Environmental & Safety Solutions, Inc.

SITE CHARACTERIZATION AND REMEDIATION PLAN ADDENDUM

Prepared For:

WPX Energy Permian, LLC

5315 Buena Vista Dr.

Carlsbad, NM 88220

Site Information:

Brushy Gathering Facility

Incident Number nAB1805133508

Unit M, Section 25, Township 26 South, Range 29 East

Eddy County, New Mexico

(32.00576, -103.94400)

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

SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Site Characterization and Remediation Plan Addendum (SCRPA) detailing recent delineation soil sampling activities associated with inadvertent release of produced water at the Brushy Gathering Facility (Site) (**Figure 1** in **Appendix A)**. Based on laboratory analytical results from soil sampling activities at the Site, WPX proposes this SCRPA detailing updated remediation objectives to rectify environmental impacts.

SITE LOCATION AND RELEASE BACKGROUND

On February 5, 2018, it was discovered that an above ground poly line failure resulted in approximately 10 barrels (bbls) of produced water to be released onto a Right-Of-Way (ROW). Vacuum trucks were immediately dispatched and recovered approximately 7 bbls of standing fluids and additional fluids from draining the compromised poly line, which was subsequently removed. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on February 19, 2018, and was assigned Incident Number nAB1805133508. The observed release extent is presented as the Area of Concern (AOC) on **Figure 2** in **Appendix A**. It should be noted that the release was reported on the Form C-141 to have occurred in 2016, however, email correspondence documents the correct year of the release occurrence as stated above.

In September of 2022, a third-party environmental contractor conducted delineation activities to confirm details of the release provided on the Form C-141 and to characterize the AOC by verifying the presence or absence of impacted soil. Six delineation boreholes (BH01 through BH06) were advanced via hand auger, which sufficiently assessed the lateral and vertical extents of the AOC. Etech prepared a Site Characterization and Remediation Plan (SCRP) which was submitted to the NMOCD on August 22, 2024, and approved with the following conditions:

- *"Remediation plan conditionally approved. Vertical delineation must be completed through excavation and confirmation sampling pursuant to 19.15.29.12 NMAC. Remediation confirmation samples must meet the most stringent remediation closure criteria found on Table I of 19.15.29 NMAC. Confirmation samples must be 5-point composite samples not representative of more than 200 square feet. This area is considered not reasonably needed for production operations or for subsequent drilling operations therefore, it must meet the requirements of 19.15.29.13 NMAC at the time of remediation. The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan. OCD will NOT approve the proposed schedule of completing remediation of this site concurrently with the proposed work associated with Incident Numbers nAB1501655607, nAB1504154780, nAB1522341642, nAB1621453181, nAB1633639499, nAPP2230032326, located due west of the site. The proposed workplans for the adjacent releases were denied. Submit a complete remediation closure report through the OCD Permitting website by 11/22/2024. A complete reclamation report can be submitted with the closure report or can be submitted after the closure report is approved."*

However, due to the age of the data, WPX conducted additional delineation within and around the AOC to reassess the conditions of the Site prior to advancing an excavation on a ROW adjacent to a highly trafficked location. Previous remediation summaries may be referenced in the approved SCRP, and the recent remediation activities are detailed in this SCRPA.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

As previously described in the SCRP, 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.

Receptor details and sources used to determine the site characterization are included in **Figure 1A**, **Figure 1B**, and **Figure 1C** in **Appendix A**. The referenced well record used for determining estimated groundwater depth at the Site is included in **Appendix B**.

Based on the results from the desktop review, specifically the designated karst potential at the Site and the proximity to a wetland feature, the following Closure Criteria was applied:

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria†
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 or EPA 8260B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B or EPA 8260B	50 mg/kg

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

DELINEATION SOIL SAMPLING ACTIVITIES

On November 19, 2024, Etech conducted additional delineation activities to reassess the AOC by verifying the presence or absence of residual impacted soil compared to the previous delineation soil sampling event. Nine delineation boreholes (BH01 through BH09) were advanced via hand auger within and around the AOC and were driven by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. A total of three soil samples were collected from each delineation soil sampling location, representing the highest observed field screening concentrations and the greatest depth. Field screening results and soil descriptions are included on soil sampling logs shown in **Appendix C**. The

locations of the delineation soil samples are shown in **Figure 2** in **Appendix A**. Photographic documentation of delineation activities is included in **Appendix D**.

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

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results indicated that concentrations of COCs for all delineation soil samples were below the applicable Site Closure Criteria, except soil samples collected from within the AOC (BH02 and BH04 through BH06) up to 1-foot bgs. Laboratory analytical results associated with chloride exceedances above the Closure Criteria ranged from 785 mg/kg to 3,760 mg/kg.

Laboratory analytical results are summarized in Table 1 in **Attachment E**, and the complete laboratory reports with chain-of-custody documentation is included in **Attachment F.**

PROPOSED REMEDIATION WORK PLAN AND SCHEDULE

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

- Identified chloride soil impacts with concentrations above the Closure Criteria exist within the top 1-foot throughout the AOC, except within proximity of BH01. As such, BH01 appears to be sufficient lateral delineation the eastern periphery of the AOC. Laboratory analytical results for COC concentrations for the remaining delineation soil samples are below the Site Closure Criteria, which sufficiently provides horizontal and vertical delineation of the AOC at the Site in conjunction with previous delineation presented in the SCRP.

Based on the conclusions drawn above, WPX proposes the following remedial corrective actions:

- Removal of impacted soil indicated by elevated chloride concentrations above the applicable Site Closure Criteria. The excavation will be advanced vertically and laterally until the applicable Site Closure Criteria is met. Based on current delineation soil sampling results, an estimated 148 cubic yards of impacted soil is anticipated to be removed from the Site in accordance with state and federal regulations.

- Following removal of soil impacts, 5-point composite confirmation soil samples will be collected from the excavation and analyzed by an accredited laboratory in accordance with NMAC 19.15.29.12.D. Excavated soil will then be transferred to an approved landfill facility for disposal.

    (1) If the excavation area is smaller than the AOC and laboratory analytical results of floor and sidewall excavation confirmation soil samples are compliant with the Site Closure Criteria, additional confirmation soil samples will be collected from the remaining surface area of the AOC. Soil samples will be collected and analyzed as previously described.

- Upon receipt of soil confirmation results indicating impacted soil has been removed, the excavation will be backfilled with clean, locally sourced soil and restored to “as close to its original state” as possible. A reclamation report will also be included in the Closure Request Report.

PROPOSED TIMELINE

Upon approval of this SCRPA, WPX proposed to initiate corrective actions within 90-days of the approval date. Since the AOC is location is situated on both a subsurface pipeline and powerline ROW, coordination efforts to initiate an excavation includes, but are not limited to:

- Removal of overhead power lines,
- Daylighting subsurface utilities, and
- Coordination and scheduling for utility representative for onsite activities.

LIMITATIONS

Etech has prepared this SCRPA to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents reference in the report and on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

Based on the proposed scope of work, WPX believes the proposed remedial actions will meet the requirements set forth in NMAC 19.15.29.13 regulations to be protective of human health, the environment and groundwater. If you have any questions or comments, please do not hesitate to contact Joseph Hernandez at (432) 305-6413 or joseph@etechenv.com or Anna Byers at (432) 305-6415 or anna@etechenv.com. Email correspondence regarding the Site and archived reports are included in **Appendix G** and **Appendix H** in this SCRPA, respectively.

Sincerely,

eTECH Environmental and Safety Solutions, Inc.

Anna Byers
Senior Geologist

Joseph S. Hernandez
Senior Managing Geologist

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

Appendices:

APPENDIX A

Figures

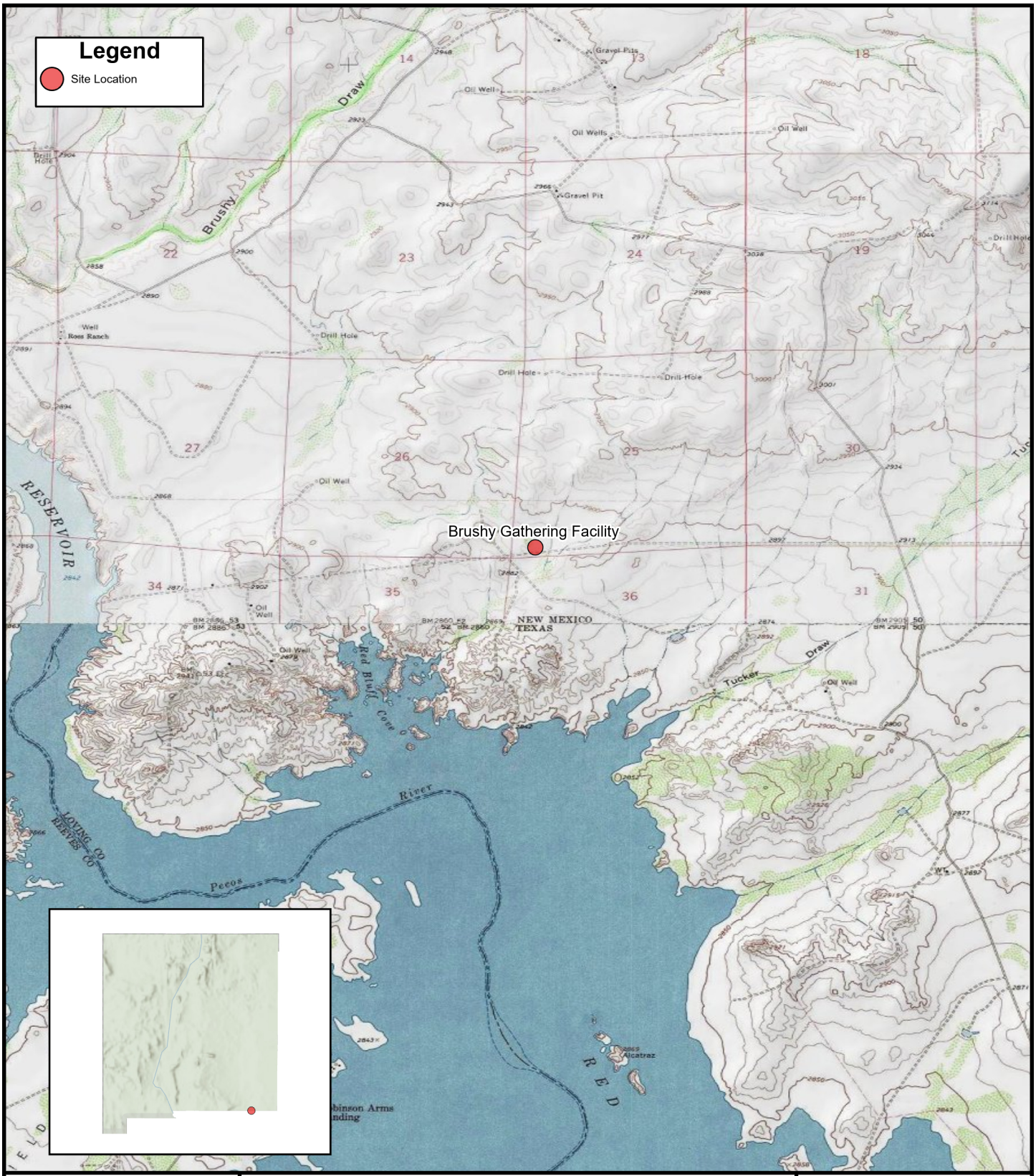

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FIGURE 1

Site Location Map

WPX ENERGY PERMIAN, LLC
Brushy Gathering Facility
Unit M Sec 25 T26S R29E
Eddy County, New Mexico

N

0 2,000 4,000 Feet

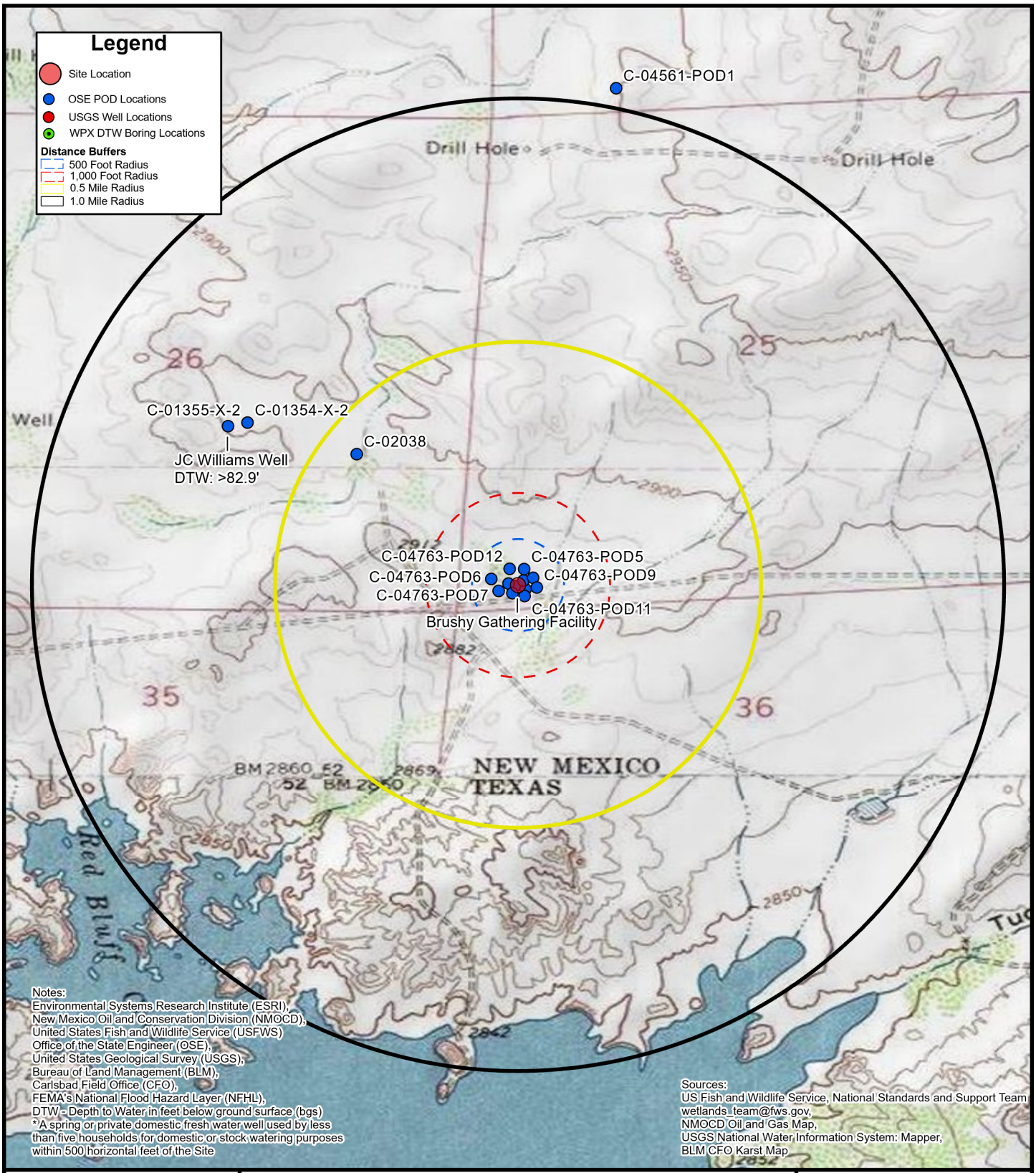


FIGURE 1A

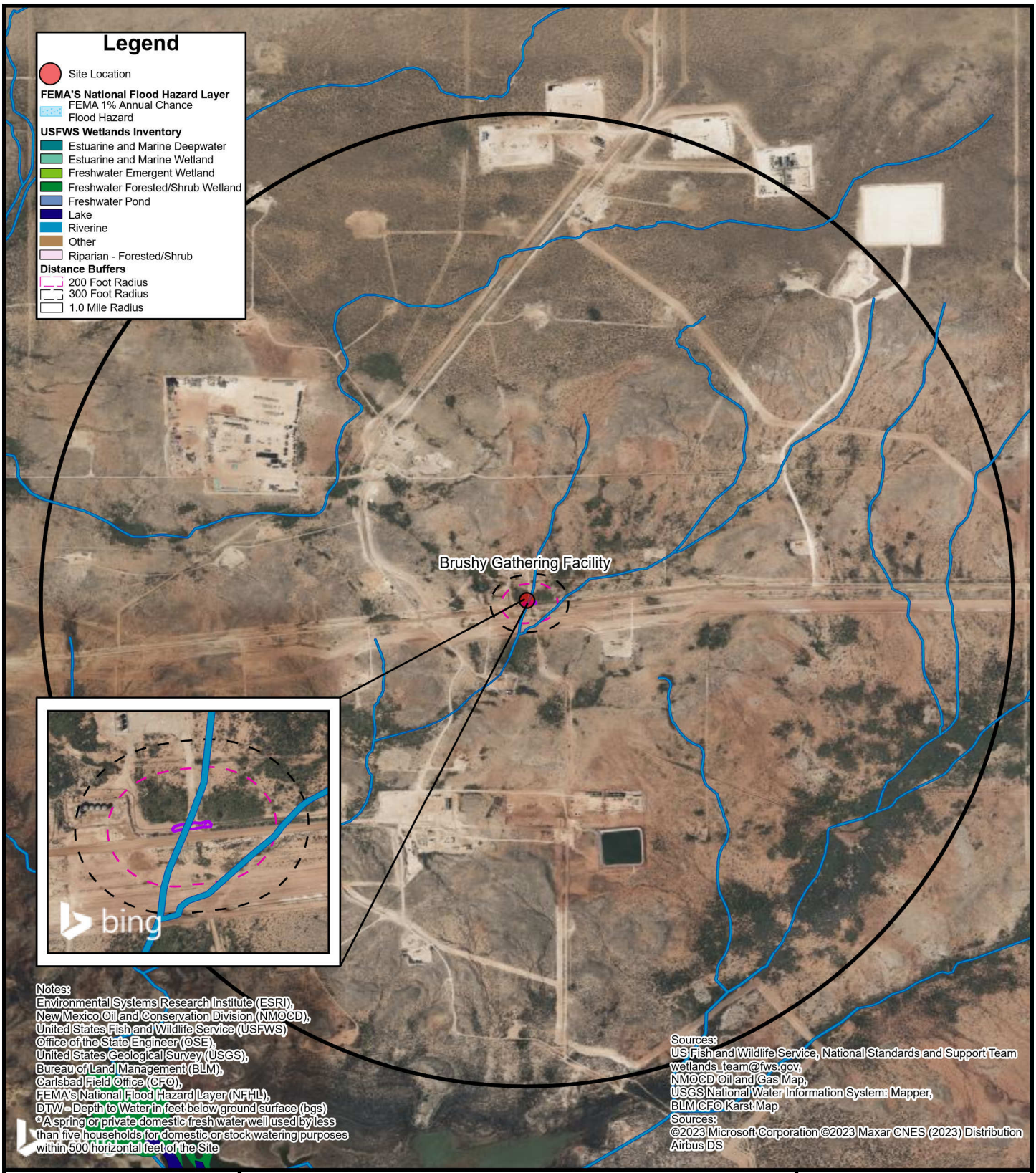
Site Characterization Map

Ground Water

WPX ENERGY PERMIAN, LLC
Brushy Gathering Facility
Unit M Sec 25 T26S R29E
Eddy County, New Mexico

N

0 500 1,000 Feet



eTECH

FIGURE 1B

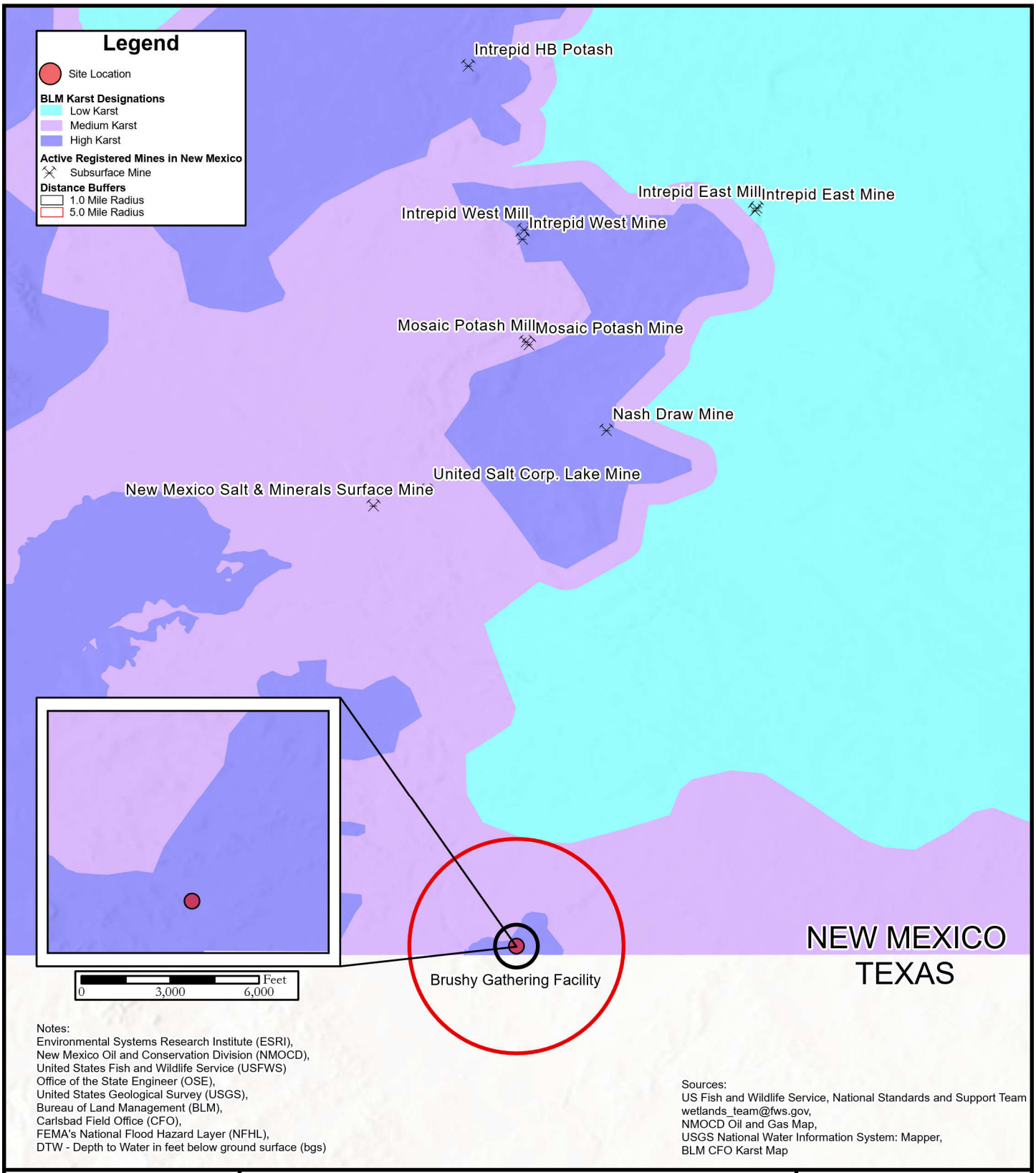
Site Characterization Map

Surficial Receptors

WPX ENERGY PERMIAN, LLC
Brushy Gathering Facility
Unit M Sec 25 T26S R29E
Eddy County, New Mexico

