01/23	
Surrogate: n-Nonane	95.0 %	50-200		05/30/23	06/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2322003
Chloride	20.5	20.0	1	05/30/23	05/30/23	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/1/2023 1:58:34PM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2321090-BLK1)

Prepared: 05/26/23 Analyzed: 05/27/23

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: Bromofluorobenzene	0.526		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			

LCS (2321090-BS1)

Prepared: 05/26/23 Analyzed: 05/27/23

Benzene	2.59	0.0250	2.50		104	70-130			
Ethylbenzene	2.67	0.0250	2.50		107	70-130			
Toluene	2.70	0.0250	2.50		108	70-130			
o-Xylene	2.89	0.0250	2.50		116	70-130			
p,m-Xylene	5.66	0.0500	5.00		113	70-130			
Total Xylenes	8.55	0.0250	7.50		114	70-130			
Surrogate: Bromofluorobenzene	0.549		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.543		0.500		109	70-130			

Matrix Spike (2321090-MS1)

Source: E305175-01

Prepared: 05/26/23 Analyzed: 05/27/23

Benzene	2.54	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.58	0.0250	2.50	ND	103	45-135			
Toluene	2.61	0.0250	2.50	ND	104	48-130			
o-Xylene	2.84	0.0250	2.50	ND	113	43-135			
p,m-Xylene	5.64	0.0500	5.00	ND	113	43-135			
Total Xylenes	8.47	0.0250	7.50	ND	113	43-135			
Surrogate: Bromofluorobenzene	0.560		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.503		0.500		101	70-130			
Surrogate: Toluene-d8	0.531		0.500		106	70-130			

Matrix Spike Dup (2321090-MSD1)

Source: E305175-01

Prepared: 05/26/23 Analyzed: 05/27/23

Benzene	2.46	0.0250	2.50	ND	98.4	48-131	3.22	23	
Ethylbenzene	2.58	0.0250	2.50	ND	103	45-135	0.349	27	
Toluene	2.57	0.0250	2.50	ND	103	48-130	1.54	24	
o-Xylene	2.83	0.0250	2.50	ND	113	43-135	0.0353	27	
p,m-Xylene	5.54	0.0500	5.00	ND	111	43-135	1.72	27	
Total Xylenes	8.38	0.0250	7.50	ND	112	43-135	1.15	27	
Surrogate: Bromofluorobenzene	0.570		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.7	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/1/2023 1:58:34PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2321090-BLK1)

Prepared: 05/26/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.526		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			

LCS (2321090-BS2)

Prepared: 05/26/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	57.0	20.0	50.0		114	70-130			
Surrogate: Bromofluorobenzene	0.551		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.5	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	70-130			

Matrix Spike (2321090-MS2)

Source: E305175-01

Prepared: 05/26/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	88.9	20.0	50.0	ND	178	70-130			M6
Surrogate: Bromofluorobenzene	0.571		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.1	70-130			
Surrogate: Toluene-d8	0.548		0.500		110	70-130			

Matrix Spike Dup (2321090-MSD2)

Source: E305175-01

Prepared: 05/26/23 Analyzed: 05/30/23

Gasoline Range Organics (C6-C10)	80.4	20.0	50.0	ND	161	70-130	9.93	20	M6
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.2	70-130			
Surrogate: Toluene-d8	0.557		0.500		111	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/1/2023 1:58:34PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2322016-BLK1)

Prepared: 05/30/23 Analyzed: 05/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.5		50.0		101	50-200			

LCS (2322016-BS1)

Prepared: 05/30/23 Analyzed: 05/31/23

Diesel Range Organics (C10-C28)	242	25.0	250		97.0	38-132			
Surrogate: n-Nonane	43.8		50.0		87.7	50-200			

Matrix Spike (2322016-MS1)

Source: E305190-21

Prepared: 05/30/23 Analyzed: 05/31/23

Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	44.8		50.0		89.7	50-200			

Matrix Spike Dup (2322016-MSD1)

Source: E305190-21

Prepared: 05/30/23 Analyzed: 05/31/23

Diesel Range Organics (C10-C28)	244	25.0	250	ND	97.4	38-132	3.54	20	
Surrogate: n-Nonane	45.1		50.0		90.3	50-200			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/1/2023 1:58:34PM

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 (2322003-BLK1)					Prepared: 05/30/23 Analyzed: 05/30/23				
Chloride	ND	20.0							
LCS (2322003-BS1)					Prepared: 05/30/23 Analyzed: 05/30/23				
Chloride	249	20.0	250		99.5	90-110			
Matrix Spike (2322003-MS1)					Source: E305160-01		Prepared: 05/30/23 Analyzed: 05/30/23		
Chloride	314	20.0	250	56.0	103	80-120			
Matrix Spike Dup (2322003-MSD1)					Source: E305160-01		Prepared: 05/30/23 Analyzed: 05/30/23		
Chloride	311	20.0	250	56.0	102	80-120	0.719	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

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/01/23 13:58

- M6 Matrix spike recovery has a high bias. The native sample results were below the RL, but appears to have contributed to high MS recoveries.
- 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.





Envirotech Analytical Laboratory

Printed: 5/26/2023 12:00:36PM

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:	Devon Energy - Carlsbad	Date Received:	05/26/23 08:30	Work Order ID:	E305174
Phone:	(505) 382-1211	Date Logged In:	05/26/23 09:37	Logged In By:	Caitlin Mars
Email:	ashley.giovengo@wescominc.com	Due Date:	06/02/23 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration required and/or requested for dissolved metals? Yes

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:
Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: Federal G Gas Com 1

Work Order: E305175

Job Number: 01058-0007

Received: 5/26/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/1/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 6/1/23

Ashley Giovengo
6488 7 Rivers Hwy
Artesia, NM 88210



Project Name: Federal G Gas Com 1
Workorder: E305175
Date Received: 5/26/2023 8:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/26/2023 8:30:00AM, under the Project Name: Federal G Gas Com 1.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 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.

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

Respectfully,

Walter Hinchman
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West Texas Midland/Odessa Area
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Sample Summary

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/01/23 13:55

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS27-24'	E305175-01A	Soil	05/25/23	05/26/23	Glass Jar, 2 oz.



