

Location:	PLU 20-8 BD 104H	
Spill Date:	2/2/2024	
Area 1		
Approximate Area =	32886.00	sq. ft.
Average Saturation (or depth) of spill =	2.50	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =		bbls
Total Produced Water =	51.61	bbls

TOTAL VOLUME OF LEAK		
Total Crude Oil =		bbls
Total Produced Water =	51.61	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =		bbls
Total Produced Water =	41.00	bbls



October 29, 2024

New Mexico Oil Conservation Division

1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**Re: Remediation Work Plan
PLU 20-8 Brushy Draw 104H
Incident Number nAPP2404750069
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Remediation Work Plan (Work Plan)* to document the assessment, delineation and soil sampling activities completed to date and propose remedial actions to address impacted soil identified at the PLU 20-8 Brushy Draw 104H (Site). The purpose of the remediation activities was to determine the presence or absence of impacted and/or waste-containing soil resulting from a produced water release at the Site. The following *Work Plan* proposes to remove impacted soil identified within the release extent.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit K, Section 20, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.11247°, -103.90588°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On February 2, 2024, a pump failure resulted in the release of 52 barrels (bbls) of produced water into a temporary lined containment area and onto the pad surface. A vacuum truck was dispatched and approximately 41 bbls of release fluids were recovered. XTO submitted a Notification of Release (NOR) and an Initial C-141 Application (C-141) on February 16, 2024. The release was assigned Incident Number nAPP2404750069.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented below. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on data from a soil boring drilled to investigate regional groundwater depth. In February 2020, a soil boring permitted by New Mexico Office of the State Engineer (C-4394) was completed approximately 0.5 miles west of the Site utilizing sonic drilling method. Soil boring C-4394 was drilled to a depth of 110 feet bgs. A field geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The temporary well was left open for over 72 hours to allow for

XTO Energy, Inc.
Remediation Work Plan
PLU 20-8 Brushy Draw 104H

potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 110 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The Well Record & Log is included in Appendix A.

The closest continuously flowing or significant watercourse is an intermittent dry wash, located approximately 72 feet east of the Site. Because the significant watercourse appeared in online databases to flow through the well pads, pipeline right-of-way (ROW), and lease roads (Figure 2), Ensolum personnel conducted a field investigation on October 4, 2024, to determine if the feature complies with the definition of a significant watercourse per Subsection P of 19.15.17.7 NMAC. Ensolum was able to confirm an intermittent dry wash with an established bed and bank located approximately 550 feet to the northeast of the release extent. The significant watercourse begins south of the pipeline ROW northeast of the Site. An erosional feature through the ROW is visible in Photo 2. A more mature cut bank with a defined bed was observed at Photo 3 and confirms the continuation of the dry wash. Ensolum observed a manmade stormwater management feature installed near the location of Photo 4 which depicts a culvert built under the lease road, and a man-made channel that runs south along the east edge of the well pad. The stormwater feature is visible in Photo 5 and in the background of Photo 5 the well pad, which was built approximately 6 feet above the natural grade of the area, is visible. More detailed results and photographic evidence are provided in Figure 2. XTO does not believe that the manmade stormwater management feature meets the definition of a significant watercourse per Subsection P of 19.15.17.7 NMAC. The significant watercourse, a dry wash located to the northeast of the Site as well as the manmade stormwater management feature located to the east of the Site are confirmed to be greater than 300 feet from the release extent.

The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area).

Because the nearest confirmed significant watercourse is confirmed to be greater than 300 feet from the Site, the following NMOCD Table I Closure Criteria apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

SITE ASSESSMENT AND DELINEATION ACTIVITIES

Between April 2 and May 26, 2024, a third-party consultant conducted a Site visit to evaluate the release extent based on information provided from XTO and visual observations. The release extent was mapped and is depicted on Figure 3. Twenty-four delineation soil samples (BH24-03, BH24-06, BH24-07, BH24-09 through BH24-07, BH24-20 through BH24-31) were collected from depths ranging from 0 feet bgs to 4 feet bgs. The delineation soil sample locations were mapped and the approximate locations are depicted on Figure 3.

XTO Energy, Inc.
Remediation Work Plan
PLU 20-8 Brushy Draw 104H

The laboratory analytical results for the delineation soil samples BH24-23, BH24-24, and BH24-28, collected by the third-party consultant, indicated TPH concentrations exceeded Closure Criteria. Laboratory analytical results for all other delineation soil samples, collected by the third-party consultant indicated all COCs were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1.

On October 16 and 17, 2024, Ensolum personnel returned to the site to oversee delineation activities to confirm the presence or absence of impacts to soil based on the previous delineation results. Photographic documentation of the Site and delineation activities was completed. A photographic log is included in Appendix B. Delineation potholes PH01 through PH04 were advanced via backhoe to assess the vertical extent of the release to a maximum depth of 5 feet bgs. Discrete delineation soil samples were collected from each pothole at depths ranging from 0.5 feet to 5 feet bgs. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 3.

The delineation pothole samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following contaminants of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standards Method SM4500.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the delineation pothole soil samples, PH01 through PH03, indicated all COCs were compliant with the Closure Criteria. Laboratory analytical results for pothole soil sample PH04, collected at 0.5 feet bgs, indicated TPH concentrations exceeded the Closure Criteria. However, laboratory analytical results for delineation soil samples PH04, collected at 2 feet and 3 feet bgs, indicated all COC concentrations were compliant with the Closure Criteria. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix D.

PROPOSED REMEDIATION WORK PLAN

The delineation soil sampling results indicate impacted soil, containing elevated TPH concentrations, exists on pad across an approximate 3,275 square foot area and extends to depths ranging from 0.5 feet to 3 feet bgs. The total release area measures approximately 44,220 square feet. As such, XTO proposes to complete the following remediation activities:

- Excavation of impacted soil to an approximate depth of 3 feet bgs. Excavation will proceed laterally until sidewall samples confirm all COC concentrations are compliant with the Closure Criteria or to the maximum extent safely possible without major facility deconstruction.
- Collection of 5-point confirmation soil samples from the excavation. Soil samples will be collected, handled, and analyzed as described above for all COCs.

XTO Energy, Inc.
Remediation Work Plan
PLU 20-8 Brushy Draw 104H

- Collection of 5-point confirmation soil samples of the remainder of the release extent to confirm the absence of impacted soil over an approximate area of 40,945 square feet. Soil samples will be collected, handled, and analyzed as described above for all COCs.
- Due to the size of the release extent, XTO requests a variance for the frequency of confirmation soil samples. XTO proposes 5-point composite samples to be collected at a sampling frequency of 400 square feet along the excavation floor and remainder of the release extent, and a sampling frequency of 200 square feet along the excavation sidewalls. The proposed sampling frequency would reduce the total number of samples from approximately 225 confirmation soil samples (200 square feet) to approximately 115 confirmation soil samples. The soil samples will be handled as described above and analyzed for all COCs. The 200 square foot and 400 square foot sampling grids are depicted in Figure 4a and Figure 4b, respectively, based on the proposed excavation extent and remaining release extent.
- An estimated 375 cubic yards of TPH-impacted soil will be excavated and disposed of at the R360 disposal facility in Hobbs, New Mexico.
- The excavation will be backfilled with locally procured material and recontoured to match pre-existing conditions.


XTO will complete the excavation and soil sampling activities within 90 days of the date of approval of this *Work Plan* by the NMOCD.

If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely,
Ensolum, LLC



Tracy Hillard
Project Engineer



Ashley Ager, PG, MS
Program Director

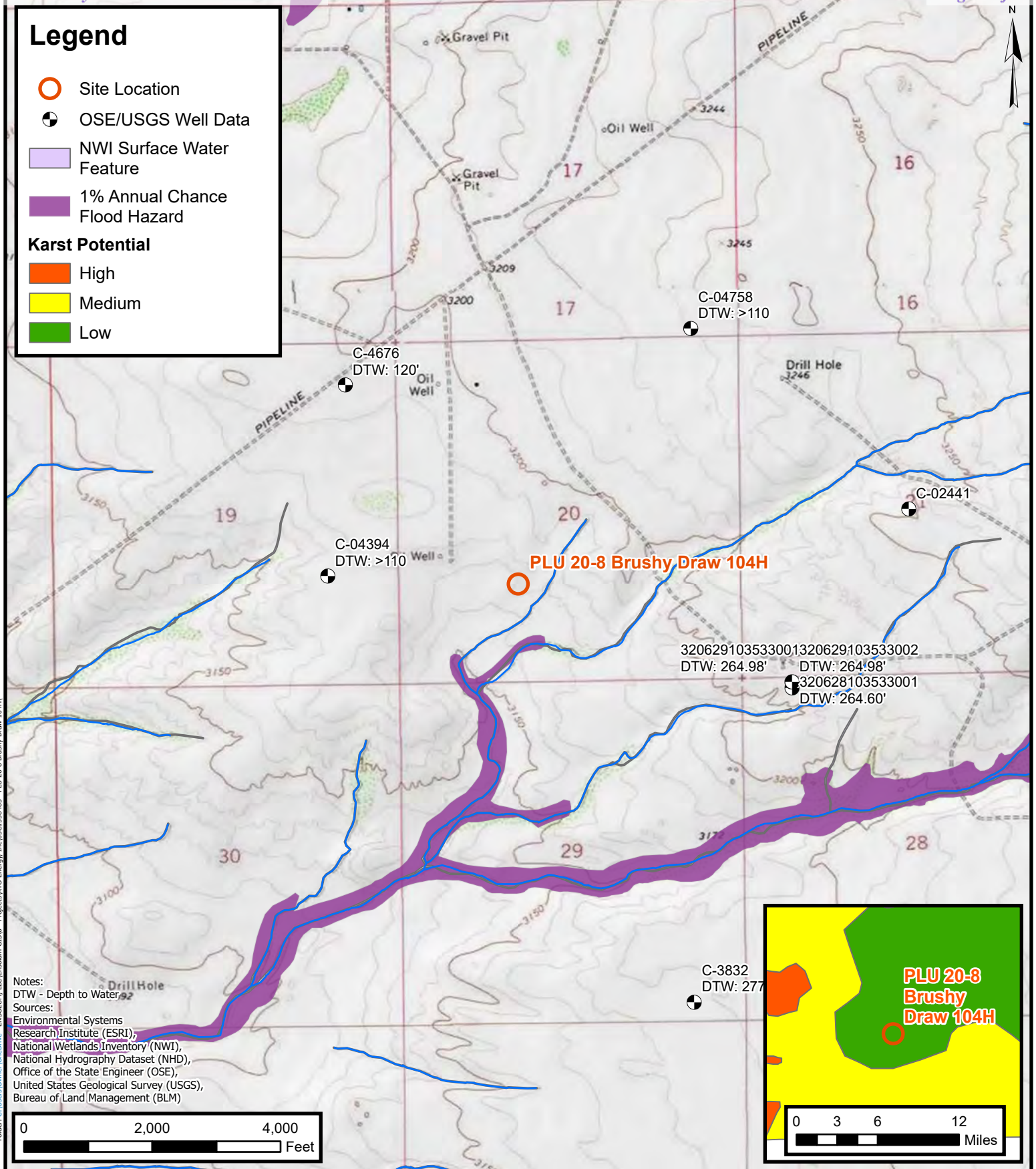
cc: Colton Brown, XTO
Kaylan Dirkx, XTO
BLM

Appendices:

Figure 1	Site Location Map
Figure 2	Watercourse Survey
Figure 3	Delineation Soil Sample Locations
Figure 4a	Proposed Excavation Extent and 200 Square Foot Sampling Grid
Figure 4b	Proposed Excavation Extent and 400 Square Foot Sampling Grid
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Lithologic / Soil Sampling Logs
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation



FIGURES

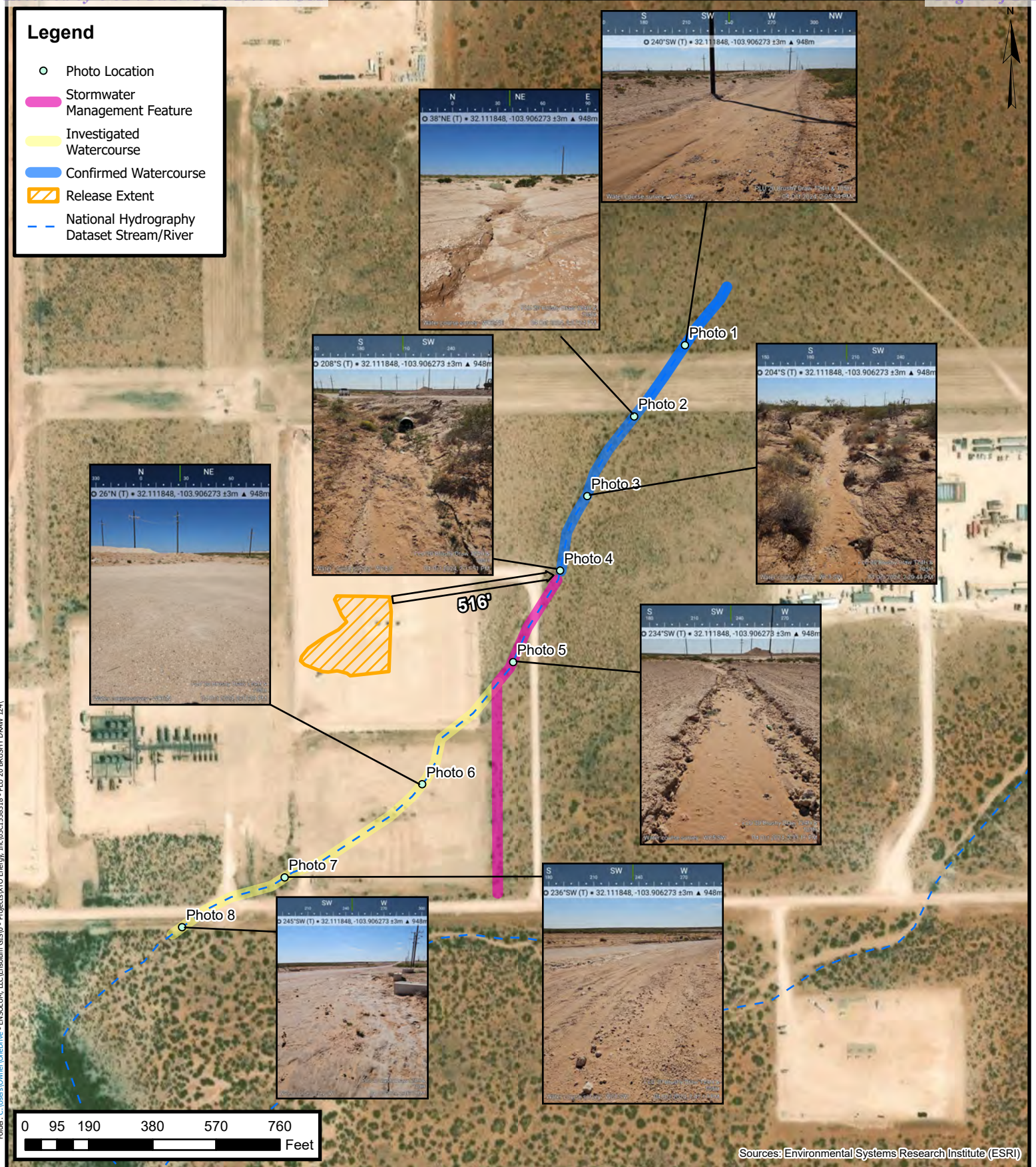


Site Receptor Map

XTO Energy, Inc
PLU 20-8 Brushy Draw 104H
Incident Number: nAPP2404750069
Unit K, Sec 20, Township 25S, Range 30E
Eddy County, New Mexico

FIGURE

1



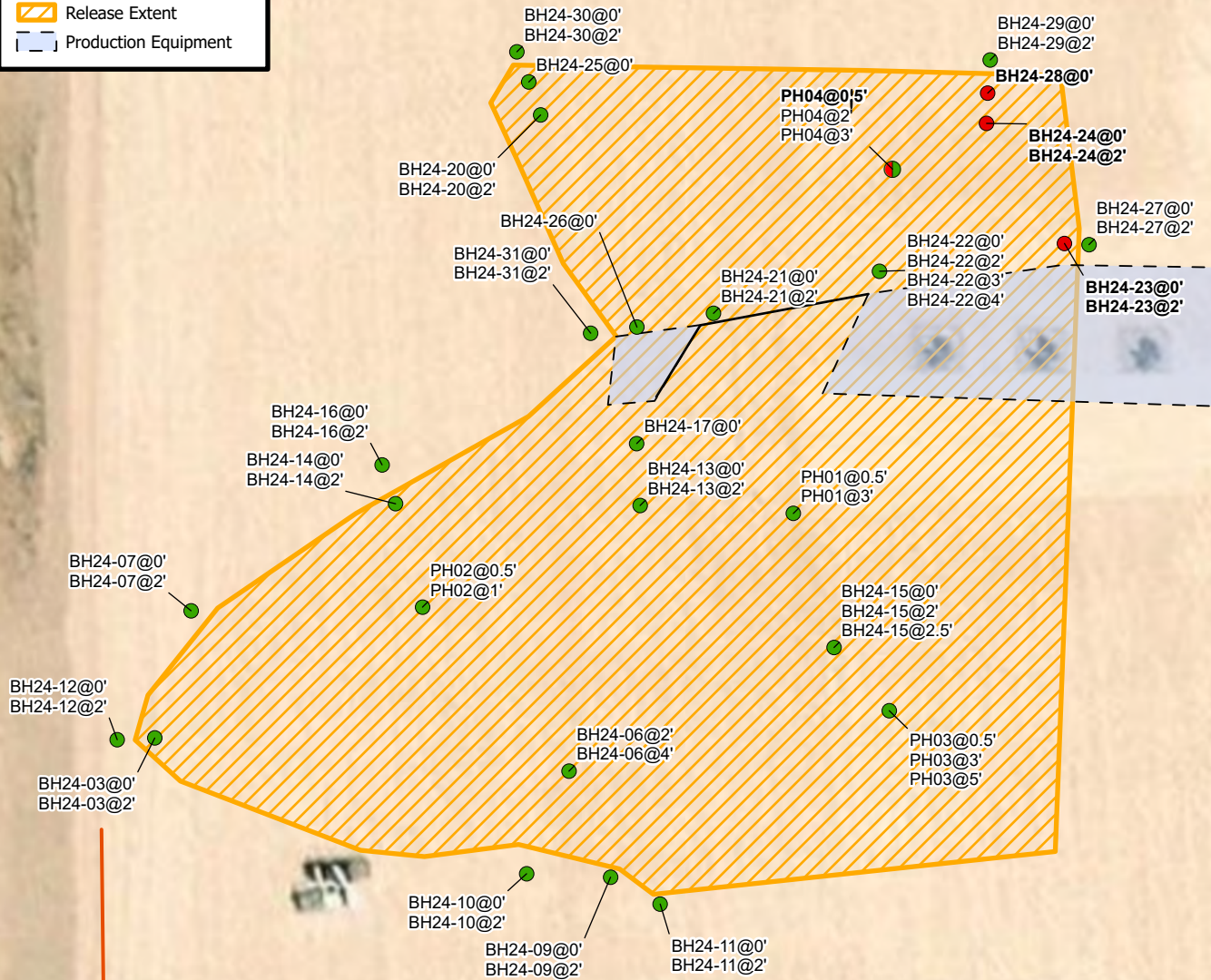
Watercourse Survey

XTO Energy, Inc
PLU 20-8 Brushy Draw 104H
Incident Number: nAPP2404750069
Unit K, Sec 20, Township 25S, Range 30E
Eddy County, New Mexico

FIGURE
2

Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Exceeding Closure Criteria
- ● Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
- Electric Utility Line
- Surface Line
- Release Extent
- Production Equipment



Notes:
 Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable closure criteria.

0 12.5 25 50 75 100
 Feet

Sources: Environmental Systems Research Institute (ESRI)

Delineation Soil Sample Locations

XTO Energy, Inc
 PLU 20-8 Brushy Draw 104H
 Incident Number: nAPP2404750069
 Unit K, Sec 20, Township 25S, Range 30E
 Eddy County, New Mexico

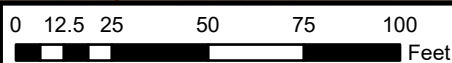
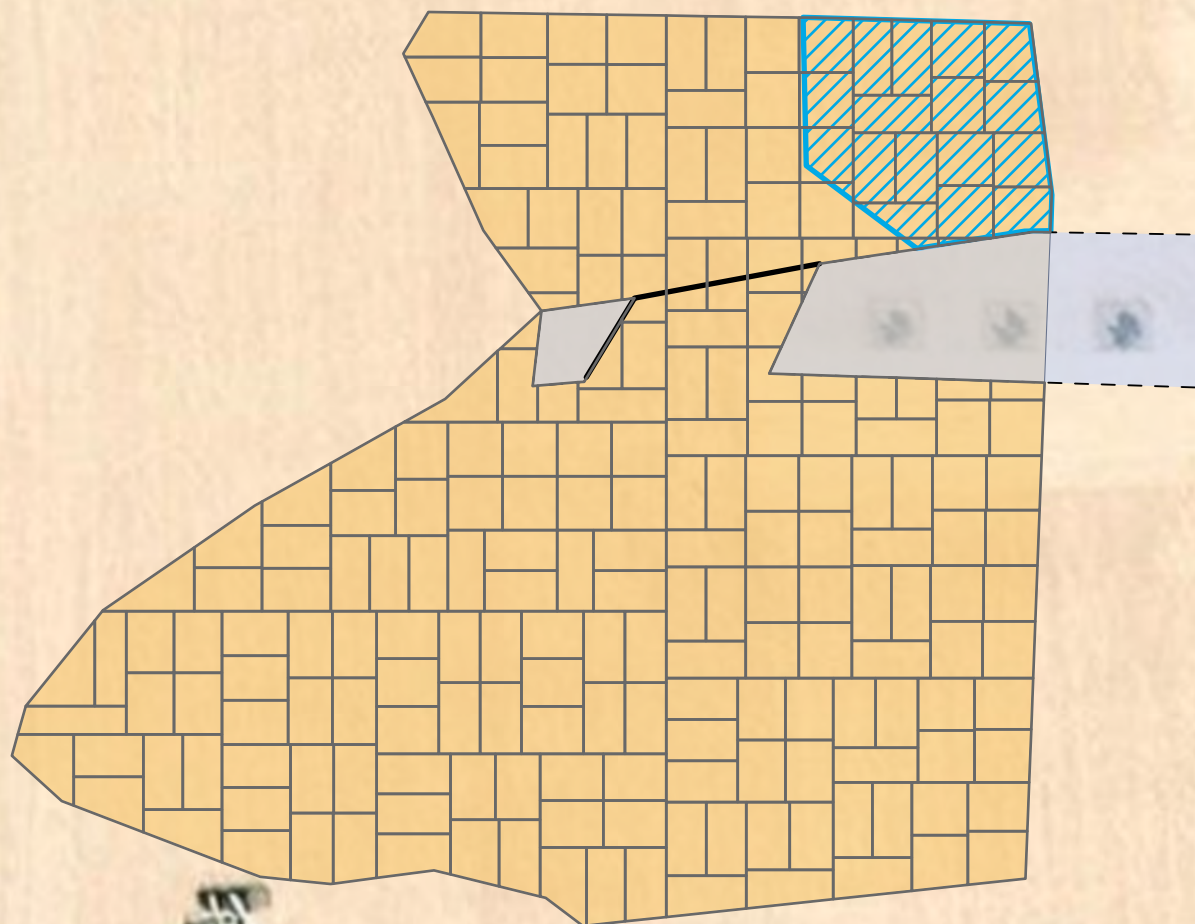
FIGURE

