



# CLOSURE REQUEST REPORT

**UCBH WW Federal 3**  
**Eddy County, New Mexico**  
**Incident Number nAB1702454101**

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

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

## SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Closure Request Report (CRR) detailing excavation and soil sampling events conducted in accordance with an approved Remediation Work Plan (RWP) to address an inadvertent release of crude oil and produced water at the UCBH WW Federal 3 (Site) and subsequent reclamation activities to fulfill complete incident closure status. Based on laboratory analytical results from confirmation soil sampling activities associated with restorative actions completed at the Site, WPX is requesting No Further Action (NFA) for Incident Number nAB1702454101.

## SITE LOCATION AND RELEASE BACKGROUND

The Site is located in Unit N, Section 25, Township 26 South, Range 29 East, in Eddy County, New Mexico (32.00706894°N, 103.9397305°W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM) (**Figure 1** in **Appendix A**).

As originally documented in the RWP, an inadvertent reportable spill that occurred on January 6, 2017, from a mechanical failure of a stuffing box on the wellhead, released approximately 5 barrels (bbls) of crude oil and 5 bbls of produced water to the well pad surface and adjacent pasture. No fluids were able to be recovered. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on January 19, 2017, and was assigned Incident Number nAB1702454101. Since initial response efforts, plugging and abandonment (P&A) activities at the Site were completed in December of 2019, which included but was not limited to removing the caliche cap from the well pad footprint and reseeding the total disturbance area with the appropriate BLM Seed Mix.

The RWP proposed corrective actions to address identified residual soil impacts exceeding the applicable Site Closure Criteria. The RWP was received by the NMOCD on October 10, 2023, and approved with the following conditions:

- *This release is in a high karst area and will need to be remediated to the strictest closure criteria from Table 1 of the OCD Spill Rule.*
- *Due to the sensitive nature of the site, the variance to install a liner at 4 feet below ground surface is denied.*
- *Confirmation floor samples will need to be taken every 200 ft<sup>2</sup>. If an inadequate number of floor samples aren't taken, the report will be denied.*
- *The variance request for 500 ft<sup>2</sup> confirmation sidewall samples is denied. Please collect confirmation sidewall samples, representing no more than 200 ft<sup>2</sup>. Sidewall/Edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release.*
- *All sidewall samples should be taken from the sidewall of the excavation. Please make sure that the edge of the release extent is accurately defined.*
- *All off pad areas must meet reclamation standards set forth in the OCD Spill Rule.*

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

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

Based on the results from the desktop review and the karst potential at the Site, the following Closure Criteria was applied:

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria <sup>†</sup>
Chloride	Environmental Protection Agency (EPA) 300.0	600 milligram per kilogram (mg/kg)
TPH (Total Petroleum Hydrocarbon)	EPA 8015 M/D	100 mg/kg
Benzene	EPA 8021B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B	50 mg/kg

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

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

## EXCAVATION SOIL SAMPLING ACTIVITIES

From December 2023 through January 2024, Etech oversaw the excavation of identified impacts via mechanical equipment based on detailed corrective actions in the approved RWP, laboratory analytical results associated with delineation soil sampling activities and visual observation. As proposed, two excavations were vertically advanced to depths ranging between 4 feet and 8 feet below ground surface (bgs) and laterally driven by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

Following the removal of impacted soil, Etech collected 5-point composite confirmation soil samples from the floors (FS01 through FS28) and sidewalls (SW01 through SW14) of the excavations at a sampling frequency of 200 square feet. The 5-point composite soil samples were comprised of five equivalent aliquots homogenized in a 1-gallon, resealable plastic bag. The samples were then placed into lab provided pre-cleaned glass jars, packaged with minimal void space, labeled, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Envirotech, Inc. in Farmington, New Mexico, for analysis of the COCs.

Approximately 1,204 cubic yards of impacted soil was removed from the Site and was transported to the Northern Delaware Basin Landfill in Jal, New Mexico under WPX approved manifests. The locations of confirmation excavation soil samples are shown in **Figure 2** in **Appendix A**. Photographic documentation of excavation activities is included in **Appendix C**.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all final confirmation excavation indicated all analyzed COCs were below the Site Closure Criteria. Laboratory analytical results are summarized in **Table 1** included in **Appendix D**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix E**.

## RECLAMATION

Upon receipt of laboratory analytical results, excavations totaling approximately 5,401 square feet (sqft) were backfilled with approximately 1,204 cubic yards (CY) of clean, locally sourced soil and the Site was restored to "as close to its original state" as possible. The final soil cover was contoured to match the Site's pre-existing grade to prevent ponding of water and erosion. BLM Seed Mix #2 (Sandy Sites) will be hand-broadcasted over the entire disturbed area in the next favorable growing season following BLM guidelines (**Appendix F**). The selected seed blend will provide the maximum results of vegetation regrowth and ground surface coverage to match pre-existing conditions at the Site.

On February 21, 2024, Etech assessed the backfill material for its capacity to host vegetative growth. One discrete soil sample was collected from the soil cover of each excavation area (SC01 and SC02) and outside of the excavation disturbance area (BG01) at 0.5-foot bgs via hand shovel and field screened for VOCs and chloride, as previously described, and qualitatively evaluated for nutrient density of pH, Nitrogen (N), Phosphorus (P), and Potassium (K) utilizing a HoldAll® Soil Test Kit according to the operating manual, which is included in **Appendix G**.

Field screening results indicated the backfill material appears to correlate with surrounding soil conditions currently supporting native vegetative growth, as summarized in **Table 2** included in **Appendix D**. The location of the restoration areas and field screened soil sample locations are shown in **Figure 3** in **Appendix A**. Photographic documentation of restoration activities is included in **Appendix C**.

## CLOSURE REQUEST

Based on laboratory analytical results for confirmation excavation soil samples, WPX believes that residual soil impacts associated with the inadvertent release have been delineated, excavated and removed from Site and subsequently restored "as close to its original state" as possible. Concentrations of COCs for all final excavation confirmation soil samples were below the Site Closure Criteria. WPX believes the completed remedial actions have mitigated impacts at the Site and the requirements set forth in NMAC 19.15.29.13 regulations to be protective of human health, the environment and groundwater. As such, NFA appears warranted until the next favorable growing season and this CRR associated with Incident Number nAB1702454101 should be respectfully considered for Closure by the NMOCD.

If you have any questions or comments, please do not hesitate to contact Joseph Hernandez at (432) 305-6413 or [joseph@etechnv.com](mailto:joseph@etechnv.com) or Erick Herrera at (432) 305-6416 or [erick@etechnv.com](mailto:erick@etechnv.com). **Appendix H** provides correspondence email notification receipts associated with the subject release. Previous remediation activities and soil sample analytical results for the subject release can be referenced in the approved RWP in **Appendix I**.

Sincerely,  
Etech Environmental and Safety Solutions, Inc.



Erick Herrera  
Staff Geologist



Joseph S. Hernandez  
Senior Managing Geologist

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

**Appendices:**

- Appendix A:** Figure 1: Site Map  
Figure 1A: Site Characterization Map – Groundwater  
Figure 1B: Site Characterization Map – Surficial Receptors  
Figure 1C: Site Characterization Map – Subsurface Receptors  
Figure 2: Excavation Soil Sample Locations  
Figure 3: Restoration Areas
- Appendix B:** Referenced Well Records
- Appendix C:** Photographic Logs
- Appendix D:** Tables
- Appendix E:** Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix F:** BLM Seed Mixture 2, for Sandy Sites
- Appendix G:** HoldAll® Operating Manual
- Appendix H:** Email Notifications
- Appendix I:** Approved Remediation Work Plan

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# APPENDIX A

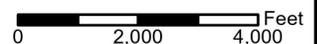
## Figures



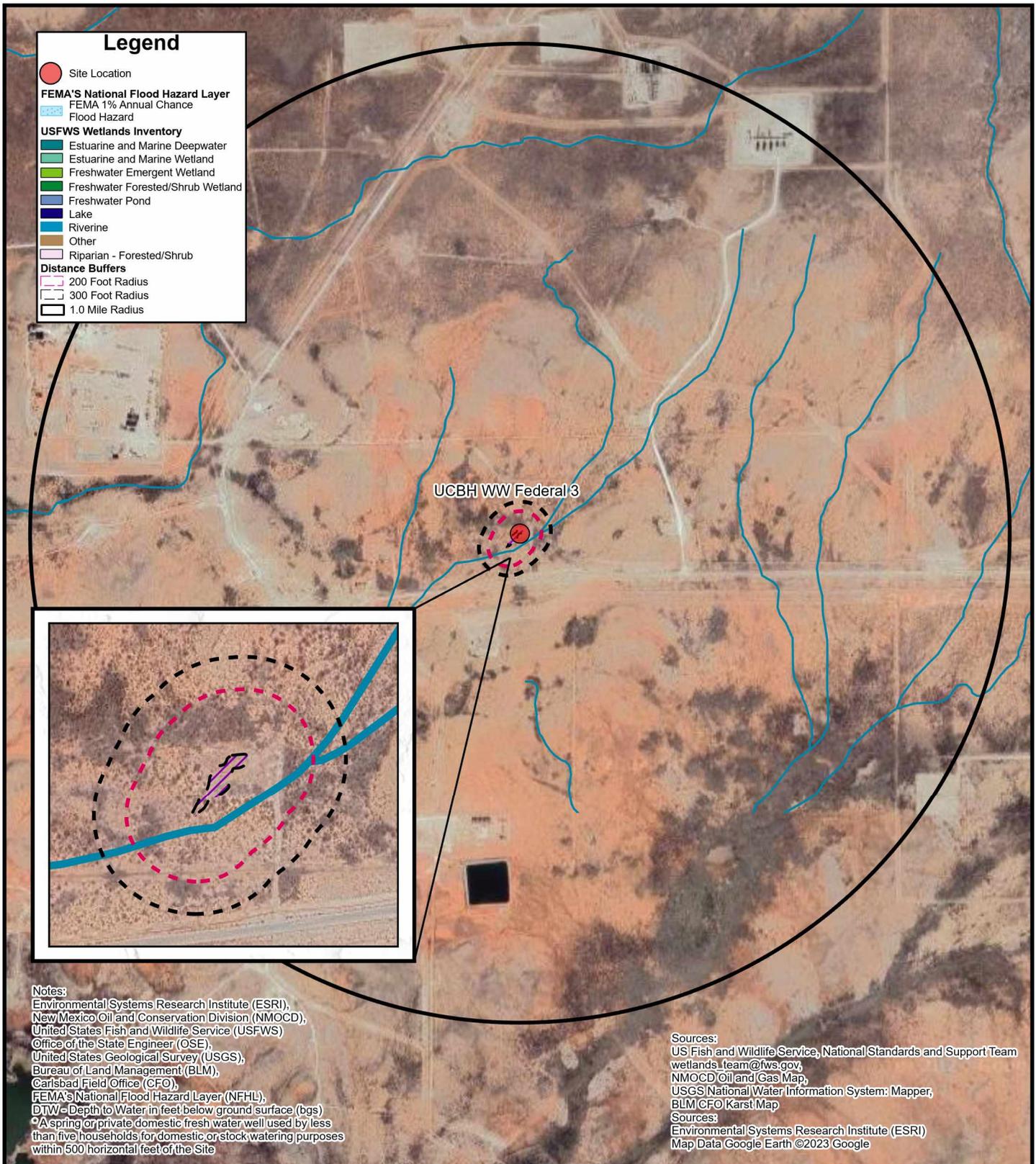
FIGURE 1

### Site Location Map

WPX ENERGY PERMIAN, LLC  
 UCBH WW Federal 3  
 Unit N Sec 25 T26S R29E  
 Eddy County, New Mexico



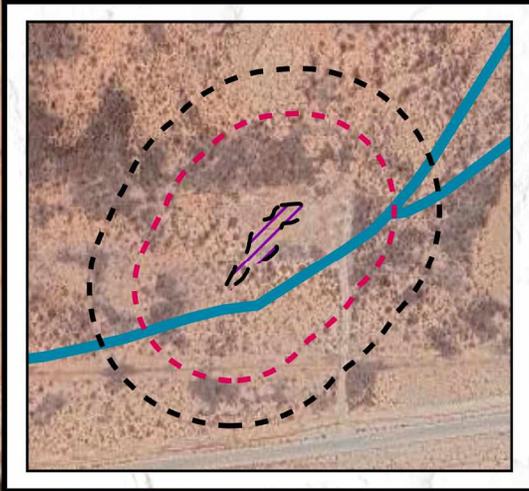




**Legend**

- Site Location
- FEMA'S National Flood Hazard Layer**
  - FEMA 1% Annual Chance Flood Hazard
- USFWS Wetlands Inventory**
  - Estuarine and Marine Deepwater
  - Estuarine and Marine Wetland
  - Freshwater Emergent Wetland
  - Freshwater Forested/Shrub Wetland
  - Freshwater Pond
  - Lake
  - Riverine
  - Other
  - Riparian - Forested/Shrub
- Distance Buffers**
  - 200 Foot Radius
  - 300 Foot Radius
  - 1.0 Mile Radius

UCBH WW Federal 3

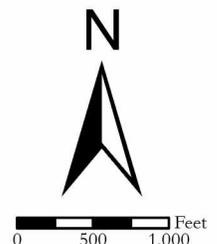


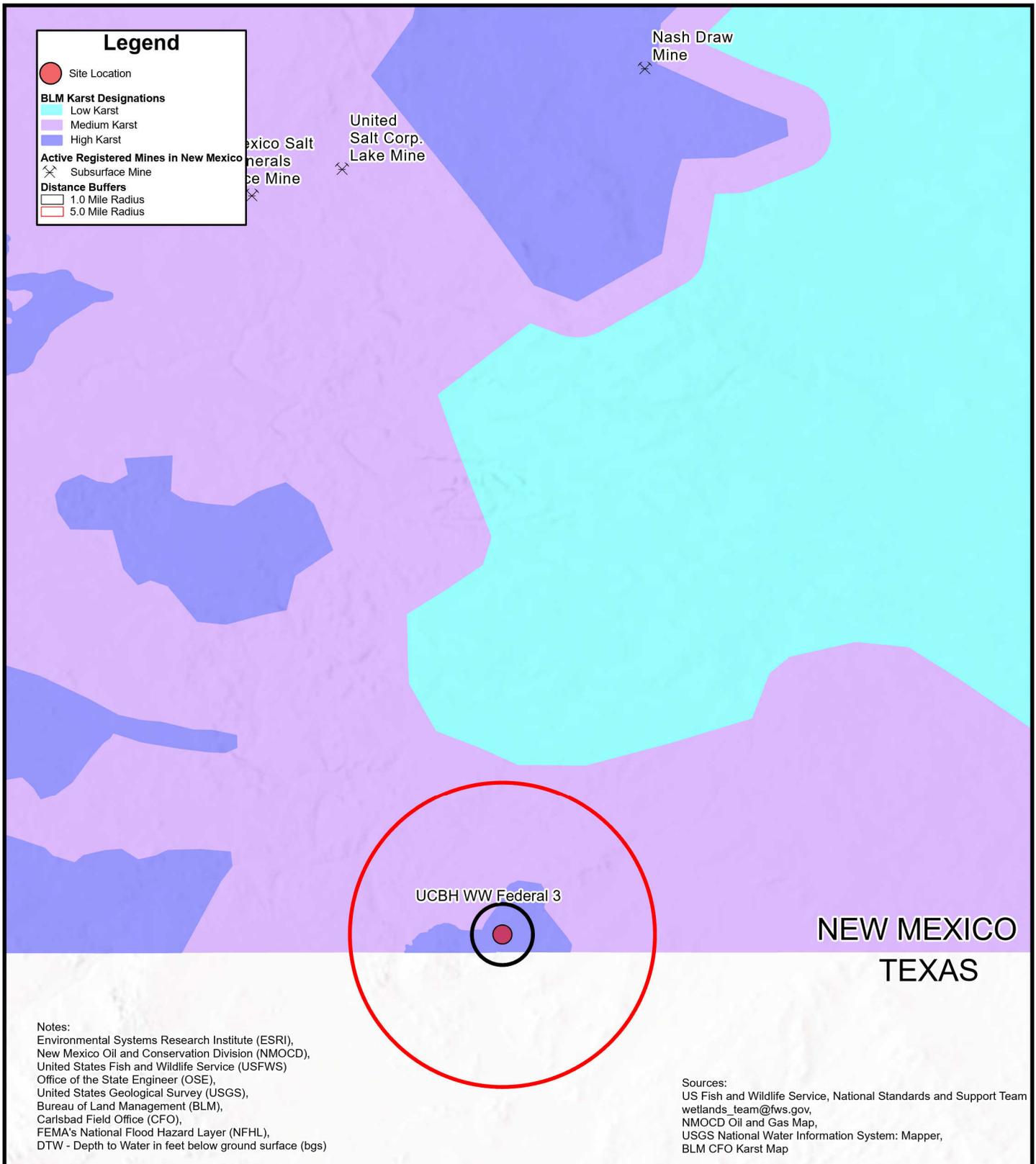
**Notes:**  
 Environmental Systems Research Institute (ESRI),  
 New Mexico Oil and Conservation Division (NMOCD),  
 United States Fish and Wildlife Service (USFWS)  
 Office of the State Engineer (OSE),  
 United States Geological Survey (USGS),  
 Bureau of Land Management (BLM),  
 Carlsbad Field Office (CFO),  
 FEMA's National Flood Hazard Layer (NFHL),  
 DTW - Depth to Water in feet below ground surface (bgs)  
 \*A spring or private domestic fresh water well used by less than five households for domestic or stock watering purposes within 500 horizontal feet of the Site

**Sources:**  
 US Fish and Wildlife Service, National Standards and Support Team wetlands\_team@fws.gov,  
 NMOCD Oil and Gas Map,  
 USGS National Water Information System: Mapper,  
 BLM CFO Karst Map  
**Sources:**  
 Environmental Systems Research Institute (ESRI)  
 Map Data Google Earth ©2023 Google

FIGURE 1B  
**Site Characterization Map**  
**Surficial Receptors**

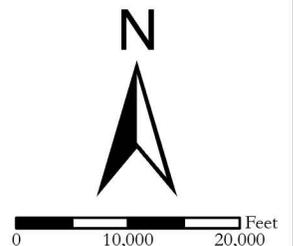
WPX ENERGY PERMIAN, LLC  
 UCBH WW Federal 3  
 Unit N Sec 25 T26S R29E  
 Eddy County, New Mexico





**FIGURE 1C**  
**Site Characterization Map**  
**Subsurface Receptors**

WPX ENERGY PERMIAN, LLC  
UCBH WW Federal 3  
Unit N Sec 25 T26S R29E  
Eddy County, New Mexico



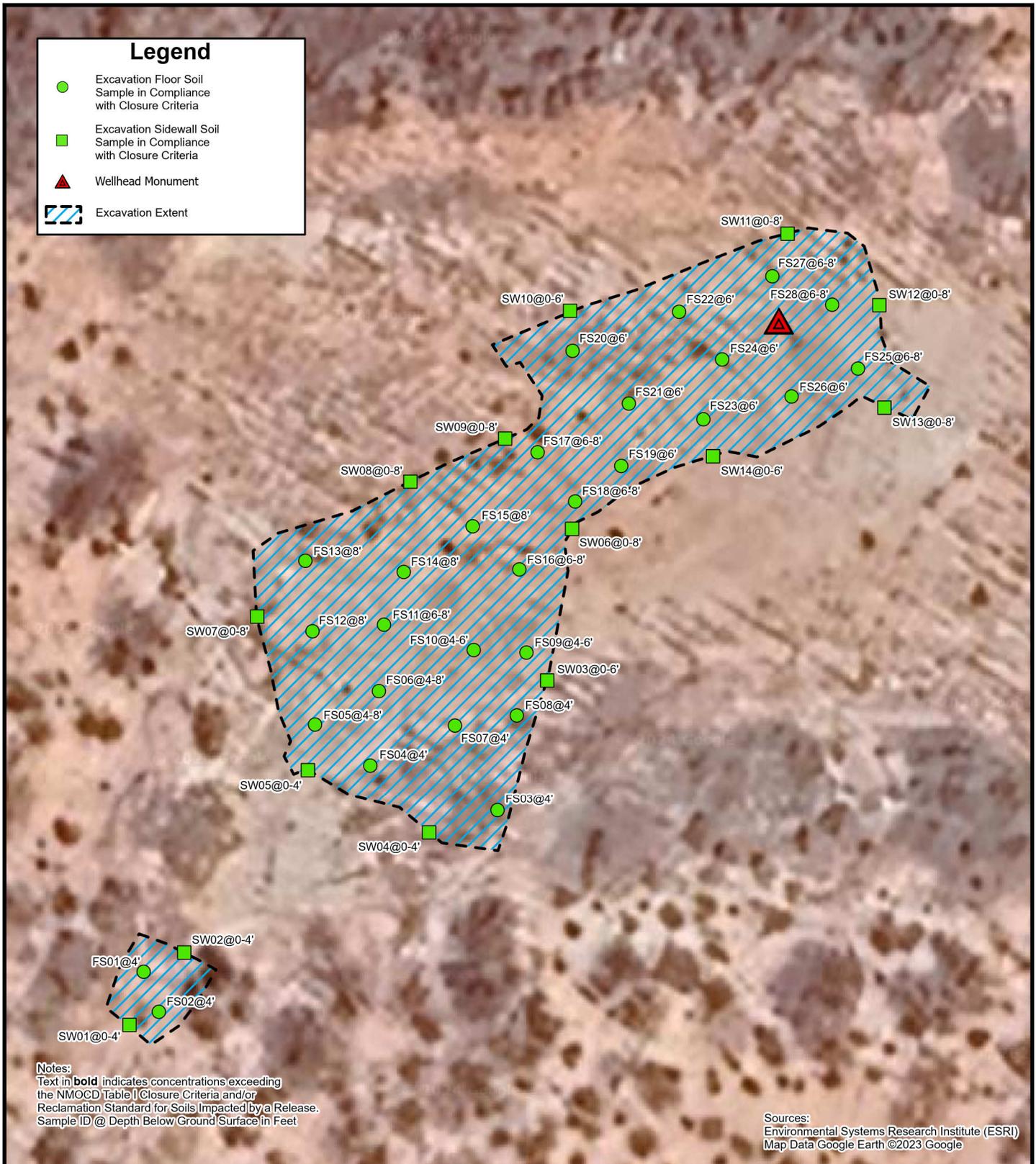
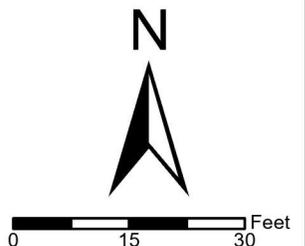


FIGURE 2

### Excavation Soil Sample Locations

WPX ENERGY PERMIAN, LLC  
UCBH WW Federal 3  
Unit N Sec 25 T26S R29E  
Eddy County, New Mexico

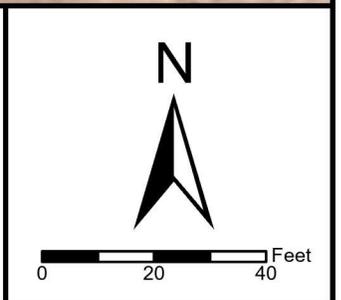




Sources:  
Environmental Systems Research Institute (ESRI)  
Map Data Google Earth ©2023 Google



FIGURE 3  
**Restoration Areas**  
WPX ENERGY PERMIAN, LLC  
UCBH WW Federal 3  
Unit N Sec 25 T26S R29E  
Eddy County, New Mexico



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# APPENDIX B

## Groundwater Sampling Form

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



Client: Devon Energy  
 Project Name: JC Williams Well GW measurement  
 Project Location: 32.0105289,-103.9534960  
 Project Manager: Joseph Hernandez

**GROUNDWATER SAMPLING FORM**

**SAMPLING INFORMATION**

Soil Boring / Monitor Well Number: NA  
 Project #: 03A1987013  
 Date Completed: NA Type of Water Quality Meter: \_\_\_\_\_  
 Total Depth of Monitor Well: NA Date Calibrated: NA  
 Screen Interval: NA Other Notes: used decontaminated water level indicator meter to measure groundwater depth in existing well  
 Sample Tubing Intake Depth: NA  
 Geologist: Gilbert Moreno

Monitor Well Depth	Tubing Placement	GW Depth (static)	After Purge	Time	Purge Rate	Temp.	pH	DO	ORP	Cond.	GW Depth	Comments:
				(minutes)	(L/min)	(°C)	(unitless)	(mg/L)	(mV)	(mS/cm)	(feet)	
				NR	NR	NR	NR	NR	NR	NR	82.9	NA = Not Available NR = Not Recorded



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# APPENDIX C

## Photographic Log

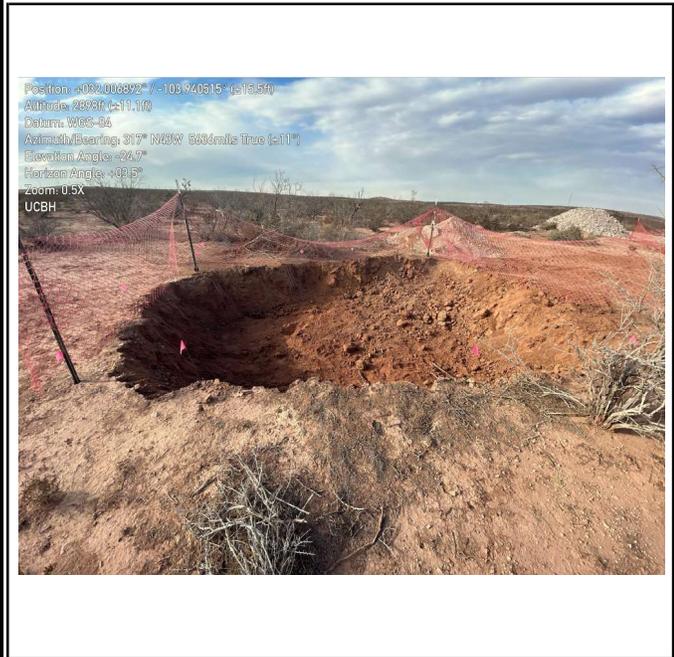
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P.O. Box 62228 Midland • TX • 79711 • Tel: 432-563-2200 • Fax: 432-563-2213

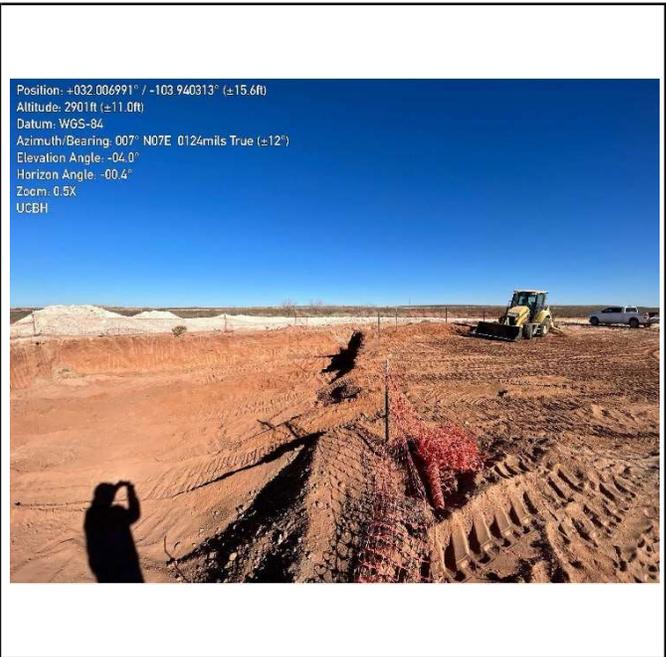




**PHOTOGRAPHIC LOG**  
WPX Energy Permian, LLC  
UCBH WW Federal 3  
Incident Number nAB1702454101



**Photograph 1**                      **Date: 01/04/2024**  
Description: Southwestern view of southern excavation activities.



**Photograph 2**                      **Date: 01/10/2024**  
Description: Northeastern view of northern excavation Activities.



**Photograph 3**                      **Date: 01/10/2024**  
Description: Northeastern view of northern excavation activities.



**Photograph 4**                      **Date: 01/10/2024**  
Description: Northwestern view of northern excavation Activities.