Sample Data

Devon Energy - Carlsbad
6488 7 Rivers Hwy
Artesia NM, 88210

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
6/1/2023 1:55:29PM

FS27-24'

E305175-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321090
Benzene	ND	0.0250	1	05/26/23	05/27/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/27/23	
Toluene	ND	0.0250	1	05/26/23	05/27/23	
o-Xylene	ND	0.0250	1	05/26/23	05/27/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/27/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/27/23	
Surrogate: Bromofluorobenzene		111 %	70-130	05/26/23	05/27/23	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	05/26/23	05/27/23	
Surrogate: Toluene-d8		107 %	70-130	05/26/23	05/27/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321090
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/27/23	
Surrogate: Bromofluorobenzene		111 %	70-130	05/26/23	05/27/23	
Surrogate: 1,2-Dichloroethane-d4		96.9 %	70-130	05/26/23	05/27/23	
Surrogate: Toluene-d8		107 %	70-130	05/26/23	05/27/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2322016
Diesel Range Organics (C10-C28)	387	25.0	1	05/30/23	06/01/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/23	06/01/23	
Surrogate: n-Nonane		102 %	50-200	05/30/23	06/01/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2322003
Chloride	50.6	20.0	1	05/30/23	05/30/23	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/1/2023 1:55:29PM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2321090-BLK1)

Prepared: 05/26/23 Analyzed: 05/27/23

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: Bromofluorobenzene	0.526		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			

LCS (2321090-BS1)

Prepared: 05/26/23 Analyzed: 05/27/23

Benzene	2.59	0.0250	2.50		104	70-130			
Ethylbenzene	2.67	0.0250	2.50		107	70-130			
Toluene	2.70	0.0250	2.50		108	70-130			
o-Xylene	2.89	0.0250	2.50		116	70-130			
p,m-Xylene	5.66	0.0500	5.00		113	70-130			
Total Xylenes	8.55	0.0250	7.50		114	70-130			
Surrogate: Bromofluorobenzene	0.549		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.543		0.500		109	70-130			

Matrix Spike (2321090-MS1)

Source: E305175-01

Prepared: 05/26/23 Analyzed: 05/27/23

Benzene	2.54	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.58	0.0250	2.50	ND	103	45-135			
Toluene	2.61	0.0250	2.50	ND	104	48-130			
o-Xylene	2.84	0.0250	2.50	ND	113	43-135			
p,m-Xylene	5.64	0.0500	5.00	ND	113	43-135			
Total Xylenes	8.47	0.0250	7.50	ND	113	43-135			
Surrogate: Bromofluorobenzene	0.560		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.503		0.500		101	70-130			
Surrogate: Toluene-d8	0.531		0.500		106	70-130			

Matrix Spike Dup (2321090-MSD1)

Source: E305175-01

Prepared: 05/26/23 Analyzed: 05/27/23

Benzene	2.46	0.0250	2.50	ND	98.4	48-131	3.22	23	
Ethylbenzene	2.58	0.0250	2.50	ND	103	45-135	0.349	27	
Toluene	2.57	0.0250	2.50	ND	103	48-130	1.54	24	
o-Xylene	2.83	0.0250	2.50	ND	113	43-135	0.0353	27	
p,m-Xylene	5.54	0.0500	5.00	ND	111	43-135	1.72	27	
Total Xylenes	8.38	0.0250	7.50	ND	112	43-135	1.15	27	
Surrogate: Bromofluorobenzene	0.570		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.7	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/1/2023 1:55:29PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2321090-BLK1)

Prepared: 05/26/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.526		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			

LCS (2321090-BS2)

Prepared: 05/26/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	57.0	20.0	50.0		114	70-130			
Surrogate: Bromofluorobenzene	0.551		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.5	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	70-130			

Matrix Spike (2321090-MS2)

Source: E305175-01

Prepared: 05/26/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	88.9	20.0	50.0	ND	178	70-130			M6
Surrogate: Bromofluorobenzene	0.571		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.1	70-130			
Surrogate: Toluene-d8	0.548		0.500		110	70-130			

Matrix Spike Dup (2321090-MSD2)

Source: E305175-01

Prepared: 05/26/23 Analyzed: 05/30/23

Gasoline Range Organics (C6-C10)	80.4	20.0	50.0	ND	161	70-130	9.93	20	M6
Surrogate: Bromofluorobenzene	0.542		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.2	70-130			
Surrogate: Toluene-d8	0.557		0.500		111	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/1/2023 1:55:29PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2322016-BLK1)

Prepared: 05/30/23 Analyzed: 05/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.5		50.0		101	50-200			

LCS (2322016-BS1)

Prepared: 05/30/23 Analyzed: 05/31/23

Diesel Range Organics (C10-C28)	242	25.0	250		97.0	38-132			
Surrogate: n-Nonane	43.8		50.0		87.7	50-200			

Matrix Spike (2322016-MS1)

Source: E305190-21

Prepared: 05/30/23 Analyzed: 05/31/23

Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	44.8		50.0		89.7	50-200			

Matrix Spike Dup (2322016-MSD1)

Source: E305190-21

Prepared: 05/30/23 Analyzed: 05/31/23

Diesel Range Organics (C10-C28)	244	25.0	250	ND	97.4	38-132	3.54	20	
Surrogate: n-Nonane	45.1		50.0		90.3	50-200			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/1/2023 1:55:29PM

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 (2322003-BLK1)					Prepared: 05/30/23 Analyzed: 05/30/23				
Chloride	ND	20.0							
LCS (2322003-BS1)					Prepared: 05/30/23 Analyzed: 05/30/23				
Chloride	249	20.0	250		99.5	90-110			
Matrix Spike (2322003-MS1)					Source: E305160-01		Prepared: 05/30/23 Analyzed: 05/30/23		
Chloride	314	20.0	250	56.0	103	80-120			
Matrix Spike Dup (2322003-MSD1)					Source: E305160-01		Prepared: 05/30/23 Analyzed: 05/30/23		
Chloride	311	20.0	250	56.0	102	80-120	0.719	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

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/01/23 13:55

- M6 Matrix spike recovery has a high bias. The native sample results were below the RL, but appears to have contributed to high MS recoveries.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