3



Legend

- Electric Utility Line
- Surface Line
- Production Equipment
- Release Extent
- Proposed Excavation Extent
- 200 Sqft Sampling Grid



Sources: Environmental Systems Research Institute (ESRI)

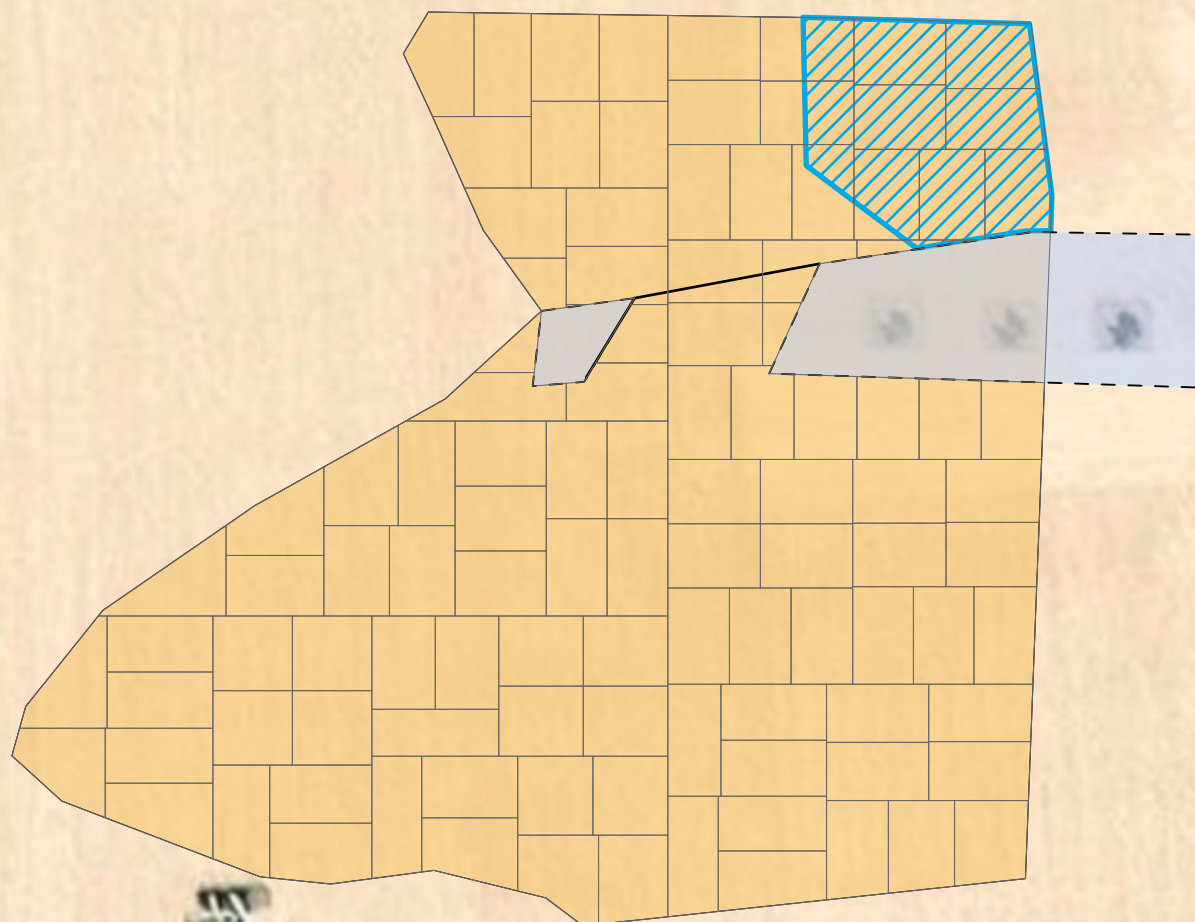


**Proposed Excavation Extent
and 200 Square Foot Sampling Grid**
XTO Energy, Inc
PLU 20-8 Brushy Draw 104H
Incident Number: nAPP2404750069
Unit K, Sec 20, Township 25S, Range 30E
Eddy County, New Mexico

**FIGURE
4a**

Legend

- Electric Utility Line
- Surface Line
- Proposed Excavation Extent
- Production Equipment
- Release Extent
- 400 Sqft Sampling Grid



Sources: Environmental Systems Research Institute (ESRI)



**Proposed Excavation Extent
and 400 Square Foot Sampling Grid**
XTO Energy, Inc
PLU 20-8 Brushy Draw 104H
Incident Number: nAPP2404750069
Unit K, Sec 20, T25W, R30N
Eddy County, New Mexico

**FIGURE
4b**



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
PLU 20-8 Brushy Draw 104H
XTO Energy, Inc
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)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
BH24-03	04/02/2024	0	ND	ND	ND	160	98.0	160	258	630
BH24-03	04/02/2024	2	ND	ND	ND	ND	ND	ND	ND	81.0
BH24-06	04/02/2024	2	ND	ND	ND	12.0	ND	12.0	12.0	520
BH24-06	04/02/2024	4	ND	ND	ND	ND	ND	ND	ND	200
BH24-07	04/02/2024	0	ND	ND	ND	11.0	ND	11.0	11.0	250
BH24-07	04/02/2024	2	ND	ND	ND	ND	ND	ND	ND	65.0
BH24-09	04/05/2024	0	ND	ND	ND	ND	ND	ND	ND	120
BH24-09	04/05/2024	2	ND	ND	ND	ND	ND	ND	ND	130
BH24-10	04/05/2024	0	ND	ND	ND	ND	ND	ND	ND	85.0
BH24-10	04/05/2024	2	ND	ND	ND	ND	ND	ND	ND	85.0
BH24-11	05/24/2024	0	ND	ND	ND	11.0	ND	11.0	11.0	1,100
BH24-11	05/24/2024	2	ND	ND	ND	ND	ND	ND	ND	270
BH24-12	05/24/2024	0	ND	ND	ND	ND	ND	ND	ND	140
BH24-12	05/24/2024	2	ND	ND	ND	ND	ND	ND	ND	130
BH24-13	05/24/2024	0	ND	ND	ND	ND	ND	ND	ND	830
BH24-13	05/24/2024	2	ND	ND	ND	14.0	ND	14.0	14.0	370
BH24-14	05/24/2024	0	ND	ND	ND	370	ND	370	370	700
BH24-14	05/24/2024	2	ND	ND	ND	ND	ND	ND	ND	140
BH24-15	05/24/2024	0	ND	ND	ND	13.0	ND	13.0	13.0	9,100
BH24-15	05/24/2024	2	ND	ND	ND	ND	ND	ND	ND	3,200
BH24-15	05/24/2024	2.5	ND	ND	ND	ND	ND	ND	ND	410
BH24-16	05/24/2024	0	ND	ND	ND	12.0	ND	12.0	12.0	740
BH24-16	05/25/2024	2	ND	ND	ND	ND	ND	ND	ND	140
BH24-17	05/24/2024	0	ND	ND	ND	270	57.0	270	327	820
BH24-20	05/24/2024	0	ND	ND	ND	65.0	ND	65.0	65.0	1,800
BH24-20	05/24/2024	2	ND	ND	ND	ND	ND	ND	ND	160
BH24-21	05/24/2024	0	ND	ND	ND	81.0	ND	81.0	81.0	210
BH24-21	05/24/2024	2	ND	ND	ND	13.0	ND	13.0	13.0	480



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
PLU 20-8 Brushy Draw 104H
XTO Energy, Inc
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)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
BH24-22	05/24/2024	0	ND	ND	ND	280	ND	280	280	420
BH24-22	05/24/2024	2	ND	ND	ND	ND	ND	ND	ND	150
BH24-22	05/25/2024	3	ND	ND	ND	ND	ND	ND	ND	ND
BH24-22	05/25/2024	4	ND	ND	ND	ND	ND	ND	ND	ND
BH24-23	05/24/2024	0	ND	0.340	22.0	19,000	ND	19,022	19,022	420
BH24-23	05/24/2024	2	ND	ND	ND	1,300	ND	1,300	1,300	650
BH24-24	05/24/2024	0	ND	0.980	46.0	16,000	ND	16,046	16,046	470
BH24-24	05/24/2024	2	ND	0.810	46.0	11,000	ND	11,046	11,046	ND
BH24-25	05/24/2024	0	ND	ND	ND	120	ND	120	120	5,700
BH24-26	05/24/2024	0	ND	ND	ND	250	220	250	470	1,400
BH24-27	05/25/2024	0	ND	ND	ND	63.0	ND	63.0	63.0	180
BH24-27	05/25/2024	2	ND	ND	ND	ND	ND	ND	ND	210
BH24-28	05/25/2024	0	ND	ND	ND	6,400	ND	6,400	6,400	1,400
BH24-29	05/26/2024	0	ND	ND	ND	ND	ND	ND	ND	130
BH24-29	05/26/2024	2	ND	ND	ND	ND	ND	ND	ND	ND
BH24-30	05/26/2024	0	ND	ND	ND	ND	ND	ND	ND	340
BH24-30	05/26/2024	2	ND	ND	ND	ND	ND	ND	ND	120
BH24-31	05/26/2024	0	ND	ND	ND	ND	ND	ND	ND	170
BH24-31	05/26/2024	2	ND	ND	ND	ND	ND	ND	ND	160
PH01	10/16/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,880
PH01	10/16/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
PH02	10/16/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	304
PH02	10/16/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
PH03	10/16/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,440
PH03	10/16/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,240
PH03	10/16/2024	5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
PLU 20-8 Brushy Draw 104H
XTO Energy, Inc
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)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
PH04	10/17/2024	0.5	<0.050	<0.300	<10.0	1,970	<10.0	1,970	1,970	2,920
PH04	10/17/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
PH04	10/17/2024	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