**PHOTOGRAPHIC LOG**  
WPX Energy Permian, LLC  
UCBH WW Federal 3  
Incident Number nAB1702454101

Position: +032.007039° / -103.939926° (±11.6ft)  
Altitude: 2902ft (±9.8ft)  
Datum: WGS-84  
Azimuth/Bearing: 278° N82W 4942mils True (±28°)  
Elevation Angle: -05.8°  
Horizon Angle: -00.1°  
Zoom: 0.5X  
UCBH



**Photograph 1** Date: 02/05/2024  
Description: Northwestern view of restoration activities.

Position: +032.007318° / -103.940306° (±15.6ft)  
Altitude: 2899ft (±10.9ft)  
Datum: WGS-84  
Azimuth/Bearing: 181° S01W 3218mils True (±13°)  
Elevation Angle: -06.7°  
Horizon Angle: -01.5°  
Zoom: 0.5X  
UCBH



**Photograph 2** Date: 02/05/2024  
Description: Southwestern view of restoration activities.

Position: +032.007291° / -103.940190° (±15.6ft)  
Altitude: 2903ft (±10.9ft)  
Datum: WGS-84  
Azimuth/Bearing: 226° S46W 4018mils True (±13°)  
Elevation Angle: -06.0°  
Horizon Angle: +00.9°  
Zoom: 0.5X  
UCBH



**Photograph 3** Date: 02/05/2024  
Description: Southwestern view of restoration activities.

Position: +032.007075° / -103.940404° (±15.6ft)  
Altitude: 2897ft (±11.0ft)  
Datum: WGS-84  
Azimuth/Bearing: 214° S34W 3804mils True (±12°)  
Elevation Angle: -08.8°  
Horizon Angle: -00.3°  
Zoom: 0.5X  
UCBH



**Photograph 4** Date: 02/05/2024  
Description: Southwestern view of restoration activities.



**PHOTOGRAPHIC LOG**  
WPX Energy Permian, LLC  
UCBH WW Federal 3  
Incident Number nAB1702454101



**Photograph 9** Date: 02/21/2024  
Description: Northeastern view of backfill soil assessment.



**Photograph 10** Date: 02/21/2024  
Description: Northeastern view of backfill soil assessment.



**Photograph 11** Date: 02/21/2024  
Description: View of nutrient density results for SC01.



**Photograph 12** Date: 02/21/2024  
Description: View of nutrient density results for BG01.

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# APPENDIX D

## Tables



**Table 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**WPX Energy Permian, LLC**  
**UCBH WW Federal 3**  
**Eddy County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCDC Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
<b>Excavation Soil Samples - Incident Number nAB1702454101</b>									
FS01	01/05/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	46.6
FS02	01/05/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	90.5
FS03	01/05/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	27.2
FS04	01/05/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	151
FS05	01/10/2024	4-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	187
FS06	01/10/2024	4-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	191
FS07	01/05/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	29.2
FS08	01/05/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<20.0
FS09	01/10/2024	4-6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	198
FS10	01/10/2024	4-6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	33.6
FS11	01/10/2024	6-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	167
FS12	01/10/2024	8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	220
FS13	01/05/2024	8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	68.1
FS14	01/05/2024	8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	24.4
FS15	01/05/2024	8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	223
FS16	01/05/2024	6-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	76.1
FS17	01/05/2024	6-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	342
FS18	01/05/2024	6-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<20.0
FS19	01/05/2024	6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	63.5
FS20	01/05/2024	6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	298
FS21	01/05/2024	6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	74.0
FS22	01/05/2024	6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	331
FS23	01/05/2024	6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	133
FS24	01/05/2024	6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	77.6
FS25	01/05/2024	6-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	295
FS26	01/05/2024	6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	302
FS27	01/05/2024	6-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	184



**Table 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**WPX Energy Permian, LLC**  
**UCBH WW Federal 3**  
**Eddy County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCDC Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
FS28	01/05/2024	6-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	194
SW01	01/05/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	117
SW02	01/05/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	95.2
SW03	01/05/2024	0-6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	63.9
SW04	01/05/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	64.7
SW05	01/05/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	64.8
SW06	01/05/2024	0-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	63.7
SW07	01/05/2024	0-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	60.9
SW08	01/05/2024	0-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	258
SW09	01/05/2024	0-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<20.0
SW10	01/05/2024	0-6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	30.6
SW11	01/05/2024	0-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	137
SW12	01/05/2024	0-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	140
SW13	01/05/2024	0-8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	287
SW14	01/05/2024	0-6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<20.0

**Notes:**

bgs: below ground surface  
 mg/kg: milligrams per kilogram  
 BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes  
 GRO: Gasoline Range Organics  
 DRO: Diesel Range Organics  
 ORO: Oil Range Organics  
 TPH: Total Petroleum Hydrocarbon  
 NMOCDC: New Mexico Oil Conservation Division  
 NMAC: New Mexico Administrative Code  
 Text in "grey" represents excavated soil samples

Concentrations in **bold** exceed the NMOCDC Table I Closure Criteria and/or Reclamation Standard<sup>†</sup> for Soils Impacted by a Release

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



**Table 1  
SOIL SAMPLE ANALYTICAL RESULTS  
WPX Energy Permian, LLC  
UCBH WW Federal 3  
Eddy County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Nitrogen	Potash	Phosphorous	PH (ppm)	Chloride (ppm)
<b>Field Screening Soil Samples - Incident Number nAB1702454101</b>							
SC01	02/21/2024	0.5	Very Low	Low	Low	7.50	420
SC02	02/21/2024	0.5	Very Low	Low	Very Low	7.00	192
BG01	02/24/2024	0.5	Very Low	Low	Very Low	7.00	<128

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# APPENDIX E

## 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: UCBH WW Federal 3

Work Order: E401024

Job Number: 01058-0007

Received: 1/9/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
1/15/24

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: 1/15/24



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: UCBH WW Federal 3  
Workorder: E401024  
Date Received: 1/9/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/9/2024 8:45:00AM, under the Project Name: UCBH WW Federal 3.

The analytical test results summarized in this report with the Project Name: UCBH WW Federal 3 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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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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### Sample Summary

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 01/15/24 14:47
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS01 4'	E401024-01A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS02 4'	E401024-02A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:47:47PM
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**FS01 4'**

**E401024-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>		mg/kg	mg/kg	Analyst: RKS		Batch: 2402021
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.9 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>		mg/kg	mg/kg	Analyst: RKS		Batch: 2402021
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.9 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		108 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>		mg/kg	mg/kg	Analyst: JL		Batch: 2402027
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		86.1 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>		mg/kg	mg/kg	Analyst: IY		Batch: 2402029
Chloride	46.6	20.0	1	01/09/24	01/09/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:47:47PM
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**FS02 4'**

**E401024-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>		mg/kg	mg/kg	Analyst: RKS		Batch: 2402021
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		110 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.4 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		111 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>		mg/kg	mg/kg	Analyst: RKS		Batch: 2402021
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		110 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.4 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		111 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>		mg/kg	mg/kg	Analyst: JL		Batch: 2402027
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		82.9 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>		mg/kg	mg/kg	Analyst: IY		Batch: 2402029
Chloride	90.5	20.0	1	01/09/24	01/09/24	



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	Reported: 1/15/2024 2:47:47PM
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#### 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 (2402021-BLK1)**

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.546		0.500		109		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.2		70-130		
Surrogate: Toluene-d8	0.542		0.500		108		70-130		

**LCS (2402021-BS1)**

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	2.64	0.0250	2.50		106		70-130		
Ethylbenzene	2.70	0.0250	2.50		108		70-130		
Toluene	2.66	0.0250	2.50		106		70-130		
o-Xylene	2.71	0.0250	2.50		108		70-130		
p,m-Xylene	5.41	0.0500	5.00		108		70-130		
Total Xylenes	8.12	0.0250	7.50		108		70-130		
Surrogate: Bromofluorobenzene	0.563		0.500		113		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.465		0.500		93.0		70-130		
Surrogate: Toluene-d8	0.537		0.500		107		70-130		

**Matrix Spike (2402021-MS1)**

Source: E401020-24

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	2.71	0.0250	2.50	ND	108		48-131		
Ethylbenzene	2.71	0.0250	2.50	ND	109		45-135		
Toluene	2.65	0.0250	2.50	ND	106		48-130		
o-Xylene	2.81	0.0250	2.50	ND	112		43-135		
p,m-Xylene	5.57	0.0500	5.00	ND	111		43-135		
Total Xylenes	8.38	0.0250	7.50	ND	112		43-135		
Surrogate: Bromofluorobenzene	0.570		0.500		114		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.6		70-130		
Surrogate: Toluene-d8	0.532		0.500		106		70-130		

**Matrix Spike Dup (2402021-MSD1)**

Source: E401020-24

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	2.68	0.0250	2.50	ND	107		48-131	1.09	23
Ethylbenzene	2.71	0.0250	2.50	ND	109		45-135	0.0368	27
Toluene	2.68	0.0250	2.50	ND	107		48-130	0.996	24
o-Xylene	2.74	0.0250	2.50	ND	110		43-135	2.39	27
p,m-Xylene	5.56	0.0500	5.00	ND	111		43-135	0.261	27
Total Xylenes	8.30	0.0250	7.50	ND	111		43-135	0.971	27
Surrogate: Bromofluorobenzene	0.558		0.500		112		70-130		
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.1		70-130		
Surrogate: Toluene-d8	0.535		0.500		107		70-130		



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:47:47PM
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#### 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 (2402021-BLK1)**

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.546		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.2	70-130			
Surrogate: Toluene-d8	0.542		0.500		108	70-130			

**LCS (2402021-BS2)**

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	58.1	20.0	50.0		116	70-130			
Surrogate: Bromofluorobenzene	0.556		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.6	70-130			
Surrogate: Toluene-d8	0.552		0.500		110	70-130			

**Matrix Spike (2402021-MS2)**

Source: E401020-24

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	54.6	20.0	50.0	ND	109	70-130			
Surrogate: Bromofluorobenzene	0.562		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.3	70-130			
Surrogate: Toluene-d8	0.536		0.500		107	70-130			

**Matrix Spike Dup (2402021-MSD2)**

Source: E401020-24

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	52.6	20.0	50.0	ND	105	70-130	3.67	20	
Surrogate: Bromofluorobenzene	0.566		0.500		113	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.2	70-130			
Surrogate: Toluene-d8	0.554		0.500		111	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:47:47PM
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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 (2402027-BLK1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	43.0		50.0		86.0	50-200			

**LCS (2402027-BS1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	277	25.0	250		111	38-132			
Surrogate: <i>n</i> -Nonane	43.7		50.0		87.4	50-200			

**Matrix Spike (2402027-MS1)**

Source: E401020-25

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	269	25.0	250	ND	108	38-132			
Surrogate: <i>n</i> -Nonane	42.1		50.0		84.3	50-200			

**Matrix Spike Dup (2402027-MSD1)**

Source: E401020-25

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	271	25.0	250	ND	108	38-132	0.632	20	
Surrogate: <i>n</i> -Nonane	44.6		50.0		89.2	50-200			



### QC Summary Data

WPX Energy - Carlsbad	Project Name:	UCBH WW Federal 3	<b>Reported:</b>
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	1/15/2024 2:47:47PM

#### Anions by EPA 300.0/9056A

Analyst: IY

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

**Blank (2402029-BLK1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Chloride	ND	20.0							
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**LCS (2402029-BS1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Chloride	250	20.0	250		99.8	90-110			
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**Matrix Spike (2402029-MS1)**

Source: E401020-22

Prepared: 01/09/24 Analyzed: 01/09/24

Chloride	250	20.0	250	ND	100	80-120			
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**Matrix Spike Dup (2402029-MSD1)**

Source: E401020-22

Prepared: 01/09/24 Analyzed: 01/09/24

Chloride	251	20.0	250	ND	101	80-120	0.551	20	
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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:	UCBH WW Federal 3	
5315 Buena Vista Dr	Project Number:	01058-0007	<b>Reported:</b>
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	01/15/24 14:47

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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

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



Released to Imaging: 4/11/2024 7:31:04 AM

Received by OCD: 3/25/2024 12:41:28 PM

Client: WPX Energy Permian, LLC. Project: UCBH WW Federal 3 Project Manager: Gilbert Moreno Address: 13000 W County Rd 100 City, State, Zip: Odessa, TX, 79765 Phone: 832-541-7719 Email: Devon-team@etechemv.com		<b>Bill To</b>			<b>Lab Use Only</b>				<b>TAT</b>			<b>EPA Program</b>		
		Attention: Jim Raley			Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA
		Address: 5315 Buena Vista Dr.			E 401024		010580007					5 day TAT		
		City, State, Zip: Carlsbad, NM, 88220			Analysis and Method									
		Phone: 575-885-7502												
Email: jim.raley@dvn.com		WBS/WO: 21138029		Incident ID: nAB1702454101										
Collected by: Edyte Konan														

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	Remarks
8:20	01.05.24	S	1	FS01	1	4'						X		
8:30	01.05.24	S	1	FS02	2	4'						X		
<div style="position: relative; width: 100%; height: 100%;"> <span style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 2em; opacity: 0.5;">Kept</span> </div>														

**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.

Relinquished by: (Signature) <i>[Signature]</i> Date: 01/08/24 Time: 11:24						Received by: (Signature) <i>[Signature]</i> Date: 1-8-24 Time: 1144						Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N	
Relinquished by: (Signature) <i>[Signature]</i> Date: 1-8-24 Time: 1625						Received by: (Signature) <i>[Signature]</i> Date: 1-8-24 Time: 1700						T1 _____ T2 _____ T3 _____	
Relinquished by: (Signature) <i>[Signature]</i> Date: 1-8-24 Time: 2330						Received by: (Signature) <i>[Signature]</i> Date: 1-9-24 Time: 845						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: 1/9/2024 2:02:20PM

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: 01/09/24 08:45 Work Order ID: E401024
Phone: (539) 573-4018 Date Logged In: 01/09/24 09:39 Logged In By: Alexa Michaels
Email: devon-team@ensolum.com Due Date: 01/15/24 17:00 (4 day TAT)

Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Carrier: Courier

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

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? 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

Empty box for Client Instruction

Comments/Resolution

Large empty box for Comments/Resolution

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: UCBH WW Federal 3

Work Order: E401021

Job Number: 01058-0007

Received: 1/9/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
1/15/24

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: 1/15/24



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: UCBH WW Federal 3  
Workorder: E401021  
Date Received: 1/9/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/9/2024 8:45:00AM, under the Project Name: UCBH WW Federal 3.

The analytical test results summarized in this report with the Project Name: UCBH WW Federal 3 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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[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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## Sample Summary

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

Project Name: UCBH WW Federal 3  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
01/15/24 14:46

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS03 4'	E401021-01A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS04 4'	E401021-02A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS07 4'	E401021-03A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS08 4'	E401021-04A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS13 8'	E401021-05A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS14 8'	E401021-06A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS15 8'	E401021-07A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS16 6-8'	E401021-08A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS17 6-8'	E401021-09A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS18 6-8'	E401021-10A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS19 6'	E401021-11A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS20 6'	E401021-12A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS21 6'	E401021-13A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS22 6'	E401021-14A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS23 6'	E401021-15A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS24 6'	E401021-16A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS25 6-8'	E401021-17A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS26 6'	E401021-18A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS27 6-8'	E401021-19A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
FS28 6-8'	E401021-20A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS03 4'**

**E401021-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>		mg/kg	mg/kg	Analyst: RKS	Batch: 2402020	
Benzene	ND	0.0250	1	01/09/24	01/09/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/09/24	
Toluene	ND	0.0250	1	01/09/24	01/09/24	
o-Xylene	ND	0.0250	1	01/09/24	01/09/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/09/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>	97.1 %	70-130		01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	97.6 %	70-130		01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>	91.5 %	70-130		01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>		mg/kg	mg/kg	Analyst: RKS	Batch: 2402020	
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>	97.1 %	70-130		01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	97.6 %	70-130		01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>	91.5 %	70-130		01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>		mg/kg	mg/kg	Analyst: JL	Batch: 2402025	
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/09/24	
<i>Surrogate: n-Nonane</i>	106 %	50-200		01/09/24	01/09/24	
<b>Anions by EPA 300.0/9056A</b>		mg/kg	mg/kg	Analyst: IY	Batch: 2402031	
Chloride	27.2	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS04 4'**

**E401021-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/09/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/09/24	
Toluene	ND	0.0250	1	01/09/24	01/09/24	
o-Xylene	ND	0.0250	1	01/09/24	01/09/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/09/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		97.9 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		92.3 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		97.9 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		92.3 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/09/24	
<i>Surrogate: n-Nonane</i>		103 %	50-200	01/09/24	01/09/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	151	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS07 4'**

**E401021-03**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/09/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/09/24	
Toluene	ND	0.0250	1	01/09/24	01/09/24	
o-Xylene	ND	0.0250	1	01/09/24	01/09/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/09/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		97.3 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		91.4 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		97.3 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		91.4 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/09/24	
<i>Surrogate: n-Nonane</i>		102 %	50-200	01/09/24	01/09/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	29.2	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS08 4'**

**E401021-04**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/09/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/09/24	
Toluene	ND	0.0250	1	01/09/24	01/09/24	
o-Xylene	ND	0.0250	1	01/09/24	01/09/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/09/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		97.1 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.1 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		91.7 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		97.1 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.1 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		91.7 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/09/24	
<i>Surrogate: n-Nonane</i>		104 %	50-200	01/09/24	01/09/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	ND	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS13 8'**

**E401021-05**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/09/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/09/24	
Toluene	ND	0.0250	1	01/09/24	01/09/24	
o-Xylene	ND	0.0250	1	01/09/24	01/09/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/09/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		97.1 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.1 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		92.9 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		97.1 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.1 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		92.9 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/09/24	
<i>Surrogate: n-Nonane</i>		104 %	50-200	01/09/24	01/09/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	68.1	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS14 8'**

**E401021-06**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/09/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/09/24	
Toluene	ND	0.0250	1	01/09/24	01/09/24	
o-Xylene	ND	0.0250	1	01/09/24	01/09/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/09/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		96.0 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.9 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		92.7 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		96.0 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.9 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		92.7 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/09/24	
<i>Surrogate: n-Nonane</i>		101 %	50-200	01/09/24	01/09/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	24.4	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS15 8'**

**E401021-07**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2402020	
Benzene	ND	0.0250	1	01/09/24	01/09/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/09/24	
Toluene	ND	0.0250	1	01/09/24	01/09/24	
o-Xylene	ND	0.0250	1	01/09/24	01/09/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/09/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		96.2 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.2 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		92.1 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2402020	
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		96.2 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.2 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		92.1 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: JL		Batch: 2402025	
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/09/24	
<i>Surrogate: n-Nonane</i>		97.5 %	50-200	01/09/24	01/09/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2402031	
Chloride	223	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS16 6-8'**

**E401021-08**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.3 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.8 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		92.8 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.3 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.8 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		92.8 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/09/24	
<i>Surrogate: n-Nonane</i>		107 %	50-200	01/09/24	01/09/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	76.1	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS17 6-8'**

**E401021-09**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		97.2 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.8 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		92.5 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		97.2 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.8 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		92.5 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		106 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	342	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS18 6-8'**

**E401021-10**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/09/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/09/24	
Toluene	ND	0.0250	1	01/09/24	01/09/24	
o-Xylene	ND	0.0250	1	01/09/24	01/09/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/09/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		97.5 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.9 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		92.1 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/09/24	
<i>Surrogate: Bromofluorobenzene</i>		97.5 %	70-130	01/09/24	01/09/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.9 %	70-130	01/09/24	01/09/24	
<i>Surrogate: Toluene-d8</i>		92.1 %	70-130	01/09/24	01/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		99.9 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	ND	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS19 6'**

**E401021-11**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.5 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.5 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.8 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.5 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.5 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.8 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		107 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	63.5	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS20 6'**

**E401021-12**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		95.7 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.9 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.9 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		95.7 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.9 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.9 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		106 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	298	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS21 6'**

**E401021-13**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>		mg/kg	mg/kg	Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.7 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.2 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.7 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>		mg/kg	mg/kg	Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.7 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.2 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.7 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>		mg/kg	mg/kg	Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		114 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>		mg/kg	mg/kg	Analyst: IY		Batch: 2402031
Chloride	74.0	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS22 6'**

**E401021-14**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		97.2 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.5 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		97.2 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.5 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		113 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	331	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS23 6'**

**E401021-15**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		95.1 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.9 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.5 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		95.1 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.9 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.5 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		112 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	133	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS24 6'**

**E401021-16**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.5 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		92.3 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.5 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		92.3 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		115 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	77.6	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS25 6-8'**

**E401021-17**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		95.7 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.7 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.4 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		95.7 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.7 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.4 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		108 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	295	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS26 6'**

**E401021-18**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		95.4 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.8 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.5 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		95.4 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.8 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.5 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		112 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	302	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS27 6-8'**

**E401021-19**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.0 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.9 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.0 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.9 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		112 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	184	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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**FS28 6-8'**

**E401021-20**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		95.5 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.0 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.9 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402020
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		95.5 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.0 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.9 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402025
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		115 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402031
Chloride	194	20.0	1	01/09/24	01/10/24	



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	Reported: 1/15/2024 2:46:29PM
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#### 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 (2402020-BLK1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.484		0.500		96.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.460		0.500		91.9	70-130			

**LCS (2402020-BS1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Benzene	2.53	0.0250	2.50		101	70-130			
Ethylbenzene	2.42	0.0250	2.50		96.8	70-130			
Toluene	2.33	0.0250	2.50		93.1	70-130			
o-Xylene	2.35	0.0250	2.50		94.1	70-130			
p,m-Xylene	4.55	0.0500	5.00		90.9	70-130			
Total Xylenes	6.90	0.0250	7.50		92.0	70-130			
Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.516		0.500		103	70-130			
Surrogate: Toluene-d8	0.462		0.500		92.3	70-130			

**Matrix Spike (2402020-MS1)**

Source: E401021-10

Prepared: 01/09/24 Analyzed: 01/09/24

Benzene	2.59	0.0250	2.50	ND	104	48-131			
Ethylbenzene	2.47	0.0250	2.50	ND	98.9	45-135			
Toluene	2.40	0.0250	2.50	ND	95.8	48-130			
o-Xylene	2.45	0.0250	2.50	ND	97.9	43-135			
p,m-Xylene	4.74	0.0500	5.00	ND	94.8	43-135			
Total Xylenes	7.19	0.0250	7.50	ND	95.8	43-135			
Surrogate: Bromofluorobenzene	0.489		0.500		97.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.513		0.500		103	70-130			
Surrogate: Toluene-d8	0.464		0.500		92.7	70-130			

**Matrix Spike Dup (2402020-MSD1)**

Source: E401021-10

Prepared: 01/09/24 Analyzed: 01/09/24

Benzene	2.56	0.0250	2.50	ND	102	48-131	1.36	23	
Ethylbenzene	2.47	0.0250	2.50	ND	98.8	45-135	0.142	27	
Toluene	2.37	0.0250	2.50	ND	94.9	48-130	0.986	24	
o-Xylene	2.45	0.0250	2.50	ND	98.1	43-135	0.163	27	
p,m-Xylene	4.74	0.0500	5.00	ND	94.9	43-135	0.105	27	
Total Xylenes	7.20	0.0250	7.50	ND	96.0	43-135	0.125	27	
Surrogate: Bromofluorobenzene	0.490		0.500		97.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		99.9	70-130			
Surrogate: Toluene-d8	0.458		0.500		91.5	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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#### 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 (2402020-BLK1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.484		0.500		96.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.460		0.500		91.9	70-130			

**LCS (2402020-BS2)**

Prepared: 01/09/24 Analyzed: 01/09/24

Gasoline Range Organics (C6-C10)	41.6	20.0	50.0		83.2	70-130			
Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.464		0.500		92.7	70-130			

**Matrix Spike (2402020-MS2)**

Source: E401021-10

Prepared: 01/09/24 Analyzed: 01/09/24

Gasoline Range Organics (C6-C10)	41.7	20.0	50.0	ND	83.4	70-130			
Surrogate: Bromofluorobenzene	0.491		0.500		98.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.464		0.500		92.7	70-130			

**Matrix Spike Dup (2402020-MSD2)**

Source: E401021-10

Prepared: 01/09/24 Analyzed: 01/09/24

Gasoline Range Organics (C6-C10)	42.3	20.0	50.0	ND	84.6	70-130	1.47	20	
Surrogate: Bromofluorobenzene	0.495		0.500		98.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.460		0.500		92.0	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:46:29PM
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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 (2402025-BLK1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n-Nonane</i>	49.9		50.0		99.7	50-200			

**LCS (2402025-BS1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	266	25.0	250		107	38-132			
Surrogate: <i>n-Nonane</i>	49.3		50.0		98.6	50-200			

**Matrix Spike (2402025-MS1)**

Source: E401021-05

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	283	25.0	250	ND	113	38-132			
Surrogate: <i>n-Nonane</i>	48.3		50.0		96.6	50-200			

**Matrix Spike Dup (2402025-MSD1)**

Source: E401021-05

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	275	25.0	250	ND	110	38-132	2.87	20	
Surrogate: <i>n-Nonane</i>	49.1		50.0		98.3	50-200			



### QC Summary Data

WPX Energy - Carlsbad	Project Name:	UCBH WW Federal 3	<b>Reported:</b> 1/15/2024 2:46:29PM
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	

#### Anions by EPA 300.0/9056A

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 (2402031-BLK1)**

Prepared: 01/09/24 Analyzed: 01/10/24

Chloride	ND	20.0							
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**LCS (2402031-BS1)**

Prepared: 01/09/24 Analyzed: 01/10/24

Chloride	250	20.0	250		99.9	90-110			
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**Matrix Spike (2402031-MS1)**

Source: E401021-01

Prepared: 01/09/24 Analyzed: 01/10/24

Chloride	278	20.0	250	27.2	100	80-120			
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**Matrix Spike Dup (2402031-MSD1)**

Source: E401021-01

Prepared: 01/09/24 Analyzed: 01/10/24

Chloride	276	20.0	250	27.2	99.4	80-120	0.753	20	
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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:	UCBH WW Federal 3	
5315 Buena Vista Dr	Project Number:	01058-0007	<b>Reported:</b>
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	01/15/24 14:46

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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

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



Client: WPX Energy Permian, LLC.		<b>Bill To</b>		Lab Use Only			TAT			EPA Program									
Project: UCBH WW Federal 3		Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA						
Project Manager: Gilbert Moreno		Address: 5315 Buena Vista Dr.		E401021		010580007					5 day TAT								
Address: 13000 W County Rd 100		City, State, Zip: Carlsbad, NM, 88220		Analysis and Method									RCRA						
City, State, Zip: Odessa, TX, 79765		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	TX	GDOC	State					
Phone: 832-541-7719		Email: jim.raley@dvn.com												NM	CO	UT	AZ	TX	
Email: Devon-team@etechemv.com		WBS/WO: 21138029																	
Collected by: Edyte Konan		Incident ID: nAB1702454101																	

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	TX	GDOC	Remarks
9:00	01.05.24	S	1	FS03	1	4'							X			
9:10	01.05.24	S	1	FS04	2	4'							X			
9:20	01.05.24	S	1	FS07	3	4'							X			
9:30	01.05.24	S	1	FS08	4	4'							X			
9:40	01.05.24	S	1	FS13	5	8'							X			
9:50	01.05.24	S	1	FS14	6	8'							X			
10:00	01.05.24	S	1	FS15	7	8'							X			
10:10	01.05.24	S	1	FS16	8	6-8'							X			
10:20	01.05.24	S	1	FS17	9	6-8'							X			
10:30	01.05.24	S	1	FS18	10	6-8'							X			

**Additional Instructions:**

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

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <i>[Signature]</i>	Date 01/08/24	Time 11:44	Received by: (Signature) <i>[Signature]</i>	Date 1-8-24	Time 1144	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <i>[Signature]</i>	Date 1-8-24	Time 1625	Received by: (Signature) <i>[Signature]</i>	Date 1-8-24	Time 1700	
Relinquished by: (Signature) <i>[Signature]</i>	Date 1-8-24	Time 2330	Received by: (Signature) <i>[Signature]</i>	Date 1-9-24	Time 845	

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.