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

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



Project Information

Chain of Custody

Page 1 of 1

Client: <u>Devon Energy</u>				Bill To		Lab Use Only				TAT				EPA Program		
Project: <u>Federal Grounds Com 1</u>				Attention: <u>Jim Raley</u>		Lab WO# <u>E-305175</u>		Job Number <u>01058-0007</u>		1D	2D	3D	Standard	CWA	SDWA	
Project Manager: <u>Ashley Giovenso</u>				Address: <u>5315 Buena Vista Dr</u>		Analysis and Method								RCRA		
Address: <u>3122 National Parks Hwy</u>				City, State, Zip: <u>Carlsbad, NM 88220</u>												
City, State, Zip: <u>Carlsbad, NM 88220</u>				Phone: <u>575-659-7597</u>												
Phone: <u>575-988-0055</u>				Email: <u>jim.raley@devon.com</u>												
Report due by:																
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	State				Remarks
												NM	CO	UT	AZ	TX
Additional Instructions: <u>Preserved on ice. Please cc cburton@ensolum.com and agiovenso@ensolum.com and jim.raley@devon.com</u>																
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.												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.				
Sampled by:																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>								
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time									
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time									
<u>Michelle Campese</u>		<u>05/25/23</u>	<u>14:25</u>	<u>Michelle Campese</u>		<u>5-25-23</u>	<u>2:25</u>									
<u>Andrew Musso</u>		<u>5-25-23</u>	<u>19:15</u>	<u>Andrew Musso</u>		<u>5-25-23</u>	<u>19:30</u>									
<u>Andrew Musso</u>		<u>5-25-23</u>	<u>01:00</u>	<u>Carla Mon</u>		<u>5/26/23</u>	<u>8:30</u>									
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 Analytical Laboratory

Printed: 5/26/2023 12:07:52PM

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:	Devon Energy - Carlsbad	Date Received:	05/26/23 08:30	Work Order ID:	E305175
Phone:	(505) 382-1211	Date Logged In:	05/26/23 09:39	Logged In By:	Caitlin Mars
Email:	ashley.giovengo@wescominc.com	Due Date:	06/02/23 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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:
Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: Federal G Gas Com 1

Work Order: E306117

Job Number: 01058-0007

Received: 6/15/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/20/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 6/20/23

Ashley Giovengo
6488 7 Rivers Hwy
Artesia, NM 88210



Project Name: Federal G Gas Com 1
Workorder: E306117
Date Received: 6/15/2023 7:45:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/15/2023 7:45:00AM, under the Project Name: Federal G Gas Com 1.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 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 regarding 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
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Rayny Hagan
Technical Representative
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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/20/23 16:54

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS18 - 4'	E306117-01A	Soil	06/13/23	06/15/23	Glass Jar, 2 oz.
FS19 - 6'	E306117-02A	Soil	06/13/23	06/15/23	Glass Jar, 2 oz.
FS20 - 3'	E306117-03A	Soil	06/13/23	06/15/23	Glass Jar, 2 oz.



Sample Data

Devon Energy - Carlsbad
6488 7 Rivers Hwy
Artesia NM, 88210

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
6/20/2023 4:54:33PM

FS18 - 4'

E306117-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2324042	
Benzene	ND	0.0250	1	06/15/23	06/15/23	
Ethylbenzene	ND	0.0250	1	06/15/23	06/15/23	
Toluene	ND	0.0250	1	06/15/23	06/15/23	
o-Xylene	ND	0.0250	1	06/15/23	06/15/23	
p,m-Xylene	ND	0.0500	1	06/15/23	06/15/23	
Total Xylenes	ND	0.0250	1	06/15/23	06/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.5 %	70-130		06/15/23	06/15/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2324042	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/23	06/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.9 %	70-130		06/15/23	06/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2324043	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/23	06/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/15/23	06/16/23	
<i>Surrogate: n-Nonane</i>						
	82.9 %	50-200		06/15/23	06/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2325006	
Chloride	235	20.0	1	06/19/23	06/19/23	



Sample Data

Devon Energy - Carlsbad
6488 7 Rivers Hwy
Artesia NM, 88210

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
6/20/2023 4:54:33PM

FS19 - 6'

E306117-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2324042
Benzene	ND	0.0250	1	06/15/23	06/15/23	
Ethylbenzene	ND	0.0250	1	06/15/23	06/15/23	
Toluene	ND	0.0250	1	06/15/23	06/15/23	
o-Xylene	ND	0.0250	1	06/15/23	06/15/23	
p,m-Xylene	ND	0.0500	1	06/15/23	06/15/23	
Total Xylenes	ND	0.0250	1	06/15/23	06/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.1 %	70-130		06/15/23	06/15/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2324042
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/23	06/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.1 %	70-130		06/15/23	06/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2324043
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/23	06/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/15/23	06/16/23	
<i>Surrogate: n-Nonane</i>						
	77.5 %	50-200		06/15/23	06/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2325006
Chloride	145	20.0	1	06/19/23	06/19/23	



Sample Data

Devon Energy - Carlsbad
6488 7 Rivers Hwy
Artesia NM, 88210

Project Name: Federal G Gas Com 1
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
6/20/2023 4:54:33PM

FS20 - 3'

E306117-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2324042
Benzene	ND	0.0250	1	06/15/23	06/15/23	
Ethylbenzene	ND	0.0250	1	06/15/23	06/15/23	
Toluene	ND	0.0250	1	06/15/23	06/15/23	
o-Xylene	ND	0.0250	1	06/15/23	06/15/23	
p,m-Xylene	ND	0.0500	1	06/15/23	06/15/23	
Total Xylenes	ND	0.0250	1	06/15/23	06/15/23	
Surrogate: 4-Bromochlorobenzene-PID	93.3 %	70-130		06/15/23	06/15/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2324042
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/23	06/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	91.3 %	70-130		06/15/23	06/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2324043
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/23	06/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/15/23	06/16/23	
Surrogate: n-Nonane	98.3 %	50-200		06/15/23	06/16/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2325006
Chloride	91.7	20.0	1	06/19/23	06/19/23	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/20/2023 4:54:33PM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2324042-BLK1)

Prepared: 06/15/23 Analyzed: 06/15/23

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	7.31		8.00		91.4	70-130			

LCS (2324042-BS1)

Prepared: 06/15/23 Analyzed: 06/15/23

Benzene	4.84	0.0250	5.00		96.9	70-130			
Ethylbenzene	4.82	0.0250	5.00		96.4	70-130			
Toluene	4.96	0.0250	5.00		99.2	70-130			
o-Xylene	4.92	0.0250	5.00		98.4	70-130			
p,m-Xylene	9.80	0.0500	10.0		98.0	70-130			
Total Xylenes	14.7	0.0250	15.0		98.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.49		8.00		93.7	70-130			