N

0 500 1,000 Feet



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

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

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FIGURE 1C
Site Characterization Map
Subsurface Receptors

WPX ENERGY PERMIAN, LLC
Brushy Gathering Facility
Unit M Sec 25 T26S R29E
Eddy County, New Mexico

N

Feet
0
18,750
37,500

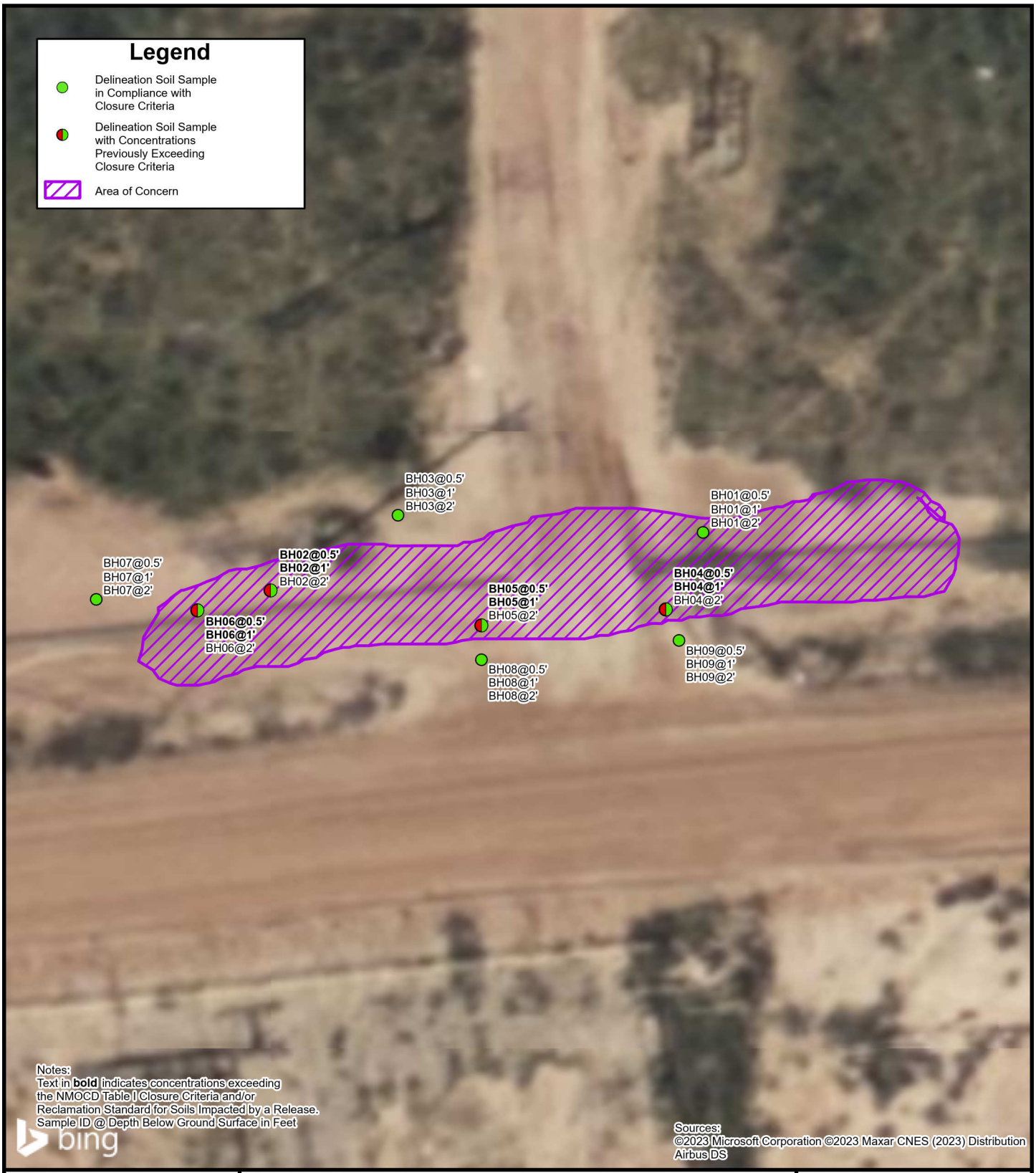

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FIGURE 2

Delineation Soil Sample Locations

WPX ENERGY PERMIAN, LLC
Brushy Gathering Facility
Unit M Sec 25 T26S R29E
Eddy County, New Mexico

N

0 13 26 Feet

APPENDIX B

Referenced Well Record

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: 08/15/2022

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 Detail	Tubing Placement	GW Depth (static)	After Purge	Time (minutes)	Purge Rate (L/min)	Temp. (ºC)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
				NR	NR	NR	NR	NR	NR	NR	82.9

Comments:

NA = Not Available
NR = Not Recorded

ENSOLUM

APPENDIX C

Soil Sampling Logs

eTECH	Sample Name: BH01	Date: 11/19/2024
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Hand Auger
Site Coordinates: 32.005726, -103.943871	Hole Diameter: 4"	Total Depth: 2'

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
						0	SP-SM	(0-2') SAND, dry, reddish-brown, fine to coarse grain, well graded with trace silt, trace subround to subangular sandstone gravel, no stain, no odor.
Dry	368	0	No	BH01	0.5			
Dry	296	0	No	BH01	1	1		
Dry	296	0	No	BH01	2	2		

Total Depth

eTECH	Sample Name: BH02	Date: 11/19/2024
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Hand Auger
Site Coordinates: 32.005673, -103.944053	Hole Diameter: 4"	Total Depth: 2'

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
						0	SP-SM	(0-2') SAND, dry, reddish-brown, fine to coarse grain, well graded with trace silt, trace subround to subangular sandstone gravel, no stain, no odor.
Dry	1,136	0	No	BH02	0.5			
Dry	712	0	No	BH02	1	1		
Dry	<116	0	No	BH02	2	2		
						Total Depth		

eTECH	Sample Name: BH03	Date: 11/19/2024
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Hand Auger
Site Coordinates: 32.005784, -103.943987	Hole Diameter: 4"	Total Depth: 2'

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
						0	SP-SM	(0-2') SAND, dry, reddish-brown, fine to coarse grain, well graded with trace silt, trace subround to subangular sandstone gravel, no stain, no odor.
Dry	168	0	No	BH03	0.5			
Dry	196	0	No	BH03	1	1		
Dry	168	0	No	BH03	2	2		

Total Depth

eTECH	Sample Name: BH04	Date: 11/19/2024
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Hand Auger
Site Coordinates: 32.005663, -103.943868	Hole Diameter: 4"	Total Depth: 2'

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
						0	SP-SM	(0-2') SAND, dry, reddish-brown, fine to coarse grain, well graded with trace silt, trace subround to subangular sandstone gravel, no stain, no odor.
Dry	3,356	0	No	BH04	0.5			
Dry	548	0	No	BH04	1	1		
Dry	412	0	No	BH04	2	2		

Total Depth

eTECH	Sample Name: BH05	Date: 11/19/2024
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Hand Auger
Site Coordinates: 32.005657, -103.943956	Hole Diameter: 4"	Total Depth: 2'

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
						0	SP-SM	(0-2') SAND, dry, reddish-brown, fine to coarse grain, well graded with trace silt, trace subround to subangular sandstone gravel, no stain, no odor.
Dry	916	0	No	BH05	0.5			
Dry	1,640	0	No	BH05	1	1		
Dry	412	0	No	BH05	2	2		
						Total Depth		

eTECH	Sample Name: BH06	Date: 11/19/2024
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Hand Auger
Site Coordinates: 32.005671, -103.944100	Hole Diameter: 4"	Total Depth: 2'

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
						0	SP-SM	(0-2') SAND, dry, reddish-brown, fine to coarse grain, well graded with trace silt, trace subround to subangular sandstone gravel, no stain, no odor.
Dry	916	0	No	BH06	0.5			
Dry	548	0	No	BH06	1	1		
Dry	412	0	No	BH06	2	2		

Total Depth

eTECH	Sample Name: BH07	Date: 11/19/2024
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Hand Auger
Site Coordinates: 32.005669, -103.944138	Hole Diameter: 4"	Total Depth: 2'

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
						0	SP-SM	(0-2') SAND, dry, reddish-brown, fine to coarse grain, well graded with trace silt, trace subround to subangular sandstone gravel, no stain, no odor.
Dry	368	0	No	BH07	0.5			
Dry	196	0	No	BH07	1	1		
Dry	196	0	No	BH07	2	2		

Total Depth

eTECH	Sample Name: BH08	Date: 11/19/2024
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Hand Auger
Site Coordinates: 32.005640, -103.943955	Hole Diameter: 4"	Total Depth: 2'

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
						0	SP-SM	(0-2') SAND, dry, reddish-brown, fine to coarse grain, well graded with trace silt, trace subround to subangular sandstone gravel, no stain, no odor.
Dry	412	0	No	BH08	0.5			
Dry	368	0	No	BH08	1	1		
Dry	296	0	No	BH08	2	2		

Total Depth

eTECH	Sample Name: BH09	Date: 11/19/2024
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Hand Auger
Site Coordinates: 32.005649, -103.943861	Hole Diameter: 4"	Total Depth: 2'

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
						0	SP-SM	(0-2') SAND, dry, reddish-brown, fine to coarse grain, well graded with trace silt, trace subround to subangular sandstone gravel, no stain, no odor.
Dry	332	0	No	BH09	0.5			
Dry	260	0	No	BH09	1	1		
Dry	260	0	No	BH09	2	2		

Total Depth

APPENDIX D

Photographic Log

PHOTOGRAPHIC LOG
WPX Energy Permian, LLC
Brushy Gathering Facility
Incident Number nAB1805133508

Photograph 1 **Date: 11/19/2024**
Description: Southwestern view of delineation activities south of the AOC.

Photograph 2 **Date: 11/19/2024**
Description: South to southwestern view of delineation activities north of the AOC.

Photograph 3 **Date: 11/19/2024**
Description: Northern view of delineation activities south of the AOC.

Photograph 4 **Date: 11/19/2024**
Description: Northeastern view of delineation activities within the AOC.

APPENDIX E

Tables

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC
Brushy Gathering Facility
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)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Delineation Soil Samples - Incident Number nAB1805133508									
BH01	11/19/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	169[†]
BH01	11/19/2024	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	57.9[†]
BH01	11/19/2024	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	172[†]
BH02	11/19/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	**899**[†]
BH02	11/19/2024	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	**861**[†]
BH02	11/19/2024	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	115[†]
BH03	11/19/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	175[†]
BH03	11/19/2024	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	174[†]
BH03	11/19/2024	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	186[†]
BH04	11/19/2024	0.5	<0.0250	<0.0500	<20.0	37.8	60.2	98.0	**3,760**[†]
BH04	11/19/2024	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	**785**[†]
BH04	11/19/2024	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	164[†]
BH05	11/19/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	**1,390**[†]
BH05	11/19/2024	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	**878**[†]
BH05	11/19/2024	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	170[†]
BH06	11/19/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	**1,630**[†]
BH06	11/19/2024	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	**807**[†]
BH06	11/19/2024	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	167[†]
BH07	11/19/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	178[†]
BH07	11/19/2024	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	167[†]
BH07	11/19/2024	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	107[†]
BH08	11/19/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	56.6[†]
BH08	11/19/2024	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	243[†]

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC
Brushy Gathering Facility
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)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Delineation Soil Samples - Incident Number nAB1805133508									
BH08	11/19/2024	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	168[†]
BH09	11/19/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	82.3[†]
BH09	11/19/2024	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	232[†]
BH09	11/19/2024	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	165[†]

Notes:
bgs: below ground surface
mg/kg: milligrams per kilogram
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon
NMOCD: New Mexico Oil Conservation Division
NMAC: New Mexico Administrative Code
Text in ""grey"" represents excavated soil samples
*Concentrations in **bold** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard[†] for Soils Impacted by a Release*
[†] The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.

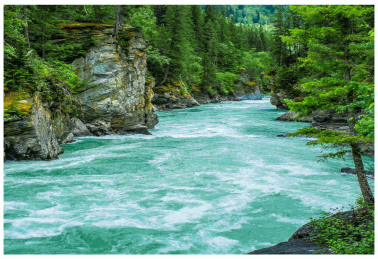
APPENDIX F

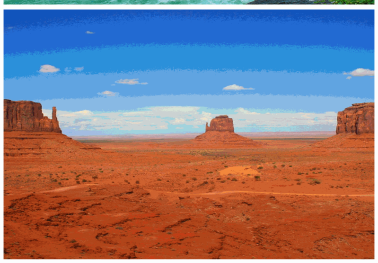
Laboratory Analytical Reports & Chain-of-Custody Documentation

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

Report to:

Anna Byers





5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Brushy Gathering Facility
Work Order:	E411215
Job Number:	01058-0007
Received:	11/21/2024

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/22/24

Date Reported: 11/22/24

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Brushy Gathering Facility
Workorder: E411215
Date Received: 11/21/2024 8:15:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/21/2024 8:15:00AM, under the Project Name: Brushy Gathering Facility.

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

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

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

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

Respectfully,

Walter Hinchman
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Cell: 775-287-1762
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Table of Contents

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Sample Summary

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/24 16:05

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 0.5'	E411215-01A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH01 1'	E411215-02A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH01 2'	E411215-03A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH02 0.5'	E411215-04A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH02 1'	E411215-05A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH02 2'	E411215-06A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH03 0.5'	E411215-07A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH03 1'	E411215-08A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH03 2'	E411215-09A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH04 0.5'	E411215-10A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH04 1'	E411215-11A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH04 2'	E411215-12A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH05 0.5'	E411215-13A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH05 1'	E411215-14A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH05 2'	E411215-15A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH06 0.5'	E411215-16A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH06 1'	E411215-17A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH06 2'	E411215-18A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH07 0.5'	E411215-19A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH07 1'	E411215-20A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH07 2'	E411215-21A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH08 0.5'	E411215-22A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH08 1'	E411215-23A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH08 2'	E411215-24A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH09 0.5'	E411215-25A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH09 1'	E411215-26A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.
BH09 2'	E411215-27A	Soil	11/19/24	11/21/24	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH01 0.5'

E411215-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.3 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.3 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*101 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**169**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH01 1'

E411215-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*95.4 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*95.4 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*99.4 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**57.9**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH01 2'

E411215-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*108 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*99.6 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*108 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*99.6 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*92.4 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**172**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH02 0.5'

E411215-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.9 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.9 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*97.2 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**899**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH02 1'

E411215-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*108 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.1 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*108 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.1 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*101 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**861**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH02 2'

E411215-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*99.2 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*99.2 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*104 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**115**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH03 0.5'

E411215-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*95.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*95.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*112 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**175**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH03 1'

E411215-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.2 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.2 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*106 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**174**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH03 2'

E411215-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*102 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*95.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*102 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*95.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*111 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**186**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH04 0.5'

E411215-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*107 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*93.2 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*107 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*93.2 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	**37.8**	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	**60.2**	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*104 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**3760**	40.0	2	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH04 1'

E411215-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*83.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.8 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*120 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*83.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.8 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*120 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*102 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**785**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH04 2'

E411215-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*87.3 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*93.6 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*87.3 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*93.6 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*110 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**164**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH05 0.5'

E411215-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*95.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.5 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*95.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.5 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*94.2 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**1390**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH05 1'

E411215-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.2 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*101 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.2 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*101 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*93.2 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**878**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH05 2'

E411215-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*94.8 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.5 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*101 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*94.8 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.5 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*101 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*99.0 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**170**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH06 0.5'

E411215-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*98.0 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*97.4 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*98.0 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*97.4 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*99.5 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**1630**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH06 1'

E411215-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*97.5 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.1 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*97.5 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.1 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*98.1 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**807**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH06 2'

E411215-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*98.6 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*98.6 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*98.3 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**167**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH07 0.5'

E411215-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*97.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.1 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*97.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.1 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*100 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**178**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH07 1'

E411215-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*97.0 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.9 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2447078
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: Bromofluorobenzene		*97.0 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.9 %*	*70-130*	*11/21/24*	*11/21/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2447076
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*104 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447086
Chloride	**167**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH07 2'

E411215-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2447080
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: 4-Bromochlorobenzene-PID		*99.6 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2447080
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.8 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2447081
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*99.1 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447090
Chloride	**107**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH08 0.5'

E411215-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2447080
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: 4-Bromochlorobenzene-PID		*99.3 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2447080
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*89.8 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2447081
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*111 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447090
Chloride	**56.6**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH08 1'

E411215-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2447080
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: 4-Bromochlorobenzene-PID		*95.9 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2447080
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*89.8 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2447081
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*100 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447090
Chloride	**243**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH08 2'

E411215-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2447080
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.7 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2447080
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.3 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2447081
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*97.5 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447090
Chloride	**168**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH09 0.5'

E411215-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL			Batch: 2447080
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: 4-Bromochlorobenzene-PID		*86.4 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL			Batch: 2447080
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.6 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2447081
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*90.1 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447090
Chloride	**82.3**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH09 1'

E411215-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL			Batch: 2447080
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: 4-Bromochlorobenzene-PID		*85.2 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL			Batch: 2447080
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.6 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2447081
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*92.4 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447090
Chloride	**232**	20.0	1	11/21/24	11/21/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

BH09 2'