Released to Imaging: 4/11/2024 7:31:04 AM

Received by OCD: 3/25/2024 12:41:28 PM

Client: WPX Energy Permian, LLC.	<b>Bill To</b>		<b>Lab Use Only</b>				<b>TAT</b>			<b>EPA Program</b>						
Project: UCBH WW Federal 3	Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA				
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.		E401021		010580007					5 day TAT						
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220		Analysis and Method													
City, State, Zip: Odessa, TX, 79765	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	TX GDOC	State					
Phone: 832-541-7719	Email: jim.raley@dvn.com										NM	CO	UT	AZ	TX	
Email: Devon-team@etechnv.com	WBS/WO: 21138029										x					
Incident ID: nAB1702454101		Remarks														

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	TX GDOC	Remarks
10:40	01.05.24	S	1	FS19	11	6'						X		
10:50	01.05.24	S	1	FS20	12	6'						X		
11:00	01.05.24	S	1	FS21	13	6'						X		
11:10	01.05.24	S	1	FS22	14	6'						X		
11:20	01.05.24	S	1	FS23	15	6'						X		
11:30	01.05.24	S	1	FS24	16	6'						X		
11:40	01.05.24	S	1	FS25	17	6-8'						X		
11:50	01.05.24	S	1	FS26	18	6'						X		
12:00	01.05.24	S	1	FS27	19	6-8'						X		
12:10	01.05.24	S	1	FS28	20	6-8'						X		

**Additional Instructions:**

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

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <i>[Signature]</i>	Date: 01/08/2024	Time: 11:40	Received by: (Signature) <i>[Signature]</i>	Date: 1-8-24	Time: 1144	<b>Lab Use Only</b> Received on ice: <input checked="" type="checkbox"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <i>[Signature]</i>	Date: 1-8-24	Time: 1625	Received by: (Signature) <i>[Signature]</i>	Date: 1-8-24	Time: 1700	
Relinquished by: (Signature) <i>[Signature]</i>	Date: 1-8-24	Time: 2330	Received by: (Signature) <i>[Signature]</i>	Date: 1-9-24	Time: 845	

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.

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### Envirotech Analytical Laboratory

Printed: 1/9/2024 12:08:11PM

#### 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:	01/09/24 08:45	Work Order ID:	E401021
Phone:	(539) 573-4018	Date Logged In:	01/09/24 09:23	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	01/15/24 17:00 (4 day TAT)		

#### Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
- 2. Does the number of samples per sampling site location match the COC? Yes
- 3. Were samples dropped off by client or carrier? Yes
- 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
- 5. Were all samples received within holding time? Yes

Carrier: Courier

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

#### Comments/Resolution

#### Sample Turn Around Time (TAT)

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

#### Sample Cooler

- 7. Was a sample cooler received? Yes
- 8. If yes, was cooler received in good condition? Yes
- 9. Was the sample(s) received intact, i.e., not broken? Yes
- 10. Were custody/security seals present? No
- 11. If yes, were custody/security seals intact? NA
- 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? 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:  
Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

### WPX Energy - Carlsbad

Project Name: UCBH WW Federal 3

Work Order: E401063

Job Number: 01058-0007

Received: 1/12/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
1/18/24

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: 1/18/24



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: UCBH WW Federal 3  
Workorder: E401063  
Date Received: 1/12/2024 9:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/12/2024 9:45:00AM, under the Project Name: UCBH WW Federal 3.

The analytical test results summarized in this report with the Project Name: UCBH WW Federal 3 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](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
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[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

**Alexa Michaels**  
Sample Custody Officer  
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[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**

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**Michelle Golzales**  
Client Representative  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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### Sample Summary

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 01/18/24 14:29
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS05 4-8'	E401063-01A	Soil	01/10/24	01/12/24	Glass Jar, 2 oz.
FS06 4-8'	E401063-02A	Soil	01/10/24	01/12/24	Glass Jar, 2 oz.



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/18/2024 2:29:12PM
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**FS05 4-8'**

**E401063-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
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<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2402071
Benzene	ND	0.0250	1	01/12/24	01/16/24
Ethylbenzene	ND	0.0250	1	01/12/24	01/16/24
Toluene	ND	0.0250	1	01/12/24	01/16/24
o-Xylene	ND	0.0250	1	01/12/24	01/16/24
p,m-Xylene	ND	0.0500	1	01/12/24	01/16/24
Total Xylenes	ND	0.0250	1	01/12/24	01/16/24

<i>Surrogate: Bromofluorobenzene</i>	119 %	70-130		01/12/24	01/16/24
<i>Surrogate: 1,2-Dichloroethane-d4</i>	96.3 %	70-130		01/12/24	01/16/24
<i>Surrogate: Toluene-d8</i>	112 %	70-130		01/12/24	01/16/24

<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2402071
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/12/24	01/16/24
<i>Surrogate: Bromofluorobenzene</i>	119 %	70-130		01/12/24	01/16/24
<i>Surrogate: 1,2-Dichloroethane-d4</i>	96.3 %	70-130		01/12/24	01/16/24
<i>Surrogate: Toluene-d8</i>	112 %	70-130		01/12/24	01/16/24

<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2402076
Diesel Range Organics (C10-C28)	ND	25.0	1	01/12/24	01/13/24
Oil Range Organics (C28-C36)	ND	50.0	1	01/12/24	01/13/24
<i>Surrogate: n-Nonane</i>	85.0 %	50-200		01/12/24	01/13/24

<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2403010
Chloride	187	20.0	1	01/15/24	01/17/24



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/18/2024 2:29:12PM
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**FS06 4-8'**

**E401063-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402071
Benzene	ND	0.0250	1	01/12/24	01/16/24	
Ethylbenzene	ND	0.0250	1	01/12/24	01/16/24	
Toluene	ND	0.0250	1	01/12/24	01/16/24	
o-Xylene	ND	0.0250	1	01/12/24	01/16/24	
p,m-Xylene	ND	0.0500	1	01/12/24	01/16/24	
Total Xylenes	ND	0.0250	1	01/12/24	01/16/24	
<i>Surrogate: Bromofluorobenzene</i>		118 %	70-130	01/12/24	01/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.2 %	70-130	01/12/24	01/16/24	
<i>Surrogate: Toluene-d8</i>		111 %	70-130	01/12/24	01/16/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402071
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/12/24	01/16/24	
<i>Surrogate: Bromofluorobenzene</i>		118 %	70-130	01/12/24	01/16/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.2 %	70-130	01/12/24	01/16/24	
<i>Surrogate: Toluene-d8</i>		111 %	70-130	01/12/24	01/16/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2402076
Diesel Range Organics (C10-C28)	ND	25.0	1	01/12/24	01/13/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/12/24	01/13/24	
<i>Surrogate: n-Nonane</i>		85.8 %	50-200	01/12/24	01/13/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2403010
Chloride	191	20.0	1	01/15/24	01/17/24	



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	Reported: 1/18/2024 2:29:12PM
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#### 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 (2402071-BLK1)

Prepared: 01/12/24 Analyzed: 01/16/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.584		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.6	70-130			
Surrogate: Toluene-d8	0.565		0.500		113	70-130			

#### LCS (2402071-BS1)

Prepared: 01/12/24 Analyzed: 01/16/24

Benzene	2.40	0.0250	2.50		95.9	70-130			
Ethylbenzene	2.66	0.0250	2.50		106	70-130			
Toluene	2.57	0.0250	2.50		103	70-130			
o-Xylene	2.60	0.0250	2.50		104	70-130			
p,m-Xylene	5.24	0.0500	5.00		105	70-130			
Total Xylenes	7.83	0.0250	7.50		104	70-130			
Surrogate: Bromofluorobenzene	0.612		0.500		122	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.571		0.500		114	70-130			

#### Matrix Spike (2402071-MS1)

Source: E401062-06

Prepared: 01/12/24 Analyzed: 01/16/24

Benzene	2.46	0.0250	2.50	ND	98.4	48-131			
Ethylbenzene	2.78	0.0250	2.50	ND	111	45-135			
Toluene	2.69	0.0250	2.50	ND	107	48-130			
o-Xylene	2.84	0.0250	2.50	ND	113	43-135			
p,m-Xylene	5.68	0.0500	5.00	ND	114	43-135			
Total Xylenes	8.51	0.0250	7.50	ND	114	43-135			
Surrogate: Bromofluorobenzene	0.616		0.500		123	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.566		0.500		113	70-130			

#### Matrix Spike Dup (2402071-MSD1)

Source: E401062-06

Prepared: 01/12/24 Analyzed: 01/16/24

Benzene	2.19	0.0250	2.50	ND	87.5	48-131	11.7	23	
Ethylbenzene	2.48	0.0250	2.50	ND	99.1	45-135	11.5	27	
Toluene	2.38	0.0250	2.50	ND	95.2	48-130	12.1	24	
o-Xylene	2.52	0.0250	2.50	ND	101	43-135	12.0	27	
p,m-Xylene	5.02	0.0500	5.00	ND	100	43-135	12.3	27	
Total Xylenes	7.54	0.0250	7.50	ND	100	43-135	12.2	27	
Surrogate: Bromofluorobenzene	0.616		0.500		123	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.558		0.500		112	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/18/2024 2:29:12PM
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#### 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 (2402071-BLK1)**

Prepared: 01/12/24 Analyzed: 01/16/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.584		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.6	70-130			
Surrogate: Toluene-d8	0.565		0.500		113	70-130			

**LCS (2402071-BS2)**

Prepared: 01/12/24 Analyzed: 01/16/24

Gasoline Range Organics (C6-C10)	58.2	20.0	50.0		116	70-130			
Surrogate: Bromofluorobenzene	0.616		0.500		123	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.8	70-130			
Surrogate: Toluene-d8	0.569		0.500		114	70-130			

**Matrix Spike (2402071-MS2)**

Source: E401062-06

Prepared: 01/12/24 Analyzed: 01/16/24

Gasoline Range Organics (C6-C10)	58.7	20.0	50.0	ND	117	70-130			
Surrogate: Bromofluorobenzene	0.635		0.500		127	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		97.0	70-130			
Surrogate: Toluene-d8	0.575		0.500		115	70-130			

**Matrix Spike Dup (2402071-MSD2)**

Source: E401062-06

Prepared: 01/12/24 Analyzed: 01/16/24

Gasoline Range Organics (C6-C10)	61.0	20.0	50.0	ND	122	70-130	3.72	20	
Surrogate: Bromofluorobenzene	0.637		0.500		127	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.1	70-130			
Surrogate: Toluene-d8	0.584		0.500		117	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/18/2024 2:29:12PM
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#### 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 (2402076-BLK1)**

Prepared: 01/12/24 Analyzed: 01/12/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	43.0		50.0		85.9	50-200			

**LCS (2402076-BS1)**

Prepared: 01/12/24 Analyzed: 01/12/24

Diesel Range Organics (C10-C28)	216	25.0	250		86.4	38-132			
Surrogate: n-Nonane	43.9		50.0		87.8	50-200			

**Matrix Spike (2402076-MS1)**

Source: E401050-05

Prepared: 01/12/24 Analyzed: 01/15/24

Diesel Range Organics (C10-C28)	259	25.0	250	32.0	90.9	38-132			
Surrogate: n-Nonane	42.4		50.0		84.8	50-200			

**Matrix Spike Dup (2402076-MSD1)**

Source: E401050-05

Prepared: 01/12/24 Analyzed: 01/12/24

Diesel Range Organics (C10-C28)	268	25.0	250	32.0	94.5	38-132	3.41	20	
Surrogate: n-Nonane	41.4		50.0		82.9	50-200			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/18/2024 2:29:12PM
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#### Anions by EPA 300.0/9056A

Analyst: DT

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 (2403010-BLK1)**

Prepared: 01/15/24 Analyzed: 01/15/24

Chloride	ND	20.0							
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**LCS (2403010-BS1)**

Prepared: 01/15/24 Analyzed: 01/15/24

Chloride	249	20.0	250		99.7	90-110			
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**Matrix Spike (2403010-MS1)**

Source: E401062-02

Prepared: 01/15/24 Analyzed: 01/15/24

Chloride	251	20.0	250	ND	100	80-120			
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**Matrix Spike Dup (2403010-MSD1)**

Source: E401062-02

Prepared: 01/15/24 Analyzed: 01/15/24

Chloride	249	20.0	250	ND	99.8	80-120	0.448	20	
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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:	UCBH WW Federal 3	
5315 Buena Vista Dr	Project Number:	01058-0007	<b>Reported:</b>
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	01/18/24 14:29

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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

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



Released to Imaging: 4/11/2024 7:31:04 AM

01058-007

Client: WPX Energy Permian, LLC.		<b>Bill To</b>		Lab Use Only			TAT			EPA Program						
Project: UCBH WW Federal 3		Attention: Jim Raley		Lab WO#	Job Number		1D	2D	3D	Standard	CWA	SDWA				
Project Manager: Gilbert Moreno		Address: 5315 Buena Vista Dr.		E 401063		04108-0629				5 day TAT						
Address: 13000 W County Rd 100		City, State, Zip: Carlsbad, NM, 88220		Analysis and Method												
City, State, Zip: Odessa, TX, 79765		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	TX GDOC	State				
Phone: 832-541-7719		Email: jim.raley@dvn.com										NM	CO	UT	AZ	TX
Email: Devon-team@etechnv.com		WBS/WO: 21138029														
Collected by: Edyte Konan		Incident ID: nAB1702454101														

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	TX GDOC	Remarks
10:00	01.10.24	S	1	FS05	1	4-8'						X		
10:10	01.10.24	S	1	FS06	2	4-8'						X		

Additional Instructions:

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

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	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>	01/11/24	11:30	<i>[Signature]</i>	1-11-24	1130	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>[Signature]</i>	11-24	1615	<i>[Signature]</i>	1-11-24	1700	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<i>[Signature]</i>	1-11-24	2400	<i>[Signature]</i>	1-12-24	945	

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.

Received by: OCD: 3/25/2024 12:41:28 PM

Page 1 of 1

Page 81 of 258

Envirotech Analytical Laboratory

Printed: 1/15/2024 12:05:35PM

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: 01/12/24 09:45	Work Order ID: E401063
Phone: (539) 573-4018	Date Logged In: 01/11/24 16:39	Logged In By: Alexa Michaels
Email: devon-team@ensolum.com	Due Date: 01/18/24 17:00 (4 day TAT)	

**Chain of Custody (COC)**

- 1. Does the sample ID match the COC? Yes
- 2. Does the number of samples per sampling site location match the COC? Yes
- 3. Were samples dropped off by client or carrier? Yes
- 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
- 5. Were all samples received within holding time? Yes

Carrier: Courier

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

**Comments/Resolution**

**Sample Turn Around Time (TAT)**

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

**Sample Cooler**

- 7. Was a sample cooler received? Yes
- 8. If yes, was cooler received in good condition? Yes
- 9. Was the sample(s) received intact, i.e., not broken? Yes
- 10. Were custody/security seals present? No
- 11. If yes, were custody/security seals intact? NA
- 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? 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:  
Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

### WPX Energy - Carlsbad

Project Name: UCBH WW Federal 3

Work Order: E401060

Job Number: 01058-0007

Received: 1/12/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
1/17/24

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

Date Reported: 1/17/24



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: UCBH WW Federal 3  
Workorder: E401060  
Date Received: 1/12/2024 9:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/12/2024 9:45:00AM, under the Project Name: UCBH WW Federal 3.

The analytical test results summarized in this report with the Project Name: UCBH WW Federal 3 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](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
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**Alexa Michaels**  
Sample Custody Officer  
Office: 505-632-1881  
[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**

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Office: 505-421-LABS(5227)  
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[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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### Sample Summary

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 01/17/24 09:29
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS09 4-6'	E401060-01A	Soil	01/10/24	01/12/24	Glass Jar, 2 oz.
FS10 4-6'	E401060-02A	Soil	01/10/24	01/12/24	Glass Jar, 2 oz.
FS11 6-8'	E401060-03A	Soil	01/10/24	01/12/24	Glass Jar, 2 oz.
FS12 8'	E401060-04A	Soil	01/10/24	01/12/24	Glass Jar, 2 oz.



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/17/2024 9:29:13AM
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**FS09 4-6'**

**E401060-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
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<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2402057
Benzene	ND	0.0250	1	01/12/24	01/12/24
Ethylbenzene	ND	0.0250	1	01/12/24	01/12/24
Toluene	ND	0.0250	1	01/12/24	01/12/24
o-Xylene	ND	0.0250	1	01/12/24	01/12/24
p,m-Xylene	ND	0.0500	1	01/12/24	01/12/24
Total Xylenes	ND	0.0250	1	01/12/24	01/12/24

<i>Surrogate: Bromofluorobenzene</i>	120 %	70-130		01/12/24	01/12/24
<i>Surrogate: 1,2-Dichloroethane-d4</i>	93.7 %	70-130		01/12/24	01/12/24
<i>Surrogate: Toluene-d8</i>	108 %	70-130		01/12/24	01/12/24

<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2402057
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/12/24	01/12/24
<i>Surrogate: Bromofluorobenzene</i>	120 %	70-130		01/12/24	01/12/24
<i>Surrogate: 1,2-Dichloroethane-d4</i>	93.7 %	70-130		01/12/24	01/12/24
<i>Surrogate: Toluene-d8</i>	108 %	70-130		01/12/24	01/12/24

<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2403009
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/24	01/15/24
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/24	01/15/24
<i>Surrogate: n-Nonane</i>	86.6 %	50-200		01/15/24	01/15/24

<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2403007
Chloride	198	20.0	1	01/15/24	01/15/24



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/17/2024 9:29:13AM
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**FS10 4-6'**

**E401060-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>		mg/kg	mg/kg	Analyst: RAS		Batch: 2402057
Benzene	ND	0.0250	1	01/12/24	01/12/24	
Ethylbenzene	ND	0.0250	1	01/12/24	01/12/24	
Toluene	ND	0.0250	1	01/12/24	01/12/24	
o-Xylene	ND	0.0250	1	01/12/24	01/12/24	
p,m-Xylene	ND	0.0500	1	01/12/24	01/12/24	
Total Xylenes	ND	0.0250	1	01/12/24	01/12/24	
<i>Surrogate: Bromofluorobenzene</i>		118 %	70-130	01/12/24	01/12/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.4 %	70-130	01/12/24	01/12/24	
<i>Surrogate: Toluene-d8</i>		106 %	70-130	01/12/24	01/12/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>		mg/kg	mg/kg	Analyst: RAS		Batch: 2402057
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/12/24	01/12/24	
<i>Surrogate: Bromofluorobenzene</i>		118 %	70-130	01/12/24	01/12/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.4 %	70-130	01/12/24	01/12/24	
<i>Surrogate: Toluene-d8</i>		106 %	70-130	01/12/24	01/12/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>		mg/kg	mg/kg	Analyst: KM		Batch: 2403009
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/24	01/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/24	01/15/24	
<i>Surrogate: n-Nonane</i>		90.3 %	50-200	01/15/24	01/15/24	
<b>Anions by EPA 300.0/9056A</b>		mg/kg	mg/kg	Analyst: IY		Batch: 2403007
Chloride	33.6	20.0	1	01/15/24	01/15/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/17/2024 9:29:13AM
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**FS11 6-8'**

**E401060-03**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2402057
Benzene	ND	0.0250	1	01/12/24	01/12/24	
Ethylbenzene	ND	0.0250	1	01/12/24	01/12/24	
Toluene	ND	0.0250	1	01/12/24	01/12/24	
o-Xylene	ND	0.0250	1	01/12/24	01/12/24	
p,m-Xylene	ND	0.0500	1	01/12/24	01/12/24	
Total Xylenes	ND	0.0250	1	01/12/24	01/12/24	
<i>Surrogate: Bromofluorobenzene</i>		117 %	70-130	01/12/24	01/12/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92.9 %	70-130	01/12/24	01/12/24	
<i>Surrogate: Toluene-d8</i>		105 %	70-130	01/12/24	01/12/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2402057
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/12/24	01/12/24	
<i>Surrogate: Bromofluorobenzene</i>		117 %	70-130	01/12/24	01/12/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92.9 %	70-130	01/12/24	01/12/24	
<i>Surrogate: Toluene-d8</i>		105 %	70-130	01/12/24	01/12/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2403009
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/24	01/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/24	01/15/24	
<i>Surrogate: n-Nonane</i>		82.4 %	50-200	01/15/24	01/15/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2403007
Chloride	167	20.0	1	01/15/24	01/15/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/17/2024 9:29:13AM
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**FS12 8'**

**E401060-04**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2402057
Benzene	ND	0.0250	1	01/12/24	01/12/24	
Ethylbenzene	ND	0.0250	1	01/12/24	01/12/24	
Toluene	ND	0.0250	1	01/12/24	01/12/24	
o-Xylene	ND	0.0250	1	01/12/24	01/12/24	
p,m-Xylene	ND	0.0500	1	01/12/24	01/12/24	
Total Xylenes	ND	0.0250	1	01/12/24	01/12/24	
<i>Surrogate: Bromofluorobenzene</i>		116 %	70-130	01/12/24	01/12/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.8 %	70-130	01/12/24	01/12/24	
<i>Surrogate: Toluene-d8</i>		106 %	70-130	01/12/24	01/12/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2402057
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/12/24	01/12/24	
<i>Surrogate: Bromofluorobenzene</i>		116 %	70-130	01/12/24	01/12/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.8 %	70-130	01/12/24	01/12/24	
<i>Surrogate: Toluene-d8</i>		106 %	70-130	01/12/24	01/12/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2403009
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/24	01/15/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/24	01/15/24	
<i>Surrogate: n-Nonane</i>		87.3 %	50-200	01/15/24	01/15/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2403007
Chloride	220	20.0	1	01/15/24	01/15/24	



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	Reported: 1/17/2024 9:29:13AM
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#### Volatile Organic Compounds by EPA 8260B

Analyst: RAS

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 (2402057-BLK1)

Prepared: 01/11/24 Analyzed: 01/11/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.606		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.540		0.500		108	70-130			

#### LCS (2402057-BS1)

Prepared: 01/11/24 Analyzed: 01/12/24

Benzene	2.89	0.0250	2.50		116	70-130			
Ethylbenzene	2.66	0.0250	2.50		106	70-130			
Toluene	2.60	0.0250	2.50		104	70-130			
o-Xylene	2.66	0.0250	2.50		106	70-130			
p,m-Xylene	5.34	0.0500	5.00		107	70-130			
Total Xylenes	8.00	0.0250	7.50		107	70-130			
Surrogate: Bromofluorobenzene	0.632		0.500		126	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.529		0.500		106	70-130			

#### Matrix Spike (2402057-MS1)

Source: E401044-06

Prepared: 01/11/24 Analyzed: 01/11/24

Benzene	2.67	0.0250	2.50	ND	107	48-131			
Ethylbenzene	2.48	0.0250	2.50	ND	99.3	45-135			
Toluene	2.48	0.0250	2.50	ND	99.3	48-130			
o-Xylene	2.45	0.0250	2.50	ND	97.9	43-135			
p,m-Xylene	4.96	0.0500	5.00	ND	99.2	43-135			
Total Xylenes	7.41	0.0250	7.50	ND	98.8	43-135			
Surrogate: Bromofluorobenzene	0.606		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.8	70-130			
Surrogate: Toluene-d8	0.541		0.500		108	70-130			

#### Matrix Spike Dup (2402057-MSD1)

Source: E401044-06

Prepared: 01/11/24 Analyzed: 01/11/24

Benzene	2.42	0.0250	2.50	ND	96.7	48-131	9.81	23	
Ethylbenzene	2.27	0.0250	2.50	ND	90.9	45-135	8.81	27	
Toluene	2.24	0.0250	2.50	ND	89.5	48-130	10.4	24	
o-Xylene	2.27	0.0250	2.50	ND	90.8	43-135	7.46	27	
p,m-Xylene	4.56	0.0500	5.00	ND	91.3	43-135	8.34	27	
Total Xylenes	6.84	0.0250	7.50	ND	91.1	43-135	8.05	27	
Surrogate: Bromofluorobenzene	0.614		0.500		123	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.4	70-130			
Surrogate: Toluene-d8	0.539		0.500		108	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/17/2024 9:29:13AM
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#### Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RAS

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 (2402057-BLK1)**

Prepared: 01/11/24 Analyzed: 01/11/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.606		0.500		121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.2	70-130			
Surrogate: Toluene-d8	0.540		0.500		108	70-130			

**LCS (2402057-BS2)**

Prepared: 01/11/24 Analyzed: 01/11/24

Gasoline Range Organics (C6-C10)	51.6	20.0	50.0		103	70-130			
Surrogate: Bromofluorobenzene	0.614		0.500		123	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.483		0.500		96.6	70-130			
Surrogate: Toluene-d8	0.551		0.500		110	70-130			

**Matrix Spike (2402057-MS2)**

Source: E401044-06

Prepared: 01/11/24 Analyzed: 01/11/24

Gasoline Range Organics (C6-C10)	54.4	20.0	50.0	ND	109	70-130			
Surrogate: Bromofluorobenzene	0.619		0.500		124	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.8	70-130			
Surrogate: Toluene-d8	0.546		0.500		109	70-130			

**Matrix Spike Dup (2402057-MSD2)**

Source: E401044-06

Prepared: 01/11/24 Analyzed: 01/11/24

Gasoline Range Organics (C6-C10)	47.3	20.0	50.0	ND	94.5	70-130	13.9	20	
Surrogate: Bromofluorobenzene	0.609		0.500		122	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.448		0.500		89.5	70-130			
Surrogate: Toluene-d8	0.546		0.500		109	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/17/2024 9:29:13AM
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#### 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 (2403009-BLK1)**

Prepared: 01/15/24 Analyzed: 01/15/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	44.6		50.0		89.2	50-200			

**LCS (2403009-BS1)**

Prepared: 01/15/24 Analyzed: 01/15/24

Diesel Range Organics (C10-C28)	209	25.0	250		83.8	38-132			
Surrogate: <i>n</i> -Nonane	44.8		50.0		89.6	50-200			

**Matrix Spike (2403009-MS1)**

Source: E401060-03

Prepared: 01/15/24 Analyzed: 01/15/24

Diesel Range Organics (C10-C28)	217	25.0	250	ND	86.7	38-132			
Surrogate: <i>n</i> -Nonane	41.0		50.0		81.9	50-200			

**Matrix Spike Dup (2403009-MSD1)**

Source: E401060-03

Prepared: 01/15/24 Analyzed: 01/15/24

Diesel Range Organics (C10-C28)	223	25.0	250	ND	89.0	38-132	2.66	20	
Surrogate: <i>n</i> -Nonane	37.7		50.0		75.4	50-200			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/17/2024 9:29:13AM
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#### Anions by EPA 300.0/9056A

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 (2403007-BLK1)**

Prepared: 01/15/24 Analyzed: 01/15/24

Chloride	ND	20.0							
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**LCS (2403007-BS1)**

Prepared: 01/15/24 Analyzed: 01/15/24

Chloride	252	20.0	250		101	90-110			
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**Matrix Spike (2403007-MS1)**

Source: E401050-02

Prepared: 01/15/24 Analyzed: 01/15/24

Chloride	544	20.0	250	295	99.7	80-120			
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**Matrix Spike Dup (2403007-MSD1)**

Source: E401050-02

Prepared: 01/15/24 Analyzed: 01/15/24

Chloride	530	20.0	250	295	94.0	80-120	2.66	20	
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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:	UCBH WW Federal 3	
5315 Buena Vista Dr	Project Number:	01058-0007	<b>Reported:</b>
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	01/17/24 09:29

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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

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



Released to Imaging: 4/11/2024 7:31:04 AM

Client: WPX Energy Permian, LLC.	<b>Bill To</b>	<b>Lab Use Only</b>	<b>TAT</b>	<b>EPA Program</b>	
Project: UCBH WW Federal 3	Attention: Jim Raley	Lab WO# <b>E461000</b>	Job Number <b>010580007</b>	1D 2D 3D Standard	
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.			<b>5 day TAT</b>	
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220	<b>Analysis and Method</b>			
City, State, Zip: Odessa, TX, 79765	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 TX GDOC	State		
Phone: 832-541-7719	Email: jim.raley@dvn.com		NM	CO	UT
Email: Devon-team@etechnv.com	WBS/WO: 21138029		AZ	TX	
Collected by: Edyte Konan	Incident ID: nAB1702454101		Remarks		

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	TX GDOC	Remarks
10:20	01.10.24	S	1	FS09	1	4-6'						X		
10:30	01.10.24	S	1	FS10	2	4-6'						X		
10:40	01.10.24	S	1	FS11	3	6-8'						X		
10:50	01.10.24	S	1	FS12	4	8'						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.

Relinquished by: (Signature) <i>[Signature]</i>	Date: 01/10/24	Time: 11:30	Received by: (Signature) <i>[Signature]</i>	Date: 1-11-24	Time: 1130	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N  T1 _____ T2 _____ T3 _____  AVG Temp °C <b>4</b>
Relinquished by: (Signature) <i>[Signature]</i>	Date: 1-11-24	Time: 1615	Received by: (Signature) <i>[Signature]</i>	Date: 1-11-24	Time: 1700	
Relinquished by: (Signature) <i>[Signature]</i>	Date: 1-11-24	Time: 2400	Received by: (Signature) <i>[Signature]</i>	Date: 1-12-24	Time: 945	

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.