Matrix Spike (2324042-MS1)

Source: E306115-02

Prepared: 06/15/23 Analyzed: 06/15/23

Benzene	5.26	0.0250	5.00	ND	105	54-133			
Ethylbenzene	5.22	0.0250	5.00	ND	104	61-133			
Toluene	5.39	0.0250	5.00	ND	108	61-130			
o-Xylene	5.35	0.0250	5.00	ND	107	63-131			
p,m-Xylene	10.6	0.0500	10.0	ND	106	63-131			
Total Xylenes	15.9	0.0250	15.0	ND	106	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.52		8.00		94.1	70-130			

Matrix Spike Dup (2324042-MSD1)

Source: E306115-02

Prepared: 06/15/23 Analyzed: 06/15/23

Benzene	4.75	0.0250	5.00	ND	95.1	54-133	10.2	20	
Ethylbenzene	4.73	0.0250	5.00	ND	94.5	61-133	9.99	20	
Toluene	4.86	0.0250	5.00	ND	97.2	61-130	10.3	20	
o-Xylene	4.82	0.0250	5.00	ND	96.3	63-131	10.5	20	
p,m-Xylene	9.60	0.0500	10.0	ND	96.0	63-131	9.68	20	
Total Xylenes	14.4	0.0250	15.0	ND	96.1	63-131	9.96	20	
Surrogate: 4-Bromochlorobenzene-PID	7.50		8.00		93.8	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/20/2023 4:54:33PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2324042-BLK1)

Prepared: 06/15/23 Analyzed: 06/15/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.91		8.00		98.8	70-130			

LCS (2324042-BS2)

Prepared: 06/15/23 Analyzed: 06/15/23

Gasoline Range Organics (C6-C10)	48.6	20.0	50.0		97.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.70		8.00		96.2	70-130			

Matrix Spike (2324042-MS2)

Source: E306115-02

Prepared: 06/15/23 Analyzed: 06/15/23

Gasoline Range Organics (C6-C10)	47.4	20.0	50.0	ND	94.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.54		8.00		94.2	70-130			

Matrix Spike Dup (2324042-MSD2)

Source: E306115-02

Prepared: 06/15/23 Analyzed: 06/15/23

Gasoline Range Organics (C6-C10)	47.1	20.0	50.0	ND	94.2	70-130	0.534	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.45		8.00		93.2	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/20/2023 4:54:33PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2324043-BLK1)					Prepared: 06/15/23 Analyzed: 06/15/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	44.3		50.0		88.5	50-200			

LCS (2324043-BS1)					Prepared: 06/15/23 Analyzed: 06/15/23				
Diesel Range Organics (C10-C28)	251	25.0	250		100	38-132			
Surrogate: n-Nonane	43.4		50.0		86.9	50-200			

Matrix Spike (2324043-MS1)					Source: E306114-05		Prepared: 06/15/23 Analyzed: 06/15/23		
Diesel Range Organics (C10-C28)	253	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	37.3		50.0		74.5	50-200			

Matrix Spike Dup (2324043-MSD1)					Source: E306114-05		Prepared: 06/15/23 Analyzed: 06/15/23		
Diesel Range Organics (C10-C28)	259	25.0	250	ND	103	38-132	2.29	20	
Surrogate: n-Nonane	36.6		50.0		73.3	50-200			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/20/2023 4:54:33PM

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 (2325006-BLK1)					Prepared: 06/19/23 Analyzed: 06/19/23				
Chloride	ND	20.0							
LCS (2325006-BS1)					Prepared: 06/19/23 Analyzed: 06/19/23				
Chloride	256	20.0	250		102	90-110			
Matrix Spike (2325006-MS1)					Source: E306116-21		Prepared: 06/19/23 Analyzed: 06/19/23		
Chloride	249	20.0	250	ND	99.4	80-120			
Matrix Spike Dup (2325006-MSD1)					Source: E306116-21		Prepared: 06/19/23 Analyzed: 06/19/23		
Chloride	251	20.0	250	ND	100	80-120	0.816	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

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/20/23 16:54

- 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.





Envirotech Analytical Laboratory

Printed: 6/15/2023 11:50:03AM

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:	Devon Energy - Carlsbad	Date Received:	06/15/23 07:45	Work Order ID:	E306117
Phone:	(505) 382-1211	Date Logged In:	06/15/23 08:33	Logged In By:	Caitlin Mars
Email:	ashley.giovengo@wescominc.com	Due Date:	06/21/23 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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:

Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: Federal G Gas Com 1 Reserve Pit

Work Order: E306129

Job Number: 01058-0007

Received: 6/16/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/21/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 6/21/23



Ashley Giovengo
6488 7 Rivers Hwy
Artesia, NM 88210

Project Name: Federal G Gas Com 1 Reserve Pit
Workorder: E306129
Date Received: 6/16/2023 7:35:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/16/2023 7:35:00AM, under the Project Name: Federal G Gas Com 1 Reserve Pit.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 Reserve Pit 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 regarding 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

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/21/23 17:03

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS01 - 4'	E306129-01A	Soil	06/14/23	06/16/23	Glass Jar, 2 oz.



Sample Data

Devon Energy - Carlsbad
6488 7 Rivers Hwy
Artesia NM, 88210

Project Name: Federal G Gas Com 1 Reserve Pit
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
6/21/2023 5:03:33PM

FS01 - 4'

E306129-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2324057
Benzene	ND	0.0250	1	06/16/23	06/17/23	
Ethylbenzene	ND	0.0250	1	06/16/23	06/17/23	
Toluene	ND	0.0250	1	06/16/23	06/17/23	
o-Xylene	ND	0.0250	1	06/16/23	06/17/23	
p,m-Xylene	ND	0.0500	1	06/16/23	06/17/23	
Total Xylenes	ND	0.0250	1	06/16/23	06/17/23	
Surrogate: 4-Bromochlorobenzene-PID	93.4 %	70-130		06/16/23	06/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2324057
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/16/23	06/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	91.1 %	70-130		06/16/23	06/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2325018
Diesel Range Organics (C10-C28)	ND	25.0	1	06/19/23	06/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/19/23	06/21/23	
Surrogate: n-Nonane	93.0 %	50-200		06/19/23	06/21/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2325012
Chloride	30.3	20.0	1	06/19/23	06/20/23	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:03:33PM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2324057-BLK1)