E411215-27

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL			Batch: 2447080
Benzene	ND	0.0250	1	11/21/24	11/21/24	
Ethylbenzene	ND	0.0250	1	11/21/24	11/21/24	
Toluene	ND	0.0250	1	11/21/24	11/21/24	
o-Xylene	ND	0.0250	1	11/21/24	11/21/24	
p,m-Xylene	ND	0.0500	1	11/21/24	11/21/24	
Total Xylenes	ND	0.0250	1	11/21/24	11/21/24	
Surrogate: 4-Bromochlorobenzene-PID		*85.5 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL			Batch: 2447080
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/21/24	11/21/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.4 %*	*70-130*	*11/21/24*	*11/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2447081
Diesel Range Organics (C10-C28)	ND	25.0	1	11/21/24	11/21/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/21/24	11/21/24	
Surrogate: n-Nonane		*86.9 %*	*50-200*	*11/21/24*	*11/21/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2447090
Chloride	**165**	20.0	1	11/21/24	11/21/24	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2447078-BLK1)									Prepared: 11/20/24 Analyzed: 11/20/24
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	*0.461*		*0.500*		*92.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.488*		*0.500*		*97.5*	*70-130*			
Surrogate: Toluene-d8	*0.507*		*0.500*		*101*	*70-130*			
LCS (2447078-BS1)									Prepared: 11/20/24 Analyzed: 11/20/24
Benzene	2.54	0.0250	2.50		101	70-130			
Ethylbenzene	2.75	0.0250	2.50		110	70-130			
Toluene	2.73	0.0250	2.50		109	70-130			
o-Xylene	3.11	0.0250	2.50		125	70-130			
p,m-Xylene	6.02	0.0500	5.00		120	70-130			
Total Xylenes	9.13	0.0250	7.50		122	70-130			
Surrogate: Bromofluorobenzene	*0.506*		*0.500*		*101*	*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*			
LCS Dup (2447078-BSD1)									Prepared: 11/20/24 Analyzed: 11/20/24
Benzene	2.55	0.0250	2.50		102	70-130	0.335	23	
Ethylbenzene	2.76	0.0250	2.50		110	70-130	0.163	27	
Toluene	2.67	0.0250	2.50		107	70-130	2.17	24	
o-Xylene	2.91	0.0250	2.50		116	70-130	6.70	27	
p,m-Xylene	5.87	0.0500	5.00		117	70-130	2.41	27	
Total Xylenes	8.79	0.0250	7.50		117	70-130	3.85	27	
Surrogate: Bromofluorobenzene	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.515*		*0.500*		*103*	*70-130*			
Surrogate: Toluene-d8	*0.509*		*0.500*		*102*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2447080-BLK1)									Prepared: 11/21/24 Analyzed: 11/22/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*6.88*		*8.00*		*86.0*	*70-130*			
LCS (2447080-BS1)									Prepared: 11/21/24 Analyzed: 11/22/24
Benzene	4.60	0.0250	5.00		92.0	70-130			
Ethylbenzene	4.41	0.0250	5.00		88.3	70-130			
Toluene	4.53	0.0250	5.00		90.5	70-130			
o-Xylene	4.43	0.0250	5.00		88.6	70-130			
p,m-Xylene	8.97	0.0500	10.0		89.7	70-130			
Total Xylenes	13.4	0.0250	15.0		89.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.08*		*8.00*		*88.5*	*70-130*			
LCS Dup (2447080-BSD1)									Prepared: 11/21/24 Analyzed: 11/22/24
Benzene	4.81	0.0250	5.00		96.2	70-130	4.52	20	
Ethylbenzene	4.64	0.0250	5.00		92.8	70-130	4.98	20	
Toluene	4.75	0.0250	5.00		95.1	70-130	4.90	20	
o-Xylene	4.65	0.0250	5.00		93.1	70-130	4.96	20	
p,m-Xylene	9.41	0.0500	10.0		94.1	70-130	4.73	20	
Total Xylenes	14.1	0.0250	15.0		93.7	70-130	4.81	20	
Surrogate: 4-Bromochlorobenzene-PID	*6.99*		*8.00*		*87.3*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2447078-BLK1)									Prepared: 11/20/24 Analyzed: 11/20/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.461*		*0.500*		*92.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.488*		*0.500*		*97.5*	*70-130*			
Surrogate: Toluene-d8	*0.507*		*0.500*		*101*	*70-130*			
LCS (2447078-BS2)									Prepared: 11/20/24 Analyzed: 11/20/24
Gasoline Range Organics (C6-C10)	55.8	20.0	50.0		112	70-130			
Surrogate: Bromofluorobenzene	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.468*		*0.500*		*93.5*	*70-130*			
Surrogate: Toluene-d8	*0.479*		*0.500*		*95.8*	*70-130*			
LCS Dup (2447078-BSD2)									Prepared: 11/20/24 Analyzed: 11/20/24
Gasoline Range Organics (C6-C10)	53.9	20.0	50.0		108	70-130	3.31	20	
Surrogate: Bromofluorobenzene	*0.497*		*0.500*		*99.4*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.483*		*0.500*		*96.6*	*70-130*			
Surrogate: Toluene-d8	*0.518*		*0.500*		*104*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2447080-BLK1)									Prepared: 11/21/24 Analyzed: 11/22/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.77*		*8.00*		*97.1*	*70-130*			
LCS (2447080-BS2)									Prepared: 11/21/24 Analyzed: 11/22/24
Gasoline Range Organics (C6-C10)	42.0	20.0	50.0		84.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.62*		*8.00*		*95.3*	*70-130*			
LCS Dup (2447080-BSD2)									Prepared: 11/21/24 Analyzed: 11/22/24
Gasoline Range Organics (C6-C10)	45.2	20.0	50.0		90.4	70-130	7.41	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.57*		*8.00*		*94.6*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2447076-BLK1)									Prepared: 11/20/24 Analyzed: 11/20/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*50.4*		*50.0*		*101*	*50-200*			
LCS (2447076-BS1)									Prepared: 11/20/24 Analyzed: 11/20/24
Diesel Range Organics (C10-C28)	273	25.0	250		109	38-132			
Surrogate: n-Nonane	*55.0*		*50.0*		*110*	*50-200*			
LCS Dup (2447076-BSD1)									Prepared: 11/20/24 Analyzed: 11/21/24
Diesel Range Organics (C10-C28)	273	25.0	250		109	38-132	0.00	20	
Surrogate: n-Nonane	*54.3*		*50.0*		*109*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2447081-BLK1)									Prepared: 11/21/24 Analyzed: 11/21/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*51.8*		*50.0*		*104*	*50-200*			
LCS (2447081-BS1)									Prepared: 11/21/24 Analyzed: 11/21/24
Diesel Range Organics (C10-C28)	256	25.0	250		102	38-132			
Surrogate: n-Nonane	*52.0*		*50.0*		*104*	*50-200*			
LCS Dup (2447081-BSD1)									Prepared: 11/21/24 Analyzed: 11/21/24
Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132	1.43	20	
Surrogate: n-Nonane	*53.4*		*50.0*		*107*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2447086-BLK1)									Prepared: 11/21/24 Analyzed: 11/21/24
Chloride	ND	20.0							
LCS (2447086-BS1)									Prepared: 11/21/24 Analyzed: 11/21/24
Chloride	253	20.0	250		101	90-110			
LCS Dup (2447086-BSD1)									Prepared: 11/21/24 Analyzed: 11/21/24
Chloride	252	20.0	250		101	90-110	0.308	20	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/2024 4:05:05PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2447090-BLK1)									Prepared: 11/21/24 Analyzed: 11/21/24
Chloride	ND	20.0							
LCS (2447090-BS1)									Prepared: 11/21/24 Analyzed: 11/21/24
Chloride	257	20.0	250		103	90-110			
LCS Dup (2447090-BSD1)									Prepared: 11/21/24 Analyzed: 11/21/24
Chloride	257	20.0	250		103	90-110	0.158	20	

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

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Brushy Gathering Facility	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/22/24 16:05

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.

Project Information

Chain of Custody

Client: WPX Energy Permian, LLC.	Bill To	Lab Use Only	TAT	EPA Program
Project: Brushy Gathering Facility	Attention: Jim Raley	Lab WO# E411215; Job Number 01058-0007	1D, 2D, 3D, Standard: 24H TAT	CWA, SDWA
Project Manager: Anna Byers	Address: 5315 Buena Vista Dr.	Analysis and Method		RCRA
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220			State: NM (x), CO, UT, AZ, TX
City, State, Zip_Odessa,TX, 79765	Phone: 575-885-7502			
Phone: 432-305-6415	Email: jim.raley@dvn.com			
Email: Devon-team@etechenv.com	WBS/WO: 21138029			
Collected by: Edyte Konan	Incident ID: nAB1805133508			

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
10:30	11.19.24	S	1	BH01	1	0.5'								x				
10:40	11.19.24	S	1	BH01	2	1'								x				
10:50	11.19.24	S	1	BH01	3	2'								x				
11:00	11.19.24	S	1	BH02	4	0.5'								x				
11:10	11.19.24	S	1	BH02	5	1'								x				
11:20	11.19.24	S	1	BH02	6	2'								x				
11:30	11.19.24	S	1	BH03	7	0.5'								x				
11:40	11.19.24	S	1	BH03	8	1'								x				
11:50	11.19.24	S	1	BH03	9	2'								x				
12:00	11.19.24	S	1	BH04	10	0.5'								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
[signature]	11/20/24	11:10	Michelle Gonzales	11-20-24	1110
Michelle Gonzales	11-20-24	1645	Caitlin Mars	11.21.24	8:15

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

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

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Client: WPX Energy Permian, LLC.	Bill To	Lab Use Only	TAT	EPA Program
Project: Brushy Gathering Facility	Attention: Jim Raley	Lab WO# E411215 / Job Number 01058-0007	1D / 2D / 3D / Standard	CWA / SDWA
Project Manager: Anna Byers	Address: 5315 Buena Vista Dr.		24H 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			
Phone: 432-305-6415	Email: jim.raley@dvn.com		State: NM (x) / CO / UT / AZ / TX	
Email: Devon-team@etechenv.com	WBS/WO: 21138029			
Collected by: Edyte Konan	Incident ID: nAB1805133508			

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC NM		GDOC TX		Remarks
12:10	11.19.24	S	1	BH04	11	1'								x				
12:20	11.19.24	S	1	BH04	12	2'								x				
12:30	11.19.24	S	1	BH05	13	0.5'								x				
12:40	11.19.24	S	1	BH05	14	1'								x				
12:50	11.19.24	S	1	BH05	15	2'								x				
13:00	11.19.24	S	1	BH06	16	0.5'								x				
13:10	11.19.24	S	1	BH06	17	1'								x				
13:20	11.19.24	S	1	BH06	18	2'								x				
13:30	11.19.24	S	1	BH07	19	0.5'								x				
13:40	11.19.24	S	1	BH07	20	1'								x				

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	11/20/24	11:20	Michelle Gonzales	11-20-24	1110
Michelle Gonzales	11-20-24	1645	Caitlin Mars	11-21-24	8:15

Lab Use Only

Received on ice: (Y) / N

T1 ____ T2 ____ T3 ____

AVG Temp °C 4

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

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Client: WPX Energy Permian, LLC.	Bill To	Lab Use Only		TAT				EPA Program	
Project: Brushy Gathering Facility	Attention: Jim Raley	Lab WO# E411215	Job Number 01058.0007	1D	2D	3D	Standard 24H TAT	CWA	SDWA
Project Manager: Anna Byers	Address: 5315 Buena Vista Dr.								
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								
Phone: 432-305-6415	Email: jim.raley@dvn.com							State	
Email: Devon-team@etechenv.com	WBS/WO: 21138029							NM x, CO, UT, AZ, TX	
Collected by: Edyte Konan	Incident ID: nAB1805133508								

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC NM		GDOC TX		Remarks
13:50	11.19.24	S	1	BH07	21	2'								x				
14:00	11.19.24	S	1	BH08	22	0.5'								x				
14:10	11.19.24	S	1	BH08	23	1'								x				
14:20	11.19.24	S	1	BH08	24	2'								x				
14:30	11.19.24	S	1	BH09	25	0.5'								x				
14:40	11.19.24	S	1	BH09	26	1'								x				
14:50	11.19.24	S	1	BH09	27	2'								x				
				11/20/2024														

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
[signature]	11/20/24	11:10	Michelle Gonzales	11-20-24	1110
Michelle Gonzales	11-20-24	1645	Caitlin Mars	11.21.24	8:15

Lab Use Only

Received on ice: (Y) N

T1 ______ T2 ______ T3 ______

AVG Temp °C 4

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

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

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 11/21/2024 9:31:26AM

Sample Receipt Checklist (SRC)

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

Client:	WPX Energy - Carlsbad	Date Received:	11/21/24 08:15	Work Order ID:	E411215
Phone:	(575) 200-6754	Date Logged In:	11/20/24 12:13	Logged In By:	Noe Soto
Email:	anna@etechenv.com	Due Date:	11/21/24 17:00 (0 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received?	Yes
8. If yes, was cooler received in good condition?	Yes
9. Was the sample(s) received intact, i.e., not broken?	Yes
10. Were custody/security seals present?	No
11. If yes, were custody/security seals intact?	NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes
13. If no visible ice, record the temperature. Actual sample temperature: 4°C	

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date

envirotech Inc.

APPENDIX G

Correspondence & Notifications

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

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

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 403466
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAB1805133508**
Incident Name	**NAB1805133508 BRUSHY GATHERING FACILITY @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**
Incident Facility	**[fAB1805133323] Brushy Gathering Facility**

Location of Release Source	
Site Name	**Brushy Gathering Facility**
Date Release Discovered	**02/05/2016**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	2,129
What is the estimated number of samples that will be gathered	24
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	11/19/2024
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Please contact Erick Herrera at 432-305-6416 with any questions.
Please provide any information necessary for navigation to sampling site	From the intersection of State Line Rd and Longhorn Rd/Whitehorn Rd head west for 1.5 mi to reach the GPS Coordinate (32.0056312, -103.9439056) for the Brushy Gathering Facility ROW.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 403466
	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.	11/14/2024

Erick Herrera

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Friday, August 2, 2024 9:47 AM
To: Raley, Jim
Cc: Devon-Team
Subject: RE: [EXTERNAL] BLM Contact

Jim,

Thank you for the clarification.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Raley, Jim <Jim.Raley@dvn.com>
Sent: Friday, August 2, 2024 8:39 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Devon-Team <Devon-Team@etechenv.com>
Subject: RE: [EXTERNAL] BLM Contact

Brittany,
The reason we did not include incident nAB1805133508 in the report is sits off by itself down the roadway a bit from the facility. The other incidents all overlap each other and should be considered together. Incident nAB1805133508 was a very small spill which we think we can just dig up and close out when we have equipment available to complete the proposed work for the other incidents.

We do plan on closing all incidents out for Brushy Gathering Facility (fAB1805133323) at the same time.

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

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Thursday, August 1, 2024 2:39 PM
To: Raley, Jim <Jim.Raley@dvn.com>

Cc: Devon-Team <Devon-Team@etechenv.com>
Subject: RE: [EXTERNAL] BLM Contact

Jim,

Thank you for responding so quickly. I pulled up the facility ID for the Brushy Gathering Facility (fAB1805133323) and found an additional incident number that is not included in the remediation plans that were submitted.

nAB1805133508 is not included on the cover page of the Remediation Work Plan Addendum that were submitted for nAB1501655607, nAB1504054780, nAB1522341642, nAB1621453181, nAB1633639499, and nAPP2230032326.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

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From: Raley, Jim <Jim.Raley@dvn.com>
Sent: Thursday, August 1, 2024 8:02 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Devon-Team <Devon-Team@etechenv.com>
Subject: RE: [EXTERNAL] BLM Contact

Brittany,
We also worked with Dave Decker with Southwest Geophysical when we encountered a karst feature. He directly communicated with the BLM on that issue. If you need his contact let me know.

I was not really sure what you were referring too as far as contact with the BLM.

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

devon

From: Raley, Jim
Sent: Thursday, August 1, 2024 7:18 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Devon-Team <Devon-Team@etechenv.com>
Subject: RE: [EXTERNAL] BLM Contact

Brittany,
I worked with Crisha Morgan to gain access to areas off-site. Contact information below.

Crisha A. Morgan |Certified - Environmental Protection Specialist | Program Officer|COR| Spills Coordinator| Orphaned Well POC Lead
Bureau of Land Management | Carlsbad Field Office
620 E. Greene Street Carlsbad, NM 88220
Cell 575-200-8648 | Office 575-234-5987 |camorgan@blm.gov

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

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Wednesday, July 31, 2024 2:15 PM
To: Raley, Jim <Jim.Raley@dvn.com>
Subject: [EXTERNAL] BLM Contact

Hi Jim,

Can you please provide the contact information for the person at the BLM you are working with regarding nAB1501655607, nAB1504054780, nAB1522341642, nAB1621453181, nAB1633639499, and nAPP2230032326?

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

APPENDIX H

Archived Reports

SITE CHARACTERIZATION AND REMEDIATION PLAN

Prepared For:

WPX Energy Permian, LLC

5315 Buena Vista Dr.

Carlsbad, NM 88220

Site Information:

Brushy Gathering Facility

Incident Number nAB1805133508

Unit M, Section 25, Township 26 South, Range 29 East

Eddy County, New Mexico

(32.00576, -103.94400)

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

SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Site Characterization and Remediation Plan (SCRP) detailing site assessment and delineation soil sampling activities associated with inadvertent release of produced water at the Brushy Gathering Facility (Site). Based on laboratory analytical results from 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 M, Section 25, Township 26 South, Range 29 East, in Eddy County, New Mexico (32.00576°, -103.94400°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM) (**Figure 1** in **Appendix A)**.

On February 5, 2018, it was discovered that an above ground poly line failure resulted in approximately 10 barrels (bbls) of produced water to be released onto a Right-Of-Way (ROW). Vacuum trucks were immediately dispatched and recovered approximately 7 bbls of standing fluids and additional fluids from draining the compromised poly line, which was subsequently removed. WPX reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on February 19, 2018, and was assigned Incident Number nAB1805133508. The observed extent of the release is presented as the Area of Concern (AOC) on **Figure 2** in **Appendix A**. It should be noted that the release was reported on the Form C-141 to have occurred in 2016, however, this was an inadvertent mistake and email correspondence documents the correct year of the release occurrence as denoted above.

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 on a recent measurement of a nearby well at the JC Williams Yard, approximately 0.65 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 Groundwater Measurement Form summarizing depth to groundwater data is provided as **Appendix B**. The location of the JC Williams well and additional regional groundwater well locations are shown in **Figure 1A** in **Appendix A**.

Based on the desktop review, the current BLM Carlsbad Field Office (CFO) karst cave potential map indicates the Site is located in a high potential karst area, and the National Wetlands Inventory indicates the Site intersects a wetland riverine. All other potential receptors are not within the established buffers in NMAC 19.15.29.12. Receptor details and sources used for the Site characterization are included in **Figure 1B** and **Figure 1C** in **Appendix A**.

Based on the results from the desktop review, specifically the designated karst potential at the Site and the proximity to a wetland feature, the following Closure Criteria was applied:

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria†
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 or EPA 8260B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B or EPA 8260B	50 mg/kg

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

DELINEATION SOIL SAMPLING ACTIVITIES

On September 8, 2022, a third-party environmental contractor conducted delineation activities to confirm details of the release provided on the Form C-141 and to characterize the AOC by verifying the presence or absence of impacted soil. Six delineation boreholes (BH01 through BH06) were advanced via hand auger to assess the lateral and vertical extents of the AOC. Delineation activities were driven by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. A total of two samples were collected from each delineation soil sampling location, representing the highest observed field screening concentrations and the greatest depth. Field screening results and soil descriptions are included on soil sampling logs shown in **Appendix C**. The locations of the delineation soil samples are shown in **Figure 2** in **Appendix A**. Photographic documentation of delineation activities is included in **Appendix D**.

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

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results indicated that concentrations of COCs for all delineation soil samples were below the applicable Site Closure Criteria, except soil samples collected from BH02. Laboratory analytical results for BH02 indicated chloride concentrations exceeded the applicable Site Closure Criteria up to 1-foot bgs. Laboratory analytical results are summarized in Table 1 in **Attachment E**, and the complete laboratory reports with chain-of-custody documentation is included in **Attachment F.**

PROPOSED REMEDIATION WORK PLAN AND SCHEDULE

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

- Identified chloride impacts, characterized by concentrations ranging from 604 mg/kg to 3,560 mg/kg, exist within the top 1-foot of the AOC in the vicinity of BH02 sampling location. Laboratory analytical results for COC concentrations for the remaining delineation soil samples are below the applicable Site Closure Criteria.

Based on the conclusions drawn above, WPX proposes the following remedial corrective actions:

- Removal of impacted soil indicated by elevated chloride concentrations above the applicable Site Closure Criteria. The excavation will be advanced vertically and laterally until the applicable Site Closure Criteria is met. Sidewall soil samples will provide horizontal delineation of the release. Based on current delineation soil sampling results, an estimated 11 CYs of additional soil is anticipated to be removed from the Site in accordance with state and federal regulations.

- Following removal of soil impacts, 5-point composite confirmation soil samples will be collected from the excavation and analyzed by an accredited laboratory in accordance to NMAC 19.15.29.12.D. Excavated soil will then be transferred to an approved landfill facility for disposal.

    (1) If the excavation area is smaller than the AOC and laboratory analytical results of floor and sidewall excavation confirmation soil samples are compliant with the Site Closure Criteria, additional confirmation soil samples will be collected from the remaining surface area of the AOC. Soil samples will be collected and analyzed as previously described.

- Upon receipt of soil confirmation results indicating impacted soil has been removed, the excavation will be backfilled with clean, locally sourced soil and restored to “as close to its original state” as possible.

PROPOSED TIMELINE

The tank battery storage facility associated with the Site, recently acquired by WaterBridge Operating, LLC. (WaterBridge), is scheduled to be decommissioned in the near future. As such, WPX requests to begin remediation activities concurrently with the proposed work associated with Incident Numbers nAB1501655607, nAB1504154780, nAB1522341642, nAB1621453181, nAB1633639499, nAPP2230032326, located due west of the Site, in accordance with the Site decommissioning schedule.

LIMITATIONS

Etech has prepared this SCRP to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents reference in the report and on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

Based on the proposed scope of work, WPX believes the proposed remedial actions will meet the requirements set forth in NMAC 19.15.29.13 regulations to be protective of human health, the environment and groundwater. If you have any questions or comments, please do not hesitate to contact

Joseph Hernandez at (432) 305-6413 or joseph@etechenv.com or Anna Byers at (432) 305-6415 or anna@etechenv.com. Email correspondence regarding the Site is included in **Appendix G**.

Sincerely,

eTECH Environmental and Safety Solutions, Inc.