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

ND: Not detected at reporting limit

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon


NMAC: New Mexico Administrative Code


Grey text indicates soil sample removed during excavation activities




APPENDIX A


Referenced Well Records


		LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW01 C 4394		Date: 2/4/2020		
				Project Name: PLU 423		RP Number: ZRP-3790		
LITHOLOGIC / SOIL SAMPLING LOG				Logged By: FS		Method: SONIC		
Lat/Long:		Field Screening: CHLORIDES, PID		Hole Diameter: 4" / 6"		Total Depth: 110'		
Comments: No sampling, Lithology remarks only								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					1			hydrovac excavated (refusal @ 1')
					2			2.5' SAND, dry, well graded,
					3		SW-S	coarse-fine graind,
					4			light brwn - tan, no stain,
					5			no odor
					6			5' few silty sand pockets,
					7		SP	reddish brwn, no plas,
					8			non cohesive
					9			6' SAND, dry, poorly
					10		SW-S	graded, light brwn -
					11			brwn, fine - very fine
					12			7.5' some mod consol ss
					13		SP	light brwn - brwn, sub
					14			rounded
					15			10' abundant ss 10-11' color change
					16			12' ss gravel? absent tan-off white
					17			16' abundant ss gravel 13' back t/
					18			(mod consol) light brwn -
					19			19' abundant - some brwn
					20			21.5' sandstone, light, abundant
					21		SW-S	brwn - tan, dry, mod well
					22			consolidated
					23			23' sandstone chunks
					24			absent
					25			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW01 C 4394	Date: 2/4/2020					
		Project Name: PLU 423	RP Number: 2RP-2674 2RP-3790					
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: FS	Method: SONIC					
Lat/Long:		Field Screening: CHLORIDES, PID	Hole Diameter: 4 1/8"					
			Total Depth: 110'					
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					26			
					27			
D			Z		28		SP	27.5' SAND, dry, light brown-tan, poorly graded, fine-very fine grey-grey
					29			30' trace light brown-tan caliche pebbles (gravel), rounded
			Z		30			
					31			31' caliche pebbles absent
			Z		32			
					33			31.5' color change light brown-reddish brown
			Z		34			
					35			33-34' abundant ss chunks, mod consol
M			Z		36			35' ss chunks absent
					37		SW-S	
			Z		38			36' some clay pockets, reddish brown, few pebbles, rounded-subrounded, grey-light grey, few laminations w/ clay, caliche, dolomite
					39			
			Z		40			
					41			42.5' clay laminations, trace, reddish brown
			Z		42			
					43			
			Z		44			44' color change, light brown-tan, SILTY sand
					45			
			Z		46		SP-SM	44.5' some SILTY sand, light brown-tan, no plasticity, non cohesive, trace high plas clay nodules, reddish brown
					47			
			Z		48			48.5' low plas clay band, orange (35-40 mm)
					49			49.5' faint yellow band, (15-20 mm)
D			Z		50			

rig adding water

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW01 C 4394	Date: 2/4/2020					
		Project Name: PLU 423	RP Number: ZRP-3790					
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: FS	Method: sonic					
Lat/Long:		Field Screening: CHLORIDES, PH	Hole Diameter: 4" / 6"					
Total Depth: 110'								
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
U			Z		51		SP	51.5' trace, high plas clay nodules
U			Z		52			
U			Z		53			53-54' some silty ss, poorly consolidated
M			Z		54			
M			Z		55			55.5' color change tan-grey band (30mm)
M			Z		56			
M			Z		57			59.5' SILTY sand, light
M			Z		58			brwn-brwn, moist,
M			Z		59			no plas, non cohesive,
M			Z		60		SM	no stain
U			Z		61			62' more consolidated
M			Z		62			64' dark brwn color
U			Z		63		sm-s	change, silty
M			Z		64			clay nodules
M			Z		65			66' pockets of silty
U			Z		66			clay brwn-green
M			Z		67			68' low plas clay pockets
M			Z		68			some, few low plas
U			Z		69			clay laminations
U			Z		70			
U			Z		71			71' SILTY sand, dry,
U			Z		72			no plas, non cohesive,
U			Z		73			light brwn-tan
U			Z		74		SM	74' trace caliche pebbles,
U			Z		75			light grey-grey

 <p>LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation</p>		Identifier: MWDI C 4394	Date: 2/4/2020					
Project Name: PLU 423		RP Number: 2RP-3790						
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: FS, BB	Method: sonic					
Lat/Long:		Field Screening: CHLORIDES, PID	Hole Diameter: 6 1/4"					
Total Depth: 110'		Comments:						
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D			N		76		SM	76.5' trace low plas clay nodules, reddish brown
D			N		77			
D			N		78			82' CLAYSTONE, moist, brown-greenish grey, low plasticity, cohesive, no stain, no odor, mod consolidated
D			N		79			
D			N		80			
D			N		81			85' SILTY sand, dry, light brown-brown, no plas, non cohesive, no stain, no odor
D			N		82		CL-S	
D			N		83			
D			N		84			
D			N		85		SM	87' color change tan-off white
D			N		86			88' light brown-brown
D			N		87		SM-S	
D			N		88			87' SILTSTONE, dry, w/ clay pockets, low plas
D			N		89			
D			N		90			
D			N		91			91' abundant clay pockets
D			N		92			94.5' band yellow low plas clay
D			N		93			
D			N		94		SM	
D			N		95		CH	end @ 95' 2/4/2020
M			N		96			2/5/20
M			N		97			95'-101' CLAY, moist, brown-dark brown, high plasticity, cohesive, some tan clay laminations, no stain, no odor.
D			N		98			
M			N		99			98'-99' tan fine grain sandstone stringers.
M			N		100			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MWOF 4394	Date: 2/5/2020
		Project Name: PLU 423	RP Number: 2RP-3790
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: BP	Method: Sonic
Lat/Long:		Field Screening: CHLORIDES, PID.	Hole Diameter: 6" / 4"
Comments:		Total Depth: 110'	

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D			N		101		CH SP-S	101' - 105' SANDSTONE, tan-light brown, dry, moderately consolidated, calcareous cemented, poorly graded, no stain, no odor.
D			N		102			
D			N		103			
D			N		104			
M			N		105		CH	105' - 110' CLAY, moist, dark brown - brown, high plasticity, cohesive, thin tan sand laminations, no stain, no odor.
D			N		106			107' - 109' tan - light brown well consolidated fine green sandstone stringers.
D			N		107			
D			N		108			
M			N		109			
					110		TD @ 110'	TD @ 110'
					111			
					112			
					113			
					114			
					115			
					116			
					117			
					118			
					119			
					120			
					121			
					122			
					123			
					124			
					125			



APPENDIX B

Photographic Log

**Photographic Log**

XTO Energy, Inc
 PLU 20-8 Brushy Draw 104H
 nAPP24047500069



Photograph: 1 Date: 10/16/2024
 Description: Delineation activities
 View: Northeast



Photograph: 2 Date: 10/16/2024
 Description: Delineation activities
 View: Northwest



Photograph: 3 Date: 10/16/2024
 Description: Delineation activities
 View: Northeast





Photograph: 4 Date: 10/17/2024
 Description: Delineation activities
 View: Southeast





APPENDIX C

Lithologic Soil Sampling Logs

 ENSOLUM		Sample Name: PH01		Date: 10/16/2024				
		Site Name: PLU 20-8 Brushy Draw 104H						
		Incident Number: nAPP2404750069						
		Job Number: 03C1558483						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.112354, -103.905973			Logged By: DM		Method: Backhoe			
			Hole Diameter: 24"		Total Depth: 3 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. A 40% correction factor is included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	(0-3') CALICHE, white/light brown, fine, with subround rocks, no odor
D	3,892	0.5	N	PH01	0.5			
D	2,570	0.4	N		1	1		(@1') white color
D	1,697	0.6	N		2	2		
D	263	0.0	N	PH01	3	3		
						Total Depth @ 3 feet bgs		

					Sample Name: PH02		Date: 10/16/2024	
					Site Name: PLU 20-8 Brushy Draw 104H			
					Incident Number: nAPP2404750069			
					Job Number: 03C1558483			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: DM		Method: Backhoe	
Coordinates: 32.112282, -103.906316					Hole Diameter: 24"		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. A 40% correction factor is included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	498	0.8	N	PH02	0.5	0	CCHE	(0-3') CALICHE, white/light brown, fine, with subround rocks, no odor
D	308	0.4	N	PH02	1	1		(@1') white color
Total Depth @ 1-foot bgs								

 ENSOLUM		Sample Name: PH03		Date: 10/16/2024				
		Site Name: PLU 20-8 Brushy Draw 104H						
		Incident Number: nAPP2404750069						
		Job Number: 03C1558483						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.112197, -103.905884			Logged By: DM		Method: Backhoe			
			Hole Diameter: 24"		Total Depth: 5 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. A 40% correction factor is included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	(0-4') CALICHE, white/light brown, fine, with subround rocks, no odor
D	8,753	2.0	N	PH03	0.5			
D	2,910	1.3	N		1	1		
D	2,910	2.3	N		2	2		
D	2,766	0.8	N	PH03	3	3		
D	2,910	0.3	N		4	4	SP	(@4') SAND, brown, fine to medium grained
D	<162	0.2	N	PH03	5	5	CCHE	(@5') CALICHE, white, fine grained
						Total Depth @ 5 feet bgs		

 ENSOLUM		Sample Name: PH04		Date: 10/17/2024				
		Site Name: PLU 20-8 Brushy Draw 104H						
		Incident Number: nAPP2404750069						
		Job Number: 03C1558483						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.112624, -103.905877				Logged By: DM				
				Method: Backhoe				
				Hole Diameter: 24"				
				Total Depth: 3 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. A 40% correction factor is included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	(0-3') CALICHE, white/light brown, fine, with subround rocks, slight odor
D	3,562	5.9	N	PH04	0.5			
D	2,750	13.2	N		1	1		
D	196	1.1	N	PH04	2	2		
D	<162	0.8	N	PH04	3	3		
						Total Depth @ 3 feet bgs		



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 18, 2024

TRACY HILLARD

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: PLU 20-8 BD 104H

Enclosed are the results of analyses for samples received by the laboratory on 10/17/24 16:14.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 10/17/2024
 Reported: 10/18/2024
 Project Name: PLU 20-8 BD 104H
 Project Number: 03C1558483
 Project Location: XTO 32.112121-103.90622

Sampling Date: 10/16/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: PH 01 0.5' (H246371-01)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/18/2024	ND	2.22	111	2.00	15.0		
Toluene*	<0.050	0.050	10/18/2024	ND	2.14	107	2.00	14.6		
Ethylbenzene*	<0.050	0.050	10/18/2024	ND	2.16	108	2.00	13.7		
Total Xylenes*	<0.150	0.150	10/18/2024	ND	6.44	107	6.00	13.9		
Total BTEX	<0.300	0.300	10/18/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2880	16.0	10/18/2024	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	195	97.5	200	3.90	
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	187	93.4	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 10/17/2024
 Reported: 10/18/2024
 Project Name: PLU 20-8 BD 104H
 Project Number: 03C1558483
 Project Location: XTO 32.112121-103.90622

Sampling Date: 10/16/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: PH 01 3' (H246371-02)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2024	ND	2.22	111	2.00	15.0	
Toluene*	<0.050	0.050	10/18/2024	ND	2.14	107	2.00	14.6	
Ethylbenzene*	<0.050	0.050	10/18/2024	ND	2.16	108	2.00	13.7	
Total Xylenes*	<0.150	0.150	10/18/2024	ND	6.44	107	6.00	13.9	
Total BTEX	<0.300	0.300	10/18/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	10/18/2024	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	195	97.5	200	3.90	
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	187	93.4	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND					

Surrogate: 1-Chlorooctane 97.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 10/17/2024
 Reported: 10/18/2024
 Project Name: PLU 20-8 BD 104H
 Project Number: 03C1558483
 Project Location: XTO 32.112121-103.90622