Received by: OCD: 3/25/2024 12:41:28 PM

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### Envirotech Analytical Laboratory

Printed: 1/15/2024 11:57:14AM

#### Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	WPX Energy - Carlsbad	Date Received:	01/12/24 09:45	Work Order ID:	E401060
Phone:	(539) 573-4018	Date Logged In:	01/11/24 16:22	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	01/18/24 17:00 (4 day TAT)		

#### Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
- 2. Does the number of samples per sampling site location match the COC? Yes
- 3. Were samples dropped off by client or carrier? Yes
- 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
- 5. Were all samples received within holding time? Yes

Carrier: Gilbert Moreno

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

#### Comments/Resolution

#### Sample Turn Around Time (TAT)

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

#### Sample Cooler

- 7. Was a sample cooler received? Yes
- 8. If yes, was cooler received in good condition? Yes
- 9. Was the sample(s) received intact, i.e., not broken? Yes
- 10. Were custody/security seals present? No
- 11. If yes, were custody/security seals intact? NA
- 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? 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:  
Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

### WPX Energy - Carlsbad

Project Name: UCBH WW Federal 3

Work Order: E401025

Job Number: 01058-0007

Received: 1/9/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
1/15/24

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: 1/15/24



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: UCBH WW Federal 3  
Workorder: E401025  
Date Received: 1/9/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/9/2024 8:45:00AM, under the Project Name: UCBH WW Federal 3.

The analytical test results summarized in this report with the Project Name: UCBH WW Federal 3 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](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

**Alexa Michaels**  
Sample Custody Officer  
Office: 505-632-1881  
[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**

**Lynn Jarboe**  
Laboratory Technical Representative  
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[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**Michelle Golzales**  
Client Representative  
Office: 505-421-LABS(5227)  
Cell: 505-947-8222  
[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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### Sample Summary

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 01/15/24 14:50
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW01 0-4'	E401025-01A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW02 0-4'	E401025-02A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:50:25PM
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**SW01 0-4'**

**E401025-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg		Analyst: RKS		Batch: 2402021
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91.1 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		110 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: RKS		Batch: 2402021
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		112 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91.1 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		110 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: JL		Batch: 2402027
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		88.0 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: IY		Batch: 2402029
Chloride	117	20.0	1	01/09/24	01/09/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:50:25PM
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**SW02 0-4'**

**E401025-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402021
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.8 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		111 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402021
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		108 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.8 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		111 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402027
Diesel Range Organics (C10-C28)	ND	25.0	1	01/09/24	01/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/09/24	01/10/24	
<i>Surrogate: n-Nonane</i>		78.1 %	50-200	01/09/24	01/10/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402029
Chloride	95.2	20.0	1	01/09/24	01/09/24	



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	Reported: 1/15/2024 2:50:25PM
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#### 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 (2402021-BLK1)

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.546		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.2	70-130			
Surrogate: Toluene-d8	0.542		0.500		108	70-130			

#### LCS (2402021-BS1)

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	2.64	0.0250	2.50		106	70-130			
Ethylbenzene	2.70	0.0250	2.50		108	70-130			
Toluene	2.66	0.0250	2.50		106	70-130			
o-Xylene	2.71	0.0250	2.50		108	70-130			
p,m-Xylene	5.41	0.0500	5.00		108	70-130			
Total Xylenes	8.12	0.0250	7.50		108	70-130			
Surrogate: Bromofluorobenzene	0.563		0.500		113	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.465		0.500		93.0	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

#### Matrix Spike (2402021-MS1)

Source: E401020-24

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	2.71	0.0250	2.50	ND	108	48-131			
Ethylbenzene	2.71	0.0250	2.50	ND	109	45-135			
Toluene	2.65	0.0250	2.50	ND	106	48-130			
o-Xylene	2.81	0.0250	2.50	ND	112	43-135			
p,m-Xylene	5.57	0.0500	5.00	ND	111	43-135			
Total Xylenes	8.38	0.0250	7.50	ND	112	43-135			
Surrogate: Bromofluorobenzene	0.570		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.6	70-130			
Surrogate: Toluene-d8	0.532		0.500		106	70-130			

#### Matrix Spike Dup (2402021-MSD1)

Source: E401020-24

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	2.68	0.0250	2.50	ND	107	48-131	1.09	23	
Ethylbenzene	2.71	0.0250	2.50	ND	109	45-135	0.0368	27	
Toluene	2.68	0.0250	2.50	ND	107	48-130	0.996	24	
o-Xylene	2.74	0.0250	2.50	ND	110	43-135	2.39	27	
p,m-Xylene	5.56	0.0500	5.00	ND	111	43-135	0.261	27	
Total Xylenes	8.30	0.0250	7.50	ND	111	43-135	0.971	27	
Surrogate: Bromofluorobenzene	0.558		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.1	70-130			
Surrogate: Toluene-d8	0.535		0.500		107	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:50:25PM
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#### 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 (2402021-BLK1)**

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.546		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.2	70-130			
Surrogate: Toluene-d8	0.542		0.500		108	70-130			

**LCS (2402021-BS2)**

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	58.1	20.0	50.0		116	70-130			
Surrogate: Bromofluorobenzene	0.556		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.6	70-130			
Surrogate: Toluene-d8	0.552		0.500		110	70-130			

**Matrix Spike (2402021-MS2)**

Source: E401020-24

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	54.6	20.0	50.0	ND	109	70-130			
Surrogate: Bromofluorobenzene	0.562		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.3	70-130			
Surrogate: Toluene-d8	0.536		0.500		107	70-130			

**Matrix Spike Dup (2402021-MSD2)**

Source: E401020-24

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	52.6	20.0	50.0	ND	105	70-130	3.67	20	
Surrogate: Bromofluorobenzene	0.566		0.500		113	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.2	70-130			
Surrogate: Toluene-d8	0.554		0.500		111	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:50:25PM
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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 (2402027-BLK1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	43.0		50.0		86.0	50-200			

**LCS (2402027-BS1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	277	25.0	250		111	38-132			
Surrogate: <i>n</i> -Nonane	43.7		50.0		87.4	50-200			

**Matrix Spike (2402027-MS1)**

Source: E401020-25

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	269	25.0	250	ND	108	38-132			
Surrogate: <i>n</i> -Nonane	42.1		50.0		84.3	50-200			

**Matrix Spike Dup (2402027-MSD1)**

Source: E401020-25

Prepared: 01/09/24 Analyzed: 01/09/24

Diesel Range Organics (C10-C28)	271	25.0	250	ND	108	38-132	0.632	20	
Surrogate: <i>n</i> -Nonane	44.6		50.0		89.2	50-200			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 2:50:25PM
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#### Anions by EPA 300.0/9056A

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 (2402029-BLK1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Chloride	ND	20.0							
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**LCS (2402029-BS1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Chloride	250	20.0	250		99.8	90-110			
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**Matrix Spike (2402029-MS1)**

Source: E401020-22

Prepared: 01/09/24 Analyzed: 01/09/24

Chloride	250	20.0	250	ND	100	80-120			
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**Matrix Spike Dup (2402029-MSD1)**

Source: E401020-22

Prepared: 01/09/24 Analyzed: 01/09/24

Chloride	251	20.0	250	ND	101	80-120	0.551	20	
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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:	UCBH WW Federal 3	
5315 Buena Vista Dr	Project Number:	01058-0007	<b>Reported:</b>
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	01/15/24 14:50

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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

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



Client: WPX Energy Permian, LLC.		<b>Bill To</b>		<b>Lab Use Only</b>			<b>TAT</b>			<b>EPA Program</b>							
Project: UCBH WW Federal 3		Attention: Jim Raley		Lab WO#	Job Number		1D	2D	3D	Standard	CWA	SDWA					
Project Manager: Gilbert Moreno		Address: 5315 Buena Vista Dr.		E401025	010580057					5 day TAT							
Address: 13000 W County Rd 100		City, State, Zip: Carlsbad, NM, 88220		Analysis and Method													
City, State, Zip: Odessa, TX, 79765		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	TX	GDOC	State				
Phone: 832-541-7719		Email: jim.raley@dvn.com											NM	CO	UT	AZ	TX
Email: Devon-team@etechnv.com		WBS/WO: 21138029											x				
Collected by: Edyte Konan		Incident ID: nAB1702454101											Remarks				

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	TX	GDOC	Remarks
8:40	01.05.24	S	1	SW01	1	0-4'						X			
8:50	01.05.24	S	1	SW02	2	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: GM**

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <i>[Signature]</i>	Date 01/08/24	Time 11:24	Received by: (Signature) <i>[Signature]</i>	Date 1-8-24	Time 11:44	<b>Lab Use Only</b> Received on ice: <input checked="" type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <i>[Signature]</i>	Date 1-8-24	Time 16:25	Received by: (Signature) <i>[Signature]</i>	Date 1-8-24	Time 17:00	
Relinquished by: (Signature) <i>[Signature]</i>	Date 1-8-24	Time 23:30	Received by: (Signature) <i>[Signature]</i>	Date 1-9-24	Time 8:45	

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: 1/9/2024 1:59:02PM

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: 01/09/24 08:45 Work Order ID: E401025
Phone: (539) 573-4018 Date Logged In: 01/09/24 09:44 Logged In By: Alexa Michaels
Email: devon-team@ensolum.com Due Date: 01/15/24 17:00 (4 day TAT)

Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Carrier: Courier

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

Comments/Resolution

Sample Turn Around Time (TAT)

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

Sample Cooler

- 7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6±2°C? 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

Empty box for 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: UCBH WW Federal 3

Work Order: E401023

Job Number: 01058-0007

Received: 1/9/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
1/15/24

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: 1/15/24



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: UCBH WW Federal 3  
Workorder: E401023  
Date Received: 1/9/2024 8:45:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/9/2024 8:45:00AM, under the Project Name: UCBH WW Federal 3.

The analytical test results summarized in this report with the Project Name: UCBH WW Federal 3 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](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
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**Alexa Michaels**  
Sample Custody Officer  
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[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

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[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**Michelle Golzales**  
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Office: 505-421-LABS(5227)  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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### Sample Summary

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 01/15/24 16:12
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW03 0-6'	E401023-01A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW04 0-4'	E401023-02A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW05 0-4'	E401023-03A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW06 0-8'	E401023-04A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW07 0-8'	E401023-05A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW08 0-8'	E401023-06A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW09 0-8'	E401023-07A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW10 0-6'	E401023-08A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW11 0-8'	E401023-09A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW12 0-8'	E401023-10A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW13 0-8'	E401023-11A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.
SW14 0-6'	E401023-12A	Soil	01/05/24	01/09/24	Glass Jar, 2 oz.

### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW03 0-6'**

**E401023-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
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<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/10/24
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24
Toluene	ND	0.0250	1	01/09/24	01/10/24
o-Xylene	ND	0.0250	1	01/09/24	01/10/24
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24
<i>Surrogate: Bromofluorobenzene</i>	97.1 %	70-130		01/09/24	01/10/24
<i>Surrogate: 1,2-Dichloroethane-d4</i>	98.2 %	70-130		01/09/24	01/10/24
<i>Surrogate: Toluene-d8</i>	91.6 %	70-130		01/09/24	01/10/24

<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24
<i>Surrogate: Bromofluorobenzene</i>	97.1 %	70-130		01/09/24	01/10/24
<i>Surrogate: 1,2-Dichloroethane-d4</i>	98.2 %	70-130		01/09/24	01/10/24
<i>Surrogate: Toluene-d8</i>	91.6 %	70-130		01/09/24	01/10/24

<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24
<i>Surrogate: n-Nonane</i>	98.5 %	50-200		01/10/24	01/11/24

<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2402032
Chloride	63.9	20.0	1	01/09/24	01/10/24



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW04 0-4'**

**E401023-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.6 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.8 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		92.2 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.6 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.8 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		92.2 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		93.5 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	64.7	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW05 0-4'**

**E401023-03**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.6 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.5 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.8 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.6 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.5 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.8 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		93.1 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	64.8	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW06 0-8'**

**E401023-04**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		96.7 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.8 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		96.7 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.8 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		99.1 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	63.7	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW07 0-8'**

**E401023-05**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		97.1 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.4 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.3 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		97.1 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.4 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.3 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		94.7 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	60.9	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW08 0-8'**

**E401023-06**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		96.5 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.5 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		96.5 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.5 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		93.2 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	258	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW09 0-8'**

**E401023-07**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/10/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/10/24	
Toluene	ND	0.0250	1	01/09/24	01/10/24	
o-Xylene	ND	0.0250	1	01/09/24	01/10/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/10/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.8 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.3 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/10/24	
<i>Surrogate: Bromofluorobenzene</i>		96.8 %	70-130	01/09/24	01/10/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/10/24	
<i>Surrogate: Toluene-d8</i>		91.3 %	70-130	01/09/24	01/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		96.4 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	ND	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW10 0-6'**

**E401023-08**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		96.2 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.0 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		96.2 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.0 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		95.7 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	30.6	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW11 0-8'**

**E401023-09**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		96.7 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.8 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		96.7 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.8 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		92.2 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	137	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW12 0-8'**

**E401023-10**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		96.4 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.5 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		96.4 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.5 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		95.0 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	140	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW13 0-8'**

**E401023-11**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		95.3 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.0 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.8 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		95.3 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.0 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.8 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		94.1 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	287	20.0	1	01/09/24	01/10/24	



### Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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**SW14 0-6'**

**E401023-12**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Benzene	ND	0.0250	1	01/09/24	01/11/24	
Ethylbenzene	ND	0.0250	1	01/09/24	01/11/24	
Toluene	ND	0.0250	1	01/09/24	01/11/24	
o-Xylene	ND	0.0250	1	01/09/24	01/11/24	
p,m-Xylene	ND	0.0500	1	01/09/24	01/11/24	
Total Xylenes	ND	0.0250	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		97.1 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.7 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2402023
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/09/24	01/11/24	
<i>Surrogate: Bromofluorobenzene</i>		97.1 %	70-130	01/09/24	01/11/24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	70-130	01/09/24	01/11/24	
<i>Surrogate: Toluene-d8</i>		91.7 %	70-130	01/09/24	01/11/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2402039
Diesel Range Organics (C10-C28)	ND	25.0	1	01/10/24	01/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/10/24	01/11/24	
<i>Surrogate: n-Nonane</i>		96.8 %	50-200	01/10/24	01/11/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2402032
Chloride	ND	20.0	1	01/09/24	01/10/24	



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	Reported: 1/15/2024 4:12:39PM
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#### 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 (2402023-BLK1)

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.456		0.500		91.2	70-130			

#### LCS (2402023-BS1)

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	2.56	0.0250	2.50		102	70-130			
Ethylbenzene	2.32	0.0250	2.50		92.6	70-130			
Toluene	2.27	0.0250	2.50		91.0	70-130			
o-Xylene	2.27	0.0250	2.50		90.7	70-130			
p,m-Xylene	4.39	0.0500	5.00		87.8	70-130			
Total Xylenes	6.66	0.0250	7.50		88.8	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.461		0.500		92.1	70-130			

#### Matrix Spike (2402023-MS1)

Source: E401023-07

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	2.69	0.0250	2.50	ND	108	48-131			
Ethylbenzene	2.44	0.0250	2.50	ND	97.8	45-135			
Toluene	2.39	0.0250	2.50	ND	95.6	48-130			
o-Xylene	2.41	0.0250	2.50	ND	96.5	43-135			
p,m-Xylene	4.69	0.0500	5.00	ND	93.8	43-135			
Total Xylenes	7.10	0.0250	7.50	ND	94.7	43-135			
Surrogate: Bromofluorobenzene	0.491		0.500		98.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		99.9	70-130			
Surrogate: Toluene-d8	0.459		0.500		91.7	70-130			

#### Matrix Spike Dup (2402023-MSD1)

Source: E401023-07

Prepared: 01/09/24 Analyzed: 01/10/24

Benzene	2.77	0.0250	2.50	ND	111	48-131	2.75	23	
Ethylbenzene	2.52	0.0250	2.50	ND	101	45-135	2.92	27	
Toluene	2.44	0.0250	2.50	ND	97.4	48-130	1.86	24	
o-Xylene	2.50	0.0250	2.50	ND	100	43-135	3.66	27	
p,m-Xylene	4.86	0.0500	5.00	ND	97.1	43-135	3.48	27	
Total Xylenes	7.36	0.0250	7.50	ND	98.1	43-135	3.54	27	
Surrogate: Bromofluorobenzene	0.494		0.500		98.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.7	70-130			
Surrogate: Toluene-d8	0.457		0.500		91.4	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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#### 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 (2402023-BLK1)**

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.456		0.500		91.2	70-130			

**LCS (2402023-BS2)**

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	41.3	20.0	50.0		82.7	70-130			
Surrogate: Bromofluorobenzene	0.496		0.500		99.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.465		0.500		92.9	70-130			

**Matrix Spike (2402023-MS2)**

Source: E401023-07

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	41.6	20.0	50.0	ND	83.3	70-130			
Surrogate: Bromofluorobenzene	0.497		0.500		99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.461		0.500		92.2	70-130			

**Matrix Spike Dup (2402023-MSD2)**

Source: E401023-07

Prepared: 01/09/24 Analyzed: 01/10/24

Gasoline Range Organics (C6-C10)	42.0	20.0	50.0	ND	84.0	70-130	0.918	20	
Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		97.0	70-130			
Surrogate: Toluene-d8	0.464		0.500		92.7	70-130			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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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 (2402039-BLK1)**

Prepared: 01/10/24 Analyzed: 01/10/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	46.7		50.0		93.3	50-200			

**LCS (2402039-BS1)**

Prepared: 01/10/24 Analyzed: 01/10/24

Diesel Range Organics (C10-C28)	277	25.0	250		111	38-132			
Surrogate: n-Nonane	48.1		50.0		96.2	50-200			

**Matrix Spike (2402039-MS1)**

Source: E401023-04

Prepared: 01/10/24 Analyzed: 01/10/24

Diesel Range Organics (C10-C28)	271	25.0	250	ND	109	38-132			
Surrogate: n-Nonane	44.4		50.0		88.9	50-200			

**Matrix Spike Dup (2402039-MSD1)**

Source: E401023-04

Prepared: 01/10/24 Analyzed: 01/10/24

Diesel Range Organics (C10-C28)	281	25.0	250	ND	112	38-132	3.43	20	
Surrogate: n-Nonane	44.7		50.0		89.3	50-200			



### QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 1/15/2024 4:12:39PM
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#### Anions by EPA 300.0/9056A

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 (2402032-BLK1)**

Prepared: 01/09/24 Analyzed: 01/09/24

Chloride ND 20.0

**LCS (2402032-BS1)**

Prepared: 01/09/24 Analyzed: 01/10/24

Chloride 250 20.0 250 100 90-110

**Matrix Spike (2402032-MS1)**

Source: E401023-02

Prepared: 01/09/24 Analyzed: 01/10/24

Chloride 319 20.0 250 64.7 102 80-120

**Matrix Spike Dup (2402032-MSD1)**

Source: E401023-02

Prepared: 01/09/24 Analyzed: 01/10/24

Chloride 322 20.0 250 64.7 103 80-120 0.987 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 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: UCBH WW Federal 3 Project Number: 01058-0007 Project Manager: Gilbert Moreno	<b>Reported:</b> 01/15/24 16:12
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ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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

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



Client: WPX Energy Permian, LLC.		<b>Bill To</b>		<b>Lab Use Only</b>				<b>TAT</b>			<b>EPA Program</b>					
Project: UCBH WW Federal 3		Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA			
Project Manager: Gilbert Moreno		Address: 5315 Buena Vista Dr.		E 401023		010580057					5 day TAT					
Address: 13000 W County Rd 100		City, State, Zip: Carlsbad, NM, 88220		Analysis and Method									RCRA			
City, State, Zip: Odessa, TX, 79765		Phone: 575-885-7502		Depth (ft.)	TPH GRO/DRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	TX GDOC	State				
Phone: 832-541-7719		Email: jim.raley@dvn.com										NM	CO	UT	AZ	TX
Email: Devon-team@etechnv.com		WBS/WO: 21138029										x				
Collected by: Edyte Konan		Incident ID: nAB1702454101										Remarks				

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth (ft.)	TPH GRO/DRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	TX GDOC	Remarks
13:10	01.05.24	S	1	SW03	1	0-6'						X		
13:20	01.05.24	S	1	SW04	2	0-4'						X		
13:30	01.05.24	S	1	SW05	3	0-4'						X		
13:40	01.05.24	S	1	SW06	4	0-8'						X		
13:50	01.05.24	S	1	SW07	5	0-8'						X		
14:00	01.05.24	S	1	SW08	6	0-8'						X		
14:10	01.05.24	S	1	SW09	7	0-8'						X		
14:20	01.05.24	S	1	SW10	8	0-6'						X		
14:30	01.05.24	S	1	SW11	9	0-8'						X		
14:40	01.05.24	S	1	SW12	10	0-8'						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.

Relinquished by: (Signature) <i>[Signature]</i>		Date: 01/08/24	Time: 11:24	Received by: (Signature) <i>[Signature]</i>		Date: 1-8-24	Time: 1144	Lab Use Only		
Relinquished by: (Signature) <i>[Signature]</i>		Date: 1-8-24	Time: 1625	Received by: (Signature) <i>[Signature]</i>		Date: 1-8-24	Time: 1700	Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N		
Relinquished by: (Signature) <i>[Signature]</i>		Date: 1-8-24	Time: 2330	Received by: (Signature) <i>[Signature]</i>		Date: 1-9-24	Time: 845	T1	T2	T3
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other							AVG Temp °C <u>4</u>			
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.

Client: WPX Energy Permian, LLC.		<b>Bill To</b>		<b>Lab Use Only</b>				<b>TAT</b>			<b>EPA Program</b>					
Project: UCBH WW Federal 3		Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA			
Project Manager: Gilbert Moreno		Address: 5315 Buena Vista Dr.		E 401023		010580007					5 day TAT					
Address: 13000 W County Rd 100		City, State, Zip: Carlsbad, NM, 88220		Analysis and Method									RCRA			
City, State, Zip: Odessa, TX, 79765		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	TX GDOC	State				
Phone: 832-541-7719		Email: jim.raley@dvn.com										NM	CO	UT	AZ	TX
Email: Devon-team@etechnv.com		WBS/WO: 21138029										x				
Collected by: Edyte Konan		Incident ID: nAB1702454101										Remarks				

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	TX GDOC	Remarks
14:50	01.05.24	S	1	SW13	11	0-8'						X		
15:00	01.05.24	S	1	SW14	12	0-6'						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. 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	Time	Received by: (Signature) <i>[Signature]</i>		Date	Time	Lab Use Only		
Relinquished by: (Signature) <i>[Signature]</i>				01/08/24	11:41	Received by: (Signature) <i>[Signature]</i>		1-8-24	1144	Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N		
Relinquished by: (Signature) <i>[Signature]</i>				1-8-24	1625	Received by: (Signature) <i>[Signature]</i>		1-8-24	1700	T1	T2	T3
Relinquished by: (Signature) <i>[Signature]</i>				1-8-24	2330	Received by: (Signature) <i>[Signature]</i>		1-9-24	845	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: 1/9/2024 1:55:33PM

#### 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:	01/09/24 08:45	Work Order ID:	E401023
Phone:	(539) 573-4018	Date Logged In:	01/09/24 09:30	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	01/15/24 17:00 (4 day TAT)		

#### Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
- 2. Does the number of samples per sampling site location match the COC? Yes
- 3. Were samples dropped off by client or carrier? Yes
- 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
- 5. Were all samples received within holding time? Yes

Carrier: Courier

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

#### Comments/Resolution

#### Sample Turn Around Time (TAT)

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

#### Sample Cooler

- 7. Was a sample cooler received? Yes
- 8. If yes, was cooler received in good condition? Yes
- 9. Was the sample(s) received intact, i.e., not broken? Yes
- 10. Were custody/security seals present? No
- 11. If yes, were custody/security seals intact? NA
- 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? 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.

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# APPENDIX F

## BLM Seed Mixture for Sandy Sites

**Seed Mixture 2, for Sandy Sites**

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

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

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

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

\*Pounds of pure live seed:

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

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# APPENDIX G

## HoldAll® Operating Manual

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



**HoldAll**<sup>®</sup>  
Decorative Plant Accessories

**40 TESTS**  
**DIRECTIONS INSIDE**

# SOIL TEST KIT



**Plants & Flowers**



**Grasses & Lawns**



**Fruits & Veggies**



**Trees & Shrubs**

**757860**

**HoldAll**<sup>®</sup>  
Decorative Plant Accessories

**757860**

# SOIL TEST KIT

**Tests Your Soil for a Healthy Garden**

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

## PREPARING YOUR SOIL SAMPLES

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

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

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

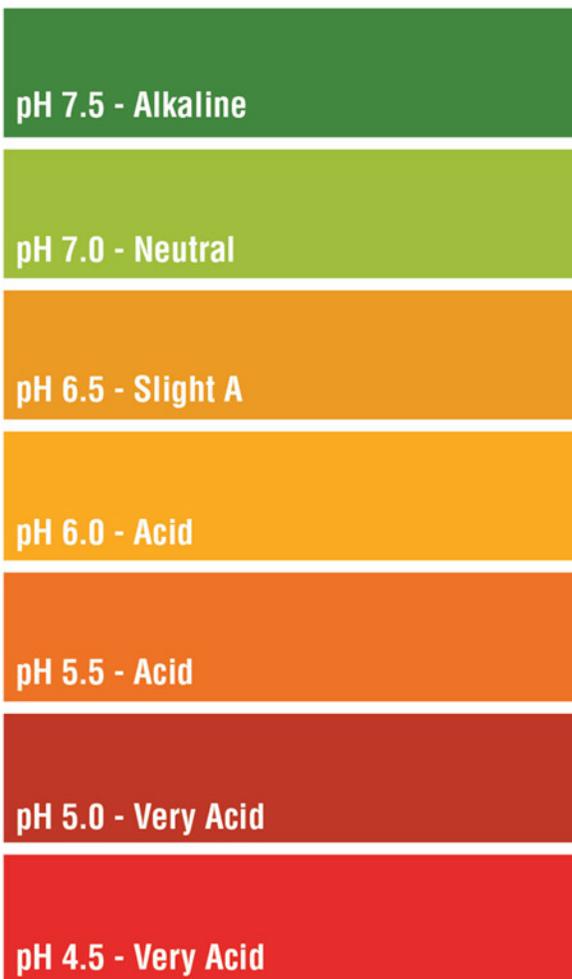
### HOW TO TEST YOUR SOIL:

Tube caps and capsules are color-coded for simplicity:

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

#### pH TEST:

1. Remove cap from the green capped tube.
2. Fill tube with soil to the first line.
3. Carefully open a green capsule and pour powder into the tube.
4. Add water (preferably distilled) to the fourth line.
5. Cap tube and shake thoroughly.
6. Allow soil to settle and color to develop for about a minute.
7. Compare color of solution to the pH color chart. Repeat for remaining capsules.



#### NITROGEN, PHOSPHORUS & POTASH TESTS:

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

PLANT FOOD CHART		
Nitrogen	Phosphorous	Potash
High	High	High
Medium	Medium	Medium
Low	Low	Low
Very Low	Very Low	Very Low

1. Remove the cap from the tube. (Please note that the color of the capsules should match the color of the tube cap.) Using dropper provided, fill the tube to the fourth line with liquid from your soil mixture. Avoid disturbing the sediment
2. Carefully separate the two halves of one of the capsules. Pour the powder into the tube.
3. Cap the tube and shake thoroughly. Allow color to develop for 10 minutes.
4. Compare color of solution to the appropriate portion of the plant food color chart. For best results allow daylight, not direct sunlight, to illuminate the solution. Note your results. Repeat for remaining capsules.

## TO RAISE OR LOWER pH OF YOUR SOIL

Raising and lowering pH is not an exact science & most plants have a reasonably wide tolerance, certainly to within 1 pH point. Consult the pH Preference List and you will see that the majority can manage well on a pH around 6.5 but some need an alkaline soil

and some a particularly acid soil. Altering pH takes time so do not expect rapid changes; rather, work steadily towards giving a plant its ideal conditions.

## ADJUSTING pH

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

is best to start in the Fall and check progress in the Spring. After working to adjust your soil, retest for pH level in 40-60 days. If results are still significantly off, retreat your soil, not exceeding recommended application levels. Allow one month to pass between adding lime and adding fertilizers.