Anna Byers
Senior 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 – Karst Potential
	Figure 2: Delineation Soil Sample Locations
Appendix B	Referenced Well Record
Appendix C	Soil Sampling Logs
Appendix D	Photographic Log
Appendix E	Tables
Appendix F	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix G	Correspondence & Notifications

APPENDIX A

Figures

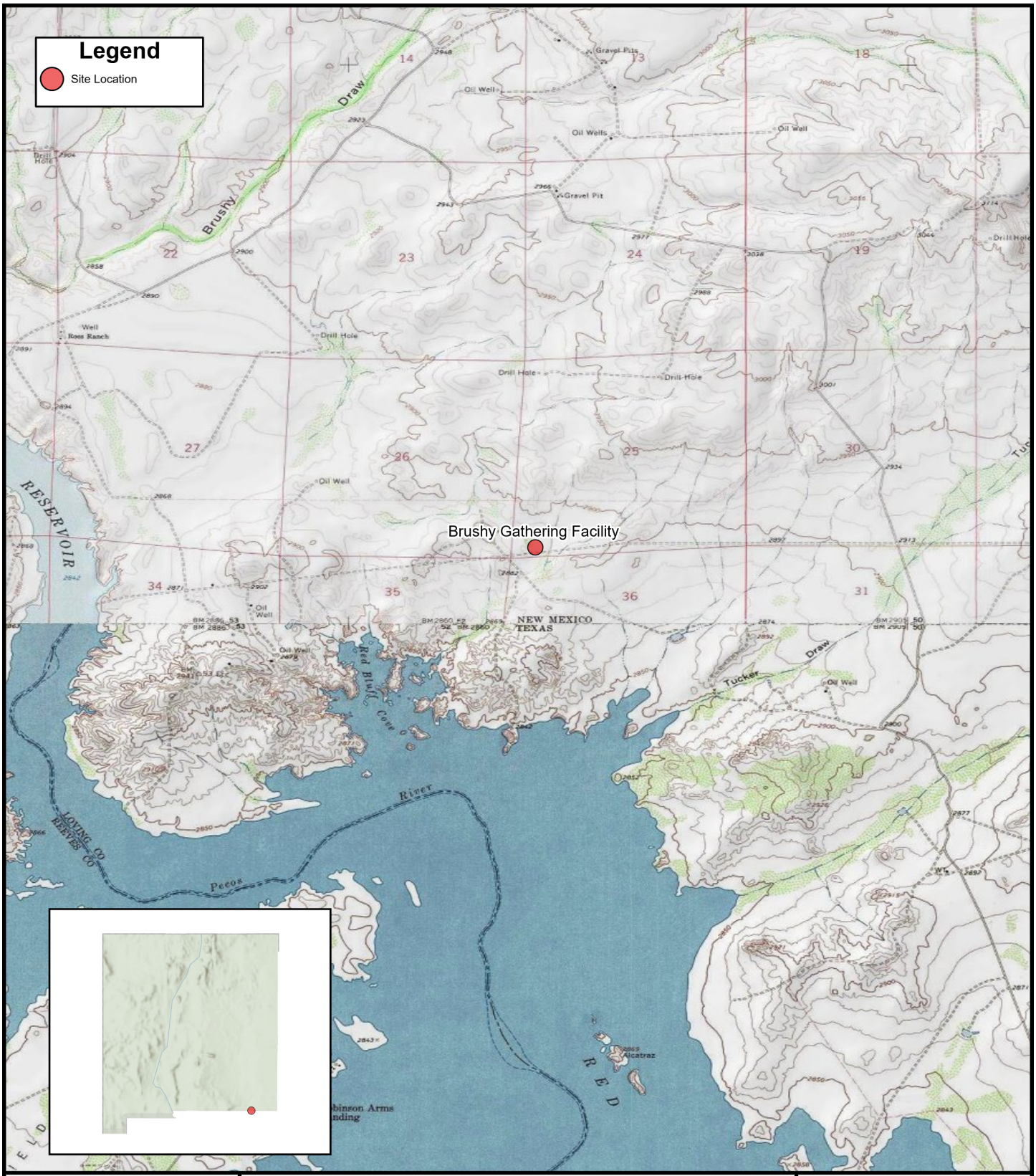


FIGURE 1

Site Location Map

WPX ENERGY PERMIAN, LLC
Brushy Gathering Facility
Unit M Sec 25 T26S R29E
Eddy County, New Mexico

N

0 2,000 4,000 Feet

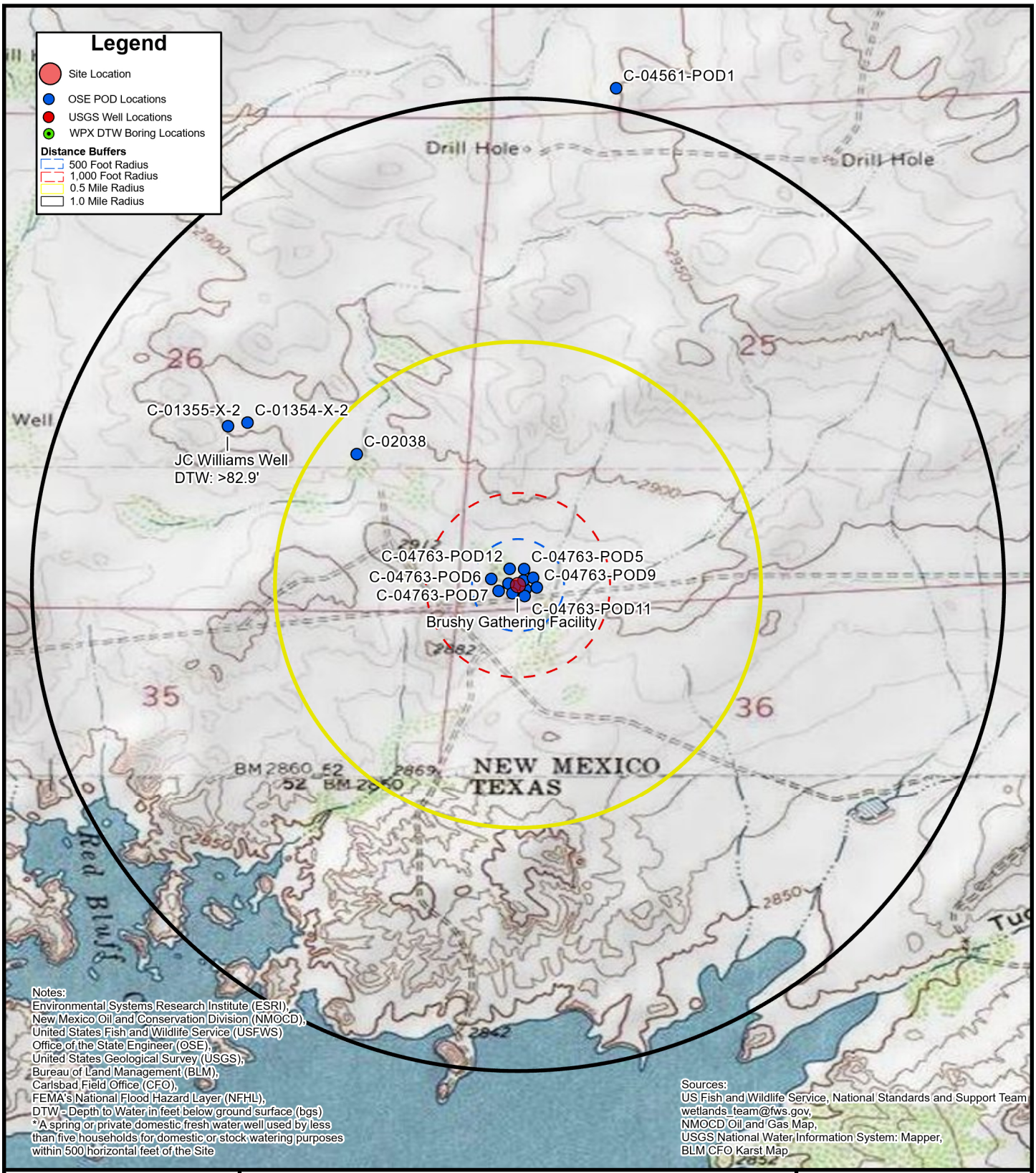


FIGURE 1A

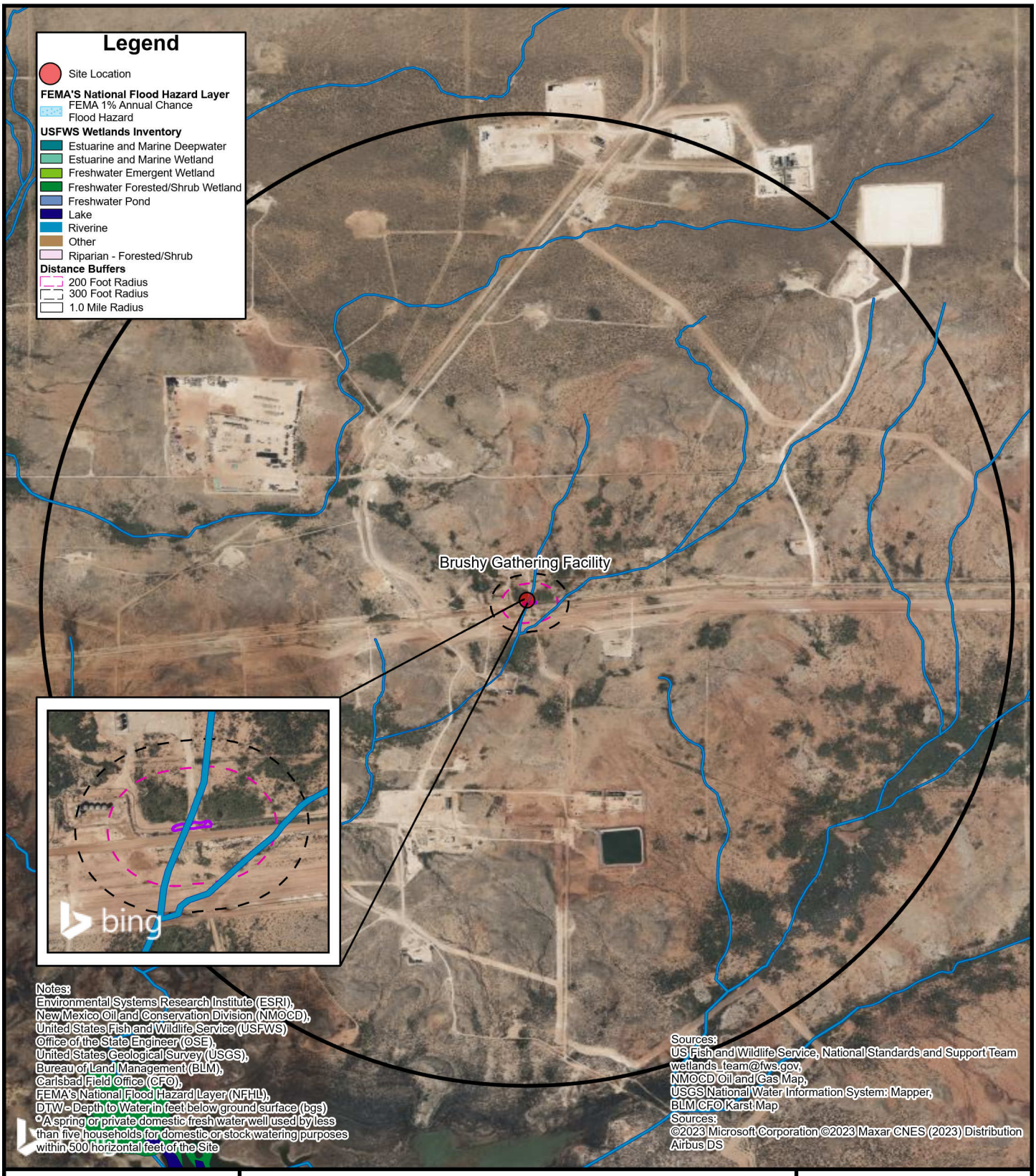
Site Characterization Map

Ground Water

WPX ENERGY PERMIAN, LLC
Brushy Gathering Facility
Unit M Sec 25 T26S R29E
Eddy County, New Mexico

N

0 500 1,000 Feet



eTECH

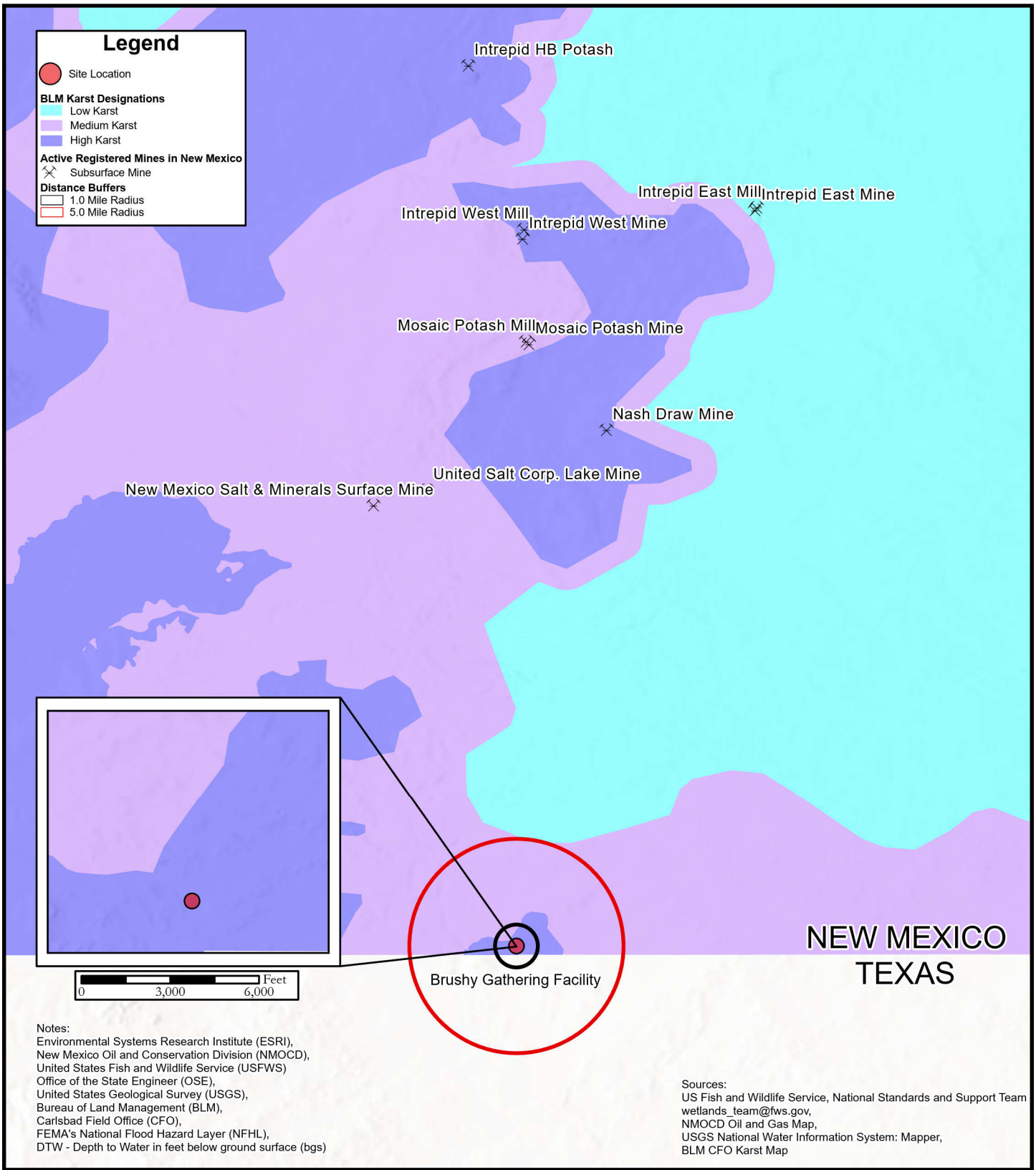
FIGURE 1B

Site Characterization Map
Surficial Receptors

WPX ENERGY PERMIAN, LLC
Brushy Gathering Facility
Unit M Sec 25 T26S R29E
Eddy County, New Mexico

N

0 500 1,000 Feet



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

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

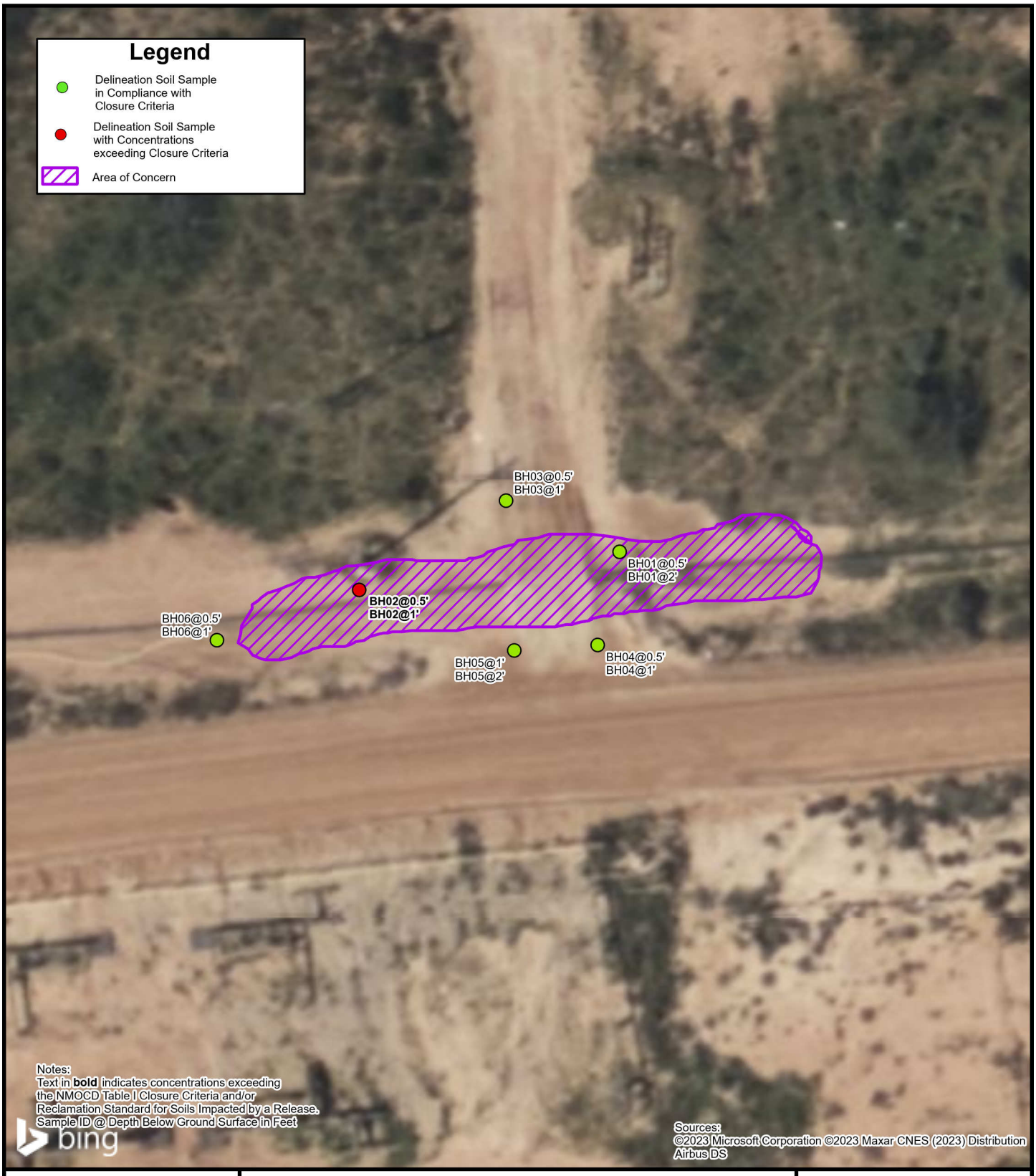
eTECH

FIGURE 1C
Site Characterization Map
Subsurface Receptors

WPX ENERGY PERMIAN, LLC
Brushy Gathering Facility
Unit M Sec 25 T26S R29E
Eddy County, New Mexico

N

Feet
0
18,750
37,500



eTECH

FIGURE 2

Delineation Soil Sample Locations

WPX ENERGY PERMIAN, LLC
Brushy Gathering Facility
Unit M Sec 25 T26S R29E
Eddy County, New Mexico

N

0 18.5 37 Feet

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 Detail	Tubing Placement	GW Depth (static)	After Purge

Time (minutes)	Purge Rate (L/min)	Temp. (ºC)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
NR	NR	NR	NR	NR	NR	NR	82.9

Comments:

NA = Not Available
NR = Not Recorded

ENSOLUM

APPENDIX C

Soil Sampling Logs

eTECH	Sample Name: BH01	Date: 09/08/2022
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: SK	Method: Hand Auger
Site Coordinates: 32.0056975, -103.9438566	Hole Diameter: N/A	Total Depth: 2 feet

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	ND	NT	No	BH01	0.5	0.5	SW-SM	(0-2') SAND, dry, brown, poorly graded with silt, very fine grain, some organics, no stain, no odor.
Dry	ND	NT	No	BH01	1	1		ND - Non-detectable NT - Not Tested
Dry	ND	NT	No		2	2		

Total Depth

eTECH	Sample Name: BH02	Date: 09/08/2022
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: SK	Method: Hand Auger
Site Coordinates: 32.0056757, -103.9440322	Hole Diameter: N/A	Total Depth: 4 feet

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	ND	NT	No	BH02	0.5	0.5	SW-SM	(0-4') SAND, dry, brown, poorly graded with silt, very fine grain, some organics, no stain, no odor.
Dry	845.6	NT	No	BH02	1	1		ND - Non-detectable NT - Not Tested
Dry	772	NT	No		2	2		
Dry	470.4	NT	No		3	3		
Dry	240.8	NT	No		4	4		

Total Depth

eTECH	Sample Name: BH03	Date: 09/08/2022
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: SK	Method: Hand Auger
Site Coordinates: 32.0057329, -103.9439383	Hole Diameter: N/A	Total Depth: 1 foot

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	ND	NT		BH03	0.5	0.5	SW-SM	(0-1') SAND, dry, brown, poorly graded with silt, very fine grain, some organics, no stain, no odor.
Dry	ND	NT		BH03	1	1		ND - Non-detectable NT - Not Tested
						Total Depth		

eTECH	Sample Name: BH04	Date: 09/08/2022
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: SK	Method: Hand Auger
Site Coordinates: 32.0056372, -103.9438775	Hole Diameter: N/A	Total Depth: 1 foot

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	324.8	NT		BH04	0.5	0.5	SW-SM	(0-1') SAND, dry, brown, poorly graded with silt, very fine grain, some organics, no stain, no odor.
Dry	280	NT		BH04	1	1		NT - Not Tested

Total Depth

eTECH	Sample Name: BH05	Date: 09/08/2022
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: SK	Method: Hand Auger
Site Coordinates: 32.0056336, -103.9439328	Hole Diameter: N/A	Total Depth: 2 feet

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	414.4	NT			0.5	0.5	SW-SM	(0-2') SAND, dry, brown, poorly graded with silt, very fine grain, some organics, no stain, no odor.
Dry	324.8	NT		BH05	1	1		NT - Not Tested
Dry	240	NT		BH05	2	2		

Total Depth

eTECH	Sample Name: BH06	Date: 09/08/2022
	Site Name: Brushy Gathering Facility	
	Incident Number: nAB1805133508	
	Job Number: 18175	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: SK	Method: Hand Auger
Site Coordinates: 32.0056404, -103.9441301	Hole Diameter: N/A	Total Depth: 1 foot

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	ND	NT		BH06	0.5	0.5	SW-SM	(0-1') SAND, dry, brown, poorly graded with silt, very fine grain, some organics, no stain, no odor.
Dry	ND	NT		BH06	1	1		ND - Non-detectable NT - Not Tested

Total Depth

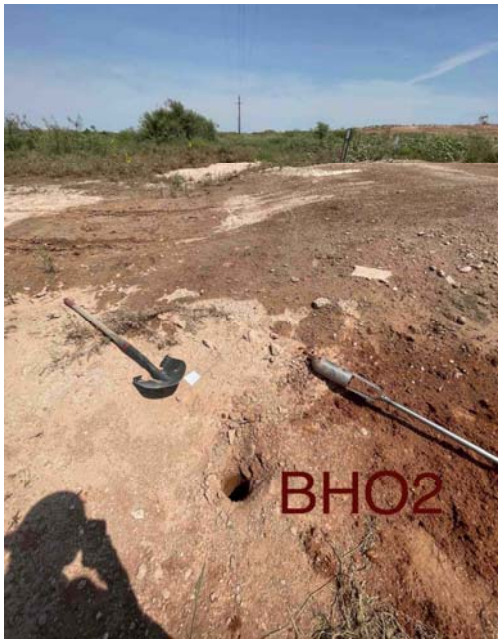
APPENDIX D

Photographic Log

PHOTOGRAPHIC LOG
WPX Energy Permian, LLC
Brushy Gathering Facility
Incident Number nAB1805133508

Photograph 1 **Date: 09/08/2022**
Description: Western view of delineation activities near BH04.