Sampling Date: 10/16/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: PH 03 0.5' (H246371-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2024	ND	2.22	111	2.00	15.0	
Toluene*	<0.050	0.050	10/18/2024	ND	2.14	107	2.00	14.6	
Ethylbenzene*	<0.050	0.050	10/18/2024	ND	2.16	108	2.00	13.7	
Total Xylenes*	<0.150	0.150	10/18/2024	ND	6.44	107	6.00	13.9	
Total BTEX	<0.300	0.300	10/18/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5440	16.0	10/18/2024	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	195	97.5	200	3.90	
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	187	93.4	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.3 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 10/17/2024
 Reported: 10/18/2024
 Project Name: PLU 20-8 BD 104H
 Project Number: 03C1558483
 Project Location: XTO 32.112121-103.90622

Sampling Date: 10/16/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: PH 03 3' (H246371-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/18/2024	ND	2.22	111	2.00	15.0		
Toluene*	<0.050	0.050	10/18/2024	ND	2.14	107	2.00	14.6		
Ethylbenzene*	<0.050	0.050	10/18/2024	ND	2.16	108	2.00	13.7		
Total Xylenes*	<0.150	0.150	10/18/2024	ND	6.44	107	6.00	13.9		
Total BTEX	<0.300	0.300	10/18/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2240	16.0	10/18/2024	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	195	97.5	200	3.90	
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	187	93.4	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 10/17/2024
 Reported: 10/18/2024
 Project Name: PLU 20-8 BD 104H
 Project Number: 03C1558483
 Project Location: XTO 32.112121-103.90622

Sampling Date: 10/16/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: PH 03 5' (H246371-05)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/18/2024	ND	2.22	111	2.00	15.0		
Toluene*	<0.050	0.050	10/18/2024	ND	2.14	107	2.00	14.6		
Ethylbenzene*	<0.050	0.050	10/18/2024	ND	2.16	108	2.00	13.7		
Total Xylenes*	<0.150	0.150	10/18/2024	ND	6.44	107	6.00	13.9		
Total BTEX	<0.300	0.300	10/18/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/18/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/17/2024	ND	195	97.5	200	3.90	
DRO >C10-C28*	<10.0	10.0	10/17/2024	ND	187	93.4	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	10/17/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.9 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 10/17/2024
 Reported: 10/18/2024
 Project Name: PLU 20-8 BD 104H
 Project Number: 03C1558483
 Project Location: XTO 32.112121-103.90622

Sampling Date: 10/16/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: PH 02 0.5' (H246371-06)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/18/2024	ND	2.19	110	2.00	0.528		
Toluene*	<0.050	0.050	10/18/2024	ND	2.13	106	2.00	3.06		
Ethylbenzene*	<0.050	0.050	10/18/2024	ND	2.08	104	2.00	2.07		
Total Xylenes*	<0.150	0.150	10/18/2024	ND	6.13	102	6.00	2.78		
Total BTEX	<0.300	0.300	10/18/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	10/18/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/18/2024	ND	195	97.5	200	3.90	
DRO >C10-C28*	<10.0	10.0	10/18/2024	ND	187	93.4	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	10/18/2024	ND					

Surrogate: 1-Chlorooctane 91.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 10/17/2024
 Reported: 10/18/2024
 Project Name: PLU 20-8 BD 104H
 Project Number: 03C1558483
 Project Location: XTO 32.112121-103.90622

Sampling Date: 10/16/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: PH 02 1' (H246371-07)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/18/2024	ND	2.19	110	2.00	0.528	
Toluene*	<0.050	0.050	10/18/2024	ND	2.13	106	2.00	3.06	
Ethylbenzene*	<0.050	0.050	10/18/2024	ND	2.08	104	2.00	2.07	
Total Xylenes*	<0.150	0.150	10/18/2024	ND	6.13	102	6.00	2.78	
Total BTEX	<0.300	0.300	10/18/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	10/18/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/18/2024	ND	195	97.5	200	3.90	
DRO >C10-C28*	<10.0	10.0	10/18/2024	ND	187	93.4	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	10/18/2024	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 10/17/2024
 Reported: 10/18/2024
 Project Name: PLU 20-8 BD 104H
 Project Number: 03C1558483
 Project Location: XTO 32.112121-103.90622

Sampling Date: 10/17/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: PH 04 0.5' (H246371-08)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/18/2024	ND	2.19	110	2.00	0.528		
Toluene*	<0.050	0.050	10/18/2024	ND	2.13	106	2.00	3.06		
Ethylbenzene*	<0.050	0.050	10/18/2024	ND	2.08	104	2.00	2.07		
Total Xylenes*	<0.150	0.150	10/18/2024	ND	6.13	102	6.00	2.78		
Total BTEX	<0.300	0.300	10/18/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2920	16.0	10/18/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/18/2024	ND	195	97.5	200	3.90	
DRO >C10-C28*	1970	10.0	10/18/2024	ND	187	93.4	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	10/18/2024	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 10/17/2024
 Reported: 10/18/2024
 Project Name: PLU 20-8 BD 104H
 Project Number: 03C1558483
 Project Location: XTO 32.112121-103.90622

Sampling Date: 10/17/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: PH 04 2' (H246371-09)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/18/2024	ND	2.19	110	2.00	0.528		
Toluene*	<0.050	0.050	10/18/2024	ND	2.13	106	2.00	3.06		
Ethylbenzene*	<0.050	0.050	10/18/2024	ND	2.08	104	2.00	2.07		
Total Xylenes*	<0.150	0.150	10/18/2024	ND	6.13	102	6.00	2.78		
Total BTEX	<0.300	0.300	10/18/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 92.1 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	10/18/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/18/2024	ND	195	97.5	200	3.90	
DRO >C10-C28*	<10.0	10.0	10/18/2024	ND	187	93.4	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	10/18/2024	ND					

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received: 10/17/2024
 Reported: 10/18/2024
 Project Name: PLU 20-8 BD 104H
 Project Number: 03C1558483
 Project Location: XTO 32.112121-103.90622

Sampling Date: 10/17/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: PH 04 3' (H246371-10)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/18/2024	ND	2.19	110	2.00	0.528		
Toluene*	<0.050	0.050	10/18/2024	ND	2.13	106	2.00	3.06		
Ethylbenzene*	<0.050	0.050	10/18/2024	ND	2.08	104	2.00	2.07		
Total Xylenes*	<0.150	0.150	10/18/2024	ND	6.13	102	6.00	2.78		
Total BTEX	<0.300	0.300	10/18/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	10/18/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/18/2024	ND	195	97.5	200	3.90	
DRO >C10-C28*	<10.0	10.0	10/18/2024	ND	187	93.4	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	10/18/2024	ND					

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in cursive script, appearing to read "C. D. Keene", written in black ink.

Celey D. Keene, Lab Director/Quality Manager



101 East Maryland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2470

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



101 East Montand, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2670

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Project Manager: Tracy Hillard Address: 601 N. Virentfeld St City: Midland State: TX Zip: 79701 Phone #: 575-937-3906 Fax #: Project #: 03C 1558483 Project Owner: Project Name: PLU 20-8 BD 104H Project Location: 32.112121, -103.906222		P.O. #: Company: XTD Attn: Colleen Brown Address: 3104 E. Green St City: Carlsbad State: NM Zip: 88220 Phone #: Fax #:	
Sample Name: D. M. Evans For Lab Use Only:		Matrix: <input type="checkbox"/> RAB OR (C)OMP. <input type="checkbox"/> CONTAINERS <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> SOIL <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER : <input type="checkbox"/> ACID/BASE: <input type="checkbox"/> ICE / COOL <input type="checkbox"/> OTHER :	
Lab I.D. 1144371 8 ID		Sample I.D. PH04 PH04 PH04 ID	
Depth (feet) 0.5 2 3		DATE 10/7/24 10/17/24 10/17/24 13/1/8	
Time 0.5 2 3		TIME 1344 1346 1348	
Received By: [Signature] Date: 10/17/24 Time: 1344		Received By: [Signature] Date: 10/17/24 Time: 1348	
Delivered By: (Circle One) Delivered - UPS - Box - Other:		Observed Temp.: 29.9°C Corrected Temp.: 29.3°C Sample Condition: Cool, moist, [] [] [] [] [] [] Checked By: [Signature]	
Vertical Profile: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Insert Photo R: At Facilities are omitted. Please provide Email address: tmoorisse@eushu.com Vertical Profile: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Insert Photo R: At Facilities are omitted. Please provide Email address: tmoorisse@eushu.com Vertical Profile: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Insert Photo R: At Facilities are omitted. Please provide Email address: tmoorisse@eushu.com		Vertical Profile: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Insert Photo R: At Facilities are omitted. Please provide Email address: tmoorisse@eushu.com Vertical Profile: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Insert Photo R: At Facilities are omitted. Please provide Email address: tmoorisse@eushu.com Vertical Profile: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Insert Photo R: At Facilities are omitted. Please provide Email address: tmoorisse@eushu.com	



Environment Testing

1

2

3

4

5

6

7

8

9

10

11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 4/10/2024 4:15:20 PM

JOB DESCRIPTION

PLU 20-8 Brushy Draw 104H

JOB NUMBER

885-2415-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.
Released to Imaging: 10/29/2024 10:19:08 AM

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
4/10/2024 4:15:20 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Laboratory Job ID: 885-2415-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	12
QC Association Summary	15
Lab Chronicle	17
Certification Summary	19
Chain of Custody	20
Receipt Checklists	21



Definitions/Glossary

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

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: Vertex
Project: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Job ID: 885-2415-1

Eurofins Albuquerque

Job Narrative 885-2415-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/5/2024 7:55 AM. 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 1.1°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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.

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Client Sample ID: BH24-03 0ft

Lab Sample ID: 885-2415-1

Date Collected: 04/02/24 10:00

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg	-	04/05/24 11:52	04/09/24 03:45	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		15 - 244			04/05/24 11:52	04/09/24 03:45	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg	-	04/05/24 11:52	04/09/24 03:45	1	
Ethylbenzene	ND		0.047	mg/Kg	-	04/05/24 11:52	04/09/24 03:45	1	
Toluene	ND		0.047	mg/Kg	-	04/05/24 11:52	04/09/24 03:45	1	
Xylenes, Total	ND		0.095	mg/Kg	-	04/05/24 11:52	04/09/24 03:45	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	85		39 - 146			04/05/24 11:52	04/09/24 03:45	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	160		9.2	mg/Kg	-	04/09/24 13:26	04/09/24 19:19	1	
Motor Oil Range Organics [C28-C40]	98		46	mg/Kg	-	04/09/24 13:26	04/09/24 19:19	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	109		62 - 134			04/09/24 13:26	04/09/24 19:19	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	630		5.0	mg/Kg	-		04/10/24 13:31	1	

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Client Sample ID: BH24-03 2ft

Lab Sample ID: 885-2415-2

Date Collected: 04/02/24 10:30

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/05/24 11:52	04/09/24 04:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244	04/05/24 11:52	04/09/24 04:08	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/05/24 11:52	04/09/24 04:08	1
Ethylbenzene	ND		0.048	mg/Kg		04/05/24 11:52	04/09/24 04:08	1
Toluene	ND		0.048	mg/Kg		04/05/24 11:52	04/09/24 04:08	1
Xylenes, Total	ND		0.095	mg/Kg		04/05/24 11:52	04/09/24 04:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146	04/05/24 11:52	04/09/24 04:08	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		04/09/24 13:26	04/09/24 19:32	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/09/24 13:26	04/09/24 19:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134	04/09/24 13:26	04/09/24 19:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	81		25	mg/Kg			04/10/24 13:36	5