## SOIL TYPES

**Sandy Soils:** A light, coarse soil comprised of crumbling and alluvial debris.

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

**Loam Soils:** A medium friable soil, consisting of a blend of coarse (sand) alluvium and fine (clay) particles mixed within fairly broad limits with a little lime and humus.

**Clay Soils:** A heavy, clinging, impermeable

## ADJUSTING SOIL pH - HOW MUCH TO APPLY

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

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

## FERTILIZER RECOMMENDATIONS

### FEEDING PRIOR TO PLANTING

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

TEST RESULTS	Very Low	Low	Medium	High
<b>Nitrogen Fertilizers (%N)</b>				
Dried Blood (11%)	36	19	6	N/A
Nitrate of Soda (16%)	27	14	3	N/A
<b>Phosphate Fertilizers (%P)</b>				
Bone Meal (19%)	27	14	6	N/A
Triple Superphosphate (46%)	10.25	5.25-5.5	2.25	N/A
<b>Potash Fertilizers (%K)</b>				
Muriate of Potash (60%)	8.75-9	4.75-5	2.25-2.5	N/A

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

### FEEDING ESTABLISHED PLANTS AND BEDS

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

### RECOMMENDATIONS FOR N, P AND K RESULTS

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

#### High

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

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

### SPECIAL RECOMMENDATIONS FOR LAWNS

For a new lawn, pay special attention to soil preparation before planting. Proper soil preparation for any size lawn will have a significant impact on the amount of water and care it demands in the future. Till the soil to a depth of at least 12" and incorporate plenty of organic material (9" or more). Test your soil for pH and adjust to the levels recommended on pH Preference List for your type of grass. Refer to the Adjusting Soil pH chart for recommended lime or sulfate applications.

For established lawns, Nitrogen is the most essential nutrient to promote lush growth and deep, green color. Phosphorus and Potassium, in lesser quantities, are also important for strong root formation and growth. Compound fertilizers will supply all 3 nutrients, or you can select an individual fertilizer, such as Nitrate of Soda. The following chart gives recommended application levels specifically for lawns, based on your Nitrogen soil test results.

### RECOMMENDATIONS FOR LAWNS

Fertilizer Type	Very Low	Low
24-4-4	4.0 lbs.	2.0 lbs.
24-3-4	3.1 lbs.	1.55 lbs.
30-4-4	3.0 lbs.	1.5 lbs.
	Medium	High
24-4-4	1.0 lbs.	N/A
24-3-4	.77 lbs.	N/A
30-4-4	.75 lbs.	N/A

Amounts listed are pounds per 1000 square feet.

### SAFETY & HYGIENE

Dispose of test solutions by rinsing down the sink. Empty gelatin capsules should be disposed of immediately with household waste. Wash the test tubes and caps in warm, soapy water immediately after each use. Make sure any sediment or color staining is removed. Rinse well and dry. Each bag of capsules should be stored inside the blister. Fit the caps on each test tube. Place all components back into the package. The blister pack has been specially designed to be reused as a storage container.

Store your kit in clean, dry conditions, indoors. The powders are safe in normal domestic terms but like all chemicals and pharmaceuticals, they should be put away and kept out of reach of children. Try to avoid touching the powders. Always wash your hands thoroughly after making your tests. Do not eat, drink or smoke while using the soil test kit. Keep powders away from food, drink and animal feed. If taken internally, drink copious amounts of water and seek medical advice.

### CAUTIONS

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



## Plant pH Preference List

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

## Soil Test Kit Questions and Answers

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

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

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

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

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

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

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

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

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

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

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

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

**Question: The testing capsule didn't dissolve.**

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

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

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

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

**HoldAll®**  
Decorative Plant Accessories

**40 TESTS**  
**DIRECTIONS INSIDE**

# SOIL TEST KIT

Tests Your Soil for a Healthy Garden

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

### WHY TEST YOUR SOIL?

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

### HOW TO TEST YOUR SOIL

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

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

### WHEN TO TEST YOUR SOIL

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

### Included in the kit are:

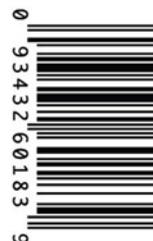
40 test capsules, 10 each for pH, N, P and K, Four (4) Color-coded Test Tubes, Test Tube Storage Dock, complete instructions for adjusting soil pH, fertilization guidelines and pH preference list for over 450 plants for the home, yard and garden.

Soil Test Kit Components  
Complete Instruction  
booklet Inside.



60183L

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2711 International St., Columbus, OH 43228  
www.PanaceaProducts.com  
Assembled in USA from  
Foreign and Domestic parts



**757860**

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# APPENDIX H

## Email Notifications

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

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

QUESTIONS

Action 299487

**QUESTIONS**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 299487
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAB1702454101
Incident Name	NAB1702454101 UCBH WW FEDERAL #003 @ 30-015-24451
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Well	[30-015-24451] UCBH WW FEDERAL #003

<b>Location of Release Source</b>	
Site Name	UCBH WW FEDERAL #003
Date Release Discovered	01/06/2017
Surface Owner	Federal

<b>Sampling Event General Information</b>	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	5,263
What is the estimated number of samples that will be gathered	40
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	01/05/2023
Time sampling will commence	08:00 AM
 <i>Warning: Notification can not be less than two business days prior to conducting final sampling.</i>	
Please provide any information necessary for observers to contact samplers	Please contact Gilbert Moreno at (832) 541-7719 with any questions.
Please provide any information necessary for navigation to sampling site	From the intersection of Whitehorn Rd/Stateline Rd head east on Stateline Rd for approximately 0.43 miles. Turn left for approximately 0.07 miles to pad area located at (32.0072, -103.9402)

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
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 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
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 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 299487

**CONDITIONS**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 299487
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**CONDITIONS**

Created By	Condition	Condition Date
jraley	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	1/3/2024

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
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**District II**  
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 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 300863

**QUESTIONS**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 300863
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAB1702454101
Incident Name	NAB1702454101 UCBH WW FEDERAL #003 @ 30-015-24451
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Well	[30-015-24451] UCBH WW FEDERAL #003

<b>Location of Release Source</b>	
Site Name	UCBH WW FEDERAL #003
Date Release Discovered	01/06/2017
Surface Owner	Federal

<b>Sampling Event General Information</b>	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	1,600
What is the estimated number of samples that will be gathered	8
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	01/10/2024
Time sampling will commence	09:30 AM
Please provide any information necessary for observers to contact samplers	Please contact Gilbert Moreno (832) 541-7719 with any questions.
Please provide any information necessary for navigation to sampling site	From the intersection of Whitehorn Rd/Staline Rd head east on Stateline Rd for approximately 0.43 miles. Turn left for approximately 0.07 miles to pad area located at (32.0072, -103.9402)

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

CONDITIONS

Action 300863

**CONDITIONS**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 300863
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**CONDITIONS**

Created By	Condition	Condition Date
jralej	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	1/8/2024

## Abe Valladares

---

**From:** Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>  
**Sent:** Friday, January 12, 2024 9:07 AM  
**To:** Raley, Jim  
**Cc:** Devon-Team; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD; Velez, Nelson, EMNRD  
**Subject:** RE: [EXTERNAL] UCBH WW3 Extension Request -- nAB1702454101

Jim,

OCD Permitting has been revamped recently and automatically defaults to 90 days for a Remediation Closure Report Extension, which this appears to be. An extension to **April 11th, 2024** is approved. Please include this e-mail correspondence in the Remediation Closure Report.

Regards,

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




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**From:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>  
**Sent:** Thursday, January 11, 2024 10:53 AM  
**To:** Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>  
**Cc:** Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>  
**Subject:** FW: [EXTERNAL] UCBH WW3 Extension Request -- nAB1702454101

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**From:** Raley, Jim <[Jim.Raley@dmv.com](mailto:Jim.Raley@dmv.com)>  
**Sent:** Thursday, January 11, 2024 10:48 AM  
**To:** Enviro, OCD, EMNRD <[OCD.Enviro@emnrd.nm.gov](mailto:OCD.Enviro@emnrd.nm.gov)>  
**Cc:** Devon-Team <[Devon-Team@etechemv.com](mailto:Devon-Team@etechemv.com)>  
**Subject:** [EXTERNAL] UCBH WW3 Extension Request -- nAB1702454101

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

NMOCD District II,  
 A remediation plan was conditionally approved on 10/17/2023 for incident nAB1702454101 at the UCBH WW FEDERAL #003 (30-015-24451) well pad.

The conditions of the remediation workplan have been met and excavation was completed on 01/10/2024. However, due to delays with staffing during the holidays, reporting is not able to be completed by the due date of 01/15/2024.

WPX respectfully asks for a 60 day extension to deliver a remediation closure report by 03/15/2024.

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



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**Erick Herrera**

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**From:** Raley, Jim <Jim.Raley@dvn.com>  
**Sent:** Thursday, October 26, 2023 10:39 AM  
**To:** Devon-Team  
**Subject:** FW: [EXTERNAL] UCBH WW3 Sundry Request - nAB1702454101  
**Attachments:** Seed\_Mixture\_2\_Sandy\_Sites.doc

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



---

**From:** CFO\_Spill, BLM\_NM <BLM\_NM\_CFO\_Spill@blm.gov>  
**Sent:** Wednesday, December 28, 2022 11:54 AM  
**To:** Raley, Jim <Jim.Raley@dvn.com>  
**Cc:** Devon-Team <Devon-Team@ensolum.com>  
**Subject:** Re: [EXTERNAL] UCBH WW3 Sundry Request - nAB1702454101

My Environmental Impact Review is as follows:

BLM surface/Minerals  
High Cave/Karst - this site will require the strictest cleanup requirements  
**An Arch Survey will be required.**  
No wildlife stipulations  
No botany stipulations  
This is within a Range allotment for grazing  
This location will require BLM Seed mixture #2 for sandy sites

---

**From:** Raley, Jim <[Jim.Raley@dvn.com](mailto:Jim.Raley@dvn.com)>  
**Sent:** Wednesday, December 28, 2022 10:28 AM  
**To:** CFO\_Spill, BLM\_NM <[BLM\\_NM\\_CFO\\_Spill@blm.gov](mailto:BLM_NM_CFO_Spill@blm.gov)>  
**Cc:** Devon-Team <[Devon-Team@ensolum.com](mailto:Devon-Team@ensolum.com)>  
**Subject:** [EXTERNAL] UCBH WW3 Sundry Request - nAB1702454101

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Chrisha,

Please find attached sundry request for offsite remediation of a historic spill that occurred in 2017.

Attached:

- Sundry 3160-5
- Map of Spill area
- KMZ of spill area.

Jim Raley | Environmental Professional - Permian Basin  
5315 Buena Vista Dr., Carlsbad, NM 88220  
C: (575)689-7597 | [jim.rale@devon.com](mailto:jim.rale@devon.com)



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# APPENDIX I

## Approved Remediation Work Plan

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Incident ID:	nAB1702454101
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party: WPX Energy Permian, LLC	OGRID: 246289
Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: jim.raley@dvn.com	Incident # (assigned by OCD): nAB1702454101
Contact mailing address: 5315 Buena Vista Dr, Carlsbad, NM, 88220	

### Location of Release Source

Latitude 32.00706894 Longitude -103.9397305  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name: UCBH WW Federal 3	Site Type: Wellpad
Date Release Discovered: 1/6/2017	API# (if applicable): 30-015-24451

Unit Letter	Section	Township	Range	County
N	25	26S	29E	Eddy

Surface Owner:  State  Federal  Tribal  Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls): 5 bbls	Volume Recovered (bbls): 0
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls): 5 bbls	Volume Recovered (bbls): 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

Human Error; leaking stuffing box. Approximately 5 bbls of water and oil spilled on location.

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

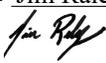
State of New Mexico  
Oil Conservation Division

Incident ID:	nAB1702454101
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: <u>Jim Raley</u> Title: <u>Environmental Professional</u> Signature: <u></u> Date: <u>5/23/2023</u> email: <u>Jim.Raley@dvn.com</u> Telephone: <u>575-689-7597</u>
<b><u>OCD Only</u></b> Received by: _____ Date: _____

Incident ID:	nAB1702454101
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?	_51-100_ (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 checked="" type="checkbox"/> Yes <input 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 checked="" type="checkbox"/> Yes <input 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 <b>not</b> 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:	nAB1702454101
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Jim Raley Title: Environmental Professional

Signature:  Date: 5/23/2023

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

**OCD Only**

Received by: Jocelyn Harimon Date: 05/24/2023

Incident ID:	nAB1702454101
District RP	
Facility ID	
Application ID	

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Jim Raley Title: Environmental Professional  
 Signature:  Date: 5/23/2023  
 email: jim.raley@dvn.com Telephone: 575-689-7597

**OCD Only**

Received by: Jocelyn Harimon Date: 05/24/2023

- Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# REMEDIATION WORK PLAN

**UCBH WW Federal 3**  
**Eddy County, New Mexico**  
**Incident Number nAB1702454101**

**Prepared For:**  
**WPX Permian Energy, LLC.**

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



## SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Remediation Work Plan (RWP) detailing site assessment and delineation soil sampling activities at the UCBH WW Federal 3 (Site). Based on field observations, field screening activities and review of the laboratory analytical results from delineation soil sampling activities at the Site, WPX proposes this RWP, which summarizes initial response efforts and details remediation objectives to rectify environmental impacts.

## SITE LOCATION AND RELEASE BACKGROUND

The Site is located in Unit N, Section 25, Township 26 South, Range 29 East, in Eddy County, New Mexico (32.00706894°N, 103.9397305°W) and is associated with oil and gas exploration and production operations on Bureau of Land Management (BLM) Federal Land (**Figure 1** in **Appendix A**).

On January 6, 2017, a stuffing box on the wellhead failed and released approximately 5 barrels (bbls) of crude oil and 5 bbls of produced water to the well pad surface and adjacent pasture. No fluids were able to be recovered. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) with a Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on January 19, 2017, and was subsequently assigned Incident Number nAB1702454101. **Figure 2** in **Appendix A** depicts the observed release area, hereafter referred to as the Area of Concern (AOC). Since initial response efforts, plugging and abandonment activities at the Site were completed in December of 2019.

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

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

Depth to groundwater at the Site is estimated to be between 51 and 100 feet below ground surface (bgs) based a recent measurement of a nearby well on the JC Williams Yard owned by WPX, located approximately 0.5 miles northwest of the Site. The well does not appear to have an identification number corresponding to the New Mexico Office of the State Engineer (NMOSE) or United States Geological Survey (USGS) well records. However, a depth to groundwater measurement at the well was obtained on August 15, 2022, and measured 82.9 feet bgs. The location of the JC Williams well is provided in **Figure 1** in **Appendix A**. The Groundwater Measurement Form summarizing findings is provided as **Appendix B**.

Based on the initial desktop review, the closest continuously flowing or significant water course to the Site is a dry wash, located approximately 37 feet south of the Site. It should be noted that a margin of error is possible based on imagery only; field verification can further confirm these specified classifications developed from image analysis. The Site is underlain by unstable geology (high potential karst designation



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

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

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria
Chloride	Environmental Protection Agency (EPA) 300.0	600 milligrams per kilogram (mg/kg)
Total Petroleum Hydrocarbon (TPH)	EPA 8015 M/D	100 mg/kg
Benzene	EPA 8021B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B	50 mg/kg

## DELINEATION SOIL SAMPLING ACTIVITIES

On September 14, 2022, delineation soil sampling activities were conducted at the Site to assess the presence or absence of soil impacts associated with the AOC. Eight boreholes (BH01 through BH08) were advanced with a hand auger within and outside of the AOC. Delineation activities were driven by field screening soil for volatile aromatic hydrocarbons utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. A minimum of two soil samples were collected from each delineation soil sample location: the sample with the highest observed field screening and the greatest depth. The locations of the delineation soil samples are shown in **Figure 2** in **Appendix A**. Field screening results and observations for each delineation soil sample were recorded on soil sampling logs (**Appendix C**). Photographic documentation during delineation activities is included in **Appendix D**.

Delineation soil samples were placed directly into lab provided pre-cleaned glass jars, packaged with minimal void space, labeled and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures, to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of COCs.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for BH01, BH02 and BH04 advanced within the AOC indicated chloride concentrations exceeding the Site Closure Criteria (ranging from 0.5-foot bgs to 8 feet bgs); delineation soil samples collected outside of the AOC indicated all COCs were below the Site Closure Criteria and will assist with defining a clean lateral excavation boundary.

Laboratory analytical results are summarized in **Table 1** included in **Appendix E**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix F**.

## PROPOSED REMEDIATION WORK PLAN

Based on the summary of delineation soil sampling results, the following conclusions regarding the release are presented:

- Laboratory analytical results for all delineation soil samples indicated BTEX and TPH concentrations were below the laboratory detection threshold for soil samples collected from every depth;
- Laboratory analytical results for BH01, BH02 and BH04 advanced within the AOC indicated chloride concentrations exceeding the Site Closure Criteria (ranging from 0.5-foot bgs to 8 feet bgs);



delineation soil samples collected outside of the AOC indicated all COCs were below the Site Closure Criteria and will assist with defining a clean lateral excavation boundary;

- Currently, delineation soil sampling results provide representative lateral and vertical delineation of residual impacts in soil. Remaining impacts within the AOC are characterized by chloride concentrations ranging from 727 mg/kg to 3,910 mg/kg based on BH01, BH02 and BH04.
- Based on current delineation soil sampling results, locations and the extent of the mapped AOC (17,850 square feet), an estimated 3,307 cubic yards of impacted soil is anticipated to be removed from the Site for disposal in accordance with state and federal regulations;

Based on the conclusions drawn above, WPX proposes the following remediation efforts:

- Depth to groundwater at the Site is estimated to be between 51 and 100 feet bgs based a recent measurement of a nearby well on the JC Williams Yard, located approximately 0.5 miles northwest of the Site, where groundwater was observed to be 82.9 feet bgs;
- WPX requests up to the top four feet of impacted soil be excavated within the AOC to address chloride exceedances and a 20-mil impermeable liner installed on the excavation floor. The liner would mitigate migration of residual chloride impacts into the subsurface. The proposed lateral extent of the excavation will be confirmed via confirmation sidewall soil samples (**Figure 3 in Appendix A**);
- Following removal of soil impacts, 5-point confirmation soil samples will be collected from the excavation sidewalls and be analyzed by an accredited laboratory for BTEX, TPH and chloride. Excavated soil will then be transferred to a New Mexico approved landfill facility for disposal and the excavation will be backfilled with non-waste containing soil, as defined by "Procedures for Implementation of the Spill Rule" (September 6, 2019);
- WPX is requesting a variance to the 200 square foot confirmation sampling requirement for the areas to be excavated, which would require an estimated 15 sidewall soil samples. Due to the extensive anticipated excavation extent based of measurements of the AOC (580 linear feet by 4 feet bgs), WPX proposes increasing the confirmation sampling frequency to 500 square feet for the sidewalls of the excavation, for a total of 7 sidewall soil samples. Residual chloride impacts within the AOC are defined by BH01 at 4 feet, BH02 at 6 feet and BH04 at 0.5-foot bgs., therefore no confirmation floor soil samples will be collected.
- There are areas off pad that will likely require third-party operator oversight and additional safety measures before or during remediation activities near their respective subsurface pipelines. WPX or the third-party operator may implement additional safety precautions above encroachment guidelines, including restrictions on hand shoveling and cribbing. These restrictions may be implemented as health and safety precautions at the judgment and responsibility of a WPX or third-party operator safety representative; and
- Subsequent to the completion of remediation and receipt of soil confirmation sample results documenting that impacted soil had been removed, the excavation will be backfilled with clean and/or treated soil and restored to "as close to its original state" as possible.

WPX believes the scope of work described above will meet requirements set forth in NMAC guidelines and be protective of human health, the environment, and groundwater. As such, WPX respectfully requests approval of this RWP from NMOCD.

If you have any questions or comments, please do not hesitate to contact Joseph Hernandez at (281) 702-2329 or [joseph@etechenv.com](mailto:joseph@etechenv.com) or Anna Byers at (575) 200-6754 or [anna@etechenv.com](mailto:anna@etechenv.com).



Documentation of communication with NMOCD regarding Incident Number nAB1702454101 is presented as **Attachment G**.

Sincerely,

Etech Environmental and Safety Solutions, Inc.

A handwritten signature in black ink that reads "Anna Byers". The signature is written in a cursive, flowing style.

Anna Byers  
Senior Geologist

A handwritten signature in black ink that reads "Joseph Hernandez". The signature is written in a cursive, flowing style.

Joseph Hernandez  
Senior Managing Geologist

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

**Appendices:**

- Appendix A:** Figure 1: Site Map  
Figure 2: Delineation Soil Sample Locations  
Figure 3: Proposed Remediation Area
- Appendix B:** Referenced Well Records
- Appendix C:** Soil Sampling Logs
- Appendix D:** Photographic Log
- Appendix E:** Tables
- Appendix F:** Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix G:** NMOCD Correspondence

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# APPENDIX A

## Figures

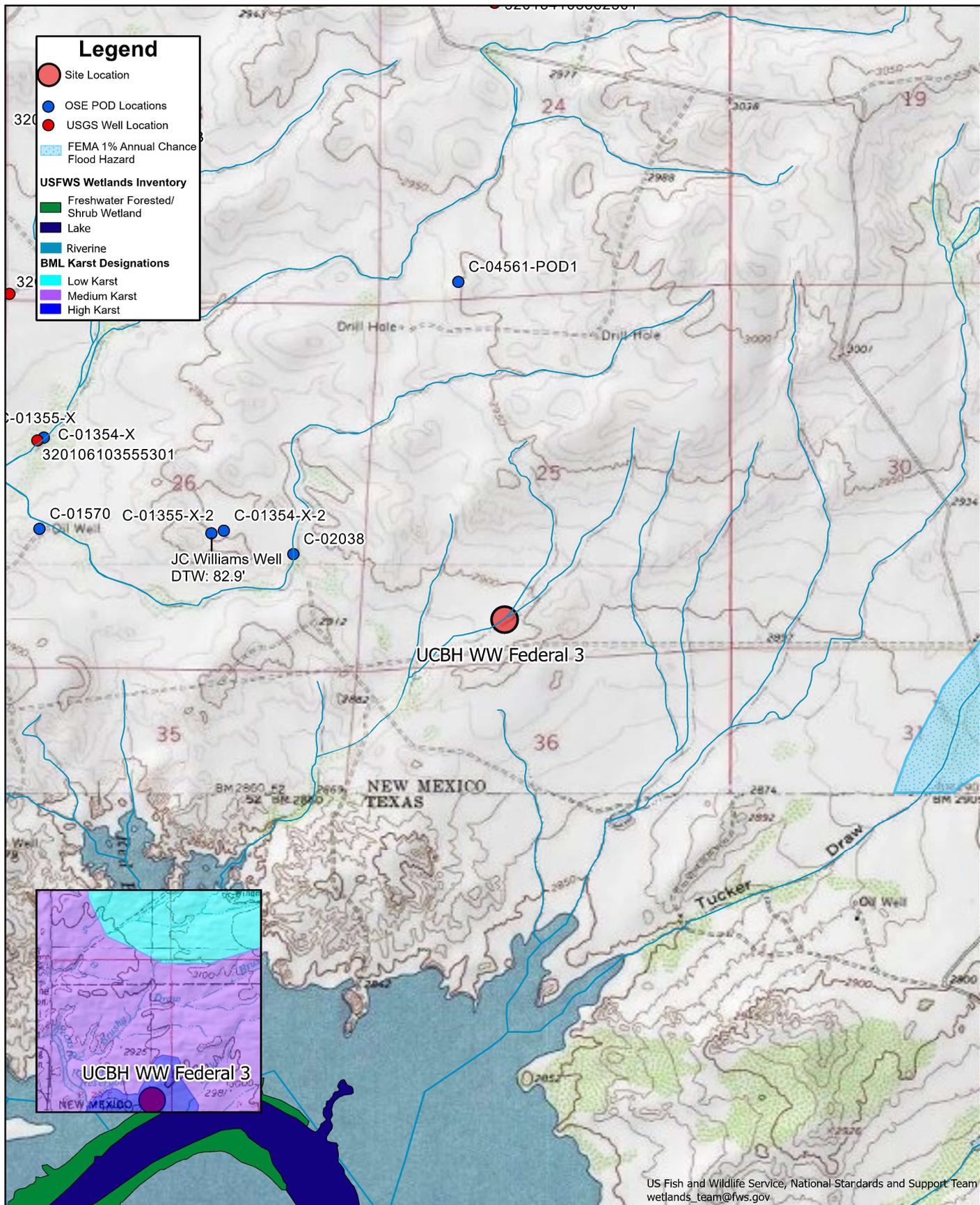
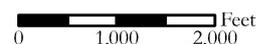


FIGURE 1

**Site Map**

WPX ENERGY PERMIAN  
UCBH WW Federal 3  
Unit N Sec 25 T26S R29E  
Eddy County, New Mexico



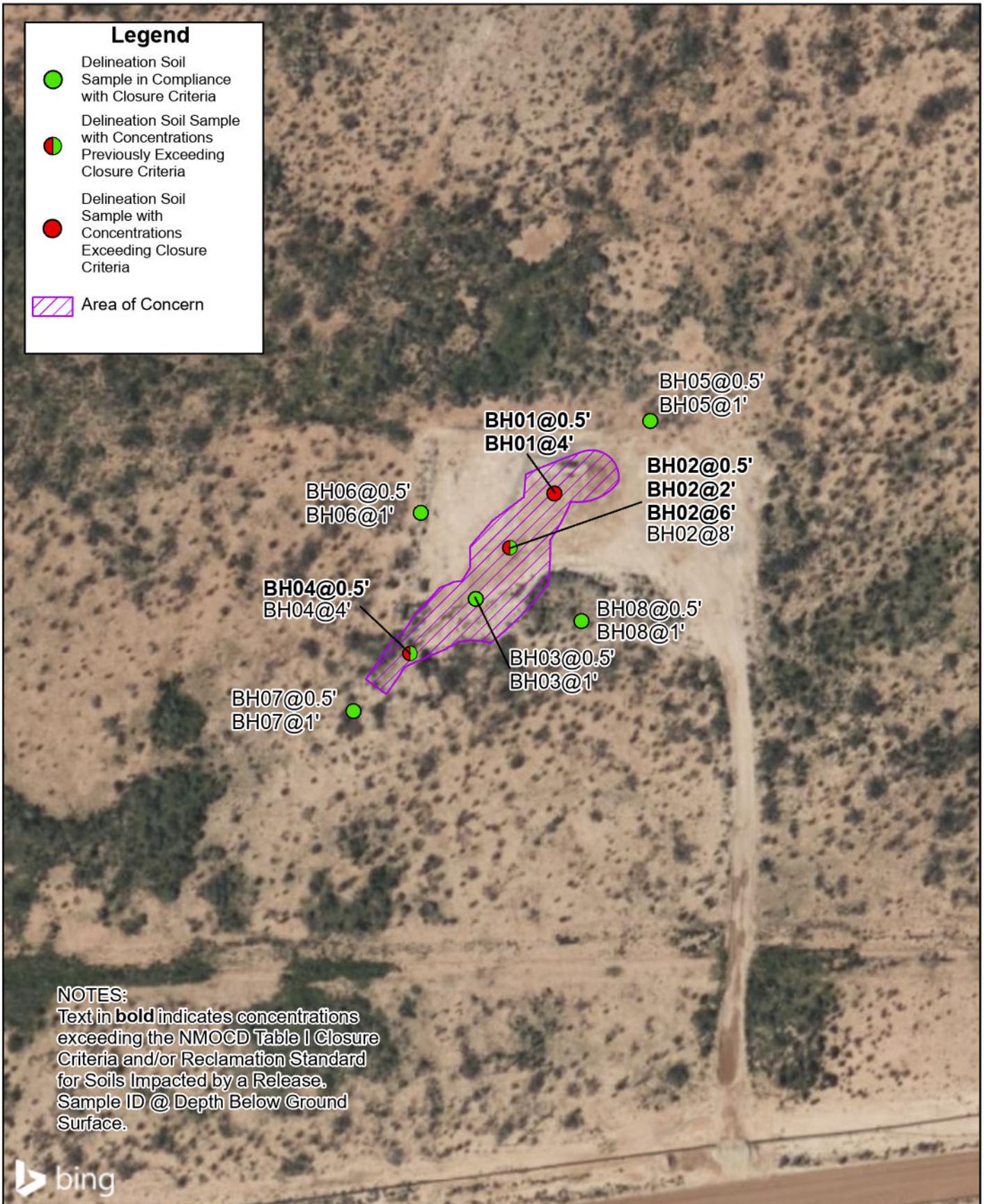
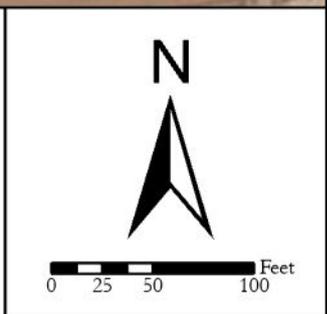