Prepared: 06/16/23 Analyzed: 06/16/23

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		93.8	70-130			

LCS (2324057-BS1)

Prepared: 06/16/23 Analyzed: 06/16/23

Benzene	4.88	0.0250	5.00		97.5	70-130			
Ethylbenzene	4.87	0.0250	5.00		97.5	70-130			
Toluene	5.00	0.0250	5.00		100	70-130			
o-Xylene	4.95	0.0250	5.00		99.1	70-130			
p,m-Xylene	9.89	0.0500	10.0		98.9	70-130			
Total Xylenes	14.8	0.0250	15.0		99.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.51		8.00		93.8	70-130			

Matrix Spike (2324057-MS1)

Source: E306126-02

Prepared: 06/16/23 Analyzed: 06/16/23

Benzene	4.41	0.0250	5.00	ND	88.2	54-133			
Ethylbenzene	4.38	0.0250	5.00	ND	87.7	61-133			
Toluene	4.51	0.0250	5.00	ND	90.2	61-130			
o-Xylene	4.51	0.0250	5.00	ND	90.2	63-131			
p,m-Xylene	8.94	0.0500	10.0	ND	89.4	63-131			
Total Xylenes	13.5	0.0250	15.0	ND	89.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.45		8.00		93.1	70-130			

Matrix Spike Dup (2324057-MSD1)

Source: E306126-02

Prepared: 06/16/23 Analyzed: 06/16/23

Benzene	4.91	0.0250	5.00	ND	98.2	54-133	10.8	20	
Ethylbenzene	4.91	0.0250	5.00	ND	98.3	61-133	11.4	20	
Toluene	5.04	0.0250	5.00	ND	101	61-130	11.0	20	
o-Xylene	5.01	0.0250	5.00	ND	100	63-131	10.5	20	
p,m-Xylene	9.99	0.0500	10.0	ND	99.9	63-131	11.1	20	
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131	10.9	20	
Surrogate: 4-Bromochlorobenzene-PID	7.55		8.00		94.4	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:03:33PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2324057-BLK1)

Prepared: 06/16/23 Analyzed: 06/16/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.2	70-130			

LCS (2324057-BS2)

Prepared: 06/16/23 Analyzed: 06/16/23

Gasoline Range Organics (C6-C10)	46.4	20.0	50.0		92.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.23		8.00		90.3	70-130			

Matrix Spike (2324057-MS2)

Source: E306126-02

Prepared: 06/16/23 Analyzed: 06/16/23

Gasoline Range Organics (C6-C10)	44.9	20.0	50.0	ND	89.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.25		8.00		90.6	70-130			

Matrix Spike Dup (2324057-MSD2)

Source: E306126-02

Prepared: 06/16/23 Analyzed: 06/16/23

Gasoline Range Organics (C6-C10)	45.9	20.0	50.0	ND	91.9	70-130	2.32	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.28		8.00		91.0	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:03:33PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2325018-BLK1)					Prepared: 06/19/23 Analyzed: 06/20/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	52.4		50.0		105	50-200			

LCS (2325018-BS1)					Prepared: 06/19/23 Analyzed: 06/20/23				
Diesel Range Organics (C10-C28)	251	25.0	250		100	38-132			
Surrogate: n-Nonane	46.8		50.0		93.6	50-200			

Matrix Spike (2325018-MS1)					Source: E306128-14		Prepared: 06/19/23 Analyzed: 06/20/23		
Diesel Range Organics (C10-C28)	249	25.0	250	ND	99.6	38-132			
Surrogate: n-Nonane	50.7		50.0		101	50-200			

Matrix Spike Dup (2325018-MSD1)					Source: E306128-14		Prepared: 06/19/23 Analyzed: 06/20/23		
Diesel Range Organics (C10-C28)	267	25.0	250	ND	107	38-132	7.17	20	
Surrogate: n-Nonane	50.2		50.0		100	50-200			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:03:33PM

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 (2325012-BLK1)					Prepared: 06/19/23 Analyzed: 06/19/23				
Chloride	ND	20.0							
LCS (2325012-BS1)					Prepared: 06/19/23 Analyzed: 06/19/23				
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2325012-MS1)					Source: E306128-01		Prepared: 06/19/23 Analyzed: 06/19/23		
Chloride	405	20.0	250	220	74.0	80-120			M2
Matrix Spike Dup (2325012-MSD1)					Source: E306128-01		Prepared: 06/19/23 Analyzed: 06/19/23		
Chloride	376	20.0	250	220	62.6	80-120	7.31	20	M2

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



Definitions and Notes

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/21/23 17:03

- M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

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

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



Client: Devon Energy					Bill To					Lab Use Only					TAT				EPA Program							
Project: Federal G Gas Com 1 Reserve Pit					Attention: Jim Raley					Lab WO# E306129					Job Number 0058-0007				1D	2D	3D	Standard	CWA	SDWA		
Project Manager: Ashley Giovengo					Address: 5315 Buena Vista Dr																	x				
Address: 3122 National Parks Hwy					City, State, Zip Carlsbad, NM 88220					Analysis and Method														RCRA		
City, State, Zip Carlsbad, NM 88220					Phone: 575-689-7597																		State			
Phone: 575-988-0055					Email: jim.raley@dnv.com																		NM CO UT AZ TX			
Email: agiovengo@ensolum.com																							x			
Report due by:																							Remarks			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC NM		GDGC TX												
1035	6/14/2023	S	1	FS01-4'	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: *Kenn Hyes*

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) <i>[Signature]</i>	Date 6/15/23	Time 1015	Received by: (Signature) <i>Michelle Cangel</i>	Date 6-15-23	Time 1015	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <i>Michelle Cangel</i>	Date 6-15-23	Time 1715	Received by: (Signature) <i>Adrian Mero</i>	Date 6-15-23	Time 1730	
Relinquished by: (Signature) <i>Adrian Mero</i>	Date 6-16-23	Time 2400	Received by: (Signature) <i>Carla Mann</i>	Date 6/16/23	Time 7:35	