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Client Sample ID: BH24-06 2ft

Lab Sample ID: 885-2415-3

Date Collected: 04/02/24 13:00

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/05/24 11:52	04/09/24 04:32		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		15 - 244			04/05/24 11:52	04/09/24 04:32		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		04/05/24 11:52	04/09/24 04:32		1
Ethylbenzene	ND		0.046	mg/Kg		04/05/24 11:52	04/09/24 04:32		1
Toluene	ND		0.046	mg/Kg		04/05/24 11:52	04/09/24 04:32		1
Xylenes, Total	ND		0.092	mg/Kg		04/05/24 11:52	04/09/24 04:32		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	84		39 - 146			04/05/24 11:52	04/09/24 04:32		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	12		9.5	mg/Kg		04/09/24 13:26	04/09/24 19:44		1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/09/24 13:26	04/09/24 19:44		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	106		62 - 134			04/09/24 13:26	04/09/24 19:44		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	520		25	mg/Kg			04/10/24 13:41		5

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Client Sample ID: BH24-06 4ft

Lab Sample ID: 885-2415-4

Date Collected: 04/02/24 13:15

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/05/24 11:52	04/09/24 04:56		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		15 - 244			04/05/24 11:52	04/09/24 04:56		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/05/24 11:52	04/09/24 04:56		1
Ethylbenzene	ND		0.048	mg/Kg		04/05/24 11:52	04/09/24 04:56		1
Toluene	ND		0.048	mg/Kg		04/05/24 11:52	04/09/24 04:56		1
Xylenes, Total	ND		0.095	mg/Kg		04/05/24 11:52	04/09/24 04:56		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	85		39 - 146			04/05/24 11:52	04/09/24 04:56		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		04/09/24 13:26	04/09/24 19:56		1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/09/24 13:26	04/09/24 19:56		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	106		62 - 134			04/09/24 13:26	04/09/24 19:56		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	200		25	mg/Kg			04/10/24 13:46		5

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Client Sample ID: BH24-07 0ft

Lab Sample ID: 885-2415-5

Date Collected: 04/02/24 14:00

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/05/24 11:52	04/09/24 05:19	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		15 - 244			04/05/24 11:52	04/09/24 05:19	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/05/24 11:52	04/09/24 05:19	1	
Ethylbenzene	ND		0.050	mg/Kg		04/05/24 11:52	04/09/24 05:19	1	
Toluene	ND		0.050	mg/Kg		04/05/24 11:52	04/09/24 05:19	1	
Xylenes, Total	ND		0.10	mg/Kg		04/05/24 11:52	04/09/24 05:19	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	83		39 - 146			04/05/24 11:52	04/09/24 05:19	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	11		9.3	mg/Kg		04/09/24 13:26	04/09/24 20:09	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/09/24 13:26	04/09/24 20:09	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	98		62 - 134			04/09/24 13:26	04/09/24 20:09	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	250		25	mg/Kg			04/10/24 13:50	5	

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Client Sample ID: BH24-07 2ft

Lab Sample ID: 885-2415-6

Date Collected: 04/02/24 14:15

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/05/24 11:52	04/09/24 05:43	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		15 - 244			04/05/24 11:52	04/09/24 05:43	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/05/24 11:52	04/09/24 05:43	1	
Ethylbenzene	ND		0.047	mg/Kg		04/05/24 11:52	04/09/24 05:43	1	
Toluene	ND		0.047	mg/Kg		04/05/24 11:52	04/09/24 05:43	1	
Xylenes, Total	ND		0.095	mg/Kg		04/05/24 11:52	04/09/24 05:43	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	84		39 - 146			04/05/24 11:52	04/09/24 05:43	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.6	mg/Kg		04/09/24 13:26	04/09/24 20:21	1	
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/09/24 13:26	04/09/24 20:21	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	104		62 - 134			04/09/24 13:26	04/09/24 20:21	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	65		25	mg/Kg			04/10/24 13:55	5	

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-2829/1-A

Matrix: Solid

Analysis Batch: 2942

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2829

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/05/24 11:52	04/08/24 19:53	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/05/24 11:52	04/08/24 19:53	1

Lab Sample ID: LCS 885-2829/2-A

Matrix: Solid

Analysis Batch: 2942

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2829

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics [C6 - C10]	25.0	26.6		mg/Kg		106	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	212		15 - 244					

Lab Sample ID: MB 885-2894/1-A

Matrix: Solid

Analysis Batch: 2942

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2894

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/08/24 09:02	04/08/24 11:37	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244			04/08/24 09:02	04/08/24 11:37	1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-2829/1-A

Matrix: Solid

Analysis Batch: 2943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2829

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/05/24 11:52	04/08/24 19:53	1
Ethylbenzene	ND		0.050	mg/Kg		04/05/24 11:52	04/08/24 19:53	1
Toluene	ND		0.050	mg/Kg		04/05/24 11:52	04/08/24 19:53	1
Xylenes, Total	ND		0.10	mg/Kg		04/05/24 11:52	04/08/24 19:53	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		39 - 146			04/05/24 11:52	04/08/24 19:53	1

Lab Sample ID: LCS 885-2829/3-A

Matrix: Solid

Analysis Batch: 2943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2829

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	1.00	0.792		mg/Kg		79	70 - 130	
Ethylbenzene	1.00	0.812		mg/Kg		81	70 - 130	

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

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

Lab Sample ID: LCS 885-2829/3-A

Matrix: Solid

Analysis Batch: 2943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2829

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	1.00	0.809		mg/Kg		81	70 - 130
Xylenes, Total	3.00	2.47		mg/Kg		82	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		39 - 146

Lab Sample ID: MB 885-2894/1-A

Matrix: Solid

Analysis Batch: 2943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2894

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/08/24 09:02	04/08/24 11:37	1
Ethylbenzene	ND		0.050	mg/Kg		04/08/24 09:02	04/08/24 11:37	1
Toluene	ND		0.050	mg/Kg		04/08/24 09:02	04/08/24 11:37	1
Xylenes, Total	ND		0.10	mg/Kg		04/08/24 09:02	04/08/24 11:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146	04/08/24 09:02	04/08/24 11:37	1

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

Lab Sample ID: MB 885-2977/1-A

Matrix: Solid

Analysis Batch: 2992

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2977

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/09/24 13:26	04/09/24 16:00	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/09/24 13:26	04/09/24 16:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134	04/09/24 13:26	04/09/24 16:00	1

Lab Sample ID: LCS 885-2977/2-A

Matrix: Solid

Analysis Batch: 2992

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2977

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	43.0		mg/Kg		86	60 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	115		62 - 134

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

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

Lab Sample ID: 885-2415-6 MS

Matrix: Solid

Analysis Batch: 2992

Client Sample ID: BH24-07 2ft

Prep Type: Total/NA

Prep Batch: 2977

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]	ND		48.8	43.7		mg/Kg		90	44 - 136		
Surrogate	MS %Recovery	MS Qualifier	Limits								
Di-n-octyl phthalate (Surr)	106		62 - 134								

Lab Sample ID: 885-2415-6 MSD

Matrix: Solid

Analysis Batch: 2992

Client Sample ID: BH24-07 2ft

Prep Type: Total/NA

Prep Batch: 2977

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		49.5	42.3		mg/Kg		85	44 - 136	3	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	111		62 - 134								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-77760/1-A

Matrix: Solid

Analysis Batch: 77797

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/10/24 11:11	1

Lab Sample ID: LCS 880-77760/2-A

Matrix: Solid

Analysis Batch: 77797

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	265		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-77760/3-A

Matrix: Solid

Analysis Batch: 77797

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	265		mg/Kg		106	90 - 110	0	20

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

GC VOA

Prep Batch: 2829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2415-1	BH24-03 0ft	Total/NA	Solid	5030C	
885-2415-2	BH24-03 2ft	Total/NA	Solid	5030C	
885-2415-3	BH24-06 2ft	Total/NA	Solid	5030C	
885-2415-4	BH24-06 4ft	Total/NA	Solid	5030C	
885-2415-5	BH24-07 0ft	Total/NA	Solid	5030C	
885-2415-6	BH24-07 2ft	Total/NA	Solid	5030C	
MB 885-2829/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-2829/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-2829/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 2894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-2894/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 2942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2415-1	BH24-03 0ft	Total/NA	Solid	8015D	2829
885-2415-2	BH24-03 2ft	Total/NA	Solid	8015D	2829
885-2415-3	BH24-06 2ft	Total/NA	Solid	8015D	2829
885-2415-4	BH24-06 4ft	Total/NA	Solid	8015D	2829
885-2415-5	BH24-07 0ft	Total/NA	Solid	8015D	2829
885-2415-6	BH24-07 2ft	Total/NA	Solid	8015D	2829
MB 885-2829/1-A	Method Blank	Total/NA	Solid	8015D	2829
MB 885-2894/1-A	Method Blank	Total/NA	Solid	8015D	2894
LCS 885-2829/2-A	Lab Control Sample	Total/NA	Solid	8015D	2829

Analysis Batch: 2943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2415-1	BH24-03 0ft	Total/NA	Solid	8021B	2829
885-2415-2	BH24-03 2ft	Total/NA	Solid	8021B	2829
885-2415-3	BH24-06 2ft	Total/NA	Solid	8021B	2829
885-2415-4	BH24-06 4ft	Total/NA	Solid	8021B	2829
885-2415-5	BH24-07 0ft	Total/NA	Solid	8021B	2829
885-2415-6	BH24-07 2ft	Total/NA	Solid	8021B	2829
MB 885-2829/1-A	Method Blank	Total/NA	Solid	8021B	2829
MB 885-2894/1-A	Method Blank	Total/NA	Solid	8021B	2894
LCS 885-2829/3-A	Lab Control Sample	Total/NA	Solid	8021B	2829

GC Semi VOA

Prep Batch: 2977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2415-1	BH24-03 0ft	Total/NA	Solid	SHAKE	
885-2415-2	BH24-03 2ft	Total/NA	Solid	SHAKE	
885-2415-3	BH24-06 2ft	Total/NA	Solid	SHAKE	
885-2415-4	BH24-06 4ft	Total/NA	Solid	SHAKE	
885-2415-5	BH24-07 0ft	Total/NA	Solid	SHAKE	
885-2415-6	BH24-07 2ft	Total/NA	Solid	SHAKE	
MB 885-2977/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-2977/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-2415-6 MS	BH24-07 2ft	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

GC Semi VOA (Continued)

Prep Batch: 2977 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2415-6 MSD	BH24-07 2ft	Total/NA	Solid	SHAKE	

Analysis Batch: 2992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2415-1	BH24-03 0ft	Total/NA	Solid	8015D	2977
885-2415-2	BH24-03 2ft	Total/NA	Solid	8015D	2977
885-2415-3	BH24-06 2ft	Total/NA	Solid	8015D	2977
885-2415-4	BH24-06 4ft	Total/NA	Solid	8015D	2977
885-2415-5	BH24-07 0ft	Total/NA	Solid	8015D	2977
885-2415-6	BH24-07 2ft	Total/NA	Solid	8015D	2977
MB 885-2977/1-A	Method Blank	Total/NA	Solid	8015D	2977
LCS 885-2977/2-A	Lab Control Sample	Total/NA	Solid	8015D	2977
885-2415-6 MS	BH24-07 2ft	Total/NA	Solid	8015D	2977
885-2415-6 MSD	BH24-07 2ft	Total/NA	Solid	8015D	2977