FIGURE 2  
**Delineation Soil Sample Locations**

WPX ENERGY PERMIAN, LLC  
UCBH WW Federal 3  
Unit N Sec 25 T26S R29E  
Eddy County, New Mexico





bing

FIGURE 3

**Proposed Remediation Area**

WPX ENERGY PERMIAN, LLC  
UCBH WW Federal 3  
Unit N Sec 25 T26S R29E  
Eddy County, New Mexico

N



0 25 50 100 Feet



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# APPENDIX B

## Referenced Well Records

Client: Devon Energy  
 Project Name: JC Williams Well GW measurement  
 Project Location: 32.0105289,-103.9534960  
 Project Manager: Joseph Hernandez

**GROUNDWATER SAMPLING FORM**

**SAMPLING INFORMATION**

Soil Boring / Monitor Well Number: NA  
 Project #: 03A1987013  
 Date Completed: NA Type of Water Quality Meter: \_\_\_\_\_  
 Total Depth of Monitor Well: NA Date Calibrated: NA  
 Screen Interval: NA Other Notes: used decontaminated water level indicator meter to measure groundwater depth in existing well  
 Sample Tubing Intake Depth: NA  
 Geologist: Gilbert Moreno

Monitor Well Depth	Tubing Placement	GW Depth (static)	After Purge	Time	Purge Rate	Temp.	pH	DO	ORP	Cond.	GW Depth	Comments:
				(minutes)	(L/min)	(°C)	(unitless)	(mg/L)	(mV)	(mS/cm)	(feet)	
				NR	NR	NR	NR	NR	NR	NR	82.9	NA = Not Available NR = Not Recorded



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# APPENDIX C

## Soil Sampling Logs



### LITHOLOGIC / SOIL SAMPLING LOG

Sample Name: BH01	Date: 09/14/2022
Site Name: UCBH WW Federal 3	
Incident Number: nAB1702454101	
Job Number: 18174	
Logged By: GM	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 4'

Site Coordinates: 32.007092, -103.940206

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
DRY	1,613	0	NO	BH01	0.5	0	SP-SM	0-4', SAND, dry, reddish-brown, poorly graded with silt, very fine-fine, trace white subround to subangular gravel, no staining, no odor.  @ 3', trace clay, no gravel.
DRY	1,613	0.2	NO		1	1	SP-SM	
DRY	4,799	0.1	NO		2			
					3	3	SP-SM	
DRY	521	0.3	NO	BH01	4	4	SP-SM	

Total depth: 4 feet



**LITHOLOGIC / SOIL SAMPLING LOG**

Sample Name: BH02	Date: 09/14/2022
Site Name: UCBH WW Federal 3	
Incident Number: nAB1702454101	
Job Number: 18174	
Logged By: GM	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 8'

Site Coordinates: 32.007092, -103.940206

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
DRY	857	0	NO	BH02	0.5	0	SP-SM	0-4', SAND, dry, reddish-brown, poorly graded with silt, very fine-fine, trace white subround to subangular gravel, no staining, no odor.  @ 3', trace clay, no gravel.
DRY	3,545	0.2	NO		1	1	SP-SM	
DRY	5,197	0.1	NO	BH02	2	2	SP-SM	
DRY	5,617		NO		3	3	SP-SM	
DRY	2,643	0.3	NO		4	4	SP-SM	
						5		
DRY	2,139	0	NO	BH02	6	6	SP-SM	
						7		
DRY	168	0	NO	BH02	8	8	SP-SM	

Total depth: 8 feet



### LITHOLOGIC / SOIL SAMPLING LOG

Sample Name: BH03	Date: 09/14/2022
Site Name: UCBH WW Federal 3	
Incident Number: nAB1702454101	
Job Number: 18174	
Logged By: GM	Method: Hand Auger
Site Coordinates: 32.007092, -103.940206	Hole Diameter: 3"
Total Depth: 1'	

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
DRY	857	0	NO	BH03	0.5	0	SP-SM	0-4', SAND, dry, reddish-brown, poorly graded with silt, very fine-fine, trace clay gravel, no staining, no odor.
DRY	3,545	0.2	NO	BH03	1	1	SP-SM	

Total depth: 1 foot



**LITHOLOGIC / SOIL SAMPLING LOG**

Sample Name: BH04	Date: 09/14/2022
Site Name: UCBH WW Federal 3	
Incident Number: nAB1702454101	
Job Number: 18174	
Logged By: GM	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 4'

Site Coordinates: 32.007092, -103.940206

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
DRY	1,014	0.2	NO	BH04	0.5	0	SP-SM	0-4', SAND, dry, reddish-brown, poorly graded with silt, very fine-fine, trace clay gravel, no staining, no odor.
DRY	857	0.1	NO		1	1	SP-SM	
DRY	930	0.2	NO		2	2	SP-SM	
DRY	1,014	0.1	NO		3	3	SP-SM	
DRY	414	0.1	NO	BH04	4	4	SP-SM	

Total depth: 4 feet



### LITHOLOGIC / SOIL SAMPLING LOG

Sample Name: BH05	Date: 09/14/2022
Site Name: UCBH WW Federal 3	
Incident Number: nAB1702454101	
Job Number: 18174	
Logged By: GM	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 1'

Site Coordinates: 32.007092, -103.940206

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
DRY	<168	0	NO	BH05	0.5	0	SP-SM	0-4', SAND, dry, reddish-brown, poorly graded with silt, very fine, no staining, no odor.
DRY	<168	0	NO	BH05	1	1	SP-SM	

Total depth: 1 feet



**LITHOLOGIC / SOIL SAMPLING LOG**

Sample Name: BH06	Date: 09/14/2022
Site Name: UCBH WW Federal 3	
Incident Number: nAB1702454101	
Job Number: 18174	
Logged By: GM	Method: Hand Auger
Site Coordinates: 32.007092, -103.940206	Hole Diameter: 3"
Total Depth: 1'	

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
DRY	<168	0	NO	BH06	0.5	0	SP-SM	0-4', SAND, dry, reddish-brown, poorly graded with silt, very fine, no staining, no odor.
DRY	<168	0	NO	BH06	1	1	SP-SM	

Total depth: 1 feet



**LITHOLOGIC / SOIL SAMPLING LOG**

Sample Name: BH07	Date: 09/14/2022
Site Name: UCBH WW Federal 3	
Incident Number: nAB1702454101	
Job Number: 18174	
Logged By: GM	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 1'

Site Coordinates: 32.007092, -103.940206

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
DRY	<168	0	NO	BH07	0.5	0	SP-SM	0-4', SAND, dry, reddish-brown, poorly graded with silt, very fine, no staining, no odor.
DRY	<168	0	NO	BH07	1	1	SP-SM	

Total depth: 1 feet



**LITHOLOGIC / SOIL SAMPLING LOG**

Sample Name: BH08	Date: 09/14/2022
Site Name: UCBH WW Federal 3	
Incident Number: nAB1702454101	
Job Number: 18174	
Logged By: GM	Method: Hand Auger
Hole Diameter: 3"	Total Depth: 1'

Site Coordinates: 32.007092, -103.940206

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
DRY	<168	0	NO	BH08	0.5	0	SP-SM	0-4', SAND, dry, reddish-brown, poorly graded with silt, very fine, no staining, no odor.
DRY	<168	0	NO	BH08	1	1	SP-SM	

Total depth: 1 feet

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# APPENDIX D

## Photographic Log



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# APPENDIX E

## Tables





**Table 1  
SOIL SAMPLE ANALYTICAL RESULTS  
WPX Energy Permian, LLC  
UCBH WW Federal 3  
Eddy County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
<b>Delineation Soil Samples - nAB1702454101</b>									
BH01	09/14/22	0.5	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<b>1,180</b>
BH01	09/14/22	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<b>727</b>
BH02	09/14/22	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<b>871</b>
BH02	09/14/22	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<b>3,910</b>
BH02	09/14/22	6	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<b>2,110</b>
BH02	09/14/22	8	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	193
BH03	09/14/22	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	13.2
BH03	09/14/22	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	13.5
BH04	09/14/22	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<b>1,420</b>
BH04	09/14/22	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	342
BH05	09/14/22	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	11.9
BH05	09/14/22	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	10.1
BH06	09/14/22	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	24.3
BH06	09/14/22	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	26.8
BH07	09/14/22	0.5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	117
BH07	09/14/22	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	49.9
BH08	09/14/22	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	10.5
BH08	09/14/22	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	12.1

Notes:  
 bgs: below ground surface  
 mg/kg: milligrams per kilogram  
 BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes  
 GRO: Gasoline Range Organics  
 DRO: Diesel Range Organics  
 ORO: Oil Range Organics  
 TPH: Total Petroleum Hydrocarbon  
 NMOCD: New Mexico Oil Conservation Division  
 NMAC: New Mexico Administrative Code  
 Concentrations in **bold** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard for Soils Impacted by a Release

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# APPENDIX F

## Laboratory Analytical Reports & Chain-of-Custody Documentation



Environment Testing  
America

## ANALYTICAL REPORT

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

Laboratory Job ID: 890-2965-1  
Laboratory Sample Delivery Group: Rural Eddy NM  
Client Project/Site: UCBH WW 3  
Revision: 1

For:  
Ensolum  
705 W. Wadley  
Suite 210  
Midland, Texas 79701

Attn: Devon Team

Authorized for release by:  
9/30/2022 2:28:20 PM

Jessica Kramer, Project Manager  
(432)704-5440  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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- 12
- 13
- 14

Client: Ensolum  
Project/Site: UCBH WW 3

Laboratory Job ID: 890-2965-1  
SDG: Rural Eddy NM

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## Definitions/Glossary

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

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## Job ID: 890-2965-1

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### Laboratory: Eurofins Carlsbad

#### Narrative

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#### Job Narrative 890-2965-1

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#### REVISION

The report being provided is a revision of the original report sent on 9/26/2022. The report (revision 1) is being revised due to per client email, requesting correction to sample depth.

Report revision history

#### Receipt

The samples were received on 9/14/2022 4:34 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.8°C

#### GC VOA

Method 8021B: LCSD biased low. Since only an acceptable LCS is required per the method, the data has been qualified and reported. (LCSD 880-35199/2-A)

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35199 and analytical batch 880-35329 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34681 and analytical batch 880-34714 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.



## Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3Job ID: 890-2965-1  
SDG: Rural Eddy NM

Client Sample ID: BH01

Lab Sample ID: 890-2965-1

Date Collected: 09/14/22 10:00

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 0.5'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *1	0.00202		mg/Kg		09/22/22 15:49	09/24/22 16:07	1
Toluene	<0.00202	U *	0.00202		mg/Kg		09/22/22 15:49	09/24/22 16:07	1
Ethylbenzene	<0.00202	U * - F1	0.00202		mg/Kg		09/22/22 15:49	09/24/22 16:07	1
m-Xylene & p-Xylene	<0.00404	U * - F1	0.00404		mg/Kg		09/22/22 15:49	09/24/22 16:07	1
o-Xylene	<0.00202	U * - F1	0.00202		mg/Kg		09/22/22 15:49	09/24/22 16:07	1
Xylenes, Total	<0.00404	U * - F1	0.00404		mg/Kg		09/22/22 15:49	09/24/22 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	09/22/22 15:49	09/24/22 16:07	1
1,4-Difluorobenzene (Surr)	111		70 - 130	09/22/22 15:49	09/24/22 16:07	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/26/22 15:58	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 15:34	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/18/22 21:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		09/16/22 13:56	09/18/22 21:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/18/22 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	09/16/22 13:56	09/18/22 21:34	1
o-Terphenyl	92		70 - 130	09/16/22 13:56	09/18/22 21:34	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1180		4.99		mg/Kg			09/20/22 22:56	1

Client Sample ID: BH01

Lab Sample ID: 890-2965-2

Date Collected: 09/14/22 10:10

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 4'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *1	0.00200		mg/Kg		09/22/22 15:49	09/24/22 16:27	1
Toluene	<0.00200	U *	0.00200		mg/Kg		09/22/22 15:49	09/24/22 16:27	1
Ethylbenzene	<0.00200	U *	0.00200		mg/Kg		09/22/22 15:49	09/24/22 16:27	1
m-Xylene & p-Xylene	<0.00399	U *	0.00399		mg/Kg		09/22/22 15:49	09/24/22 16:27	1
o-Xylene	<0.00200	U *	0.00200		mg/Kg		09/22/22 15:49	09/24/22 16:27	1
Xylenes, Total	<0.00399	U *	0.00399		mg/Kg		09/22/22 15:49	09/24/22 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/22/22 15:49	09/24/22 16:27	1

Eurofins Carlsbad

### Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

**Client Sample ID: BH01**  
Date Collected: 09/14/22 10:10  
Date Received: 09/14/22 16:34  
Sample Depth: 4'

**Lab Sample ID: 890-2965-2**  
Matrix: Solid

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130	09/22/22 15:49	09/24/22 16:27	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/26/22 15:58	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 15:34	1

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/18/22 22:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/18/22 22:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/18/22 22:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	09/16/22 13:56	09/18/22 22:36	1
o-Terphenyl	93		70 - 130	09/16/22 13:56	09/18/22 22:36	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	727		4.95		mg/Kg			09/20/22 23:01	1

**Client Sample ID: BH02**  
Date Collected: 09/14/22 10:20  
Date Received: 09/14/22 16:34  
Sample Depth: 0.5'

**Lab Sample ID: 890-2965-3**  
Matrix: Solid

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *1	0.00199		mg/Kg		09/22/22 15:49	09/24/22 16:48	1
Toluene	<0.00199	U *	0.00199		mg/Kg		09/22/22 15:49	09/24/22 16:48	1
Ethylbenzene	<0.00199	U *	0.00199		mg/Kg		09/22/22 15:49	09/24/22 16:48	1
m-Xylene & p-Xylene	<0.00398	U *	0.00398		mg/Kg		09/22/22 15:49	09/24/22 16:48	1
o-Xylene	<0.00199	U *	0.00199		mg/Kg		09/22/22 15:49	09/24/22 16:48	1
Xylenes, Total	<0.00398	U *	0.00398		mg/Kg		09/22/22 15:49	09/24/22 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/22/22 15:49	09/24/22 16:48	1
1,4-Difluorobenzene (Surr)	109		70 - 130	09/22/22 15:49	09/24/22 16:48	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/26/22 15:58	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

Eurofins Carlsbad

## Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3Job ID: 890-2965-1  
SDG: Rural Eddy NM

Client Sample ID: BH02

Lab Sample ID: 890-2965-3

Date Collected: 09/14/22 10:20

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 0.5'

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 22:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 22:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 22:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				09/16/22 13:56	09/18/22 22:56	1
o-Terphenyl	93		70 - 130				09/16/22 13:56	09/18/22 22:56	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	871		4.98		mg/Kg			09/20/22 23:06	1

Client Sample ID: BH02

Lab Sample ID: 890-2965-4

Date Collected: 09/14/22 10:30

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 2'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *1	0.00199		mg/Kg		09/22/22 15:49	09/24/22 17:08	1
Toluene	<0.00199	U *-	0.00199		mg/Kg		09/22/22 15:49	09/24/22 17:08	1
Ethylbenzene	<0.00199	U *-	0.00199		mg/Kg		09/22/22 15:49	09/24/22 17:08	1
m-Xylene & p-Xylene	<0.00398	U *-	0.00398		mg/Kg		09/22/22 15:49	09/24/22 17:08	1
o-Xylene	<0.00199	U *-	0.00199		mg/Kg		09/22/22 15:49	09/24/22 17:08	1
Xylenes, Total	<0.00398	U *-	0.00398		mg/Kg		09/22/22 15:49	09/24/22 17:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130				09/22/22 15:49	09/24/22 17:08	1
1,4-Difluorobenzene (Surr)	120		70 - 130				09/22/22 15:49	09/24/22 17:08	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/26/22 15:58	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 15:34	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/18/22 23:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/18/22 23:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/18/22 23:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130				09/16/22 13:56	09/18/22 23:16	1
o-Terphenyl	86		70 - 130				09/16/22 13:56	09/18/22 23:16	1

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### Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

**Client Sample ID: BH02**  
Date Collected: 09/14/22 10:30  
Date Received: 09/14/22 16:34  
Sample Depth: 2'

**Lab Sample ID: 890-2965-4**  
Matrix: Solid

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3910		24.9		mg/Kg			09/20/22 23:11	5

**Client Sample ID: BH02**  
Date Collected: 09/14/22 10:40  
Date Received: 09/14/22 16:34  
Sample Depth: 6'

**Lab Sample ID: 890-2965-5**  
Matrix: Solid

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *1	0.00198		mg/Kg		09/22/22 15:49	09/24/22 17:29	1
Toluene	<0.00198	U *-	0.00198		mg/Kg		09/22/22 15:49	09/24/22 17:29	1
Ethylbenzene	<0.00198	U *-	0.00198		mg/Kg		09/22/22 15:49	09/24/22 17:29	1
m-Xylene & p-Xylene	<0.00396	U *-	0.00396		mg/Kg		09/22/22 15:49	09/24/22 17:29	1
o-Xylene	<0.00198	U *-	0.00198		mg/Kg		09/22/22 15:49	09/24/22 17:29	1
Xylenes, Total	<0.00396	U *-	0.00396		mg/Kg		09/22/22 15:49	09/24/22 17:29	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	96		70 - 130				09/22/22 15:49	09/24/22 17:29	1
1,4-Difluorobenzene (Surr)	110		70 - 130				09/22/22 15:49	09/24/22 17:29	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/26/22 15:58	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 23:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 23:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 23:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	91		70 - 130				09/16/22 13:56	09/18/22 23:36	1
o-Terphenyl	97		70 - 130				09/16/22 13:56	09/18/22 23:36	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2110		25.0		mg/Kg			09/20/22 23:15	5

## Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3Job ID: 890-2965-1  
SDG: Rural Eddy NM

Client Sample ID: BH02

Lab Sample ID: 890-2965-6

Date Collected: 09/14/22 10:50

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 8'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *1	0.00201		mg/Kg		09/22/22 15:49	09/24/22 17:49	1
Toluene	<0.00201	U *-	0.00201		mg/Kg		09/22/22 15:49	09/24/22 17:49	1
Ethylbenzene	<0.00201	U *-	0.00201		mg/Kg		09/22/22 15:49	09/24/22 17:49	1
m-Xylene & p-Xylene	<0.00402	U *-	0.00402		mg/Kg		09/22/22 15:49	09/24/22 17:49	1
o-Xylene	<0.00201	U *-	0.00201		mg/Kg		09/22/22 15:49	09/24/22 17:49	1
Xylenes, Total	<0.00402	U *-	0.00402		mg/Kg		09/22/22 15:49	09/24/22 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	09/22/22 15:49	09/24/22 17:49	1
1,4-Difluorobenzene (Surr)	122		70 - 130	09/22/22 15:49	09/24/22 17:49	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/26/22 15:58	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 23:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 23:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 23:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	09/16/22 13:56	09/18/22 23:56	1
o-Terphenyl	90		70 - 130	09/16/22 13:56	09/18/22 23:56	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	193		4.95		mg/Kg			09/20/22 23:30	1

Client Sample ID: BH03

Lab Sample ID: 890-2965-7

Date Collected: 09/14/22 11:00

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 0.5'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *1	0.00200		mg/Kg		09/22/22 15:49	09/24/22 18:10	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		09/22/22 15:49	09/24/22 18:10	1
Ethylbenzene	<0.00200	U *-	0.00200		mg/Kg		09/22/22 15:49	09/24/22 18:10	1
m-Xylene & p-Xylene	<0.00401	U *-	0.00401		mg/Kg		09/22/22 15:49	09/24/22 18:10	1
o-Xylene	<0.00200	U *-	0.00200		mg/Kg		09/22/22 15:49	09/24/22 18:10	1
Xylenes, Total	<0.00401	U *-	0.00401		mg/Kg		09/22/22 15:49	09/24/22 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/22/22 15:49	09/24/22 18:10	1

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### Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

**Client Sample ID: BH03**  
Date Collected: 09/14/22 11:00  
Date Received: 09/14/22 16:34  
Sample Depth: 0.5'

**Lab Sample ID: 890-2965-7**  
Matrix: Solid

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	09/22/22 15:49	09/24/22 18:10	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/26/22 15:58	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 15:34	1

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 00:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 00:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 00:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	09/16/22 13:56	09/19/22 00:16	1
o-Terphenyl	85		70 - 130	09/16/22 13:56	09/19/22 00:16	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.2		4.98		mg/Kg			09/20/22 23:35	1

**Client Sample ID: BH03**  
Date Collected: 09/14/22 11:10  
Date Received: 09/14/22 16:34  
Sample Depth: 1'

**Lab Sample ID: 890-2965-8**  
Matrix: Solid

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *1	0.00200		mg/Kg		09/22/22 15:49	09/24/22 18:30	1
Toluene	<0.00200	U *	0.00200		mg/Kg		09/22/22 15:49	09/24/22 18:30	1
Ethylbenzene	<0.00200	U *	0.00200		mg/Kg		09/22/22 15:49	09/24/22 18:30	1
m-Xylene & p-Xylene	<0.00399	U *	0.00399		mg/Kg		09/22/22 15:49	09/24/22 18:30	1
o-Xylene	<0.00200	U *	0.00200		mg/Kg		09/22/22 15:49	09/24/22 18:30	1
Xylenes, Total	<0.00399	U *	0.00399		mg/Kg		09/22/22 15:49	09/24/22 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	09/22/22 15:49	09/24/22 18:30	1
1,4-Difluorobenzene (Surr)	113		70 - 130	09/22/22 15:49	09/24/22 18:30	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/26/22 15:58	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

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## Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3Job ID: 890-2965-1  
SDG: Rural Eddy NM

Client Sample ID: BH03

Lab Sample ID: 890-2965-8

Date Collected: 09/14/22 11:10

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 1'

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 00:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 00:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				09/16/22 13:56	09/19/22 00:36	1
o-Terphenyl	90		70 - 130				09/16/22 13:56	09/19/22 00:36	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.5		5.00		mg/Kg			09/20/22 23:49	1

Client Sample ID: BH04

Lab Sample ID: 890-2965-9

Date Collected: 09/14/22 11:20

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 0.5'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *1	0.00199		mg/Kg		09/22/22 15:49	09/24/22 18:51	1
Toluene	<0.00199	U *-	0.00199		mg/Kg		09/22/22 15:49	09/24/22 18:51	1
Ethylbenzene	<0.00199	U *-	0.00199		mg/Kg		09/22/22 15:49	09/24/22 18:51	1
m-Xylene & p-Xylene	<0.00398	U *-	0.00398		mg/Kg		09/22/22 15:49	09/24/22 18:51	1
o-Xylene	<0.00199	U *-	0.00199		mg/Kg		09/22/22 15:49	09/24/22 18:51	1
Xylenes, Total	<0.00398	U *-	0.00398		mg/Kg		09/22/22 15:49	09/24/22 18:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				09/22/22 15:49	09/24/22 18:51	1
1,4-Difluorobenzene (Surr)	114		70 - 130				09/22/22 15:49	09/24/22 18:51	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/26/22 15:58	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 15:34	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 00:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 00:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 00:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				09/16/22 13:56	09/19/22 00:56	1
o-Terphenyl	99		70 - 130				09/16/22 13:56	09/19/22 00:56	1

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### Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

**Client Sample ID: BH04**  
Date Collected: 09/14/22 11:20  
Date Received: 09/14/22 16:34  
Sample Depth: 0.5'

**Lab Sample ID: 890-2965-9**  
Matrix: Solid

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1420		25.3		mg/Kg			09/20/22 23:54	5

**Client Sample ID: BH04**  
Date Collected: 09/14/22 11:30  
Date Received: 09/14/22 16:34  
Sample Depth: 4'

**Lab Sample ID: 890-2965-10**  
Matrix: Solid

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *1	0.00201		mg/Kg		09/22/22 15:49	09/24/22 19:12	1
Toluene	<0.00201	U *-	0.00201		mg/Kg		09/22/22 15:49	09/24/22 19:12	1
Ethylbenzene	<0.00201	U *-	0.00201		mg/Kg		09/22/22 15:49	09/24/22 19:12	1
m-Xylene & p-Xylene	<0.00402	U *-	0.00402		mg/Kg		09/22/22 15:49	09/24/22 19:12	1
o-Xylene	<0.00201	U *-	0.00201		mg/Kg		09/22/22 15:49	09/24/22 19:12	1
Xylenes, Total	<0.00402	U *-	0.00402		mg/Kg		09/22/22 15:49	09/24/22 19:12	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	79		70 - 130				09/22/22 15:49	09/24/22 19:12	1
1,4-Difluorobenzene (Surr)	120		70 - 130				09/22/22 15:49	09/24/22 19:12	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/26/22 15:58	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 15:34	1

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 01:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 01:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 01:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	78		70 - 130				09/16/22 13:56	09/19/22 01:16	1
o-Terphenyl	80		70 - 130				09/16/22 13:56	09/19/22 01:16	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	342		5.05		mg/Kg			09/20/22 23:59	1

## Surrogate Summary

Client: Ensolum  
Project/Site: UCBH WW 3Job ID: 890-2965-1  
SDG: Rural Eddy NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-2965-1	BH01	95	111
890-2965-1 MS	BH01	82	109
890-2965-1 MSD	BH01	81	111
890-2965-2	BH01	98	111
890-2965-3	BH02	96	109
890-2965-4	BH02	89	120
890-2965-5	BH02	96	110
890-2965-6	BH02	87	122
890-2965-7	BH03	99	109
890-2965-8	BH03	81	113
890-2965-9	BH04	99	114
890-2965-10	BH04	79	120
LCS 880-35199/1-A	Lab Control Sample	85	108
LCSD 880-35199/2-A	Lab Control Sample Dup	84	101
MB 880-35199/5-A	Method Blank	103	119

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
890-2965-1	BH01	91	92
890-2965-1 MS	BH01	81	76
890-2965-1 MSD	BH01	86	80
890-2965-2	BH01	87	93
890-2965-3	BH02	87	93
890-2965-4	BH02	82	86
890-2965-5	BH02	91	97
890-2965-6	BH02	87	90
890-2965-7	BH03	82	85
890-2965-8	BH03	84	90
890-2965-9	BH04	94	99
890-2965-10	BH04	78	80
LCS 880-34681/2-A	Lab Control Sample	85	92
LCSD 880-34681/3-A	Lab Control Sample Dup	86	96
MB 880-34681/1-A	Method Blank	116	119

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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### QC Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

#### Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35199/5-A  
Matrix: Solid  
Analysis Batch: 35329

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 35199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:49	09/24/22 15:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:49	09/24/22 15:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:49	09/24/22 15:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/22/22 15:49	09/24/22 15:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:49	09/24/22 15:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/22/22 15:49	09/24/22 15:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/22/22 15:49	09/24/22 15:38	1
1,4-Difluorobenzene (Surr)	119		70 - 130	09/22/22 15:49	09/24/22 15:38	1

Lab Sample ID: LCS 880-35199/1-A  
Matrix: Solid  
Analysis Batch: 35329

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 35199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1041		mg/Kg		104	70 - 130
Toluene	0.100	0.08298		mg/Kg		83	70 - 130
Ethylbenzene	0.100	0.07948		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	0.200	0.1620		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08134		mg/Kg		81	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: LCSD 880-35199/2-A  
Matrix: Solid  
Analysis Batch: 35329

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 35199

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07166	*1	mg/Kg		72	70 - 130	37	35
Toluene	0.100	0.05980	*-	mg/Kg		60	70 - 130	32	35
Ethylbenzene	0.100	0.05660	*-	mg/Kg		57	70 - 130	34	35
m-Xylene & p-Xylene	0.200	0.1165	*-	mg/Kg		58	70 - 130	33	35
o-Xylene	0.100	0.06050	*-	mg/Kg		60	70 - 130	29	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	84		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-2965-1 MS  
Matrix: Solid  
Analysis Batch: 35329