Photograph 2 **Date: 09/08/2022**
Description: View of delineation activities near BH01.



Photograph 3 **Date: 09/08/2022**
Description: Eastern view of delineation activities near BH02.

Photograph 4 **Date: 09/08/2022**
Description: View of delineation activities near BH05.

APPENDIX E

Tables

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC
Brushy Gathering Facility
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)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Delineation Soil Samples - Incident Number nAB1805133508									
BH01	09/08/2022	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	20.4
BH01	09/08/2022	2	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	11.5
BH02	09/08/2022	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	**3,560**
BH02	09/08/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	**604**
BH03	09/08/2022	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	9.36
BH03	09/08/2022	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	12.2
BH04	09/08/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	370
BH04	09/08/2022	1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	420
BH05	09/08/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	344
BH05	09/08/2022	2	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	381
BH06	09/08/2022	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	69.0
BH06	09/08/2022	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	17.0

Notes:
bgs: below ground surface
mg/kg: milligrams per kilogram
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon
NMOCD: New Mexico Oil Conservation Division
NMAC: New Mexico Administrative Code
Text in ""grey"" represents excavated soil samples
*Concentrations in **bold** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard† for Soils Impacted by a Release*
† The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.

APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2927-1
Laboratory Sample Delivery Group: 03A1987009
Client Project/Site: UCBH WW ROW BOOSTER STATION

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

Attn: Devon Team

JKramer

Authorized for release by:
9/21/2022 2:04:47 PM

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

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.

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Laboratory Job ID: 890-2927-1
SDG: 03A1987009

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery 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.
S1+	Surrogate recovery exceeds control limits, high biased.
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.
¤	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 ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

Job ID: 890-2927-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2927-1

Receipt
The samples were received on 9/9/2022 3:05 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 4.0°C

GC VOA
Method 8021B: The LCS was biased high for o-xylene. Since the method requires either an acceptable LCS or LCSD, the data was qualified and reported. (LCS 880-34854/1-A)

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-34854/1-A). Evidence of matrix interferences is not obvious.

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: Surrogate recovery for the following sample was outside control limits: (LCS 880-34396/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34396 and analytical batch 880-34334 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 ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

Client Sample ID: BH01

Lab Sample ID: 890-2927-1
Matrix: Solid
Date Collected: 09/08/22 10:30
Date Received: 09/09/22 15:05
Sample Depth: 0.5

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		09/19/22 14:55	09/20/22 16:54	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/19/22 14:55	09/20/22 16:54	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/19/22 14:55	09/20/22 16:54	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/19/22 14:55	09/20/22 16:54	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		09/19/22 14:55	09/20/22 16:54	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		09/19/22 14:55	09/20/22 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*09/19/22 14:55*	*09/20/22 16:54*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*09/19/22 14:55*	*09/20/22 16:54*	*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			09/21/22 09:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/14/22 09:34	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	<49.8	U	49.8		mg/Kg		09/13/22 11:41	09/14/22 03:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/22 11:41	09/14/22 03:56	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/22 11:41	09/14/22 03:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*09/13/22 11:41*	*09/14/22 03:56*	*1*
o-Terphenyl	*104*		*70 - 130*	*09/13/22 11:41*	*09/14/22 03:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.4**		4.99		mg/Kg			09/15/22 12:13	1

Client Sample ID: BH01

Lab Sample ID: 890-2927-2
Matrix: Solid
Date Collected: 09/08/22 10:45
Date Received: 09/09/22 15:05
Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/19/22 14:55	09/20/22 17:14	1
Toluene	**0.00207**		0.00202		mg/Kg		09/19/22 14:55	09/20/22 17:14	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/19/22 14:55	09/20/22 17:14	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/19/22 14:55	09/20/22 17:14	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		09/19/22 14:55	09/20/22 17:14	1
Xylenes, Total	<0.00404	U *+	0.00404		mg/Kg		09/19/22 14:55	09/20/22 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/19/22 14:55*	*09/20/22 17:14*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

Client Sample ID: BH01

Date Collected: 09/08/22 10:45
Date Received: 09/09/22 15:05
Sample Depth: 2

Lab Sample ID: 890-2927-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/19/22 14:55*	*09/20/22 17:14*	*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			09/21/22 09:38	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			09/14/22 09:34	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		09/13/22 11:41	09/14/22 04:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 04:18	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 04:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*09/13/22 11:41*	*09/14/22 04:18*	*1*
o-Terphenyl	*122*		*70 - 130*	*09/13/22 11:41*	*09/14/22 04:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.5**		5.04		mg/Kg			09/15/22 13:31	1

Surrogate Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

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)										
880-19366-A-1-A MS	Matrix Spike	111	102										
880-19366-A-1-B MSD	Matrix Spike Duplicate	127	95										
890-2927-1	BH01	112	89										
890-2927-2	BH01	101	104										
LCS 880-34854/1-A	Lab Control Sample	149 S1+	99										
LCSD 880-34854/2-A	Lab Control Sample Dup	118	90										
MB 880-34854/5-A	Method Blank	98	91										

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)										
880-19130-A-8-B MS	Matrix Spike	97	86										
880-19130-A-8-C MSD	Matrix Spike Duplicate	95	83										
890-2927-1	BH01	102	104										
890-2927-2	BH01	122	122										
LCS 880-34396/2-A	Lab Control Sample	133 S1+	133 S1+										
LCSD 880-34396/3-A	Lab Control Sample Dup	130	128										
MB 880-34396/1-A	Method Blank	105	110										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34854/5-A
Matrix: Solid
Analysis Batch: 34891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:55	09/20/22 10:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:55	09/20/22 10:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:55	09/20/22 10:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/19/22 14:55	09/20/22 10:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:55	09/20/22 10:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/19/22 14:55	09/20/22 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*09/19/22 14:55*	*09/20/22 10:44*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*09/19/22 14:55*	*09/20/22 10:44*	*1*

Lab Sample ID: LCS 880-34854/1-A
Matrix: Solid
Analysis Batch: 34891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34854

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09097		mg/Kg		91	70 - 130		
Toluene			0.100	0.09371		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.1136		mg/Kg		114	70 - 130		
m-Xylene & p-Xylene			0.200	0.2523		mg/Kg		126	70 - 130		
o-Xylene			0.100	0.1444	*+	mg/Kg		144	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*149*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-34854/2-A
Matrix: Solid
Analysis Batch: 34891

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34854

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07718		mg/Kg		77	70 - 130	16	35
Toluene			0.100	0.08630		mg/Kg		86	70 - 130	8	35
Ethylbenzene			0.100	0.1069		mg/Kg		107	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2066		mg/Kg		103	70 - 130	20	35
o-Xylene			0.100	0.1153		mg/Kg		115	70 - 130	22	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: 880-19366-A-1-A MS
Matrix: Solid
Analysis Batch: 34891

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34854

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U F1	0.0998	0.06213	F1	mg/Kg		61	70 - 130		
Toluene	0.0234	F1	0.0998	0.07378	F1	mg/Kg		50	70 - 130		

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QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

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

Lab Sample ID: 880-19366-A-1-A MS
Matrix: Solid
Analysis Batch: 34891

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34854

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.0228	F1	0.0998	0.06507	F1	mg/Kg		42	70 - 130
m-Xylene & p-Xylene	0.0552	F1	0.200	0.1410	F1	mg/Kg		43	70 - 130
o-Xylene	0.0303	*+ F1	0.0998	0.08285	F1	mg/Kg		53	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-19366-A-1-B MSD
Matrix: Solid
Analysis Batch: 34891

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34854

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.100	0.05480	F1	mg/Kg		53	70 - 130	13	35
Toluene	0.0234	F1	0.100	0.06882	F1	mg/Kg		45	70 - 130	7	35
Ethylbenzene	0.0228	F1	0.100	0.06318	F1	mg/Kg		40	70 - 130	3	35
m-Xylene & p-Xylene	0.0552	F1	0.200	0.1334	F1	mg/Kg		39	70 - 130	6	35
o-Xylene	0.0303	*+ F1	0.100	0.07350	F1	mg/Kg		43	70 - 130	12	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

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		09/13/22 11:41	09/13/22 19:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*

Lab Sample ID: LCS 880-34396/2-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	951.8		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	917.8		mg/Kg		92	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

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

Lab Sample ID: LCS 880-34396/2-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34396

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	133	S1+	70 - 130

Lab Sample ID: LCSD 880-34396/3-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34396

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	842.1		mg/Kg		84	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	981.9		mg/Kg		98	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	130		70 - 130
o-Terphenyl	128		70 - 130

Lab Sample ID: 880-19130-A-8-B MS
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	630.3	F1	mg/Kg		62	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	913.7		mg/Kg		92	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 880-19130-A-8-C MSD
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34396

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 F1	999	645.9	F1	mg/Kg		63	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	899.8		mg/Kg		90	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	83		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34414/1-A
Matrix: Solid
Analysis Batch: 34568

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			09/15/22 11:58	1

Lab Sample ID: LCS 880-34414/2-A
Matrix: Solid
Analysis Batch: 34568

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			200	192.2		mg/Kg		96	90 - 110		

Lab Sample ID: LCSD 880-34414/3-A
Matrix: Solid
Analysis Batch: 34568

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			200	192.7		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 890-2927-1 MS
Matrix: Solid
Analysis Batch: 34568

Client Sample ID: BH01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	20.4		250	263.9		mg/Kg		98	90 - 110		

Lab Sample ID: 890-2927-1 MSD
Matrix: Solid
Analysis Batch: 34568

Client Sample ID: BH01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	20.4		250	265.5		mg/Kg		98	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

GC VOA

Prep Batch: 34854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2927-1	BH01	Total/NA	Solid	5035	
890-2927-2	BH01	Total/NA	Solid	5035	
MB 880-34854/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34854/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34854/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19366-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-19366-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2927-1	BH01	Total/NA	Solid	8021B	34854
890-2927-2	BH01	Total/NA	Solid	8021B	34854
MB 880-34854/5-A	Method Blank	Total/NA	Solid	8021B	34854
LCS 880-34854/1-A	Lab Control Sample	Total/NA	Solid	8021B	34854
LCSD 880-34854/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34854
880-19366-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	34854
880-19366-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34854

Analysis Batch: 35019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2927-1	BH01	Total/NA	Solid	Total BTEX	
890-2927-2	BH01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 34334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2927-1	BH01	Total/NA	Solid	8015B NM	34396
890-2927-2	BH01	Total/NA	Solid	8015B NM	34396
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015B NM	34396
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34396
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34396
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015B NM	34396
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34396

Prep Batch: 34396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2927-1	BH01	Total/NA	Solid	8015NM Prep	
890-2927-2	BH01	Total/NA	Solid	8015NM Prep	
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2927-1	BH01	Total/NA	Solid	8015 NM	
890-2927-2	BH01	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

HPLC/IC

Leach Batch: 34414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2927-1	BH01	Soluble	Solid	DI Leach	
890-2927-2	BH01	Soluble	Solid	DI Leach	
MB 880-34414/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34414/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34414/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2927-1 MS	BH01	Soluble	Solid	DI Leach	
890-2927-1 MSD	BH01	Soluble	Solid	DI Leach	

Analysis Batch: 34568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2927-1	BH01	Soluble	Solid	300.0	34414
890-2927-2	BH01	Soluble	Solid	300.0	34414
MB 880-34414/1-A	Method Blank	Soluble	Solid	300.0	34414
LCS 880-34414/2-A	Lab Control Sample	Soluble	Solid	300.0	34414
LCSD 880-34414/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34414
890-2927-1 MS	BH01	Soluble	Solid	300.0	34414
890-2927-1 MSD	BH01	Soluble	Solid	300.0	34414

Lab Chronicle

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

Client Sample ID: BH01
Date Collected: 09/08/22 10:30
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2927-1
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			4.97 g	5 mL	34854	09/19/22 14:55	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34891	09/20/22 16:54	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35019	09/21/22 09:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34484	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 03:56	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34414	09/13/22 15:08	KS	EET MID
Soluble	Analysis	300.0		1			34568	09/15/22 12:13	CH	EET MID

Client Sample ID: BH01
Date Collected: 09/08/22 10:45
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2927-2
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			4.95 g	5 mL	34854	09/19/22 14:55	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34891	09/20/22 17:14	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35019	09/21/22 09:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34484	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 04:18	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34414	09/13/22 15:08	KS	EET MID
Soluble	Analysis	300.0		1			34568	09/15/22 13:31	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 ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

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

Method Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

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 ROW BOOSTER STATION

Job ID: 890-2927-1
SDG: 03A1987009

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2927-1	BH01	Solid	09/08/22 10:30	09/09/22 15:05	0.5
890-2927-2	BH01	Solid	09/08/22 10:45	09/09/22 15:05	2

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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) 988-3199

Work Order No: _____

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Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum, LLC.	Company Name:	Devon Energy Corporation
Address:	2351 W Northwest Hwy Suite 1203A	Address:	5315 Buena Vista Dr.
City, State ZIP:	Dallas, TX 75220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	jim.raley@dvn.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	UCBH WW ROW BOOSTER STATION	Turn Around	
Project Number:	03A1987009	☑ Routine ☐ Rush	
Project Location:		Due Date:	5TAT
Sampler's Name:	Sanju Khatri	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	IR#007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.3	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	4.2	
Total Containers:		Corrected Temperature:	4.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX - EPA METHOD 8021B	TPH - EPA METHOD 8015M/D	CHLORIDE - EPA METHOD 300.0
BH01	S	9/8/2022	10:30	0.5'	Grab/	1		x	x	x
BH01	S	9/8/2022	10:45	2'	Grab/	1		x	x	x

ANALYSIS REQUEST / Parameters

890-2927 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID: NAB1805133508
Cost center: 9030007583

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_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			9.9.22 1505	2		
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2927-1
SDG Number: 03A1987009

Login Number: 2927
List Number: 1
Creator: Clifton, Cloe

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	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2927-1
SDG Number: 03A1987009

Login Number: 2927
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/13/22 10:37 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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2926-1
Laboratory Sample Delivery Group: 03A1987009
Client Project/Site: UCBH WW ROW BOOSTER STATION

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

Attn: Devon Team

JKramer

Authorized for release by:
9/21/2022 5:16:54 PM

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

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.

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Laboratory Job ID: 890-2926-1
SDG: 03A1987009

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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.
S1+	Surrogate recovery exceeds control limits, high biased.
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.
¤	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 ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

Job ID: 890-2926-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2926-1

Receipt
The samples were received on 9/9/2022 3:05 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 4.0°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-34858 and analytical batch 880-34895 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: Surrogate recovery for the following sample was outside control limits: (LCS 880-34396/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34396 and analytical batch 880-34334 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 ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

Client Sample ID: BH02

Lab Sample ID: 890-2926-1
Matrix: Solid
Date Collected: 09/08/22 11:15
Date Received: 09/09/22 15:05
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		09/19/22 15:06	09/21/22 12:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 12:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 12:39	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/19/22 15:06	09/21/22 12:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 12:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/19/22 15:06	09/21/22 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*09/19/22 15:06*	*09/21/22 12:39*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*09/19/22 15:06*	*09/21/22 12:39*	*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			09/21/22 15:17	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			09/14/22 09:34	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		09/13/22 11:41	09/14/22 03:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/14/22 03:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/14/22 03:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*09/13/22 11:41*	*09/14/22 03:13*	*1*
o-Terphenyl	*123*		*70 - 130*	*09/13/22 11:41*	*09/14/22 03:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3560**		50.5		mg/Kg			09/14/22 03:16	10

Client Sample ID: BH02

Lab Sample ID: 890-2926-2
Matrix: Solid
Date Collected: 09/08/22 11:30
Date Received: 09/09/22 15:05
Sample Depth: 1

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		09/19/22 15:06	09/21/22 12:59	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/19/22 15:06	09/21/22 12:59	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/19/22 15:06	09/21/22 12:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/19/22 15:06	09/21/22 12:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/19/22 15:06	09/21/22 12:59	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/19/22 15:06	09/21/22 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/19/22 15:06*	*09/21/22 12:59*	*1*

Client Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

Client Sample ID: BH02

Date Collected: 09/08/22 11:30
Date Received: 09/09/22 15:05
Sample Depth: 1

Lab Sample ID: 890-2926-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/19/22 15:06*	*09/21/22 12:59*	*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			09/21/22 15:17	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			09/14/22 09:34	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		09/13/22 11:41	09/14/22 03:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 03:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*09/13/22 11:41*	*09/14/22 03:35*	*1*
o-Terphenyl	*99*		*70 - 130*	*09/13/22 11:41*	*09/14/22 03:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**604**		4.99		mg/Kg			09/14/22 03:21	1

Surrogate Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

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)
880-19019-A-1-E MS	Matrix Spike	117	114
880-19019-A-1-F MSD	Matrix Spike Duplicate	92	112
890-2926-1	BH02	93	113
890-2926-2	BH02	95	112
LCS 880-34858/1-A	Lab Control Sample	91	102
LCSD 880-34858/2-A	Lab Control Sample Dup	94	103
MB 880-34692/5-A	Method Blank	102	116
MB 880-34858/5-A	Method Blank	104	116

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)
880-19130-A-8-B MS	Matrix Spike	97	86
880-19130-A-8-C MSD	Matrix Spike Duplicate	95	83
890-2926-1	BH02	124	123
890-2926-2	BH02	97	99
LCS 880-34396/2-A	Lab Control Sample	133 S1+	133 S1+
LCSD 880-34396/3-A	Lab Control Sample Dup	130	128
MB 880-34396/1-A	Method Blank	105	110

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34692/5-A
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/16/22 16:15	09/20/22 17:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/16/22 16:15*	*09/20/22 17:37*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*09/16/22 16:15*	*09/20/22 17:37*	*1*

Lab Sample ID: MB 880-34858/5-A
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34858

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 05:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 05:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 05:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/19/22 15:06	09/21/22 05:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 05:13	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/19/22 15:06	09/21/22 05:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/19/22 15:06*	*09/21/22 05:13*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*09/19/22 15:06*	*09/21/22 05:13*	*1*

Lab Sample ID: LCS 880-34858/1-A
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34858

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09802		mg/Kg		98	70 - 130
Toluene	0.100	0.08583		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.08534		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1780		mg/Kg		89	70 - 130
o-Xylene	0.100	0.08903		mg/Kg		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-34858/2-A
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34858

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09393		mg/Kg		94	70 - 130	4	35

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

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

Lab Sample ID: LCSD 880-34858/2-A
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34858