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: 6/16/2023 10:57:53AM

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:	Devon Energy - Carlsbad	Date Received:	06/16/23 07:35	Work Order ID:	E306129
Phone:	(505) 382-1211	Date Logged In:	06/16/23 09:12	Logged In By:	Caitlin Mars
Email:	ashley.giovengo@wescominc.com	Due Date:	06/22/23 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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:
Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: Federal G Gas Com 1 Reserve Pit

Work Order: E306131

Job Number: 01058-0007

Received: 6/16/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/21/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 6/21/23

Ashley Giovengo
6488 7 Rivers Hwy
Artesia, NM 88210



Project Name: Federal G Gas Com 1 Reserve Pit
Workorder: E306131
Date Received: 6/16/2023 7:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/16/2023 7:30:00AM, under the Project Name: Federal G Gas Com 1 Reserve Pit.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 Reserve Pit 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 regarding 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
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Office: 505-632-1881
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ljjarboe@envirotech-inc.com

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Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/21/23 17:06

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW02 - 0 - 5.5'	E306131-01A	Soil	06/14/23	06/16/23	Glass Jar, 2 oz.



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Federal G Gas Com 1 Reserve Pit Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 6/21/2023 5:06:36PM
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SW02 - 0 - 5.5'

E306131-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2324057	
Benzene	ND	0.0250	1	06/16/23	06/17/23	
Ethylbenzene	ND	0.0250	1	06/16/23	06/17/23	
Toluene	ND	0.0250	1	06/16/23	06/17/23	
o-Xylene	ND	0.0250	1	06/16/23	06/17/23	
p,m-Xylene	ND	0.0500	1	06/16/23	06/17/23	
Total Xylenes	ND	0.0250	1	06/16/23	06/17/23	
Surrogate: 4-Bromochlorobenzene-PID	94.1 %	70-130		06/16/23	06/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2324057	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/16/23	06/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	92.5 %	70-130		06/16/23	06/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2325022	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/20/23	06/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/20/23	06/20/23	
Surrogate: n-Nonane	75.1 %	50-200		06/20/23	06/20/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2325025	
Chloride	463	20.0	1	06/20/23	06/20/23	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:06:36PM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2324057-BLK1)

Prepared: 06/16/23 Analyzed: 06/16/23

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		93.8	70-130			

LCS (2324057-BS1)

Prepared: 06/16/23 Analyzed: 06/16/23

Benzene	4.88	0.0250	5.00		97.5	70-130			
Ethylbenzene	4.87	0.0250	5.00		97.5	70-130			
Toluene	5.00	0.0250	5.00		100	70-130			
o-Xylene	4.95	0.0250	5.00		99.1	70-130			
p,m-Xylene	9.89	0.0500	10.0		98.9	70-130			
Total Xylenes	14.8	0.0250	15.0		99.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.51		8.00		93.8	70-130			

Matrix Spike (2324057-MS1)

Source: E306126-02

Prepared: 06/16/23 Analyzed: 06/16/23

Benzene	4.41	0.0250	5.00	ND	88.2	54-133			
Ethylbenzene	4.38	0.0250	5.00	ND	87.7	61-133			
Toluene	4.51	0.0250	5.00	ND	90.2	61-130			
o-Xylene	4.51	0.0250	5.00	ND	90.2	63-131			
p,m-Xylene	8.94	0.0500	10.0	ND	89.4	63-131			
Total Xylenes	13.5	0.0250	15.0	ND	89.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.45		8.00		93.1	70-130			

Matrix Spike Dup (2324057-MSD1)

Source: E306126-02

Prepared: 06/16/23 Analyzed: 06/16/23

Benzene	4.91	0.0250	5.00	ND	98.2	54-133	10.8	20	
Ethylbenzene	4.91	0.0250	5.00	ND	98.3	61-133	11.4	20	
Toluene	5.04	0.0250	5.00	ND	101	61-130	11.0	20	
o-Xylene	5.01	0.0250	5.00	ND	100	63-131	10.5	20	
p,m-Xylene	9.99	0.0500	10.0	ND	99.9	63-131	11.1	20	
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131	10.9	20	
Surrogate: 4-Bromochlorobenzene-PID	7.55		8.00		94.4	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:06:36PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2324057-BLK1)

Prepared: 06/16/23 Analyzed: 06/16/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.2	70-130			

LCS (2324057-BS2)

Prepared: 06/16/23 Analyzed: 06/16/23

Gasoline Range Organics (C6-C10)	46.4	20.0	50.0		92.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.23		8.00		90.3	70-130			

Matrix Spike (2324057-MS2)

Source: E306126-02

Prepared: 06/16/23 Analyzed: 06/16/23

Gasoline Range Organics (C6-C10)	44.9	20.0	50.0	ND	89.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.25		8.00		90.6	70-130			

Matrix Spike Dup (2324057-MSD2)

Source: E306126-02

Prepared: 06/16/23 Analyzed: 06/16/23

Gasoline Range Organics (C6-C10)	45.9	20.0	50.0	ND	91.9	70-130	2.32	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.28		8.00		91.0	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:06:36PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2325022-BLK1)

Prepared: 06/20/23 Analyzed: 06/20/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	43.9		50.0		87.8	50-200			

LCS (2325022-BS1)

Prepared: 06/20/23 Analyzed: 06/20/23

Diesel Range Organics (C10-C28)	243	25.0	250		97.1	38-132			
Surrogate: <i>n</i> -Nonane	42.4		50.0		84.8	50-200			

Matrix Spike (2325022-MS1)

Source: E306121-04

Prepared: 06/20/23 Analyzed: 06/20/23

Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132			
Surrogate: <i>n</i> -Nonane	32.1		50.0		64.3	50-200			

Matrix Spike Dup (2325022-MSD1)

Source: E306121-04

Prepared: 06/20/23 Analyzed: 06/20/23

Diesel Range Organics (C10-C28)	249	25.0	250	ND	99.5	38-132	1.51	20	
Surrogate: <i>n</i> -Nonane	38.9		50.0		77.7	50-200			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:06:36PM

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 (2325025-BLK1)					Prepared: 06/20/23 Analyzed: 06/20/23				
Chloride	ND	20.0							
LCS (2325025-BS1)					Prepared: 06/20/23 Analyzed: 06/20/23				
Chloride	249	20.0	250		99.4	90-110			
Matrix Spike (2325025-MS1)					Source: E306121-01		Prepared: 06/20/23 Analyzed: 06/21/23		
Chloride	261	20.0	250	ND	104	80-120			
Matrix Spike Dup (2325025-MSD1)					Source: E306121-01		Prepared: 06/20/23 Analyzed: 06/21/23		
Chloride	263	20.0	250	ND	105	80-120	0.880	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

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/21/23 17:06

- 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.