HPLC/IC

Leach Batch: 77760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2415-1	BH24-03 0ft	Soluble	Solid	DI Leach	
885-2415-2	BH24-03 2ft	Soluble	Solid	DI Leach	
885-2415-3	BH24-06 2ft	Soluble	Solid	DI Leach	
885-2415-4	BH24-06 4ft	Soluble	Solid	DI Leach	
885-2415-5	BH24-07 0ft	Soluble	Solid	DI Leach	
885-2415-6	BH24-07 2ft	Soluble	Solid	DI Leach	
MB 880-77760/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-77760/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-77760/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 77797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2415-1	BH24-03 0ft	Soluble	Solid	300.0	77760
885-2415-2	BH24-03 2ft	Soluble	Solid	300.0	77760
885-2415-3	BH24-06 2ft	Soluble	Solid	300.0	77760
885-2415-4	BH24-06 4ft	Soluble	Solid	300.0	77760
885-2415-5	BH24-07 0ft	Soluble	Solid	300.0	77760
885-2415-6	BH24-07 2ft	Soluble	Solid	300.0	77760
MB 880-77760/1-A	Method Blank	Soluble	Solid	300.0	77760
LCS 880-77760/2-A	Lab Control Sample	Soluble	Solid	300.0	77760
LCSD 880-77760/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	77760

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Client Sample ID: BH24-03 0ft

Lab Sample ID: 885-2415-1

Date Collected: 04/02/24 10:00

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 03:45
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 03:45
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 19:19
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 13:31

Client Sample ID: BH24-03 2ft

Lab Sample ID: 885-2415-2

Date Collected: 04/02/24 10:30

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 04:08
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 04:08
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 19:32
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		5	77797	SMC	EET MID	04/10/24 13:36

Client Sample ID: BH24-06 2ft

Lab Sample ID: 885-2415-3

Date Collected: 04/02/24 13:00

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 04:32
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 04:32
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 19:44
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		5	77797	SMC	EET MID	04/10/24 13:41

Client Sample ID: BH24-06 4ft

Lab Sample ID: 885-2415-4

Date Collected: 04/02/24 13:15

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 04:56

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Client Sample ID: BH24-06 4ft
Date Collected: 04/02/24 13:15
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2415-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 04:56
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 19:56
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		5	77797	SMC	EET MID	04/10/24 13:46

Client Sample ID: BH24-07 0ft
Date Collected: 04/02/24 14:00
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2415-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 05:19
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 05:19
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 20:09
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		5	77797	SMC	EET MID	04/10/24 13:50

Client Sample ID: BH24-07 2ft
Date Collected: 04/02/24 14:15
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2415-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 05:43
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 05:43
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 20:21
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		5	77797	SMC	EET MID	04/10/24 13:55

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-2415-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
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
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25
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
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

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	T104704400-23-26	06-30-24
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
300.0		Solid	Chloride

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2415-1

Login Number: 2415

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

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: Vertex

Job Number: 885-2415-1

Login Number: 2415
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 04/09/24 01:30 PM

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	



Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 4/16/2024 4:15:11 PM

JOB DESCRIPTION

PLU 20-8 BD 104H

JOB NUMBER

885-2704-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.
Released to Imaging: 10/29/2024 10:49:08 AM

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
4/16/2024 4:15:11 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Laboratory Job ID: 885-2704-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	10
QC Association Summary	14
Lab Chronicle	16
Certification Summary	18
Chain of Custody	19
Receipt Checklists	20

Definitions/Glossary

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Case Narrative

Client: Vertex
Project: PLU 20-8 BD 104H

Job ID: 885-2704-1

Job ID: 885-2704-1Eurofins Albuquerque

Job Narrative
885-2704-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/11/2024 7:50 AM. 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 5.4°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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.

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

Client Sample ID: BH24-09 0'

Lab Sample ID: 885-2704-1

Date Collected: 04/05/24 12:00

Matrix: Solid

Date Received: 04/11/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/11/24 13:02	04/12/24 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244	04/11/24 13:02	04/12/24 18:32	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/11/24 13:02	04/12/24 18:32	1
Ethylbenzene	ND		0.050	mg/Kg		04/11/24 13:02	04/12/24 18:32	1
Toluene	ND		0.050	mg/Kg		04/11/24 13:02	04/12/24 18:32	1
Xylenes, Total	ND		0.10	mg/Kg		04/11/24 13:02	04/12/24 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146	04/11/24 13:02	04/12/24 18:32	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/11/24 14:31	04/12/24 15:58	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/11/24 14:31	04/12/24 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134	04/11/24 14:31	04/12/24 15:58	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		60	mg/Kg		04/12/24 07:53	04/12/24 09:34	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

Client Sample ID: BH24-09 2'

Lab Sample ID: 885-2704-2

Date Collected: 04/05/24 12:05

Matrix: Solid

Date Received: 04/11/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/11/24 13:02	04/12/24 19:42	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		15 - 244			04/11/24 13:02	04/12/24 19:42	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/11/24 13:02	04/12/24 19:42	1	
Ethylbenzene	ND		0.049	mg/Kg		04/11/24 13:02	04/12/24 19:42	1	
Toluene	ND		0.049	mg/Kg		04/11/24 13:02	04/12/24 19:42	1	
Xylenes, Total	ND		0.098	mg/Kg		04/11/24 13:02	04/12/24 19:42	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	90		39 - 146			04/11/24 13:02	04/12/24 19:42	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/11/24 14:31	04/12/24 16:22	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/11/24 14:31	04/12/24 16:22	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	133		62 - 134			04/11/24 14:31	04/12/24 16:22	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	130		60	mg/Kg		04/12/24 07:53	04/12/24 10:19	20	

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

Client Sample ID: BH24-10 0' Lab Sample ID: 885-2704-3
Date Collected: 04/05/24 12:10 Matrix: Solid
Date Received: 04/11/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/11/24 13:02	04/12/24 20:53	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		15 - 244			04/11/24 13:02	04/12/24 20:53	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/11/24 13:02	04/12/24 20:53	1	
Ethylbenzene	ND		0.047	mg/Kg		04/11/24 13:02	04/12/24 20:53	1	
Toluene	ND		0.047	mg/Kg		04/11/24 13:02	04/12/24 20:53	1	
Xylenes, Total	ND		0.095	mg/Kg		04/11/24 13:02	04/12/24 20:53	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	88		39 - 146			04/11/24 13:02	04/12/24 20:53	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		04/11/24 14:31	04/12/24 16:46	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/11/24 14:31	04/12/24 16:46	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	82		62 - 134			04/11/24 14:31	04/12/24 16:46	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	85		60	mg/Kg		04/12/24 07:53	04/12/24 13:06	20	

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

Client Sample ID: BH24-10 2'

Lab Sample ID: 885-2704-4

Date Collected: 04/05/24 12:15

Matrix: Solid

Date Received: 04/11/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/11/24 13:02	04/12/24 21:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 244	04/11/24 13:02	04/12/24 21:16	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/11/24 13:02	04/12/24 21:16	1
Ethylbenzene	ND		0.048	mg/Kg		04/11/24 13:02	04/12/24 21:16	1
Toluene	ND		0.048	mg/Kg		04/11/24 13:02	04/12/24 21:16	1
Xylenes, Total	ND		0.096	mg/Kg		04/11/24 13:02	04/12/24 21:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146	04/11/24 13:02	04/12/24 21:16	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		04/11/24 14:31	04/12/24 17:10	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/11/24 14:31	04/12/24 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	69		62 - 134	04/11/24 14:31	04/12/24 17:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85		60	mg/Kg		04/12/24 07:53	04/12/24 13:21	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-3124/1-A

Matrix: Solid

Analysis Batch: 3291

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3124

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/11/24 13:02	04/12/24 15:25	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/11/24 13:02	04/12/24 15:25	1

Lab Sample ID: LCS 885-3124/2-A

Matrix: Solid

Analysis Batch: 3291

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	25.5		mg/Kg		102	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	209		15 - 244				

Lab Sample ID: 885-2704-1 MS

Matrix: Solid

Analysis Batch: 3291

Client Sample ID: BH24-09 0'

Prep Type: Total/NA

Prep Batch: 3124

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.8	27.5		mg/Kg		111	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	223		15 - 244						

Lab Sample ID: 885-2704-1 MSD

Matrix: Solid

Analysis Batch: 3291

Client Sample ID: BH24-09 0'

Prep Type: Total/NA

Prep Batch: 3124

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.9	28.2		mg/Kg		113	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	229		15 - 244								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3124/1-A

Matrix: Solid

Analysis Batch: 3292

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3124

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/11/24 13:02	04/12/24 15:25	1
Ethylbenzene	ND		0.050	mg/Kg		04/11/24 13:02	04/12/24 15:25	1
Toluene	ND		0.050	mg/Kg		04/11/24 13:02	04/12/24 15:25	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

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

Lab Sample ID: MB 885-3124/1-A

Matrix: Solid

Analysis Batch: 3292

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3124

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		04/11/24 13:02	04/12/24 15:25	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		39 - 146			04/11/24 13:02	04/12/24 15:25	1

Lab Sample ID: LCS 885-3124/3-A

Matrix: Solid

Analysis Batch: 3292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.805		mg/Kg		80	70 - 130
Ethylbenzene	1.00	0.832		mg/Kg		83	70 - 130
m,p-Xylene	2.00	1.69		mg/Kg		84	70 - 130
o-Xylene	1.00	0.825		mg/Kg		82	70 - 130
Toluene	1.00	0.816		mg/Kg		82	70 - 130
Xylenes, Total	3.00	2.51		mg/Kg		84	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	87		39 - 146				

Lab Sample ID: 885-2704-2 MS

Matrix: Solid

Analysis Batch: 3292

Client Sample ID: BH24-09 2'

Prep Type: Total/NA

Prep Batch: 3124

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.979	0.845		mg/Kg		86	70 - 130
Ethylbenzene	ND		0.979	0.879		mg/Kg		90	70 - 130
m,p-Xylene	ND		1.96	1.79		mg/Kg		91	70 - 130
o-Xylene	ND		0.979	0.873		mg/Kg		89	70 - 130
Toluene	ND		0.979	0.861		mg/Kg		88	70 - 130
Xylenes, Total	ND		2.94	2.66		mg/Kg		91	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	90		39 - 146						

Lab Sample ID: 885-2704-2 MSD

Matrix: Solid

Analysis Batch: 3292

Client Sample ID: BH24-09 2'

Prep Type: Total/NA

Prep Batch: 3124

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.978	0.869		mg/Kg		89	70 - 130	3	20
Ethylbenzene	ND		0.978	0.909		mg/Kg		93	70 - 130	3	20
m,p-Xylene	ND		1.96	1.83		mg/Kg		93	70 - 130	2	20
o-Xylene	ND		0.978	0.899		mg/Kg		92	70 - 130	3	20
Toluene	ND		0.978	0.888		mg/Kg		91	70 - 130	3	20
Xylenes, Total	ND		2.94	2.72		mg/Kg		93	70 - 130	2	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

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

Lab Sample ID: 885-2704-2 MSD

Matrix: Solid

Analysis Batch: 3292

Client Sample ID: BH24-09 2'

Prep Type: Total/NA

Prep Batch: 3124

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		39 - 146

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

Lab Sample ID: MB 885-3140/1-A

Matrix: Solid

Analysis Batch: 3263

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3140

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/11/24 14:31	04/12/24 11:10	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/11/24 14:31	04/12/24 11:10	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	121		62 - 134			04/11/24 14:31	04/12/24 11:10	1