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08451		mg/Kg		85	70 - 130	2	35
Ethylbenzene			0.100	0.08316		mg/Kg		83	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.1731		mg/Kg		87	70 - 130	3	35
o-Xylene			0.100	0.08797		mg/Kg		88	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 880-19019-A-1-E MS
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34858

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F2 F1	0.0998	0.04876	F1	mg/Kg		49	70 - 130
Toluene	<0.00201	U F2 F1	0.0998	0.04594	F1	mg/Kg		46	70 - 130
Ethylbenzene	<0.00201	U F2 F1	0.0998	0.04536	F1	mg/Kg		45	70 - 130
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.200	0.09537	F1	mg/Kg		48	70 - 130
o-Xylene	<0.00201	U F2 F1	0.0998	0.05511	F1	mg/Kg		55	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: 880-19019-A-1-F MSD
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34858

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F2 F1	0.0990	0.1026	F2	mg/Kg		104	70 - 130	71	35
Toluene	<0.00201	U F2 F1	0.0990	0.08240	F2	mg/Kg		83	70 - 130	57	35
Ethylbenzene	<0.00201	U F2 F1	0.0990	0.07768	F2	mg/Kg		78	70 - 130	53	35
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.198	0.1614	F2	mg/Kg		82	70 - 130	51	35
o-Xylene	<0.00201	U F2 F1	0.0990	0.08266	F2	mg/Kg		83	70 - 130	40	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

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		09/13/22 11:41	09/13/22 19:23	1

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*

Lab Sample ID: LCS 880-34396/2-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	951.8		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	917.8		mg/Kg		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*133*	*S1+*	*70 - 130*
o-Terphenyl	*133*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-34396/3-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	842.1		mg/Kg		84	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	981.9		mg/Kg		98	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*130*		*70 - 130*
o-Terphenyl	*128*		*70 - 130*

Lab Sample ID: 880-19130-A-8-B MS
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	630.3	F1	mg/Kg		62	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	913.7		mg/Kg		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

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

Lab Sample ID: 880-19130-A-8-C MSD
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34396

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 F1	999	645.9	F1	mg/Kg		63	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	899.8		mg/Kg		90	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34376/1-A
Matrix: Solid
Analysis Batch: 34467

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			09/14/22 00:37	1

Lab Sample ID: LCS 880-34376/2-A
Matrix: Solid
Analysis Batch: 34467

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	242.6		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-34376/3-A
Matrix: Solid
Analysis Batch: 34467

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	243.0		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-18884-A-8-D MS
Matrix: Solid
Analysis Batch: 34467

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	74.5		250	334.2		mg/Kg		104	90 - 110

Lab Sample ID: 880-18884-A-8-E MSD
Matrix: Solid
Analysis Batch: 34467

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	74.5		250	336.7		mg/Kg		105	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

GC VOA

Prep Batch: 34692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34692/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 34858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2926-1	BH02	Total/NA	Solid	5035	
890-2926-2	BH02	Total/NA	Solid	5035	
MB 880-34858/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34858/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34858/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19019-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19019-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2926-1	BH02	Total/NA	Solid	8021B	34858
890-2926-2	BH02	Total/NA	Solid	8021B	34858
MB 880-34692/5-A	Method Blank	Total/NA	Solid	8021B	34692
MB 880-34858/5-A	Method Blank	Total/NA	Solid	8021B	34858
LCS 880-34858/1-A	Lab Control Sample	Total/NA	Solid	8021B	34858
LCSD 880-34858/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34858
880-19019-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	34858
880-19019-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34858

Analysis Batch: 35089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2926-1	BH02	Total/NA	Solid	Total BTEX	
890-2926-2	BH02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 34334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2926-1	BH02	Total/NA	Solid	8015B NM	34396
890-2926-2	BH02	Total/NA	Solid	8015B NM	34396
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015B NM	34396
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34396
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34396
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015B NM	34396
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34396

Prep Batch: 34396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2926-1	BH02	Total/NA	Solid	8015NM Prep	
890-2926-2	BH02	Total/NA	Solid	8015NM Prep	
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

GC Semi VOA

Analysis Batch: 34483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2926-1	BH02	Total/NA	Solid	8015 NM	
890-2926-2	BH02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2926-1	BH02	Soluble	Solid	DI Leach	
890-2926-2	BH02	Soluble	Solid	DI Leach	
MB 880-34376/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34376/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34376/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18884-A-8-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-18884-A-8-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 34467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2926-1	BH02	Soluble	Solid	300.0	34376
890-2926-2	BH02	Soluble	Solid	300.0	34376
MB 880-34376/1-A	Method Blank	Soluble	Solid	300.0	34376
LCS 880-34376/2-A	Lab Control Sample	Soluble	Solid	300.0	34376
LCSD 880-34376/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34376
880-18884-A-8-D MS	Matrix Spike	Soluble	Solid	300.0	34376
880-18884-A-8-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34376

Lab Chronicle

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

Client Sample ID: BH02
Date Collected: 09/08/22 11:15
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2926-1
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			5.01 g	5 mL	34858	09/19/22 15:06	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34895	09/21/22 12:39	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35089	09/21/22 15:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			34483	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 03:13	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34376	09/13/22 14:00	SMC	EET MID
Soluble	Analysis	300.0		10			34467	09/14/22 03:16	CH	EET MID

Client Sample ID: BH02
Date Collected: 09/08/22 11:30
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2926-2
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			5.03 g	5 mL	34858	09/19/22 15:06	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34895	09/21/22 12:59	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35089	09/21/22 15:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			34483	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 03:35	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34376	09/13/22 14:00	SMC	EET MID
Soluble	Analysis	300.0		1			34467	09/14/22 03:21	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 ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

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

Method Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

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 ROW BOOSTER STATION

Job ID: 890-2926-1
SDG: 03A1987009

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2926-1	BH02	Solid	09/08/22 11:15	09/09/22 15:05	0.5
890-2926-2	BH02	Solid	09/08/22 11:30	09/09/22 15:05	1

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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) 988-3199

Work Order No: _____

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Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum, LLC.	Company Name:	Devon Energy Corporation
Address:	2351 W Northwest Hwy Suite 1203A	Address:	5315 Buena Vista Dr.
City, State ZIP:	Dallas, TX 75220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	jim.raley@dvn.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	UCBH WW ROW BOOSTER STATION	Turn Around	
Project Number:	03A1987009	☑ Routine ☐ Rush	
Project Location:		Due Date:	5TAT
Sampler's Name:	Sanju Khatri	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	NM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	4.2
Total Containers:		Corrected Temperature:	4.0

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX - EPA METHOD 8021B	TPH - EPA METHOD 8015M/D	CHLORIDE - EPA METHOD 300.0
BH02	S	9/8/2022	11:15	0.5'	Grab/	1		x	x	x
BH02	S	9/8/2022	11:30	1'	Grab/	1		x	x	x

Parameters

890-2926 Chain of Custody

Sample Comments

Incident ID: NAB1805133508

Cost center: 9030007583

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_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9.9.22 1503	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2926-1
SDG Number: 03A1987009

Login Number: 2926
List Number: 1
Creator: Clifton, Cloe

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	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2926-1
SDG Number: 03A1987009

Login Number: 2926
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/13/22 10:37 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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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2925-1
Laboratory Sample Delivery Group: 03A1987009
Client Project/Site: UCBH WW ROW BOOSTER STATION

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

Attn: Devon Team

JKramer

Authorized for release by:
9/21/2022 5:16:39 PM

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

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.

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Laboratory Job ID: 890-2925-1
SDG: 03A1987009

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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.
S1+	Surrogate recovery exceeds control limits, high biased.
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.
¤	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 ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

Job ID: 890-2925-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2925-1

Receipt
The samples were received on 9/9/2022 3:05 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 4.0°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-34858 and analytical batch 880-34895 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: Surrogate recovery for the following sample was outside control limits: (LCS 880-34396/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34396 and analytical batch 880-34334 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 ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

Client Sample ID: BH03

Lab Sample ID: 890-2925-1
Matrix: Solid
Date Collected: 09/08/22 14:15
Date Received: 09/09/22 15:05
Sample Depth: 0.5

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		09/19/22 15:06	09/21/22 11:58	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/19/22 15:06	09/21/22 11:58	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/19/22 15:06	09/21/22 11:58	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/19/22 15:06	09/21/22 11:58	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/19/22 15:06	09/21/22 11:58	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/19/22 15:06	09/21/22 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/19/22 15:06*	*09/21/22 11:58*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/19/22 15:06*	*09/21/22 11:58*	*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			09/21/22 15:17	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			09/14/22 09:34	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		09/13/22 11:41	09/14/22 02:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 02:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*09/13/22 11:41*	*09/14/22 02:31*	*1*
o-Terphenyl	*102*		*70 - 130*	*09/13/22 11:41*	*09/14/22 02:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.36**		5.00		mg/Kg			09/14/22 03:06	1

Client Sample ID: BH03

Lab Sample ID: 890-2925-2
Matrix: Solid
Date Collected: 09/08/22 14:30
Date Received: 09/09/22 15:05
Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/19/22 15:06	09/21/22 12:18	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/19/22 15:06	09/21/22 12:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/19/22 15:06	09/21/22 12:18	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/19/22 15:06	09/21/22 12:18	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/19/22 15:06	09/21/22 12:18	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/19/22 15:06	09/21/22 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*09/19/22 15:06*	*09/21/22 12:18*	*1*

Client Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

Client Sample ID: BH03

Date Collected: 09/08/22 14:30
Date Received: 09/09/22 15:05
Sample Depth: 1

Lab Sample ID: 890-2925-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*09/19/22 15:06*	*09/21/22 12:18*	*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			09/21/22 15:17	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			09/14/22 09:34	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		09/13/22 11:41	09/14/22 02:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/14/22 02:52	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/14/22 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*09/13/22 11:41*	*09/14/22 02:52*	*1*
o-Terphenyl	*102*		*70 - 130*	*09/13/22 11:41*	*09/14/22 02:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.2**		5.00		mg/Kg			09/14/22 03:11	1

Surrogate Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-19019-A-1-E MS	Matrix Spike	117	114										
880-19019-A-1-F MSD	Matrix Spike Duplicate	92	112										
890-2925-1	BH03	95	110										
890-2925-2	BH03	107	111										
LCS 880-34858/1-A	Lab Control Sample	91	102										
LCSD 880-34858/2-A	Lab Control Sample Dup	94	103										
MB 880-34692/5-A	Method Blank	102	116										
MB 880-34858/5-A	Method Blank	104	116										

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)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-19130-A-8-B MS	Matrix Spike	97	86										
880-19130-A-8-C MSD	Matrix Spike Duplicate	95	83										
890-2925-1	BH03	101	102										
890-2925-2	BH03	101	102										
LCS 880-34396/2-A	Lab Control Sample	133 S1+	133 S1+										
LCSD 880-34396/3-A	Lab Control Sample Dup	130	128										
MB 880-34396/1-A	Method Blank	105	110										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34692/5-A
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:15	09/20/22 17:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/16/22 16:15	09/20/22 17:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/16/22 16:15*	*09/20/22 17:37*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*09/16/22 16:15*	*09/20/22 17:37*	*1*

Lab Sample ID: MB 880-34858/5-A
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34858

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 05:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 05:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 05:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/19/22 15:06	09/21/22 05:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/22 15:06	09/21/22 05:13	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/19/22 15:06	09/21/22 05:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/19/22 15:06*	*09/21/22 05:13*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*09/19/22 15:06*	*09/21/22 05:13*	*1*

Lab Sample ID: LCS 880-34858/1-A
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34858

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09802		mg/Kg		98	70 - 130
Toluene	0.100	0.08583		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.08534		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1780		mg/Kg		89	70 - 130
o-Xylene	0.100	0.08903		mg/Kg		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-34858/2-A
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34858

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09393		mg/Kg		94	70 - 130	4	35

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

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

Lab Sample ID: LCSD 880-34858/2-A
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34858

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08451		mg/Kg		85	70 - 130	2	35
Ethylbenzene			0.100	0.08316		mg/Kg		83	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.1731		mg/Kg		87	70 - 130	3	35
o-Xylene			0.100	0.08797		mg/Kg		88	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 880-19019-A-1-E MS
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34858

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F2 F1	0.0998	0.04876	F1	mg/Kg		49	70 - 130
Toluene	<0.00201	U F2 F1	0.0998	0.04594	F1	mg/Kg		46	70 - 130
Ethylbenzene	<0.00201	U F2 F1	0.0998	0.04536	F1	mg/Kg		45	70 - 130
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.200	0.09537	F1	mg/Kg		48	70 - 130
o-Xylene	<0.00201	U F2 F1	0.0998	0.05511	F1	mg/Kg		55	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: 880-19019-A-1-F MSD
Matrix: Solid
Analysis Batch: 34895

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34858

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F2 F1	0.0990	0.1026	F2	mg/Kg		104	70 - 130	71	35
Toluene	<0.00201	U F2 F1	0.0990	0.08240	F2	mg/Kg		83	70 - 130	57	35
Ethylbenzene	<0.00201	U F2 F1	0.0990	0.07768	F2	mg/Kg		78	70 - 130	53	35
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.198	0.1614	F2	mg/Kg		82	70 - 130	51	35
o-Xylene	<0.00201	U F2 F1	0.0990	0.08266	F2	mg/Kg		83	70 - 130	40	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

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		09/13/22 11:41	09/13/22 19:23	1

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*

Lab Sample ID: LCS 880-34396/2-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	951.8		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	917.8		mg/Kg		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*133*	*S1+*	*70 - 130*
o-Terphenyl	*133*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-34396/3-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	842.1		mg/Kg		84	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	981.9		mg/Kg		98	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*130*		*70 - 130*
o-Terphenyl	*128*		*70 - 130*

Lab Sample ID: 880-19130-A-8-B MS
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	630.3	F1	mg/Kg		62	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	913.7		mg/Kg		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

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

Lab Sample ID: 880-19130-A-8-C MSD
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34396

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 F1	999	645.9	F1	mg/Kg		63	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	899.8		mg/Kg		90	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34376/1-A
Matrix: Solid
Analysis Batch: 34467

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			09/14/22 00:37	1

Lab Sample ID: LCS 880-34376/2-A
Matrix: Solid
Analysis Batch: 34467

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	242.6		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-34376/3-A
Matrix: Solid
Analysis Batch: 34467

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	243.0		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-18884-A-8-D MS
Matrix: Solid
Analysis Batch: 34467

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	74.5		250	334.2		mg/Kg		104	90 - 110

Lab Sample ID: 880-18884-A-8-E MSD
Matrix: Solid
Analysis Batch: 34467

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	74.5		250	336.7		mg/Kg		105	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

GC VOA

Prep Batch: 34692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34692/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 34858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2925-1	BH03	Total/NA	Solid	5035	
890-2925-2	BH03	Total/NA	Solid	5035	
MB 880-34858/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34858/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34858/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19019-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19019-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2925-1	BH03	Total/NA	Solid	8021B	34858
890-2925-2	BH03	Total/NA	Solid	8021B	34858
MB 880-34692/5-A	Method Blank	Total/NA	Solid	8021B	34692
MB 880-34858/5-A	Method Blank	Total/NA	Solid	8021B	34858
LCS 880-34858/1-A	Lab Control Sample	Total/NA	Solid	8021B	34858
LCSD 880-34858/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34858
880-19019-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	34858
880-19019-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34858

Analysis Batch: 35088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2925-1	BH03	Total/NA	Solid	Total BTEX	
890-2925-2	BH03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 34334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2925-1	BH03	Total/NA	Solid	8015B NM	34396
890-2925-2	BH03	Total/NA	Solid	8015B NM	34396
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015B NM	34396
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34396
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34396
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015B NM	34396
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34396

Prep Batch: 34396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2925-1	BH03	Total/NA	Solid	8015NM Prep	
890-2925-2	BH03	Total/NA	Solid	8015NM Prep	
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

GC Semi VOA

Analysis Batch: 34482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2925-1	BH03	Total/NA	Solid	8015 NM	
890-2925-2	BH03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2925-1	BH03	Soluble	Solid	DI Leach	
890-2925-2	BH03	Soluble	Solid	DI Leach	
MB 880-34376/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34376/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34376/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18884-A-8-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-18884-A-8-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 34467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2925-1	BH03	Soluble	Solid	300.0	34376
890-2925-2	BH03	Soluble	Solid	300.0	34376
MB 880-34376/1-A	Method Blank	Soluble	Solid	300.0	34376
LCS 880-34376/2-A	Lab Control Sample	Soluble	Solid	300.0	34376
LCSD 880-34376/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34376
880-18884-A-8-D MS	Matrix Spike	Soluble	Solid	300.0	34376
880-18884-A-8-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34376

Lab Chronicle

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

Client Sample ID: BH03
Date Collected: 09/08/22 14:15
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2925-1
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			4.97 g	5 mL	34858	09/19/22 15:06	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34895	09/21/22 11:58	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35088	09/21/22 15:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			34482	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 02:31	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34376	09/13/22 14:00	SMC	EET MID
Soluble	Analysis	300.0		1			34467	09/14/22 03:06	CH	EET MID

Client Sample ID: BH03
Date Collected: 09/08/22 14:30
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2925-2
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			4.95 g	5 mL	34858	09/19/22 15:06	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34895	09/21/22 12:18	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35088	09/21/22 15:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			34482	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 02:52	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34376	09/13/22 14:00	SMC	EET MID
Soluble	Analysis	300.0		1			34467	09/14/22 03:11	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 ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

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

Method Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

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 ROW BOOSTER STATION

Job ID: 890-2925-1
SDG: 03A1987009

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2925-1	BH03	Solid	09/08/22 14:15	09/09/22 15:05	0.5
890-2925-2	BH03	Solid	09/08/22 14:30	09/09/22 15:05	1

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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) 988-3199

Work Order No: _____

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9/21/2022

Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum, LLC.	Company Name:	Devon Energy Corporation
Address:	2351 W Northwest Hwy Suite 1203A	Address:	5315 Buena Vista Dr.
City, State ZIP:	Dallas, TX 75220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	jim.raley@dvn.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	UCBH WW ROW BOOSTER STATION	Turn Around	
Project Number:	03A1987009	☑ Routine ☐ Rush	
Project Location:		Due Date:	5TAT
Sampler's Name:	Sanju Khatri	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TWN009
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	4.2
Total Containers:		Corrected Temperature:	4.0

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX - EPA METHOD 8021B	TPH - EPA METHOD 8015M/D	CHLORIDE - EPA METHOD 300.0
BH03	S	9/8/2022	14:15	0.5'	Grab/	1		x	x	x
BH03	S	9/8/2022	14:30	1'	Grab/	1		x	x	x

890-2925 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID: NAB1805133508
Cost center: 9030007583

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_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010:** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 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
1		9.9.22 1505	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2925-1
SDG Number: 03A1987009

Login Number: 2925
List Number: 1
Creator: Clifton, Cloe

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	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2925-1
SDG Number: 03A1987009

Login Number: 2925
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/13/22 10:37 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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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2924-1
Laboratory Sample Delivery Group: 03A1987009
Client Project/Site: UCBH WW ROW BOOSTER STATION

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

Attn: Devon Team

JKramer

Authorized for release by:
9/22/2022 9:13:32 AM

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

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.