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.						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.			
Sampled by: <u>Ronni Hayes</u>									
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>6/15/23</u>	Time <u>1015</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>6-15-23</u>	Time <u>1015</u>	Lab Use Only Received on ice: <u>(Y) / N</u>			
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>6-15-23</u>	Time <u>1715</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>6-15-23</u>	Time <u>1730</u>	T1 _____ T2 _____ T3 _____			
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>6-16-23</u>	Time <u>2400</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>6/16/23</u>	Time <u>7:30</u>	AVG Temp °C <u>4</u>			
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 Analytical Laboratory

Printed: 6/16/2023 11:06:52AM

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:	Devon Energy - Carlsbad	Date Received:	06/16/23 07:30	Work Order ID:	E306131
Phone:	(505) 382-1211	Date Logged In:	06/16/23 09:15	Logged In By:	Caitlin Mars
Email:	ashley.giovengo@wescominc.com	Due Date:	06/22/23 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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:
Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: Federal G Gas Com 1 Reserve Pit

Work Order: E306146

Job Number: 01058-0007

Received: 6/19/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/21/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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: 6/21/23

Ashley Giovengo
6488 7 Rivers Hwy
Artesia, NM 88210



Project Name: Federal G Gas Com 1 Reserve Pit
Workorder: E306146
Date Received: 6/19/2023 8:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/19/2023 8:00:00AM, under the Project Name: Federal G Gas Com 1 Reserve Pit.

The analytical test results summarized in this report with the Project Name: Federal G Gas Com 1 Reserve Pit 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 regarding 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

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/21/23 17:13

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW01-0-5.5'	E306146-01A	Soil	06/15/23	06/19/23	Glass Jar, 4 oz.



Sample Data

Devon Energy - Carlsbad
6488 7 Rivers Hwy
Artesia NM, 88210

Project Name: Federal G Gas Com 1 Reserve Pit
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
6/21/2023 5:13:40PM

SW01-0-5.5'

E306146-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2325010	
Benzene	ND	0.0250	1	06/19/23	06/20/23	
Ethylbenzene	ND	0.0250	1	06/19/23	06/20/23	
Toluene	ND	0.0250	1	06/19/23	06/20/23	
o-Xylene	ND	0.0250	1	06/19/23	06/20/23	
p,m-Xylene	ND	0.0500	1	06/19/23	06/20/23	
Total Xylenes	ND	0.0250	1	06/19/23	06/20/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.3 %	70-130		06/19/23	06/20/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2325010	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/19/23	06/20/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.8 %	70-130		06/19/23	06/20/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2325022	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/20/23	06/21/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/20/23	06/21/23	
<i>Surrogate: n-Nonane</i>						
	71.2 %	50-200		06/20/23	06/21/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2325025	
Chloride	37.4	20.0	1	06/20/23	06/20/23	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:13:40PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2325010-BLK1)

Prepared: 06/19/23 Analyzed: 06/20/23

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	7.60		8.00		95.0	70-130			

LCS (2325010-BS1)

Prepared: 06/19/23 Analyzed: 06/20/23

Benzene	4.55	0.0250	5.00		91.1	70-130			
Ethylbenzene	4.63	0.0250	5.00		92.7	70-130			
Toluene	4.82	0.0250	5.00		96.5	70-130			
o-Xylene	4.87	0.0250	5.00		97.5	70-130			
p,m-Xylene	9.56	0.0500	10.0		95.6	70-130			
Total Xylenes	14.4	0.0250	15.0		96.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.63		8.00		95.4	70-130			

Matrix Spike (2325010-MS1)

Source: E306144-22

Prepared: 06/19/23 Analyzed: 06/20/23

Benzene	4.61	0.0250	5.00	ND	92.2	54-133			
Ethylbenzene	4.72	0.0250	5.00	ND	94.3	61-133			
Toluene	4.90	0.0250	5.00	ND	98.1	61-130			
o-Xylene	4.97	0.0250	5.00	ND	99.3	63-131			
p,m-Xylene	9.72	0.0500	10.0	ND	97.2	63-131			
Total Xylenes	14.7	0.0250	15.0	ND	97.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.73		8.00		96.6	70-130			

Matrix Spike Dup (2325010-MSD1)

Source: E306144-22

Prepared: 06/19/23 Analyzed: 06/20/23

Benzene	4.63	0.0250	5.00	ND	92.7	54-133	0.465	20	
Ethylbenzene	4.72	0.0250	5.00	ND	94.4	61-133	0.0647	20	
Toluene	4.91	0.0250	5.00	ND	98.3	61-130	0.185	20	
o-Xylene	4.98	0.0250	5.00	ND	99.6	63-131	0.321	20	
p,m-Xylene	9.73	0.0500	10.0	ND	97.3	63-131	0.0776	20	
Total Xylenes	14.7	0.0250	15.0	ND	98.1	63-131	0.160	20	
Surrogate: 4-Bromochlorobenzene-PID	7.75		8.00		96.8	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:13:40PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2325010-BLK1)

Prepared: 06/19/23 Analyzed: 06/20/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.94		8.00		86.8	70-130			

LCS (2325010-BS2)

Prepared: 06/19/23 Analyzed: 06/20/23

Gasoline Range Organics (C6-C10)	47.4	20.0	50.0		94.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.07		8.00		88.3	70-130			

Matrix Spike (2325010-MS2)

Source: E306144-22

Prepared: 06/19/23 Analyzed: 06/20/23

Gasoline Range Organics (C6-C10)	46.8	20.0	50.0	ND	93.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.06		8.00		88.2	70-130			

Matrix Spike Dup (2325010-MSD2)

Source: E306144-22

Prepared: 06/19/23 Analyzed: 06/20/23

Gasoline Range Organics (C6-C10)	47.0	20.0	50.0	ND	94.1	70-130	0.500	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.05		8.00		88.1	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:13:40PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2325022-BLK1)

Prepared: 06/20/23 Analyzed: 06/20/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	43.9		50.0		87.8	50-200			

LCS (2325022-BS1)