Client Sample ID: BH01  
Prep Type: Total/NA  
Prep Batch: 35199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U *1	0.0998	0.09137		mg/Kg		91	70 - 130
Toluene	<0.00202	U *-	0.0998	0.07416		mg/Kg		73	70 - 130

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### QC Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2965-1 MS  
Matrix: Solid  
Analysis Batch: 35329

Client Sample ID: BH01  
Prep Type: Total/NA  
Prep Batch: 35199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U *- F1	0.0998	0.06651	F1	mg/Kg		66	70 - 130
m-Xylene & p-Xylene	<0.00404	U *- F1	0.200	0.1323	F1	mg/Kg		65	70 - 130
o-Xylene	<0.00202	U *- F1	0.0998	0.06601	F1	mg/Kg		65	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 890-2965-1 MSD  
Matrix: Solid  
Analysis Batch: 35329

Client Sample ID: BH01  
Prep Type: Total/NA  
Prep Batch: 35199

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00202	U *1	0.100	0.09751		mg/Kg		96	70 - 130	7	35
Toluene	<0.00202	U *-	0.100	0.07203		mg/Kg		70	70 - 130	3	35
Ethylbenzene	<0.00202	U *- F1	0.100	0.06391	F1	mg/Kg		63	70 - 130	4	35
m-Xylene & p-Xylene	<0.00404	U *- F1	0.201	0.1265	F1	mg/Kg		62	70 - 130	5	35
o-Xylene	<0.00202	U *- F1	0.100	0.06225	F1	mg/Kg		61	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	81		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-34681/1-A  
Matrix: Solid  
Analysis Batch: 34714

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 34681

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 20:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 20:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 20:31	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	09/16/22 13:56	09/18/22 20:31	1
o-Terphenyl	119		70 - 130	09/16/22 13:56	09/18/22 20:31	1

Lab Sample ID: LCS 880-34681/2-A  
Matrix: Solid  
Analysis Batch: 34714

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 34681

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	917.5		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	836.1		mg/Kg		84	70 - 130

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### QC Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)**

**Lab Sample ID: LCS 880-34681/2-A**  
**Matrix: Solid**  
**Analysis Batch: 34714**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 34681**

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	85		70 - 130
o-Terphenyl	92		70 - 130

**Lab Sample ID: LCSD 880-34681/3-A**  
**Matrix: Solid**  
**Analysis Batch: 34714**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 34681**

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	893.4		mg/Kg		89	70 - 130	3		20
Diesel Range Organics (Over C10-C28)	1000	813.5		mg/Kg		81	70 - 130	3		20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	86		70 - 130
o-Terphenyl	96		70 - 130

**Lab Sample ID: 890-2965-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 34714**

**Client Sample ID: BH01**  
**Prep Type: Total/NA**  
**Prep Batch: 34681**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1291		mg/Kg		126	70 - 130			
Diesel Range Organics (Over C10-C28)	<49.9	U F1	996	664.2	F1	mg/Kg		67	70 - 130			

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	81		70 - 130
o-Terphenyl	76		70 - 130

**Lab Sample ID: 890-2965-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 34714**

**Client Sample ID: BH01**  
**Prep Type: Total/NA**  
**Prep Batch: 34681**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1261		mg/Kg		123	70 - 130	2		20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	717.2		mg/Kg		72	70 - 130	8		20

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	86		70 - 130
o-Terphenyl	80		70 - 130

### QC Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34663/1-A  
Matrix: Solid  
Analysis Batch: 34948

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/20/22 21:53	1

Lab Sample ID: LCS 880-34663/2-A  
Matrix: Solid  
Analysis Batch: 34948

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	249.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-34663/3-A  
Matrix: Solid  
Analysis Batch: 34948

Client Sample ID: Lab Control Sample Dup  
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	250.1		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-2965-5 MS  
Matrix: Solid  
Analysis Batch: 34948

Client Sample ID: BH02  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2110		1250	3412		mg/Kg		104	90 - 110

Lab Sample ID: 890-2965-5 MSD  
Matrix: Solid  
Analysis Batch: 34948

Client Sample ID: BH02  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2110		1250	3406		mg/Kg		104	90 - 110	0	20

# QC Association Summary

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

## GC VOA

### Prep Batch: 35199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2965-1	BH01	Total/NA	Solid	5035	
890-2965-2	BH01	Total/NA	Solid	5035	
890-2965-3	BH02	Total/NA	Solid	5035	
890-2965-4	BH02	Total/NA	Solid	5035	
890-2965-5	BH02	Total/NA	Solid	5035	
890-2965-6	BH02	Total/NA	Solid	5035	
890-2965-7	BH03	Total/NA	Solid	5035	
890-2965-8	BH03	Total/NA	Solid	5035	
890-2965-9	BH04	Total/NA	Solid	5035	
890-2965-10	BH04	Total/NA	Solid	5035	
MB 880-35199/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35199/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 880-35199/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2965-1 MS	BH01	Total/NA	Solid	5035	
890-2965-1 MSD	BH01	Total/NA	Solid	5035	

### Analysis Batch: 35329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2965-1	BH01	Total/NA	Solid	8021B	35199
890-2965-2	BH01	Total/NA	Solid	8021B	35199
890-2965-3	BH02	Total/NA	Solid	8021B	35199
890-2965-4	BH02	Total/NA	Solid	8021B	35199
890-2965-5	BH02	Total/NA	Solid	8021B	35199
890-2965-6	BH02	Total/NA	Solid	8021B	35199
890-2965-7	BH03	Total/NA	Solid	8021B	35199
890-2965-8	BH03	Total/NA	Solid	8021B	35199
890-2965-9	BH04	Total/NA	Solid	8021B	35199
890-2965-10	BH04	Total/NA	Solid	8021B	35199
MB 880-35199/5-A	Method Blank	Total/NA	Solid	8021B	35199
LCS 880-35199/1-A	Lab Control Sample	Total/NA	Solid	8021B	35199
LCS 880-35199/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35199
890-2965-1 MS	BH01	Total/NA	Solid	8021B	35199
890-2965-1 MSD	BH01	Total/NA	Solid	8021B	35199

### Analysis Batch: 35433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2965-1	BH01	Total/NA	Solid	Total BTEX	
890-2965-2	BH01	Total/NA	Solid	Total BTEX	
890-2965-3	BH02	Total/NA	Solid	Total BTEX	
890-2965-4	BH02	Total/NA	Solid	Total BTEX	
890-2965-5	BH02	Total/NA	Solid	Total BTEX	
890-2965-6	BH02	Total/NA	Solid	Total BTEX	
890-2965-7	BH03	Total/NA	Solid	Total BTEX	
890-2965-8	BH03	Total/NA	Solid	Total BTEX	
890-2965-9	BH04	Total/NA	Solid	Total BTEX	
890-2965-10	BH04	Total/NA	Solid	Total BTEX	

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### QC Association Summary

Client: Ensolum  
 Project/Site: UCBH WW 3

Job ID: 890-2965-1  
 SDG: Rural Eddy NM

#### GC Semi VOA

##### Prep Batch: 34681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2965-1	BH01	Total/NA	Solid	8015NM Prep	
890-2965-2	BH01	Total/NA	Solid	8015NM Prep	
890-2965-3	BH02	Total/NA	Solid	8015NM Prep	
890-2965-4	BH02	Total/NA	Solid	8015NM Prep	
890-2965-5	BH02	Total/NA	Solid	8015NM Prep	
890-2965-6	BH02	Total/NA	Solid	8015NM Prep	
890-2965-7	BH03	Total/NA	Solid	8015NM Prep	
890-2965-8	BH03	Total/NA	Solid	8015NM Prep	
890-2965-9	BH04	Total/NA	Solid	8015NM Prep	
890-2965-10	BH04	Total/NA	Solid	8015NM Prep	
MB 880-34681/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34681/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCS 880-34681/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2965-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-2965-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

##### Analysis Batch: 34714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2965-1	BH01	Total/NA	Solid	8015B NM	34681
890-2965-2	BH01	Total/NA	Solid	8015B NM	34681
890-2965-3	BH02	Total/NA	Solid	8015B NM	34681
890-2965-4	BH02	Total/NA	Solid	8015B NM	34681
890-2965-5	BH02	Total/NA	Solid	8015B NM	34681
890-2965-6	BH02	Total/NA	Solid	8015B NM	34681
890-2965-7	BH03	Total/NA	Solid	8015B NM	34681
890-2965-8	BH03	Total/NA	Solid	8015B NM	34681
890-2965-9	BH04	Total/NA	Solid	8015B NM	34681
890-2965-10	BH04	Total/NA	Solid	8015B NM	34681
MB 880-34681/1-A	Method Blank	Total/NA	Solid	8015B NM	34681
LCS 880-34681/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34681
LCS 880-34681/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34681
890-2965-1 MS	BH01	Total/NA	Solid	8015B NM	34681
890-2965-1 MSD	BH01	Total/NA	Solid	8015B NM	34681

##### Analysis Batch: 34867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2965-1	BH01	Total/NA	Solid	8015 NM	
890-2965-2	BH01	Total/NA	Solid	8015 NM	
890-2965-3	BH02	Total/NA	Solid	8015 NM	
890-2965-4	BH02	Total/NA	Solid	8015 NM	
890-2965-5	BH02	Total/NA	Solid	8015 NM	
890-2965-6	BH02	Total/NA	Solid	8015 NM	
890-2965-7	BH03	Total/NA	Solid	8015 NM	
890-2965-8	BH03	Total/NA	Solid	8015 NM	
890-2965-9	BH04	Total/NA	Solid	8015 NM	
890-2965-10	BH04	Total/NA	Solid	8015 NM	

### QC Association Summary

Client: Ensolum  
 Project/Site: UCBH WW 3

Job ID: 890-2965-1  
 SDG: Rural Eddy NM

#### HPLC/IC

##### Leach Batch: 34663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2965-1	BH01	Soluble	Solid	DI Leach	
890-2965-2	BH01	Soluble	Solid	DI Leach	
890-2965-3	BH02	Soluble	Solid	DI Leach	
890-2965-4	BH02	Soluble	Solid	DI Leach	
890-2965-5	BH02	Soluble	Solid	DI Leach	
890-2965-6	BH02	Soluble	Solid	DI Leach	
890-2965-7	BH03	Soluble	Solid	DI Leach	
890-2965-8	BH03	Soluble	Solid	DI Leach	
890-2965-9	BH04	Soluble	Solid	DI Leach	
890-2965-10	BH04	Soluble	Solid	DI Leach	
MB 880-34663/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34663/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34663/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2965-5 MS	BH02	Soluble	Solid	DI Leach	
890-2965-5 MSD	BH02	Soluble	Solid	DI Leach	

##### Analysis Batch: 34948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2965-1	BH01	Soluble	Solid	300.0	34663
890-2965-2	BH01	Soluble	Solid	300.0	34663
890-2965-3	BH02	Soluble	Solid	300.0	34663
890-2965-4	BH02	Soluble	Solid	300.0	34663
890-2965-5	BH02	Soluble	Solid	300.0	34663
890-2965-6	BH02	Soluble	Solid	300.0	34663
890-2965-7	BH03	Soluble	Solid	300.0	34663
890-2965-8	BH03	Soluble	Solid	300.0	34663
890-2965-9	BH04	Soluble	Solid	300.0	34663
890-2965-10	BH04	Soluble	Solid	300.0	34663
MB 880-34663/1-A	Method Blank	Soluble	Solid	300.0	34663
LCS 880-34663/2-A	Lab Control Sample	Soluble	Solid	300.0	34663
LCSD 880-34663/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34663
890-2965-5 MS	BH02	Soluble	Solid	300.0	34663
890-2965-5 MSD	BH02	Soluble	Solid	300.0	34663

### Lab Chronicle

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

**Client Sample ID: BH01**  
**Date Collected: 09/14/22 10:00**  
**Date Received: 09/14/22 16:34**

**Lab Sample ID: 890-2965-1**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	35199	09/22/22 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 16:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35433	09/26/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			34867	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/18/22 21:34	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/20/22 22:56	CH	EET MID

**Client Sample ID: BH01**  
**Date Collected: 09/14/22 10:10**  
**Date Received: 09/14/22 16:34**

**Lab Sample ID: 890-2965-2**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35199	09/22/22 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 16:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35433	09/26/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			34867	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/18/22 22:36	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/20/22 23:01	CH	EET MID

**Client Sample ID: BH02**  
**Date Collected: 09/14/22 10:20**  
**Date Received: 09/14/22 16:34**

**Lab Sample ID: 890-2965-3**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35199	09/22/22 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 16:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35433	09/26/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			34867	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/18/22 22:56	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/20/22 23:06	CH	EET MID

**Client Sample ID: BH02**  
**Date Collected: 09/14/22 10:30**  
**Date Received: 09/14/22 16:34**

**Lab Sample ID: 890-2965-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35199	09/22/22 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 17:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35433	09/26/22 15:58	SM	EET MID

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### Lab Chronicle

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

**Client Sample ID: BH02**

**Lab Sample ID: 890-2965-4**

**Date Collected: 09/14/22 10:30**

**Matrix: Solid**

**Date Received: 09/14/22 16:34**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34867	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/18/22 23:16	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		5			34948	09/20/22 23:11	CH	EET MID

**Client Sample ID: BH02**

**Lab Sample ID: 890-2965-5**

**Date Collected: 09/14/22 10:40**

**Matrix: Solid**

**Date Received: 09/14/22 16:34**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35199	09/22/22 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 17:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35433	09/26/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			34867	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/18/22 23:36	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		5			34948	09/20/22 23:15	CH	EET MID

**Client Sample ID: BH02**

**Lab Sample ID: 890-2965-6**

**Date Collected: 09/14/22 10:50**

**Matrix: Solid**

**Date Received: 09/14/22 16:34**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35199	09/22/22 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 17:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35433	09/26/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			34867	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/18/22 23:56	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/20/22 23:30	CH	EET MID

**Client Sample ID: BH03**

**Lab Sample ID: 890-2965-7**

**Date Collected: 09/14/22 11:00**

**Matrix: Solid**

**Date Received: 09/14/22 16:34**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35199	09/22/22 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 18:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35433	09/26/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			34867	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 00:16	SM	EET MID

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### Lab Chronicle

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

**Client Sample ID: BH03**  
**Date Collected: 09/14/22 11:00**  
**Date Received: 09/14/22 16:34**

**Lab Sample ID: 890-2965-7**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/20/22 23:35	CH	EET MID

**Client Sample ID: BH03**  
**Date Collected: 09/14/22 11:10**  
**Date Received: 09/14/22 16:34**

**Lab Sample ID: 890-2965-8**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35199	09/22/22 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 18:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35433	09/26/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			34867	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 00:36	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/20/22 23:49	CH	EET MID

**Client Sample ID: BH04**  
**Date Collected: 09/14/22 11:20**  
**Date Received: 09/14/22 16:34**

**Lab Sample ID: 890-2965-9**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35199	09/22/22 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 18:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35433	09/26/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			34867	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 00:56	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		5			34948	09/20/22 23:54	CH	EET MID

**Client Sample ID: BH04**  
**Date Collected: 09/14/22 11:30**  
**Date Received: 09/14/22 16:34**

**Lab Sample ID: 890-2965-10**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35199	09/22/22 15:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 19:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35433	09/26/22 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			34867	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 01:16	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/20/22 23:59	CH	EET MID

Eurofins Carlsbad

# Lab Chronicle

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

**Laboratory References:**

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

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# Accreditation/Certification Summary

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

## Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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## Method Summary

Client: Ensolum  
 Project/Site: UCBH WW 3

Job ID: 890-2965-1  
 SDG: Rural Eddy NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

**Protocol References:**

- ASTM = ASTM International
- MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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



# Sample Summary

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2965-1  
SDG: Rural Eddy NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2965-1	BH01	Solid	09/14/22 10:00	09/14/22 16:34	0.5'
890-2965-2	BH01	Solid	09/14/22 10:10	09/14/22 16:34	4'
890-2965-3	BH02	Solid	09/14/22 10:20	09/14/22 16:34	0.5'
890-2965-4	BH02	Solid	09/14/22 10:30	09/14/22 16:34	2'
890-2965-5	BH02	Solid	09/14/22 10:40	09/14/22 16:34	6'
890-2965-6	BH02	Solid	09/14/22 10:50	09/14/22 16:34	8'
890-2965-7	BH03	Solid	09/14/22 11:00	09/14/22 16:34	0.5'
890-2965-8	BH03	Solid	09/14/22 11:10	09/14/22 16:34	1'
890-2965-9	BH04	Solid	09/14/22 11:20	09/14/22 16:34	0.5'
890-2965-10	BH04	Solid	09/14/22 11:30	09/14/22 16:34	4'

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### Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 802-0300  
 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
 El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 986-3199

Work Order No: \_\_\_\_\_

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Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	Ensoium	Company Name:	WPX
Address:	3122 National Parks HWY	Address:	5315 Buena Vista Dr.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	jhernandez@Ensoium.com, jim.raley@dvn.com

**Work Order Comments**

Program:  UST/PST  PRP  Brownfields  RRC  Superfund

State of Project: \_\_\_\_\_

Reporting: Level II  Level III  PST/UST  TRRP  Level IV

Deliverables: EDD  ADAPT  Other: \_\_\_\_\_

Project Name:	UCBH WW 3	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Prs. Code	
Project Number:	03A1987009	Due Date:	5 Day TAT		
Project Location:	Rural Eddy, NM	TAT starts the day received by the lab. If received by 4:30pm			
Sampler's Name:	Gilbert Moreno	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
CC #:	9030007583	Thermometer ID:	TNA-80	Correction Factor:	-0.5
<b>SAMPLE RECEIPT</b>		Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:	TNA-80	Correction Factor:	-0.5
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading:	5.0	Corrected Temperature:	4.8
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Corrected Temperature:	4.8		
Total Containers:					



Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST	Preservative Codes	Sample Comments
BH01	S	9.14.22	10:00	0.5'	Grab/	1	CHLORIDES (EPA: 300.0)	None: NO	DI Water: H <sub>2</sub> O
BH01	S	9.14.22	10:10	4'	Grab/	1	TPH (8015)	Cool: Cool	MeOH: Me
BH02	S	9.14.22	10:20	0.5'	Grab/	1	BTEX (8021)	HCL: HC	HNO <sub>3</sub> : HN
BH02	S	9.14.22	10:30	2'	Grab/	1		H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	NaOH: Na
BH02	S	9.14.22	10:40	6'	Grab/	1		H <sub>3</sub> PO <sub>4</sub> : HP	
BH02	S	9.14.22	10:50	8'	Grab/	1		NaHSO <sub>4</sub> : NABIS	
BH03	S	9.14.22	11:00	0.5'	Grab/	1		Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub> : NaSO <sub>3</sub>	
BH03	S	9.14.22	11:10	1'	Grab/	1		Zn Acetate+NaOH: Zn	
BH04	S	9.14.22	11:20	0.5'	Grab/	1		NaOH-Ascorbic Acid: SASC	
BH04	S	9.14.22	11:30	4'	Grab/	1			

**Total 200.7 / 6010 200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed: TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631/245, 1/7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco, a minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins 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
<i>[Signature]</i>	<i>[Signature]</i>	9/14/22 16:34			

### Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2965-1  
SDG Number: Rural Eddy NM

**Login Number: 2965**  
**List Number: 1**  
**Creator: Stutzman, Amanda**

**List Source: Eurofins Carlsbad**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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### Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2965-1  
SDG Number: Rural Eddy NM

**Login Number: 2965**  
**List Number: 2**  
**Creator: Rodriguez, Leticia**

**List Source: Eurofins Midland**  
**List Creation: 09/16/22 11:00 AM**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Environment Testing  
America

## ANALYTICAL REPORT

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

Laboratory Job ID: 890-2966-1  
Laboratory Sample Delivery Group: Rural Eddy NM  
Client Project/Site: UCBH WW 3

For:  
Ensolum  
705 W. Wadley  
Suite 210  
Midland, Texas 79701

Attn: Devon Team

Authorized for release by:  
9/26/2022 3:34:06 PM

Jessica Kramer, Project Manager  
(432)704-5440  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Client: Ensolum  
Project/Site: UCBH WW 3

Laboratory Job ID: 890-2966-1  
SDG: Rural Eddy NM

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## Definitions/Glossary

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

### Case Narrative

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

**Job ID: 890-2966-1**

**Laboratory: Eurofins Carlsbad**

**Narrative**

**Job Narrative  
890-2966-1**

**Receipt**

The samples were received on 9/14/2022 4:34 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.8°C

**GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-2953-A-61-E MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35198 and analytical batch 880-35227 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34681 and analytical batch 880-34714 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-34668 and analytical batch 880-34975 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.



### Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

**Client Sample ID: BH05**

**Lab Sample ID: 890-2966-1**

Date Collected: 09/14/22 11:40

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 0.5'

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:35	09/24/22 02:59	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:35	09/24/22 02:59	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:35	09/24/22 02:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/22 15:35	09/24/22 02:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:35	09/24/22 02:59	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/22 15:35	09/24/22 02:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	09/22/22 15:35	09/24/22 02:59	1
1,4-Difluorobenzene (Surr)	87		70 - 130	09/22/22 15:35	09/24/22 02:59	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/26/22 16:09	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 15:34	1

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 01:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 01:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/16/22 13:56	09/19/22 01:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130	09/16/22 13:56	09/19/22 01:56	1
o-Terphenyl	85		70 - 130	09/16/22 13:56	09/19/22 01:56	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.9		4.97		mg/Kg			09/21/22 10:01	1

**Client Sample ID: BH05**

**Lab Sample ID: 890-2966-2**

Date Collected: 09/14/22 11:50

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 1'

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:35	09/24/22 03:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:35	09/24/22 03:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:35	09/24/22 03:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/22/22 15:35	09/24/22 03:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:35	09/24/22 03:19	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/22/22 15:35	09/24/22 03:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/22/22 15:35	09/24/22 03:19	1

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### Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

**Client Sample ID: BH05**

**Lab Sample ID: 890-2966-2**

Date Collected: 09/14/22 11:50

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 1'

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	86		70 - 130	09/22/22 15:35	09/24/22 03:19	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/26/22 16:09	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 02:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 02:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 02:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	09/16/22 13:56	09/19/22 02:16	1
o-Terphenyl	85		70 - 130	09/16/22 13:56	09/19/22 02:16	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.1		4.99		mg/Kg			09/21/22 00:05	1

**Client Sample ID: BH06**

**Lab Sample ID: 890-2966-3**

Date Collected: 09/14/22 12:00

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 0.5'

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 03:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 03:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 03:40	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/22/22 15:35	09/24/22 03:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 03:40	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/22/22 15:35	09/24/22 03:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/22/22 15:35	09/24/22 03:40	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/22 15:35	09/24/22 03:40	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/26/22 16:09	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

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### Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

**Client Sample ID: BH06**

**Lab Sample ID: 890-2966-3**

Date Collected: 09/14/22 12:00

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 0.5'

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 02:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 02:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 02:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130	09/16/22 13:56	09/19/22 02:36	1
o-Terphenyl	85		70 - 130	09/16/22 13:56	09/19/22 02:36	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.3		5.00		mg/Kg			09/21/22 00:10	1

**Client Sample ID: BH06**

**Lab Sample ID: 890-2966-4**

Date Collected: 09/14/22 12:10

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 1'

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 04:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 04:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 04:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/22 15:35	09/24/22 04:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 04:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/22 15:35	09/24/22 04:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	09/22/22 15:35	09/24/22 04:00	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/22/22 15:35	09/24/22 04:00	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/26/22 16:09	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 02:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 02:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 02:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130	09/16/22 13:56	09/19/22 02:56	1
o-Terphenyl	83		70 - 130	09/16/22 13:56	09/19/22 02:56	1

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### Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

**Client Sample ID: BH06**

**Lab Sample ID: 890-2966-4**

Date Collected: 09/14/22 12:10

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 1'

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.8		5.01		mg/Kg			09/21/22 00:15	1

**Client Sample ID: BH07**

**Lab Sample ID: 890-2966-5**

Date Collected: 09/14/22 12:20

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 0.5'

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/22/22 15:35	09/24/22 04:21	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/22/22 15:35	09/24/22 04:21	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/22/22 15:35	09/24/22 04:21	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/22/22 15:35	09/24/22 04:21	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/22/22 15:35	09/24/22 04:21	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/22/22 15:35	09/24/22 04:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	115		70 - 130				09/22/22 15:35	09/24/22 04:21	1
1,4-Difluorobenzene (Surr)	85		70 - 130				09/22/22 15:35	09/24/22 04:21	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/26/22 16:09	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 03:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 03:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 03:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	94		70 - 130				09/16/22 13:56	09/19/22 03:16	1
o-Terphenyl	99		70 - 130				09/16/22 13:56	09/19/22 03:16	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	117		4.96		mg/Kg			09/21/22 13:39	1

### Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

**Client Sample ID: BH07**

**Lab Sample ID: 890-2966-6**

Date Collected: 09/14/22 12:30

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 1'

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 04:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 04:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 04:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/22/22 15:35	09/24/22 04:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 04:41	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/22/22 15:35	09/24/22 04:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/22/22 15:35	09/24/22 04:41	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/22/22 15:35	09/24/22 04:41	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/26/22 16:09	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 03:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 03:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 03:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	09/16/22 13:56	09/19/22 03:36	1
o-Terphenyl	101		70 - 130	09/16/22 13:56	09/19/22 03:36	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.9		5.05		mg/Kg			09/21/22 10:47	1

**Client Sample ID: BH08**

**Lab Sample ID: 890-2966-7**

Date Collected: 09/14/22 12:40

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 0.5'

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 05:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 05:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 05:02	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/22 15:35	09/24/22 05:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 05:02	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/22 15:35	09/24/22 05:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	09/22/22 15:35	09/24/22 05:02	1

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### Client Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

**Client Sample ID: BH08**

**Lab Sample ID: 890-2966-7**

Date Collected: 09/14/22 12:40

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 0.5'

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	91		70 - 130	09/22/22 15:35	09/24/22 05:02	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/26/22 16:09	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 03:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 03:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 03:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	09/16/22 13:56	09/19/22 03:56	1
o-Terphenyl	84		70 - 130	09/16/22 13:56	09/19/22 03:56	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.5		4.98		mg/Kg			09/21/22 10:53	1

**Client Sample ID: BH08**

**Lab Sample ID: 890-2966-8**

Date Collected: 09/14/22 12:50

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 1'

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 05:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 05:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 05:22	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/22/22 15:35	09/24/22 05:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/24/22 05:22	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/22/22 15:35	09/24/22 05:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/22/22 15:35	09/24/22 05:22	1
1,4-Difluorobenzene (Surr)	74		70 - 130	09/22/22 15:35	09/24/22 05:22	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/26/22 16:09	1

**Method: 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 15:34	1

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### Client Sample Results

Client: Ensolum  
 Project/Site: UCBH WW 3

Job ID: 890-2966-1  
 SDG: Rural Eddy NM

**Client Sample ID: BH08**

**Lab Sample ID: 890-2966-8**

Date Collected: 09/14/22 12:50

Matrix: Solid

Date Received: 09/14/22 16:34

Sample Depth: 1'

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 04:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 04:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/19/22 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130	09/16/22 13:56	09/19/22 04:16	1
o-Terphenyl	84		70 - 130	09/16/22 13:56	09/19/22 04:16	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.1		5.00		mg/Kg			09/21/22 11:00	1

### Surrogate Summary

Client: Ensolum  
 Project/Site: UCBH WW 3

Job ID: 890-2966-1  
 SDG: Rural Eddy NM

**Method: 8021B - Volatile Organic Compounds (GC)**

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2953-A-61-E MS	Matrix Spike	134 S1+	88
890-2953-A-61-F MSD	Matrix Spike Duplicate	122	107
890-2966-1	BH05	114	87
890-2966-2	BH05	113	86
890-2966-3	BH06	104	78
890-2966-4	BH06	118	89
890-2966-5	BH07	115	85
890-2966-6	BH07	113	86
890-2966-7	BH08	119	91
890-2966-8	BH08	109	74
LCS 880-35198/1-A	Lab Control Sample	120	109
LCSD 880-35198/2-A	Lab Control Sample Dup	117	107
MB 880-35106/5-A	Method Blank	100	82
MB 880-35198/5-A	Method Blank	98	78