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Laboratory Job ID: 890-2924-1
SDG: 03A1987009

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

Qualifiers

GC VOA

Qualifier	Qualifier Description
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.
S1+	Surrogate recovery exceeds control limits, high biased.
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.
¤	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 ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

Job ID: 890-2924-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2924-1

Receipt
The samples were received on 9/9/2022 3:05 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 4.0°C

GC VOA
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: Surrogate recovery for the following sample was outside control limits: (LCS 880-34396/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34396 and analytical batch 880-34334 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 880-34288 and analytical batch 880-34499 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 ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

Client Sample ID: BH04

Lab Sample ID: 890-2924-1
Matrix: Solid
Date Collected: 09/08/22 13:45
Date Received: 09/09/22 15:05
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		09/19/22 14:33	09/22/22 04:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/19/22 14:33	09/22/22 04:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/19/22 14:33	09/22/22 04:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/19/22 14:33	09/22/22 04:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/19/22 14:33	09/22/22 04:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/19/22 14:33	09/22/22 04:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*09/19/22 14:33*	*09/22/22 04:11*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*09/19/22 14:33*	*09/22/22 04:11*	*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			09/22/22 09:56	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			09/14/22 09:34	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		09/13/22 11:41	09/14/22 01:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 01:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*09/13/22 11:41*	*09/14/22 01:48*	*1*
o-Terphenyl	*122*		*70 - 130*	*09/13/22 11:41*	*09/14/22 01:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**370**		24.9		mg/Kg			09/15/22 00:48	5

Client Sample ID: BH04

Lab Sample ID: 890-2924-2
Matrix: Solid
Date Collected: 09/08/22 14:00
Date Received: 09/09/22 15:05
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		09/19/22 14:33	09/22/22 04:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/22/22 04:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/22/22 04:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/19/22 14:33	09/22/22 04:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/22/22 04:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/19/22 14:33	09/22/22 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*09/19/22 14:33*	*09/22/22 04:32*	*1*

Client Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

Client Sample ID: BH04

Date Collected: 09/08/22 14:00
Date Received: 09/09/22 15:05
Sample Depth: 1

Lab Sample ID: 890-2924-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*09/19/22 14:33*	*09/22/22 04:32*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/22/22 09:56	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			09/14/22 09:34	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		09/13/22 11:41	09/14/22 02:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/14/22 02:09	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/14/22 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*09/13/22 11:41*	*09/14/22 02:09*	*1*
o-Terphenyl	*118*		*70 - 130*	*09/13/22 11:41*	*09/14/22 02:09*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**420**		25.3		mg/Kg			09/15/22 00:53	5

Surrogate Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

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)										
890-2915-A-1-C MS	Matrix Spike	115	109										
890-2915-A-1-D MSD	Matrix Spike Duplicate	117	102										
890-2924-1	BH04	114	84										
890-2924-2	BH04	113	85										
LCS 880-34851/1-A	Lab Control Sample	114	106										
LCSD 880-34851/2-A	Lab Control Sample Dup	115	108										
MB 880-34851/5-A	Method Blank	88	77										
MB 880-34941/5-A	Method Blank	100	93										

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)										
880-19130-A-8-B MS	Matrix Spike	97	86										
880-19130-A-8-C MSD	Matrix Spike Duplicate	95	83										
890-2924-1	BH04	123	122										
890-2924-2	BH04	120	118										
LCS 880-34396/2-A	Lab Control Sample	133 S1+	133 S1+										
LCSD 880-34396/3-A	Lab Control Sample Dup	130	128										
MB 880-34396/1-A	Method Blank	105	110										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34851/5-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/19/22 14:33	09/21/22 20:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/19/22 14:33*	*09/21/22 20:40*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*09/19/22 14:33*	*09/21/22 20:40*	*1*

Lab Sample ID: LCS 880-34851/1-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34851

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09662		mg/Kg		97	70 - 130		
Toluene			0.100	0.08888		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.09395		mg/Kg		94	70 - 130		
m-Xylene & p-Xylene			0.200	0.1964		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.1106		mg/Kg		111	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-34851/2-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34851

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09096		mg/Kg		91	70 - 130	6	35
Toluene			0.100	0.08531		mg/Kg		85	70 - 130	4	35
Ethylbenzene			0.100	0.08835		mg/Kg		88	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1845		mg/Kg		92	70 - 130	6	35
o-Xylene			0.100	0.1080		mg/Kg		108	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 890-2915-A-1-C MS
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U	0.101	0.09155		mg/Kg		91	70 - 130		
Toluene	<0.00202	U	0.101	0.08263		mg/Kg		82	70 - 130		

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

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

Lab Sample ID: 890-2915-A-1-C MS
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.101	0.08658		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.202	0.1775		mg/Kg		88	70 - 130
o-Xylene	<0.00202	U	0.101	0.1042		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 890-2915-A-1-D MSD
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34851

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0996	0.08776		mg/Kg		88	70 - 130	4	35
Toluene	<0.00202	U	0.0996	0.08175		mg/Kg		82	70 - 130	1	35
Ethylbenzene	<0.00202	U	0.0996	0.08872		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1777		mg/Kg		89	70 - 130	0	35
o-Xylene	<0.00202	U	0.0996	0.1037		mg/Kg		104	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 880-34941/5-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/20/22 12:51	09/21/22 10:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/20/22 12:51*	*09/21/22 10:04*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/20/22 12:51*	*09/21/22 10:04*	*1*

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

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		09/13/22 11:41	09/13/22 19:23	1

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*

Lab Sample ID: LCS 880-34396/2-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	951.8		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	917.8		mg/Kg		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*133*	*S1+*	*70 - 130*
o-Terphenyl	*133*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-34396/3-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	842.1		mg/Kg		84	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	981.9		mg/Kg		98	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*130*		*70 - 130*
o-Terphenyl	*128*		*70 - 130*

Lab Sample ID: 880-19130-A-8-B MS
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	630.3	F1	mg/Kg		62	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	913.7		mg/Kg		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

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

Lab Sample ID: 880-19130-A-8-C MSD
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34396

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 F1	999	645.9	F1	mg/Kg		63	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	899.8		mg/Kg		90	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34288/1-A
Matrix: Solid
Analysis Batch: 34499

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			09/14/22 22:32	1

Lab Sample ID: LCS 880-34288/2-A
Matrix: Solid
Analysis Batch: 34499

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	241.4		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-34288/3-A
Matrix: Solid
Analysis Batch: 34499

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	242.0		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-19037-A-2-D MS
Matrix: Solid
Analysis Batch: 34499

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	29800	F1	12600	54900	F1	mg/Kg		200	90 - 110

Lab Sample ID: 880-19037-A-2-E MSD
Matrix: Solid
Analysis Batch: 34499

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	29800	F1	12600	53580	F1	mg/Kg		190	90 - 110	2	20

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

GC VOA

Prep Batch: 34851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2924-1	BH04	Total/NA	Solid	5035	
890-2924-2	BH04	Total/NA	Solid	5035	
MB 880-34851/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34851/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34851/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2915-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2915-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 34941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34941/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 35013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2924-1	BH04	Total/NA	Solid	8021B	34851
890-2924-2	BH04	Total/NA	Solid	8021B	34851
MB 880-34851/5-A	Method Blank	Total/NA	Solid	8021B	34851
MB 880-34941/5-A	Method Blank	Total/NA	Solid	8021B	34941
LCS 880-34851/1-A	Lab Control Sample	Total/NA	Solid	8021B	34851
LCSD 880-34851/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34851
890-2915-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	34851
890-2915-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34851

Analysis Batch: 35147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2924-1	BH04	Total/NA	Solid	Total BTEX	
890-2924-2	BH04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 34334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2924-1	BH04	Total/NA	Solid	8015B NM	34396
890-2924-2	BH04	Total/NA	Solid	8015B NM	34396
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015B NM	34396
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34396
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34396
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015B NM	34396
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34396

Prep Batch: 34396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2924-1	BH04	Total/NA	Solid	8015NM Prep	
890-2924-2	BH04	Total/NA	Solid	8015NM Prep	
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

GC Semi VOA

Analysis Batch: 34481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2924-1	BH04	Total/NA	Solid	8015 NM	
890-2924-2	BH04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2924-1	BH04	Soluble	Solid	DI Leach	
890-2924-2	BH04	Soluble	Solid	DI Leach	
MB 880-34288/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34288/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34288/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19037-A-2-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19037-A-2-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 34499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2924-1	BH04	Soluble	Solid	300.0	34288
890-2924-2	BH04	Soluble	Solid	300.0	34288
MB 880-34288/1-A	Method Blank	Soluble	Solid	300.0	34288
LCS 880-34288/2-A	Lab Control Sample	Soluble	Solid	300.0	34288
LCSD 880-34288/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34288
880-19037-A-2-D MS	Matrix Spike	Soluble	Solid	300.0	34288
880-19037-A-2-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34288

Lab Chronicle

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

Client Sample ID: BH04

Date Collected: 09/08/22 13:45
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2924-1

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			5.03 g	5 mL	34851	09/19/22 14:33	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35013	09/22/22 04:11	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35147	09/22/22 09:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34481	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 01:48	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34288	09/12/22 11:50	KS	EET MID
Soluble	Analysis	300.0		5			34499	09/15/22 00:48	CH	EET MID

Client Sample ID: BH04

Date Collected: 09/08/22 14:00
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2924-2

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			5.00 g	5 mL	34851	09/19/22 14:33	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35013	09/22/22 04:32	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35147	09/22/22 09:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34481	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 02:09	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34288	09/12/22 11:50	KS	EET MID
Soluble	Analysis	300.0		5			34499	09/15/22 00:53	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 ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

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

Method Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

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 ROW BOOSTER STATION

Job ID: 890-2924-1
SDG: 03A1987009

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2924-1	BH04	Solid	09/08/22 13:45	09/09/22 15:05	0.5
890-2924-2	BH04	Solid	09/08/22 14:00	09/09/22 15:05	1

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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) 988-3199

Work Order No: _____

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Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum, LLC.	Company Name:	Devon Energy Corporation
Address:	2351 W Northwest Hwy Suite 1203A	Address:	5315 Buena Vista Dr.
City, State ZIP:	Dallas, TX 75220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	jim.raley@dvn.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	UCBH WW ROW BOOSTER STATION	Turn Around	
Project Number:	03A1987009	☑ Routine ☐ Rush	
Project Location:		Due Date:	5TAT
Sampler's Name:	Sanju Khatri	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	IR#007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	4.2
Total Containers:		Corrected Temperature:	4.0

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX - EPA METHOD 8021B	TPH - EPA METHOD 8015M/D	CHLORIDE - EPA METHOD 300.0
BH04	S	9/8/2022	13:45	0.5'	Grab/	1		x	x	x
BH04	S	9/8/2022	14:00	1'	Grab/	1		x	x	x

Parameters

ANALYSIS REQUEST

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID: NAB1805133508

Cost center: 9030007583

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_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9.9.22 1505	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2924-1
SDG Number: 03A1987009

Login Number: 2924
List Number: 1
Creator: Clifton, Cloe

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	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2924-1
SDG Number: 03A1987009

Login Number: 2924
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/13/22 10:37 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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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2923-1
Laboratory Sample Delivery Group: 03A1987009
Client Project/Site: UCBH WW ROW BOOSTER STATION

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

Attn: Devon Team

JKramer

Authorized for release by:
9/22/2022 9:13:00 AM

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

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.

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Laboratory Job ID: 890-2923-1
SDG: 03A1987009

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

Qualifiers

GC VOA

Qualifier	Qualifier Description
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.
S1+	Surrogate recovery exceeds control limits, high biased.
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.
¤	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 ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

Job ID: 890-2923-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2923-1

Receipt
The samples were received on 9/9/2022 3:05 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 4.0°C

GC VOA
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: Surrogate recovery for the following sample was outside control limits: (LCS 880-34396/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34396 and analytical batch 880-34334 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 880-34288 and analytical batch 880-34499 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 ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

Client Sample ID: BH05

Lab Sample ID: 890-2923-1
Matrix: Solid
Date Collected: 09/08/22 13:15
Date Received: 09/09/22 15:05
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		09/19/22 14:33	09/22/22 03:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/22/22 03:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/22/22 03:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/19/22 14:33	09/22/22 03:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/22/22 03:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/19/22 14:33	09/22/22 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/19/22 14:33*	*09/22/22 03:31*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*09/19/22 14:33*	*09/22/22 03:31*	*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			09/22/22 09:55	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			09/14/22 09:34	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		09/13/22 11:41	09/14/22 01:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 01:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 01:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*09/13/22 11:41*	*09/14/22 01:05*	*1*
o-Terphenyl	*97*		*70 - 130*	*09/13/22 11:41*	*09/14/22 01:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**344**		25.2		mg/Kg			09/15/22 00:39	5

Client Sample ID: BH05

Lab Sample ID: 890-2923-2
Matrix: Solid
Date Collected: 09/08/22 13:30
Date Received: 09/09/22 15:05
Sample Depth: 2

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		09/19/22 14:33	09/22/22 03:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/19/22 14:33	09/22/22 03:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/19/22 14:33	09/22/22 03:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/19/22 14:33	09/22/22 03:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/19/22 14:33	09/22/22 03:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/19/22 14:33	09/22/22 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*09/19/22 14:33*	*09/22/22 03:51*	*1*

Client Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

Client Sample ID: BH05

Date Collected: 09/08/22 13:30
Date Received: 09/09/22 15:05
Sample Depth: 2

Lab Sample ID: 890-2923-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*09/19/22 14:33*	*09/22/22 03:51*	*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			09/22/22 09:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/14/22 09:34	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	<49.8	U	49.8		mg/Kg		09/13/22 11:41	09/14/22 01:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/22 11:41	09/14/22 01:26	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/22 11:41	09/14/22 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*09/13/22 11:41*	*09/14/22 01:26*	*1*
o-Terphenyl	*104*		*70 - 130*	*09/13/22 11:41*	*09/14/22 01:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**381**		4.97		mg/Kg			09/15/22 00:44	1

Surrogate Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

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)
890-2915-A-1-C MS	Matrix Spike	115	109
890-2915-A-1-D MSD	Matrix Spike Duplicate	117	102
890-2923-1	BH05	117	85
890-2923-2	BH05	107	73
LCS 880-34851/1-A	Lab Control Sample	114	106
LCSD 880-34851/2-A	Lab Control Sample Dup	115	108
MB 880-34851/5-A	Method Blank	88	77
MB 880-34941/5-A	Method Blank	100	93

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)
880-19130-A-8-B MS	Matrix Spike	97	86
880-19130-A-8-C MSD	Matrix Spike Duplicate	95	83
890-2923-1	BH05	96	97
890-2923-2	BH05	101	104
LCS 880-34396/2-A	Lab Control Sample	133 S1+	133 S1+
LCSD 880-34396/3-A	Lab Control Sample Dup	130	128
MB 880-34396/1-A	Method Blank	105	110

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34851/5-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/19/22 14:33	09/21/22 20:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/19/22 14:33*	*09/21/22 20:40*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*09/19/22 14:33*	*09/21/22 20:40*	*1*

Lab Sample ID: LCS 880-34851/1-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34851

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09662		mg/Kg		97	70 - 130		
Toluene			0.100	0.08888		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.09395		mg/Kg		94	70 - 130		
m-Xylene & p-Xylene			0.200	0.1964		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.1106		mg/Kg		111	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-34851/2-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34851

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09096		mg/Kg		91	70 - 130	6	35
Toluene			0.100	0.08531		mg/Kg		85	70 - 130	4	35
Ethylbenzene			0.100	0.08835		mg/Kg		88	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1845		mg/Kg		92	70 - 130	6	35
o-Xylene			0.100	0.1080		mg/Kg		108	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 890-2915-A-1-C MS
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U	0.101	0.09155		mg/Kg		91	70 - 130		
Toluene	<0.00202	U	0.101	0.08263		mg/Kg		82	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

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

Lab Sample ID: 890-2915-A-1-C MS
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.101	0.08658		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.202	0.1775		mg/Kg		88	70 - 130
o-Xylene	<0.00202	U	0.101	0.1042		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 890-2915-A-1-D MSD
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34851

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0996	0.08776		mg/Kg		88	70 - 130	4	35
Toluene	<0.00202	U	0.0996	0.08175		mg/Kg		82	70 - 130	1	35
Ethylbenzene	<0.00202	U	0.0996	0.08872		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1777		mg/Kg		89	70 - 130	0	35
o-Xylene	<0.00202	U	0.0996	0.1037		mg/Kg		104	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 880-34941/5-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/20/22 12:51	09/21/22 10:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/20/22 12:51*	*09/21/22 10:04*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/20/22 12:51*	*09/21/22 10:04*	*1*

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

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		09/13/22 11:41	09/13/22 19:23	1

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*

Lab Sample ID: LCS 880-34396/2-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	951.8		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	917.8		mg/Kg		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*133*	*S1+*	*70 - 130*
o-Terphenyl	*133*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-34396/3-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	842.1		mg/Kg		84	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	981.9		mg/Kg		98	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*130*		*70 - 130*
o-Terphenyl	*128*		*70 - 130*

Lab Sample ID: 880-19130-A-8-B MS
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	630.3	F1	mg/Kg		62	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	913.7		mg/Kg		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

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

Lab Sample ID: 880-19130-A-8-C MSD
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34396

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 F1	999	645.9	F1	mg/Kg		63	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	899.8		mg/Kg		90	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34288/1-A
Matrix: Solid
Analysis Batch: 34499

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			09/14/22 22:32	1

Lab Sample ID: LCS 880-34288/2-A
Matrix: Solid
Analysis Batch: 34499

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	241.4		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-34288/3-A
Matrix: Solid
Analysis Batch: 34499

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	242.0		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-19037-A-2-D MS
Matrix: Solid
Analysis Batch: 34499

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	29800	F1	12600	54900	F1	mg/Kg		200	90 - 110

Lab Sample ID: 880-19037-A-2-E MSD
Matrix: Solid
Analysis Batch: 34499

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	29800	F1	12600	53580	F1	mg/Kg		190	90 - 110	2	20

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2913-A-1-C MS
Matrix: Solid
Analysis Batch: 34499

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	22.1		250	276.5		mg/Kg		102	90 - 110

Lab Sample ID: 890-2913-A-1-D MSD
Matrix: Solid
Analysis Batch: 34499

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	22.1		250	277.5		mg/Kg		102	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

GC VOA

Prep Batch: 34851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2923-1	BH05	Total/NA	Solid	5035	
890-2923-2	BH05	Total/NA	Solid	5035	
MB 880-34851/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34851/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34851/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2915-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2915-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 34941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34941/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 35013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2923-1	BH05	Total/NA	Solid	8021B	34851
890-2923-2	BH05	Total/NA	Solid	8021B	34851
MB 880-34851/5-A	Method Blank	Total/NA	Solid	8021B	34851
MB 880-34941/5-A	Method Blank	Total/NA	Solid	8021B	34941
LCS 880-34851/1-A	Lab Control Sample	Total/NA	Solid	8021B	34851
LCSD 880-34851/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34851
890-2915-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	34851
890-2915-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34851

Analysis Batch: 35146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2923-1	BH05	Total/NA	Solid	Total BTEX	
890-2923-2	BH05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 34334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2923-1	BH05	Total/NA	Solid	8015B NM	34396
890-2923-2	BH05	Total/NA	Solid	8015B NM	34396
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015B NM	34396
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34396
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34396
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015B NM	34396
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34396

Prep Batch: 34396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2923-1	BH05	Total/NA	Solid	8015NM Prep	
890-2923-2	BH05	Total/NA	Solid	8015NM Prep	
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

GC Semi VOA

Analysis Batch: 34480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2923-1	BH05	Total/NA	Solid	8015 NM	
890-2923-2	BH05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2923-1	BH05	Soluble	Solid	DI Leach	
890-2923-2	BH05	Soluble	Solid	DI Leach	
MB 880-34288/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34288/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34288/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19037-A-2-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19037-A-2-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-2913-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2913-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 34499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2923-1	BH05	Soluble	Solid	300.0	34288
890-2923-2	BH05	Soluble	Solid	300.0	34288
MB 880-34288/1-A	Method Blank	Soluble	Solid	300.0	34288
LCS 880-34288/2-A	Lab Control Sample	Soluble	Solid	300.0	34288
LCSD 880-34288/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34288
880-19037-A-2-D MS	Matrix Spike	Soluble	Solid	300.0	34288
880-19037-A-2-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34288
890-2913-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	34288
890-2913-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34288

Lab Chronicle

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

Client Sample ID: BH05
Date Collected: 09/08/22 13:15
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2923-1
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			5.01 g	5 mL	34851	09/19/22 14:33	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35013	09/22/22 03:31	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35146	09/22/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34480	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 01:05	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34288	09/12/22 11:50	KS	EET MID
Soluble	Analysis	300.0		5			34499	09/15/22 00:39	CH	EET MID

Client Sample ID: BH05
Date Collected: 09/08/22 13:30
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2923-2
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			4.97 g	5 mL	34851	09/19/22 14:33	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35013	09/22/22 03:51	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35146	09/22/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34480	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 01:26	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34288	09/12/22 11:50	KS	EET MID
Soluble	Analysis	300.0		1			34499	09/15/22 00:44	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 ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

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

Method Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

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 ROW BOOSTER STATION

Job ID: 890-2923-1
SDG: 03A1987009

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2923-1	BH05	Solid	09/08/22 13:15	09/09/22 15:05	1
890-2923-2	BH05	Solid	09/08/22 13:30	09/09/22 15:05	2

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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) 988-3199

Work Order No: _____

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Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum, LLC.	Company Name:	Devon Energy Corporation
Address:	2351 W Northwest Hwy Suite 1203A	Address:	5315 Buena Vista Dr.
City, State ZIP:	Dallas, TX 75220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	jim.raley@dvn.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	UCBH WW ROW BOOSTER STATION	Turn Around	
Project Number:	03A1987009	☑ Routine ☐ Rush	
Project Location:		Due Date:	5TAT
Sampler's Name:	Sanju Khatri	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TM003
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	4.2
Total Containers:		Corrected Temperature:	4.0

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX - EPA METHOD 8021B	TPH - EPA METHOD 8015M/D	CHLORIDE - EPA METHOD 300.0
BH05	S	9/8/2022	13:15	1'	Grab/	1		x	x	x
BH05	S	9/8/2022	13:30	2'	Grab/	1		x	x	x

ANALYSIS REQUEST — Parameters

890-2923 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID: NAB1805133508

Cost center: 9030007583

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_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9.9.22 1504	3		
5			4		
			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2923-1
SDG Number: 03A1987009

Login Number: 2923
List Number: 1
Creator: Clifton, Cloe

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	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2923-1
SDG Number: 03A1987009

Login Number: 2923
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/13/22 10:37 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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2922-1
Laboratory Sample Delivery Group: 03A1987009
Client Project/Site: UCBH WW ROW BOOSTER STATION

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

Attn: Devon Team

JKramer

Authorized for release by:
9/22/2022 9:13:01 AM

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

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.