Prepared: 06/20/23 Analyzed: 06/20/23

Diesel Range Organics (C10-C28)	243	25.0	250		97.1	38-132			
Surrogate: n-Nonane	42.4		50.0		84.8	50-200			

Matrix Spike (2325022-MS1)

Source: E306121-04

Prepared: 06/20/23 Analyzed: 06/20/23

Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	32.1		50.0		64.3	50-200			

Matrix Spike Dup (2325022-MSD1)

Source: E306121-04

Prepared: 06/20/23 Analyzed: 06/20/23

Diesel Range Organics (C10-C28)	249	25.0	250	ND	99.5	38-132	1.51	20	
Surrogate: n-Nonane	38.9		50.0		77.7	50-200			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/21/2023 5:13:40PM

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 (2325025-BLK1)					Prepared: 06/20/23 Analyzed: 06/20/23				
Chloride	ND	20.0							
LCS (2325025-BS1)					Prepared: 06/20/23 Analyzed: 06/20/23				
Chloride	249	20.0	250		99.4	90-110			
Matrix Spike (2325025-MS1)					Source: E306121-01		Prepared: 06/20/23 Analyzed: 06/21/23		
Chloride	261	20.0	250	ND	104	80-120			
Matrix Spike Dup (2325025-MSD1)					Source: E306121-01		Prepared: 06/20/23 Analyzed: 06/21/23		
Chloride	263	20.0	250	ND	105	80-120	0.880	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

Devon Energy - Carlsbad	Project Name:	Federal G Gas Com 1 Reserve Pit	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/21/23 17:13

- 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 - 8/17/2023 9:01:37 AM

Received by: OCD: 7/26/2023 9:27:22 AM

Client: Devon Energy Project: Federal G Gas Com 1 Reserve Pit Project Manager: Ashley Giovengo Address: 3122 National Parks Hwy City, State, Zip Carlsbad, NM 88220 Phone: 575-988-0055 Email: agiovengo@ensolum.com Report due by:				Bill To Attention: Jim Raley Address: 5315 Buena Vista Dr City, State, Zip Carlsbad, NM 88220 Phone: 575-689-7597 Email: jim.raley@dvn.com				Lab Use Only				TAT				EPA Program		
								Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA	
								E.304146		21088-0007								
								Analysis and Method										RCRA
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC NM	GDOC TX	State				
														NM	CO	UT	AZ	TX
845	6/15/2023	S	1	SW01-0-5.5'	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.												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.						
Sampled by: <i>Jim Raley</i>												Lab Use Only						
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N										
<i>Michelle Cangelosi</i>		6-16-23	1030	<i>Michelle Cangelosi</i>		6-16-23	1030											
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1 T2 T3										
<i>Michelle Cangelosi</i>		6-16-23	1700	<i>Michelle Cangelosi</i>		6-16-23	1700											
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	AVG Temp °C										
<i>Michelle Cangelosi</i>		6-16-23	2300	<i>Michelle Cangelosi</i>		6-16-23	8:00	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.																		

Page 514 of 521

Envirotech Analytical Laboratory

Printed: 6/19/2023 10:17:58AM

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:	Devon Energy - Carlsbad	Date Received:	06/19/23 08:00	Work Order ID:	E306146
Phone:	(505) 382-1211	Date Logged In:	06/19/23 09:08	Logged In By:	Caitlin Mars
Email:	ashley.giovengo@wescominc.com	Due Date:	06/23/23 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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 Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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

Email Correspondence

Erick Herrera

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, March 16, 2023 10:21 AM
To: Erick Herrera
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Subject: RE: [EXTERNAL] WPX Site Sampling Activity Update (3/20 - 3/24/2023)

[**EXTERNAL EMAIL**]

Erick,

Thank you for the notification. The notification requirement is two full business days which would require notification at the latest at the end of the workday on Wednesday for Monday morning sampling. Also please indicate specific times, dates and locations for each sampling event. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
[http:// www.emnrd.nm.gov](http://www.emnrd.nm.gov)



From: Erick Herrera <eherrera@ensolum.com>
Sent: Thursday, March 16, 2023 8:41 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; 'CFO_Spill, BLM_NM' <blm_nm_cfo_spill@blm.gov>
Cc: Raley, Jim <jim.rale@dmn.com>; Devon Team <Devon-Team@ensolum.com>
Subject: [EXTERNAL] WPX Site Sampling Activity Update (3/20 - 3/24/2023)

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

Good morning,

WPX anticipates conducting confirmation soil sampling activities at the following sites between March 20 – March 24, 2023:

Site Name: Pecos Federal #001Y
API: 30-015-24875
Incident Number: nAPP2208846424

Site Name: RDX 9-1

API: 30-015-36211

Incident Number: nAB1728635377

Site Name: Federal G Gas Com #001

API: 30-015-20848

Incident Number: nAB1428733041

Thank you,



Erick Herrera

Staff Geologist

281-777-4152

Ensolum, LLC



From: [Ashley Giovengo](#)
To: [Enviro, OCD, EMNRD](#)
Cc: [Cole Burton](#)
Subject: 48-hour Confirmation Sampling Notification Email - Federal G Gas Com #1
Date: Monday, May 15, 2023 10:13:08 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Hello,

Due to an internet connectivity issue, the initial 48-hour confirmation sampling notification email was not received via the incident group notification email ocd.enviro@emnrd.nm.gov

Please let this email serve as notice to re-collect confirmation samples at the Federal G Gas Com #1 on 05/12/2023 and 05/15/2023.

Thanks,



Ashley Giovengo

Senior Engineer

575-988-0055

Ensolum, LLC

in f 

From: [Ashley Giovengo](#)
To: [Enviro, OCD, EMNRD](#)
Cc: [Bratcher, Michael, EMNRD](#); [Cole Burton](#); [Ronni Hayes](#)
Subject: 48-hour Confirmation Sampling Notification Email - Federal G Gas Com #1
Date: Friday, June 9, 2023 11:49:49 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Hello,

We intend to collect confirmation samples at Devon Energy's Federal G Gas Com #1 site (NAB1428733041) on Tuesday, June 13, 2023, through June 14, 2023, at 09:00 am MST.

Please let us know if you plan to be onsite to oversee the sampling.

Thanks,



Ashley Giovengo

Senior Engineer

575-988-0055

Ensolum, LLC

in f 

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

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

CONDITIONS

Action 244491

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 244491
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	8/17/2023