**Surrogate Legend**  
 BFB = 4-Bromofluorobenzene (Surr)  
 DFBZ = 1,4-Difluorobenzene (Surr)

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)**

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2965-A-1-C MS	Matrix Spike	81	76
890-2965-A-1-D MSD	Matrix Spike Duplicate	86	80
890-2966-1	BH05	81	85
890-2966-2	BH05	82	85
890-2966-3	BH06	81	85
890-2966-4	BH06	81	83
890-2966-5	BH07	94	99
890-2966-6	BH07	94	101
890-2966-7	BH08	82	84
890-2966-8	BH08	80	84
LCS 880-34681/2-A	Lab Control Sample	85	92
LCSD 880-34681/3-A	Lab Control Sample Dup	86	96
MB 880-34681/1-A	Method Blank	116	119

**Surrogate Legend**  
 1CO = 1-Chlorooctane  
 OTPH = o-Terphenyl

### QC Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

#### Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35106/5-A  
Matrix: Solid  
Analysis Batch: 35227

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 35106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:42	09/23/22 10:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:42	09/23/22 10:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:42	09/23/22 10:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/21/22 15:42	09/23/22 10:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:42	09/23/22 10:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/21/22 15:42	09/23/22 10:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/21/22 15:42	09/23/22 10:54	1
1,4-Difluorobenzene (Surr)	82		70 - 130	09/21/22 15:42	09/23/22 10:54	1

Lab Sample ID: MB 880-35198/5-A  
Matrix: Solid  
Analysis Batch: 35227

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 35198

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/23/22 21:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/23/22 21:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/23/22 21:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/22/22 15:35	09/23/22 21:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:35	09/23/22 21:29	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/22/22 15:35	09/23/22 21:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/22/22 15:35	09/23/22 21:29	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/22 15:35	09/23/22 21:29	1

Lab Sample ID: LCS 880-35198/1-A  
Matrix: Solid  
Analysis Batch: 35227

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 35198

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09191		mg/Kg		92	70 - 130
Toluene	0.100	0.08545		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.09090		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1922		mg/Kg		96	70 - 130
o-Xylene	0.100	0.1086		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-35198/2-A  
Matrix: Solid  
Analysis Batch: 35227

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 35198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08728		mg/Kg		87	70 - 130	5	35

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### QC Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-35198/2-A  
Matrix: Solid  
Analysis Batch: 35227

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 35198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Toluene	0.100	0.08104		mg/Kg		81	70 - 130	5	35	
Ethylbenzene	0.100	0.08609		mg/Kg		86	70 - 130	5	35	
m-Xylene & p-Xylene	0.200	0.1778		mg/Kg		89	70 - 130	8	35	
o-Xylene	0.100	0.1069		mg/Kg		107	70 - 130	2	35	
		<b>LCSD</b>	<b>LCSD</b>							
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>							
4-Bromofluorobenzene (Surr)	117		70 - 130							
1,4-Difluorobenzene (Surr)	107		70 - 130							

Lab Sample ID: 890-2953-A-61-E MS  
Matrix: Solid  
Analysis Batch: 35227

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 35198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
Benzene	<0.00201	U F2 F1	0.100	0.03739	F1	mg/Kg		37	70 - 130			
Toluene	<0.00201	U F2 F1	0.100	0.04389	F1	mg/Kg		44	70 - 130			
Ethylbenzene	<0.00201	U F2 F1	0.100	0.05197	F1	mg/Kg		52	70 - 130			
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.201	0.09854	F1	mg/Kg		49	70 - 130			
o-Xylene	<0.00201	U F2 F1	0.100	0.05897	F1	mg/Kg		59	70 - 130			
		<b>MS</b>	<b>MS</b>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>									
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130									
1,4-Difluorobenzene (Surr)	88		70 - 130									

Lab Sample ID: 890-2953-A-61-F MSD  
Matrix: Solid  
Analysis Batch: 35227

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 35198

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
Benzene	<0.00201	U F2 F1	0.0990	0.06926	F2	mg/Kg		70	70 - 130	60	35	
Toluene	<0.00201	U F2 F1	0.0990	0.06230	F1	mg/Kg		63	70 - 130	35	35	
Ethylbenzene	<0.00201	U F2 F1	0.0990	0.06203	F1	mg/Kg		63	70 - 130	18	35	
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.198	0.1235	F1	mg/Kg		62	70 - 130	22	35	
o-Xylene	<0.00201	U F2 F1	0.0990	0.07774		mg/Kg		79	70 - 130	27	35	
		<b>MSD</b>	<b>MSD</b>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>									
4-Bromofluorobenzene (Surr)	122		70 - 130									
1,4-Difluorobenzene (Surr)	107		70 - 130									

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-34681/1-A  
Matrix: Solid  
Analysis Batch: 34714

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 34681

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 20:31	1

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### QC Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-34681/1-A  
Matrix: Solid  
Analysis Batch: 34714

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 34681

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 20:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/22 13:56	09/18/22 20:31	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
1-Chlorooctane	116		70 - 130	09/16/22 13:56	09/18/22 20:31	1			
o-Terphenyl	119		70 - 130	09/16/22 13:56	09/18/22 20:31	1			

Lab Sample ID: LCS 880-34681/2-A  
Matrix: Solid  
Analysis Batch: 34714

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 34681

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics (Over C10-C28)	1000	836.1		mg/Kg		84	70 - 130
Surrogate	LCS	LCS	Limits				
	%Recovery	Qualifier					
1-Chlorooctane	85		70 - 130				
o-Terphenyl	92		70 - 130				

Lab Sample ID: LCSD 880-34681/3-A  
Matrix: Solid  
Analysis Batch: 34714

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 34681

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	893.4		mg/Kg		89	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	813.5		mg/Kg		81	70 - 130	3	20
Surrogate	LCSD	LCSD	Limits						
	%Recovery	Qualifier							
1-Chlorooctane	86		70 - 130						
o-Terphenyl	96		70 - 130						

Lab Sample ID: 890-2965-A-1-C MS  
Matrix: Solid  
Analysis Batch: 34714

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 34681

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1291		mg/Kg		126	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	996	664.2	F1	mg/Kg		67	70 - 130
Surrogate	MS	MS	Limits						
	%Recovery	Qualifier							
1-Chlorooctane	81		70 - 130						
o-Terphenyl	76		70 - 130						

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### QC Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-2965-A-1-D MSD  
Matrix: Solid  
Analysis Batch: 34714

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 34681

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1261		mg/Kg		123	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	717.2		mg/Kg		72	70 - 130	8	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>MSD</b>	<b>Limits</b>							
1-Chlorooctane	86			70 - 130							
o-Terphenyl	80			70 - 130							

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34663/1-A  
Matrix: Solid  
Analysis Batch: 34948

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/20/22 21:53	1

Lab Sample ID: LCS 880-34663/2-A  
Matrix: Solid  
Analysis Batch: 34948

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	249.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-34663/3-A  
Matrix: Solid  
Analysis Batch: 34948

Client Sample ID: Lab Control Sample Dup  
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	250.1		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-2964-A-1-B MS  
Matrix: Solid  
Analysis Batch: 34948

Client Sample ID: Matrix Spike  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	257		250	497.5		mg/Kg		96	90 - 110

Lab Sample ID: 890-2964-A-1-C MSD  
Matrix: Solid  
Analysis Batch: 34948

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	257		250	497.5		mg/Kg		96	90 - 110	0	20

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### QC Sample Results

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

#### Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-34668/1-A  
Matrix: Solid  
Analysis Batch: 34975

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/21/22 09:26	1

Lab Sample ID: LCS 880-34668/2-A  
Matrix: Solid  
Analysis Batch: 34975

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.2		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-34668/3-A  
Matrix: Solid  
Analysis Batch: 34975

Client Sample ID: Lab Control Sample Dup  
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	252.9		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-2967-A-3-B MS  
Matrix: Solid  
Analysis Batch: 34975

Client Sample ID: Matrix Spike  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	411	F1	250	639.6		mg/Kg		91	90 - 110

Lab Sample ID: 890-2967-A-3-C MSD  
Matrix: Solid  
Analysis Batch: 34975

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	411	F1	250	718.2	F1	mg/Kg		123	90 - 110	12	20

### QC Association Summary

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

#### GC VOA

##### Prep Batch: 35106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35106/5-A	Method Blank	Total/NA	Solid	5035	

##### Prep Batch: 35198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-1	BH05	Total/NA	Solid	5035	
890-2966-2	BH05	Total/NA	Solid	5035	
890-2966-3	BH06	Total/NA	Solid	5035	
890-2966-4	BH06	Total/NA	Solid	5035	
890-2966-5	BH07	Total/NA	Solid	5035	
890-2966-6	BH07	Total/NA	Solid	5035	
890-2966-7	BH08	Total/NA	Solid	5035	
890-2966-8	BH08	Total/NA	Solid	5035	
MB 880-35198/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35198/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35198/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2953-A-61-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2953-A-61-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

##### Analysis Batch: 35227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-1	BH05	Total/NA	Solid	8021B	35198
890-2966-2	BH05	Total/NA	Solid	8021B	35198
890-2966-3	BH06	Total/NA	Solid	8021B	35198
890-2966-4	BH06	Total/NA	Solid	8021B	35198
890-2966-5	BH07	Total/NA	Solid	8021B	35198
890-2966-6	BH07	Total/NA	Solid	8021B	35198
890-2966-7	BH08	Total/NA	Solid	8021B	35198
890-2966-8	BH08	Total/NA	Solid	8021B	35198
MB 880-35106/5-A	Method Blank	Total/NA	Solid	8021B	35106
MB 880-35198/5-A	Method Blank	Total/NA	Solid	8021B	35198
LCS 880-35198/1-A	Lab Control Sample	Total/NA	Solid	8021B	35198
LCSD 880-35198/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35198
890-2953-A-61-E MS	Matrix Spike	Total/NA	Solid	8021B	35198
890-2953-A-61-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35198

##### Analysis Batch: 35443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-1	BH05	Total/NA	Solid	Total BTEX	
890-2966-2	BH05	Total/NA	Solid	Total BTEX	
890-2966-3	BH06	Total/NA	Solid	Total BTEX	
890-2966-4	BH06	Total/NA	Solid	Total BTEX	
890-2966-5	BH07	Total/NA	Solid	Total BTEX	
890-2966-6	BH07	Total/NA	Solid	Total BTEX	
890-2966-7	BH08	Total/NA	Solid	Total BTEX	
890-2966-8	BH08	Total/NA	Solid	Total BTEX	

#### GC Semi VOA

##### Prep Batch: 34681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-1	BH05	Total/NA	Solid	8015NM Prep	

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### QC Association Summary

Client: Ensolum  
 Project/Site: UCBH WW 3

Job ID: 890-2966-1  
 SDG: Rural Eddy NM

#### GC Semi VOA (Continued)

##### Prep Batch: 34681 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-2	BH05	Total/NA	Solid	8015NM Prep	
890-2966-3	BH06	Total/NA	Solid	8015NM Prep	
890-2966-4	BH06	Total/NA	Solid	8015NM Prep	
890-2966-5	BH07	Total/NA	Solid	8015NM Prep	
890-2966-6	BH07	Total/NA	Solid	8015NM Prep	
890-2966-7	BH08	Total/NA	Solid	8015NM Prep	
890-2966-8	BH08	Total/NA	Solid	8015NM Prep	
MB 880-34681/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34681/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34681/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2965-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2965-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

##### Analysis Batch: 34714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-1	BH05	Total/NA	Solid	8015B NM	34681
890-2966-2	BH05	Total/NA	Solid	8015B NM	34681
890-2966-3	BH06	Total/NA	Solid	8015B NM	34681
890-2966-4	BH06	Total/NA	Solid	8015B NM	34681
890-2966-5	BH07	Total/NA	Solid	8015B NM	34681
890-2966-6	BH07	Total/NA	Solid	8015B NM	34681
890-2966-7	BH08	Total/NA	Solid	8015B NM	34681
890-2966-8	BH08	Total/NA	Solid	8015B NM	34681
MB 880-34681/1-A	Method Blank	Total/NA	Solid	8015B NM	34681
LCS 880-34681/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34681
LCSD 880-34681/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34681
890-2965-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	34681
890-2965-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34681

##### Analysis Batch: 34868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-1	BH05	Total/NA	Solid	8015 NM	
890-2966-2	BH05	Total/NA	Solid	8015 NM	
890-2966-3	BH06	Total/NA	Solid	8015 NM	
890-2966-4	BH06	Total/NA	Solid	8015 NM	
890-2966-5	BH07	Total/NA	Solid	8015 NM	
890-2966-6	BH07	Total/NA	Solid	8015 NM	
890-2966-7	BH08	Total/NA	Solid	8015 NM	
890-2966-8	BH08	Total/NA	Solid	8015 NM	

#### HPLC/IC

##### Leach Batch: 34663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-1	BH05	Soluble	Solid	DI Leach	
890-2966-2	BH05	Soluble	Solid	DI Leach	
890-2966-3	BH06	Soluble	Solid	DI Leach	
890-2966-4	BH06	Soluble	Solid	DI Leach	
MB 880-34663/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34663/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34663/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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### QC Association Summary

Client: Ensolum  
 Project/Site: UCBH WW 3

Job ID: 890-2966-1  
 SDG: Rural Eddy NM

#### HPLC/IC (Continued)

##### Leach Batch: 34663 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2964-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2964-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

##### Leach Batch: 34668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-5	BH07	Soluble	Solid	DI Leach	
890-2966-6	BH07	Soluble	Solid	DI Leach	
890-2966-7	BH08	Soluble	Solid	DI Leach	
890-2966-8	BH08	Soluble	Solid	DI Leach	
MB 880-34668/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34668/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34668/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2967-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2967-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

##### Analysis Batch: 34948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-1	BH05	Soluble	Solid	300.0	34663
890-2966-2	BH05	Soluble	Solid	300.0	34663
890-2966-3	BH06	Soluble	Solid	300.0	34663
890-2966-4	BH06	Soluble	Solid	300.0	34663
MB 880-34663/1-A	Method Blank	Soluble	Solid	300.0	34663
LCS 880-34663/2-A	Lab Control Sample	Soluble	Solid	300.0	34663
LCSD 880-34663/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34663
890-2964-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	34663
890-2964-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34663

##### Analysis Batch: 34975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2966-5	BH07	Soluble	Solid	300.0	34668
890-2966-6	BH07	Soluble	Solid	300.0	34668
890-2966-7	BH08	Soluble	Solid	300.0	34668
890-2966-8	BH08	Soluble	Solid	300.0	34668
MB 880-34668/1-A	Method Blank	Soluble	Solid	300.0	34668
LCS 880-34668/2-A	Lab Control Sample	Soluble	Solid	300.0	34668
LCSD 880-34668/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34668
890-2967-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	34668
890-2967-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34668

### Lab Chronicle

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

**Client Sample ID: BH05**

**Lab Sample ID: 890-2966-1**

Date Collected: 09/14/22 11:40

Matrix: Solid

Date Received: 09/14/22 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35198	09/22/22 15:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35227	09/24/22 02:59	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35443	09/26/22 16:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			34868	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 01:56	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/21/22 10:01	CH	EET MID

**Client Sample ID: BH05**

**Lab Sample ID: 890-2966-2**

Date Collected: 09/14/22 11:50

Matrix: Solid

Date Received: 09/14/22 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35198	09/22/22 15:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35227	09/24/22 03:19	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35443	09/26/22 16:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			34868	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 02:16	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/21/22 00:05	CH	EET MID

**Client Sample ID: BH06**

**Lab Sample ID: 890-2966-3**

Date Collected: 09/14/22 12:00

Matrix: Solid

Date Received: 09/14/22 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35198	09/22/22 15:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35227	09/24/22 03:40	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35443	09/26/22 16:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			34868	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 02:36	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/21/22 00:10	CH	EET MID

**Client Sample ID: BH06**

**Lab Sample ID: 890-2966-4**

Date Collected: 09/14/22 12:10

Matrix: Solid

Date Received: 09/14/22 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35198	09/22/22 15:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35227	09/24/22 04:00	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35443	09/26/22 16:09	SM	EET MID

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### Lab Chronicle

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

**Client Sample ID: BH06**

**Lab Sample ID: 890-2966-4**

Date Collected: 09/14/22 12:10

Matrix: Solid

Date Received: 09/14/22 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34868	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 02:56	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34663	09/16/22 10:37	CH	EET MID
Soluble	Analysis	300.0		1			34948	09/21/22 00:15	CH	EET MID

**Client Sample ID: BH07**

**Lab Sample ID: 890-2966-5**

Date Collected: 09/14/22 12:20

Matrix: Solid

Date Received: 09/14/22 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35198	09/22/22 15:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35227	09/24/22 04:21	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35443	09/26/22 16:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			34868	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 03:16	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	34668	09/16/22 10:45	CH	EET MID
Soluble	Analysis	300.0		1			34975	09/21/22 13:39	CH	EET MID

**Client Sample ID: BH07**

**Lab Sample ID: 890-2966-6**

Date Collected: 09/14/22 12:30

Matrix: Solid

Date Received: 09/14/22 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35198	09/22/22 15:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35227	09/24/22 04:41	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35443	09/26/22 16:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			34868	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 03:36	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34668	09/16/22 10:45	CH	EET MID
Soluble	Analysis	300.0		1			34975	09/21/22 10:47	CH	EET MID

**Client Sample ID: BH08**

**Lab Sample ID: 890-2966-7**

Date Collected: 09/14/22 12:40

Matrix: Solid

Date Received: 09/14/22 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35198	09/22/22 15:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35227	09/24/22 05:02	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35443	09/26/22 16:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			34868	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 03:56	SM	EET MID

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### Lab Chronicle

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

**Client Sample ID: BH08**

**Lab Sample ID: 890-2966-7**

Date Collected: 09/14/22 12:40

Matrix: Solid

Date Received: 09/14/22 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	34668	09/16/22 10:45	CH	EET MID
Soluble	Analysis	300.0		1			34975	09/21/22 10:53	CH	EET MID

**Client Sample ID: BH08**

**Lab Sample ID: 890-2966-8**

Date Collected: 09/14/22 12:50

Matrix: Solid

Date Received: 09/14/22 16:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35198	09/22/22 15:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35227	09/24/22 05:22	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35443	09/26/22 16:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			34868	09/19/22 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34681	09/16/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34714	09/19/22 04:16	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34668	09/16/22 10:45	CH	EET MID
Soluble	Analysis	300.0		1			34975	09/21/22 11:00	CH	EET MID

**Laboratory References:**

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

### Accreditation/Certification Summary

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

#### Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

### Method Summary

Client: Ensolum  
 Project/Site: UCBH WW 3

Job ID: 890-2966-1  
 SDG: Rural Eddy NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

**Protocol References:**

- ASTM = ASTM International
- MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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



### Sample Summary

Client: Ensolum  
Project/Site: UCBH WW 3

Job ID: 890-2966-1  
SDG: Rural Eddy NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2966-1	BH05	Solid	09/14/22 11:40	09/14/22 16:34	0.5'
890-2966-2	BH05	Solid	09/14/22 11:50	09/14/22 16:34	1'
890-2966-3	BH06	Solid	09/14/22 12:00	09/14/22 16:34	0.5'
890-2966-4	BH06	Solid	09/14/22 12:10	09/14/22 16:34	1'
890-2966-5	BH07	Solid	09/14/22 12:20	09/14/22 16:34	0.5'
890-2966-6	BH07	Solid	09/14/22 12:30	09/14/22 16:34	1'
890-2966-7	BH08	Solid	09/14/22 12:40	09/14/22 16:34	0.5'
890-2966-8	BH08	Solid	09/14/22 12:50	09/14/22 16:34	1'

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Environment Testing  
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 502-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1286  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

### Chain of Custody

Work Order No: \_\_\_\_\_

www.xenco.com Page 1 of 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	Ensolum	Company Name:	WPIX
Address:	3122 National Parks HWY	Address:	6315 Buena Vista Dr.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	jhernandez@Ensolum.com, jim.raley@dvm.com

Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project: _____	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____



None: NO	DI Water: H <sub>2</sub> O
Cool: Cool	MeOH: Me
HCL: HC	HNO <sub>3</sub> : HN
H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	NaOH: Na
H <sub>3</sub> PO <sub>4</sub> : HP	
NaHSO <sub>4</sub> : NABIS	
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NASO <sub>3</sub>	
Zn Acetate+NaOH: Zn	
NaOH+Ascorbic Acid: SAPC	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST											Sample Comments
							Parameters											
BH05	S	9.14.22	11:40	0.5'	Grab/1	1	CHLORIDES (EPA: 300.0)											
BH05	S	9.14.22	11:50	1'	Grab/1	1	TPH (8015)											
BH06	S	9.14.22	12:00	0.5'	Grab/1	1	BTEX (8021)											
BH06	S	9.14.22	12:10	1'	Grab/1	1												Incident ID NAB1702454101
BH07	S	9.14.22	12:20	0.5'	Grab/1	1												
BH07	S	9.14.22	12:30	1'	Grab/1	1												
BH08	S	9.14.22	12:40	0.5'	Grab/1	1												
BH08	S	9.14.22	12:50	1'	Grab/1	1												

Total 200.7 / 6010    200.8 / 6020:    8RCRA 13PPM    Texas 11    Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed    TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U    Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins 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
<i>[Signature]</i>	<i>[Signature]</i>	9/14/20 16:34			

### Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2966-1  
 SDG Number: Rural Eddy NM  
 List Source: Eurofins Carlsbad

**Login Number: 2966**  
**List Number: 1**  
**Creator: Stutzman, Amanda**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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### Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2966-1  
SDG Number: Rural Eddy NM

**Login Number: 2966**  
**List Number: 2**  
**Creator: Rodriguez, Leticia**

**List Source: Eurofins Midland**  
**List Creation: 09/16/22 11:00 AM**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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# APPENDIX G

## NMOCD Correspondence

**Erick Herrera**

---

**From:** Joseph Hernandez  
**Sent:** Friday, November 11, 2022 12:13 PM  
**To:** Erick Herrera  
**Subject:** FW: WPX Site Sampling Activity Update (9/12-9/16/22)



**Joseph S. Hernandez**

Senior Geologist

281-702-2329

Ensolum, LLC



**PLEASE NOTE OUR NEW CORPORATE ADDRESS:**

Ensolum, LLC  
8330 LBJ Freeway, Ste. B830  
Dallas, TX 75243

---

**From:** Joseph Hernandez  
**Sent:** Friday, September 9, 2022 4:13 PM  
**To:** ocd.enviro@state.nm.us; 'CFO\_Spill, BLM\_NM' <BLM\_NM\_CFO\_Spill@blm.gov>  
**Cc:** Devon-Team <Devon-Team@ensolum.com>; Raley, Jim <Jim.Raley@dvn.com>; Anderson, Lacey <Lacey.Anderson@dvn.com>  
**Subject:** WPX Site Sampling Activity Update (9/12-9/16/22)

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between September 12 through September 16, 2022:

Site: RDX Federal 28 #011H  
API: 30-015-42109  
Incident Number: nAPP2215732821

Site: RDX 21-43  
API: 30-015-40997  
Incident Number: NAB1730640185

Site: UCBH WW 3  
API: 30-015-24451  
Incident Numbers: nAB1702454101

Site: RDX Federal 21 #044  
API: 30-015-41193  
Incident Number: nAPP2115533694

Site: EP USA 3  
API: 30-015-24249

Incident Number: nAB1622531873

Site: Yates Federal #001

API: 30-015-24602

Incident Number: NRM2011138650



**Joseph S. Hernandez**

Senior Geologist

281-702-2329

Ensolum, LLC

in f 

Incident ID:	nAB1702454101
District RP	
Facility ID	
Application ID	

## Remediation Plan

**Remediation Plan Checklist:** Each of the following items must be included in the plan.

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** Each of the following items must be confirmed as part of any request for deferral of remediation.

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Jim Raley Title: Environmental Professional  
 Signature:  Date: 5/23/2023  
 email: jim.raley@dvn.com Telephone: 575-689-7597

**OCD Only**

Received by: Jocelyn Harimon Date: 05/24/2023

- Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

Signature:  Date: 10/17/2023

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

CONDITIONS

Action 219790

**CONDITIONS**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 219790
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. This release is in a high karst area and will need to be remediated to the strictest closure criteria from Table 1 of the OCD Spill Rule. Due to the sensitive nature of the site, the variance to install a liner at 4 feet below ground surface is denied. Confirmation floor samples will need to be taken every 200 ft2. If an inadequate number of floor samples aren't taken, the report will be denied. The variance request for 500 ft2 confirmation sidewall samples is denied. Please collect confirmation sidewall samples, representing no more than 200 ft2. Sidewall/Edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. All sidewall samples should be taken from the sidewall of the excavation. Please make sure that the edge of the release extent is accurately defined. All off pad areas must meet reclamation standards set forth in the OCD Spill Rule.	10/17/2023

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

QUESTIONS

Action 326367

**QUESTIONS**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 326367
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAB1702454101
Incident Name	NAB1702454101 UCBH WW FEDERAL #003 @ 30-015-24451
Incident Type	Produced Water Release
Incident Status	Reclamation Report Received
Incident Well	[30-015-24451] UCBH WW FEDERAL #003

**Location of Release Source**

Please answer all the questions in this group.

Site Name	UCBH WW FEDERAL #003
Date Release Discovered	01/06/2017
Surface Owner	Federal

**Incident Details**

Please answer all the questions in this group.

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

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Cause: Equipment Failure   Well   Crude Oil   Released: 2 BBL   Recovered: 0 BBL   Lost: 2 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Well   Produced Water   Released: 3 BBL   Recovered: 0 BBL   Lost: 3 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 326367

**QUESTIONS (continued)**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 326367
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>More info needed to determine if this will be treated as a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>No</b>
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

*With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.*

**Initial Response**

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

The source of the release has been stopped	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>True</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dmv.com Date: 03/25/2024
--	--

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**Santa Fe, NM 87505**

QUESTIONS, Page 3

Action 326367

**QUESTIONS (continued)**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 326367
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

**Site Characterization**  
*Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 75 and 100 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 100 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 100 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

*Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	3910
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

*Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.*

On what estimated date will the remediation commence	12/18/2023
On what date will (or did) the final sampling or liner inspection occur	01/10/2024
On what date will (or was) the remediation complete(d)	01/10/2024
What is the estimated surface area (in square feet) that will be reclaimed	5402
What is the estimated volume (in cubic yards) that will be reclaimed	1204
What is the estimated surface area (in square feet) that will be remediated	5402
What is the estimated volume (in cubic yards) that will be remediated	1204

*These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.*

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

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QUESTIONS, Page 4

Action 326367

**QUESTIONS (continued)**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 326367
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

**Remediation Plan (continued)**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Yes
In which state is the disposal taking place	Texas
What is the name of the out-of-state facility	R360
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 03/25/2024
--	--

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

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Action 326367

**QUESTIONS (continued)**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 326367
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Deferral Requests Only</b>	
<i>Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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Action 326367

**QUESTIONS (continued)**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 326367
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>300863</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>01/10/2024</b>
What was the (estimated) number of samples that were to be gathered	<b>8</b>
What was the sampling surface area in square feet	<b>1600</b>

<b>Remediation Closure Request</b>	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	<b>Yes</b>
Have the lateral and vertical extents of contamination been fully delineated	<b>Yes</b>
Was this release entirely contained within a lined containment area	<b>No</b>
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	<b>Yes</b>
What was the total surface area (in square feet) remediated	<b>5402</b>
What was the total volume (cubic yards) remediated	<b>1204</b>
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	<b>Yes</b>
What was the total surface area (in square feet) reclaimed	<b>5402</b>
What was the total volume (in cubic yards) reclaimed	<b>1204</b>
Summarize any additional remediation activities not included by answers (above)	<b>Remediation area has been restored with clean backfill material and will be re-seeded with BLM Seed Mixture #2 following the appropriate BLM re-seeding guidelines for seed to sqft area ratio.</b>

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 03/25/2024
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Action 326367

**QUESTIONS (continued)**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 326367
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

**Reclamation Report**

*Only answer the questions in this group if all reclamation steps have been completed.*

Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	5402
What was the total volume of replacement material (in cubic yards) for this site	1204

*Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.*

Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeded commence(d)	04/20/2024

Summarize any additional reclamation activities not included by answers (above)	Remediation area has been restored with clean backfill material and will be re-seeded with BLM Seed Mixture #2 following the appropriate BLM re-seeding guidelines for seed to sqft area ratio.
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*The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeded plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 03/25/2024
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Action 326367

**QUESTIONS (continued)**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 326367
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Revegetation Report</b>	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS

Action 326367

**CONDITIONS**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 326367
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**CONDITIONS**

Created By	Condition	Condition Date
amaxwell	Reclamation approved.	4/11/2024
amaxwell	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	4/11/2024
amaxwell	OR Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	4/11/2024