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Laboratory Job ID: 890-2922-1
SDG: 03A1987009

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

Qualifiers

GC VOA

Qualifier	Qualifier Description
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.
S1+	Surrogate recovery exceeds control limits, high biased.
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.
¤	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 ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

Job ID: 890-2922-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2922-1

Receipt
The samples were received on 9/9/2022 3:05 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 4.0°C

GC VOA
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: Surrogate recovery for the following sample was outside control limits: (LCS 880-34396/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34396 and analytical batch 880-34334 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 ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

Client Sample ID: BH06

Lab Sample ID: 890-2922-1
Matrix: Solid
Date Collected: 09/08/22 12:30
Date Received: 09/09/22 15:05
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		09/19/22 14:33	09/22/22 02:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/22/22 02:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/22/22 02:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/19/22 14:33	09/22/22 02:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/22/22 02:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/19/22 14:33	09/22/22 02:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/19/22 14:33*	*09/22/22 02:50*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*09/19/22 14:33*	*09/22/22 02:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/22/22 09:55	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			09/14/22 09:34	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		09/13/22 11:41	09/14/22 00:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/14/22 00:01	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/14/22 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*09/13/22 11:41*	*09/14/22 00:01*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/13/22 11:41*	*09/14/22 00:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**69.0**		5.00		mg/Kg			09/15/22 00:29	1

Client Sample ID: BH06

Lab Sample ID: 890-2922-2
Matrix: Solid
Date Collected: 09/08/22 12:45
Date Received: 09/09/22 15:05
Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/19/22 14:33	09/22/22 03:10	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/19/22 14:33	09/22/22 03:10	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/19/22 14:33	09/22/22 03:10	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/19/22 14:33	09/22/22 03:10	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/19/22 14:33	09/22/22 03:10	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/19/22 14:33	09/22/22 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/19/22 14:33*	*09/22/22 03:10*	*1*

Client Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

Client Sample ID: BH06

Date Collected: 09/08/22 12:45
Date Received: 09/09/22 15:05
Sample Depth: 1

Lab Sample ID: 890-2922-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*09/19/22 14:33*	*09/22/22 03:10*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/22/22 09:55	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			09/14/22 09:34	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		09/13/22 11:41	09/14/22 00:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 00:22	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 11:41	09/14/22 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/13/22 11:41*	*09/14/22 00:22*	*1*
o-Terphenyl	*106*		*70 - 130*	*09/13/22 11:41*	*09/14/22 00:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.0**		4.95		mg/Kg			09/15/22 00:34	1

Surrogate Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

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)
890-2915-A-1-C MS	Matrix Spike	115	109
890-2915-A-1-D MSD	Matrix Spike Duplicate	117	102
890-2922-1	BH06	116	83
890-2922-2	BH06	117	85
LCS 880-34851/1-A	Lab Control Sample	114	106
LCSD 880-34851/2-A	Lab Control Sample Dup	115	108
MB 880-34851/5-A	Method Blank	88	77
MB 880-34941/5-A	Method Blank	100	93

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)
880-19130-A-8-B MS	Matrix Spike	97	86
880-19130-A-8-C MSD	Matrix Spike Duplicate	95	83
890-2922-1	BH06	108	110
890-2922-2	BH06	104	106
LCS 880-34396/2-A	Lab Control Sample	133 S1+	133 S1+
LCSD 880-34396/3-A	Lab Control Sample Dup	130	128
MB 880-34396/1-A	Method Blank	105	110

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34851/5-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/22 14:33	09/21/22 20:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/19/22 14:33	09/21/22 20:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/19/22 14:33*	*09/21/22 20:40*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*09/19/22 14:33*	*09/21/22 20:40*	*1*

Lab Sample ID: LCS 880-34851/1-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34851

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09662		mg/Kg		97	70 - 130		
Toluene			0.100	0.08888		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.09395		mg/Kg		94	70 - 130		
m-Xylene & p-Xylene			0.200	0.1964		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.1106		mg/Kg		111	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-34851/2-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34851

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09096		mg/Kg		91	70 - 130	6	35
Toluene			0.100	0.08531		mg/Kg		85	70 - 130	4	35
Ethylbenzene			0.100	0.08835		mg/Kg		88	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1845		mg/Kg		92	70 - 130	6	35
o-Xylene			0.100	0.1080		mg/Kg		108	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 890-2915-A-1-C MS
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U	0.101	0.09155		mg/Kg		91	70 - 130		
Toluene	<0.00202	U	0.101	0.08263		mg/Kg		82	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

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

Lab Sample ID: 890-2915-A-1-C MS
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.101	0.08658		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.202	0.1775		mg/Kg		88	70 - 130
o-Xylene	<0.00202	U	0.101	0.1042		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 890-2915-A-1-D MSD
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34851

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0996	0.08776		mg/Kg		88	70 - 130	4	35
Toluene	<0.00202	U	0.0996	0.08175		mg/Kg		82	70 - 130	1	35
Ethylbenzene	<0.00202	U	0.0996	0.08872		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1777		mg/Kg		89	70 - 130	0	35
o-Xylene	<0.00202	U	0.0996	0.1037		mg/Kg		104	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 880-34941/5-A
Matrix: Solid
Analysis Batch: 35013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/20/22 12:51	09/21/22 10:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/20/22 12:51	09/21/22 10:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/20/22 12:51*	*09/21/22 10:04*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/20/22 12:51*	*09/21/22 10:04*	*1*

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

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		09/13/22 11:41	09/13/22 19:23	1

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

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

Lab Sample ID: MB 880-34396/1-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 11:41	09/13/22 19:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/13/22 11:41*	*09/13/22 19:23*	*1*

Lab Sample ID: LCS 880-34396/2-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	951.8		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	917.8		mg/Kg		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*133*	*S1+*	*70 - 130*
o-Terphenyl	*133*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-34396/3-A
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	842.1		mg/Kg		84	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	981.9		mg/Kg		98	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*130*		*70 - 130*
o-Terphenyl	*128*		*70 - 130*

Lab Sample ID: 880-19130-A-8-B MS
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	630.3	F1	mg/Kg		62	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	913.7		mg/Kg		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

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

Lab Sample ID: 880-19130-A-8-C MSD
Matrix: Solid
Analysis Batch: 34334

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34396

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 F1	999	645.9	F1	mg/Kg		63	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	899.8		mg/Kg		90	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34288/1-A
Matrix: Solid
Analysis Batch: 34499

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			09/14/22 22:32	1

Lab Sample ID: LCS 880-34288/2-A
Matrix: Solid
Analysis Batch: 34499

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	241.4		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-34288/3-A
Matrix: Solid
Analysis Batch: 34499

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	242.0		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 890-2913-A-1-C MS
Matrix: Solid
Analysis Batch: 34499

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	22.1		250	276.5		mg/Kg		102	90 - 110

Lab Sample ID: 890-2913-A-1-D MSD
Matrix: Solid
Analysis Batch: 34499

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	22.1		250	277.5		mg/Kg		102	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

GC VOA

Prep Batch: 34851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2922-1	BH06	Total/NA	Solid	5035	
890-2922-2	BH06	Total/NA	Solid	5035	
MB 880-34851/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34851/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34851/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2915-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2915-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 34941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34941/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 35013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2922-1	BH06	Total/NA	Solid	8021B	34851
890-2922-2	BH06	Total/NA	Solid	8021B	34851
MB 880-34851/5-A	Method Blank	Total/NA	Solid	8021B	34851
MB 880-34941/5-A	Method Blank	Total/NA	Solid	8021B	34941
LCS 880-34851/1-A	Lab Control Sample	Total/NA	Solid	8021B	34851
LCSD 880-34851/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34851
890-2915-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	34851
890-2915-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34851

Analysis Batch: 35145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2922-1	BH06	Total/NA	Solid	Total BTEX	
890-2922-2	BH06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 34334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2922-1	BH06	Total/NA	Solid	8015B NM	34396
890-2922-2	BH06	Total/NA	Solid	8015B NM	34396
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015B NM	34396
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34396
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34396
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015B NM	34396
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34396

Prep Batch: 34396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2922-1	BH06	Total/NA	Solid	8015NM Prep	
890-2922-2	BH06	Total/NA	Solid	8015NM Prep	
MB 880-34396/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34396/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19130-A-8-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19130-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

GC Semi VOA

Analysis Batch: 34479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2922-1	BH06	Total/NA	Solid	8015 NM	
890-2922-2	BH06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2922-1	BH06	Soluble	Solid	DI Leach	
890-2922-2	BH06	Soluble	Solid	DI Leach	
MB 880-34288/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34288/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34288/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2913-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2913-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 34499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2922-1	BH06	Soluble	Solid	300.0	34288
890-2922-2	BH06	Soluble	Solid	300.0	34288
MB 880-34288/1-A	Method Blank	Soluble	Solid	300.0	34288
LCS 880-34288/2-A	Lab Control Sample	Soluble	Solid	300.0	34288
LCSD 880-34288/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34288
890-2913-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	34288
890-2913-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34288

Lab Chronicle

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

Client Sample ID: BH06
Date Collected: 09/08/22 12:30
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2922-1
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			5.00 g	5 mL	34851	09/19/22 14:33	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35013	09/22/22 02:50	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35145	09/22/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34479	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 00:01	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34288	09/12/22 11:50	KS	EET MID
Soluble	Analysis	300.0		1			34499	09/15/22 00:29	CH	EET MID

Client Sample ID: BH06
Date Collected: 09/08/22 12:45
Date Received: 09/09/22 15:05

Lab Sample ID: 890-2922-2
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			4.96 g	5 mL	34851	09/19/22 14:33	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35013	09/22/22 03:10	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35145	09/22/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34479	09/14/22 09:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34396	09/13/22 11:41	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34334	09/14/22 00:22	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34288	09/12/22 11:50	KS	EET MID
Soluble	Analysis	300.0		1			34499	09/15/22 00:34	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 ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

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

Method Summary

Client: Ensolum
Project/Site: UCBH WW ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

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 ROW BOOSTER STATION

Job ID: 890-2922-1
SDG: 03A1987009

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2922-1	BH06	Solid	09/08/22 12:30	09/09/22 15:05	0.5
890-2922-2	BH06	Solid	09/08/22 12:45	09/09/22 15:05	1

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum, LLC.	Company Name:	Devon Energy Corporation
Address:	2351 W Northwest Hwy Suite 1203A	Address:	5315 Buena Vista Dr.
City, State ZIP:	Dallas, TX 75220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	jim.raley@dvn.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	UCBH WW ROW BOOSTER STATION	Turn Around	
Project Number:	03A1987009	☑ Routine ☐ Rush	
Project Location:		Due Date:	5TAT
Sampler's Name:	Sanju Khatri	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TRM007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	4.2	
Total Containers:		Corrected Temperature:	4.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX - EPA METHOD 8021B	TPH - EPA METHOD 8015M/D	CHLORIDE - EPA METHOD 300.0
BH06	S	9/8/2022	12:30	0.5'	Grab/	1		x	x	x
BH06	S	9/8/2022	12:45	1'	Grab/	1		x	x	x

Parameters

ANALYSIS REQUEST

890-2922 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID: NAB1805133508

Cost center: 9030007583

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_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 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
1		9.9.22 1505	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2922-1
SDG Number: 03A1987009

Login Number: 2922
List Number: 1
Creator: Clifton, Cloe

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	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2922-1
SDG Number: 03A1987009

Login Number: 2922
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/13/22 10:37 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	

APPENDIX G

Correspondence & Notifications

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 19 2018
RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

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

fAB1805133323
NAB1805133508

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: RKI Exploration / WPX Energy 246289	Contact: James Raley
Address: 5315 Buena Vista Dr.	Telephone No: 575-689-7597
Facility Name: Brushy Gathering Facility	Facility Type: Produced Water Gathering Facility

Surface Owner: Federal	Mineral Owner: Federal	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	25	26S	29E					Eddy

Latitude 32.00576 Longitude -103.94400 NAD83

NATURE OF RELEASE

Type of Release: Produced Water Release	Volume of Release: 10 bbls	Volume Recovered: 7 bbls
Source of Release: Above Ground Line	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher	
By Whom? Jim Raley	Date and Hour: 2/5/2016	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

Describe Cause of Problem and Remedial Action Taken.*
An above ground poly line that was not is use was damaged by a piece of heavy equipment, which resulted in the release of residual produced water to the soils in pipeline ROW. A vac truck was immediately dispatched to remove standing liquids and drain line. Line was removed. Impacted soils were confined to an area of approx 50'x50'. Spill was along Stateline road at coordinates 32.00576, -103.94400. Did not occur on facility.

Describe Area Affected and Cleanup Action Taken.*
Obviously impacted soils were removed and samples collected to determine depths of impacts.

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

Signature: Jim Raley

Printed Name: Jim Raley

Title: Environmental Specialist

E-mail Address: james.raley@wpxenergy.com

Date: 2/19/2019 Phone: 575-689-7597

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Signed By Mike Bratcher

Approval Date: 2/20/18 Expiration Date: N/A

Conditions of Approval: See attached

Attached ☐ 3RP-4630

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 2/19/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4103D has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 3/19/2018. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Bratcher, Mike, EMNRD

From: Raley, Jim <James.Raley@wpxenergy.com>
Sent: Tuesday, February 20, 2018 6:45 AM
To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD
Cc: Tucker, Shelly; Blaney, Karolina
Subject: RE: [EXTERNAL] RE: Initial Notification - WPX Brushy Gathering Station

Mike,
The legal should be S25 T26S R29E.

Jim Raley | Environmental Specialist - Permian Basin
5315 Buena Vista Dr., Carlsbad, NM 88220
C: (575)689-7597 | james.raley@wpxenergy.com
WPXENERGY

From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]
Sent: Monday, February 19, 2018 4:49 PM
To: Raley, Jim <James.Raley@wpxenergy.com>; Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>
Cc: Tucker, Shelly <stucker@blm.gov>; Blaney, Karolina <Karolina.Blaney@wpxenergy.com>
Subject: [EXTERNAL] RE: Initial Notification - WPX Brushy Gathering Station

Jim – Do have the STR for this site?

Thanks,

Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210
575-748-1283 Ext 108

From: Raley, Jim [mailto:James.Raley@wpxenergy.com]
Sent: Monday, February 19, 2018 4:34 PM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>
Cc: Tucker, Shelly <stucker@blm.gov>; Blaney, Karolina <Karolina.Blaney@wpxenergy.com>
Subject: RE: Initial Notification - WPX Brushy Gathering Station

Please find attached C-141 for this incident.

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

WPXENERGY

From: Raley, Jim
Sent: Tuesday, February 06, 2018 10:11 AM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; 'Weaver, Crystal, EMNRD' <Crystal.Weaver@state.nm.us>
Cc: 'Tucker, Shelly' <stucker@blm.gov>; Blaney, Karolina <Karolina.Blaney@wpxenergy.com>
Subject: Initial Notification - WPX Brushy Gathering Station

Good Morning,

This is a follow-up email in regards to a voicemail left for Mike Bratcher giving immediate notification on 2/5/2016 at 8:44 A.M of a release that occurred near our Brushy Booster Station.

An unauthorized release of approx. 10bbls/produced water occurred near our Brushy Draw Booster Station. This release was the result of equipment damage to a produced water transfer line that was being removed. The line had not been fully drained and the damage allowed fluids to impact soils along the State Line Road in an area of approx. 50'x50'. The spill is located at 32.00576,-103.94400 which I show as BLM surface. No water was threatened. The spill was mapped with a Trimble GPS

In giving verbal notification I had indicated that 80 bbls was recovered. Upon further investigation it was discovered that the additional fluids were from draining the damaged gathering line and did not impact soils. A C-141 will be submitted within the next 15 days.

WPX would like permission to remove impacted soils to a depth of 1' within the spill area and collect samples to delineate the vertical extent of the impacts.

Jim Raley | Environmental Specialist - Permian Basin
5315 Buena Vista Dr., Carlsbad, NM 88220
C: (575)689-7597 | james.raley@wpxenergy.com
WPXENERGY

Weaver, Crystal, EMNRD

From: Raley, Jim <James.Raley@wpxenergy.com>
Sent: Tuesday, February 6, 2018 10:11 AM
To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD
Cc: Tucker, Shelly; Blaney, Karolina
Subject: Initial Notification - WPX Brushy Gathering Station

Good Morning,

This is a follow-up email in regards to a voicemail left for Mike Bratcher giving immediate notification on 2/5/2016 at 8:44 A.M of a release that occurred near our Brushy Booster Station.

An unauthorized release of approx. 10bbls/produced water occurred near our Brushy Draw Booster Station. This release was the result of equipment damage to a produced water transfer line that was being removed. The line had not been fully drained and the damage allowed fluids to impact soils along the State Line Road in an area of approx. 50'x50'. The spill is located at 32.00576,-103.94400 which I show as BLM surface. No water was threatened. The spill was mapped with a Trimble GPS

In giving verbal notification I had indicated that 80 bbls was recovered. Upon further investigation it was discovered that the additional fluids were from draining the damaged gathering line and did not impact soils. A C-141 will be submitted within the next 15 days.

WPX would like permission to remove impacted soils to a depth of 1' within the spill area and collect samples to delineate the vertical extent of the impacts.

Jim Raley | Environmental Specialist - Permian Basin
5315 Buena Vista Dr., Carlsbad, NM 88220
C: (575)689-7597 | james.raley@wpxenergy.com
WPXENERGY

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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

QUESTIONS

Action 376289

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 376289
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAB1805133508**
Incident Name	**NAB1805133508 BRUSHY GATHERING FACILITY @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Received**
Incident Facility	**[fAB1805133323] Brushy Gathering Facility**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Brushy Gathering Facility
Date Release Discovered	02/05/2016
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Vandalism | Flow Line - Production | Produced Water | Released: 10 BBL | Recovered: 7 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 (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 376289
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 08/21/2024

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QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 376289
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 100 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 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	Zero feet, overlying, or within area
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	Yes

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	3560
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	09/08/2022
On what date will (or did) the final sampling or liner inspection occur	12/31/2024
On what date will (or was) the remediation complete(d)	12/31/2024
What is the estimated surface area (in square feet) that will be reclaimed	200
What is the estimated volume (in cubic yards) that will be reclaimed	11
What is the estimated surface area (in square feet) that will be remediated	200
What is the estimated volume (in cubic yards) that will be remediated	11
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 376289
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	*Not answered.*
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	Yes
In which state is the disposal taking place	Texas
What is the name of the out-of-state facility	R360
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 08/21/2024

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

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QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 376289
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

District I
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QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 376289
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	***{Unavailable.}***

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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

CONDITIONS

Operator:	OGRID:
WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	246289
	Action Number: 376289
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation plan conditionally approved.	8/22/2024
bhall	Vertical delineation must be completed through excavation and confirmation sampling pursuant to 19.15.29.12 NMAC.	8/22/2024
bhall	Remediation confirmation samples must meet the most stringent remediation closure criteria found on Table I of 19.15.29 NMAC.	8/22/2024
bhall	Confirmation samples must be 5-point composite samples not representative of more than 200 square feet.	8/22/2024
bhall	This area is considered not reasonably needed for production operations or for subsequent drilling operations therefore, it must meet the requirements of 19.15.29.13 NMAC at the time of remediation.	8/22/2024
bhall	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	8/22/2024
bhall	OCD will NOT approve the proposed schedule of completing remediation of this site concurrently with the proposed work associated with Incident Numbers nAB1501655607, nAB1504154780, nAB1522341642, nAB1621453181, nAB1633639499, nAPP2230032326, located due west of the site. The proposed workplans for the adjacent releases were denied.	8/22/2024
bhall	Submit a complete remediation closure report through the OCD Permitting website by 11/22/2024.	8/22/2024
bhall	A complete reclamation report can be submitted with the closure report or can be submitted after the closure report is approved.	8/22/2024

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QUESTIONS

Action 406024

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 406024
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAB1805133508**
Incident Name	**NAB1805133508 BRUSHY GATHERING FACILITY @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**
Incident Facility	**[fAB1805133323] Brushy Gathering Facility**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Brushy Gathering Facility
Date Release Discovered	02/05/2016
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Vandalism | Flow Line - Production | Produced Water | Released: 10 BBL | Recovered: 7 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 (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 406024
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 11/22/2024

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QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 406024
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 100 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 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	Zero feet, overlying, or within area
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	Yes

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Requesting a remediation plan approval with this submission		Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
Have the lateral and vertical extents of contamination been fully delineated		Yes
Was this release entirely contained within a lined containment area		No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride	(EPA 300.0 or SM4500 Cl B)	3760
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	98
GRO+DRO	(EPA SW-846 Method 8015M)	37.8
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
On what estimated date will the remediation commence		03/01/2025
On what date will (or did) the final sampling or liner inspection occur		12/31/2025
On what date will (or was) the remediation complete(d)		12/31/2025
What is the estimated surface area (in square feet) that will be reclaimed		2000
What is the estimated volume (in cubic yards) that will be reclaimed		148
What is the estimated surface area (in square feet) that will be remediated		200
What is the estimated volume (in cubic yards) that will be remediated		148
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.		

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QUESTIONS (continued)

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	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	*Not answered.*
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	Yes
In which state is the disposal taking place	Texas
What is the name of the out-of-state facility	R360
OR is the **off-site** disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
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: 11/22/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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QUESTIONS

Deferral Requests Only *Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

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	Action Number: 406024
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QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**403476**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**11/21/2024**
What was the (estimated) number of samples that were to be gathered	**24**
What was the sampling surface area in square feet	**2129**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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	Action Number: 406024
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation plan conditionally approved.	11/25/2024
bhall	Remediation closure/final samples must meet the most stringent closure criteria found on Table I of 19.15.29 NMAC. The excavation may need to advanced further than what is proposed in this plan based on field/confirmation analytical results.	11/25/2024
bhall	This area is considered not reasonably needed for production operations or for subsequent drilling operations therefore, it must meet the requirements of 19.15.29.13 NMAC at the time of remediation.	11/25/2024
bhall	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is nonwaste containing; At least one (1) representative 5point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	11/25/2024
bhall	Submit a complete remediation closure and/or reclamation report through the OCD Permitting website by 2/28/2025.	11/25/2024
bhall	A complete reclamation report can be submitted with the closure report or can be submitted after the closure report is approved.	11/25/2024