Lab Sample ID: LCS 885-3140/2-A

Matrix: Solid

Analysis Batch: 3263

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	52.3		mg/Kg		105	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	102		62 - 134				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-3159/1-A

Matrix: Solid

Analysis Batch: 3227

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3159

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		04/12/24 07:53	04/12/24 09:03	1

Lab Sample ID: LCS 885-3159/2-A

Matrix: Solid

Analysis Batch: 3227

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3159

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	28.1		mg/Kg		94	90 - 110

Lab Sample ID: 885-2704-1 MS

Matrix: Solid

Analysis Batch: 3227

Client Sample ID: BH24-09 0'

Prep Type: Total/NA

Prep Batch: 3159

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	120		29.9	140		mg/Kg		76	50 - 150

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-2704-1 MSD							Client Sample ID: BH24-09 0'				
Matrix: Solid							Prep Type: Total/NA				
Analysis Batch: 3227							Prep Batch: 3159				
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	120		30.3	152		mg/Kg		116	50 - 150	8	20

Lab Sample ID: 885-2704-2 MS							Client Sample ID: BH24-09 2'				
Matrix: Solid							Prep Type: Total/NA				
Analysis Batch: 3227							Prep Batch: 3159				
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	130		30.1	154	4	mg/Kg		80	50 - 150		

Lab Sample ID: 885-2704-2 MSD							Client Sample ID: BH24-09 2'				
Matrix: Solid							Prep Type: Total/NA				
Analysis Batch: 3227							Prep Batch: 3159				
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	130		30.0	154	4	mg/Kg		81	50 - 150	0	20

QC Association Summary

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

GC VOA

Prep Batch: 3124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2704-1	BH24-09 0'	Total/NA	Solid	5030C	
885-2704-2	BH24-09 2'	Total/NA	Solid	5030C	
885-2704-3	BH24-10 0'	Total/NA	Solid	5030C	
885-2704-4	BH24-10 2'	Total/NA	Solid	5030C	
MB 885-3124/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3124/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3124/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-2704-1 MS	BH24-09 0'	Total/NA	Solid	5030C	
885-2704-1 MSD	BH24-09 0'	Total/NA	Solid	5030C	
885-2704-2 MS	BH24-09 2'	Total/NA	Solid	5030C	
885-2704-2 MSD	BH24-09 2'	Total/NA	Solid	5030C	

Analysis Batch: 3291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2704-1	BH24-09 0'	Total/NA	Solid	8015D	3124
885-2704-2	BH24-09 2'	Total/NA	Solid	8015D	3124
885-2704-3	BH24-10 0'	Total/NA	Solid	8015D	3124
885-2704-4	BH24-10 2'	Total/NA	Solid	8015D	3124
MB 885-3124/1-A	Method Blank	Total/NA	Solid	8015D	3124
LCS 885-3124/2-A	Lab Control Sample	Total/NA	Solid	8015D	3124
885-2704-1 MS	BH24-09 0'	Total/NA	Solid	8015D	3124
885-2704-1 MSD	BH24-09 0'	Total/NA	Solid	8015D	3124

Analysis Batch: 3292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2704-1	BH24-09 0'	Total/NA	Solid	8021B	3124
885-2704-2	BH24-09 2'	Total/NA	Solid	8021B	3124
885-2704-3	BH24-10 0'	Total/NA	Solid	8021B	3124
885-2704-4	BH24-10 2'	Total/NA	Solid	8021B	3124
MB 885-3124/1-A	Method Blank	Total/NA	Solid	8021B	3124
LCS 885-3124/3-A	Lab Control Sample	Total/NA	Solid	8021B	3124
885-2704-2 MS	BH24-09 2'	Total/NA	Solid	8021B	3124
885-2704-2 MSD	BH24-09 2'	Total/NA	Solid	8021B	3124

GC Semi VOA

Prep Batch: 3140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2704-1	BH24-09 0'	Total/NA	Solid	SHAKE	
885-2704-2	BH24-09 2'	Total/NA	Solid	SHAKE	
885-2704-3	BH24-10 0'	Total/NA	Solid	SHAKE	
885-2704-4	BH24-10 2'	Total/NA	Solid	SHAKE	
MB 885-3140/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3140/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 3263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2704-1	BH24-09 0'	Total/NA	Solid	8015D	3140
885-2704-2	BH24-09 2'	Total/NA	Solid	8015D	3140
885-2704-3	BH24-10 0'	Total/NA	Solid	8015D	3140
885-2704-4	BH24-10 2'	Total/NA	Solid	8015D	3140

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

GC Semi VOA (Continued)

Analysis Batch: 3263 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-3140/1-A	Method Blank	Total/NA	Solid	8015D	3140
LCS 885-3140/2-A	Lab Control Sample	Total/NA	Solid	8015D	3140

HPLC/IC

Prep Batch: 3159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2704-1	BH24-09 0'	Total/NA	Solid	300_Prep	
885-2704-2	BH24-09 2'	Total/NA	Solid	300_Prep	
885-2704-3	BH24-10 0'	Total/NA	Solid	300_Prep	
885-2704-4	BH24-10 2'	Total/NA	Solid	300_Prep	
MB 885-3159/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-3159/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-2704-1 MS	BH24-09 0'	Total/NA	Solid	300_Prep	
885-2704-1 MSD	BH24-09 0'	Total/NA	Solid	300_Prep	
885-2704-2 MS	BH24-09 2'	Total/NA	Solid	300_Prep	
885-2704-2 MSD	BH24-09 2'	Total/NA	Solid	300_Prep	

Analysis Batch: 3227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2704-1	BH24-09 0'	Total/NA	Solid	300.0	3159
885-2704-2	BH24-09 2'	Total/NA	Solid	300.0	3159
885-2704-3	BH24-10 0'	Total/NA	Solid	300.0	3159
885-2704-4	BH24-10 2'	Total/NA	Solid	300.0	3159
MB 885-3159/1-A	Method Blank	Total/NA	Solid	300.0	3159
LCS 885-3159/2-A	Lab Control Sample	Total/NA	Solid	300.0	3159
885-2704-1 MS	BH24-09 0'	Total/NA	Solid	300.0	3159
885-2704-1 MSD	BH24-09 0'	Total/NA	Solid	300.0	3159
885-2704-2 MS	BH24-09 2'	Total/NA	Solid	300.0	3159
885-2704-2 MSD	BH24-09 2'	Total/NA	Solid	300.0	3159

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

Client Sample ID: BH24-09 0'

Date Collected: 04/05/24 12:00

Date Received: 04/11/24 07:50

Lab Sample ID: 885-2704-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02
Total/NA	Analysis	8015D		1	3291	JP	EET ALB	04/12/24 18:32
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02
Total/NA	Analysis	8021B		1	3292	JP	EET ALB	04/12/24 18:32
Total/NA	Prep	SHAKE			3140	JU	EET ALB	04/11/24 14:31
Total/NA	Analysis	8015D		1	3263	JU	EET ALB	04/12/24 15:58
Total/NA	Prep	300_Prep			3159	JT	EET ALB	04/12/24 07:53
Total/NA	Analysis	300.0		20	3227	RC	EET ALB	04/12/24 09:34

Client Sample ID: BH24-09 2'

Date Collected: 04/05/24 12:05

Date Received: 04/11/24 07:50

Lab Sample ID: 885-2704-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02
Total/NA	Analysis	8015D		1	3291	JP	EET ALB	04/12/24 19:42
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02
Total/NA	Analysis	8021B		1	3292	JP	EET ALB	04/12/24 19:42
Total/NA	Prep	SHAKE			3140	JU	EET ALB	04/11/24 14:31
Total/NA	Analysis	8015D		1	3263	JU	EET ALB	04/12/24 16:22
Total/NA	Prep	300_Prep			3159	JT	EET ALB	04/12/24 07:53
Total/NA	Analysis	300.0		20	3227	RC	EET ALB	04/12/24 10:19

Client Sample ID: BH24-10 0'

Date Collected: 04/05/24 12:10

Date Received: 04/11/24 07:50

Lab Sample ID: 885-2704-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02
Total/NA	Analysis	8015D		1	3291	JP	EET ALB	04/12/24 20:53
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02
Total/NA	Analysis	8021B		1	3292	JP	EET ALB	04/12/24 20:53
Total/NA	Prep	SHAKE			3140	JU	EET ALB	04/11/24 14:31
Total/NA	Analysis	8015D		1	3263	JU	EET ALB	04/12/24 16:46
Total/NA	Prep	300_Prep			3159	JT	EET ALB	04/12/24 07:53
Total/NA	Analysis	300.0		20	3227	RC	EET ALB	04/12/24 13:06

Client Sample ID: BH24-10 2'

Date Collected: 04/05/24 12:15

Date Received: 04/11/24 07:50

Lab Sample ID: 885-2704-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02
Total/NA	Analysis	8015D		1	3291	JP	EET ALB	04/12/24 21:16

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

Client Sample ID: BH24-10 2'

Date Collected: 04/05/24 12:15

Date Received: 04/11/24 07:50

Lab Sample ID: 885-2704-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02
Total/NA	Analysis	8021B		1	3292	JP	EET ALB	04/12/24 21:16
Total/NA	Prep	SHAKE			3140	JU	EET ALB	04/11/24 14:31
Total/NA	Analysis	8015D		1	3263	JU	EET ALB	04/12/24 17:10
Total/NA	Prep	300_Prep			3159	JT	EET ALB	04/12/24 07:53
Total/NA	Analysis	300.0		20	3227	RC	EET ALB	04/12/24 13:21

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Accreditation/Certification Summary

Client: Vertex
Project/Site: PLU 20-8 BD 104H

Job ID: 885-2704-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
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
300.0	300_Prep	Solid	Chloride
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2704-1

Login Number: 2704

List Number: 1

Creator: Proctor, Nancy

List Source: Eurofins Albuquerque

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.	True	
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").	True	



Environment Testing

1

2

3

4

5

6

7

8

9

10

11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 6/7/2024 3:59:07 PM

JOB DESCRIPTION

PLU 20-8 Brushy Draw 104H

JOB NUMBER

885-5206-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.
Released to Imaging: 10/29/2024 10:49:08 AM

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Generated
6/7/2024 3:59:07 PM

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Laboratory Job ID: 885-5206-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	43
QC Association Summary	54
Lab Chronicle	63
Certification Summary	75
Chain of Custody	76
Receipt Checklists	80

Definitions/Glossary

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
S1-	Surrogate recovery exceeds control limits, low biased.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Case Narrative

Client: Vertex
Project: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Job ID: 885-5206-1

Eurofins Albuquerque

Job Narrative
885-5206-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 5/29/2024 7:55 AM. 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 0.6°C.

Gasoline Range Organics

Method 8015D_GRO: Internal standard responses were outside of acceptance limits for the following sample: BH24-24 2.0' (885-5206-10). The sample(s) shows evidence of matrix interference.

Method 8015D_GRO: Internal standard responses were outside of acceptance limits for the following sample: BH24-24 0.0' (885-5206-9). The sample(s) shows evidence of matrix interference.

Method 8015D_GRO: The following sample was diluted due to the nature of the sample matrix: BH24-24 0.0' (885-5206-9). Elevated reporting limits (RLs) are provided.

Method 8015D_GRO: The following sample was diluted due to the nature of the sample matrix: BH24-28 0.0' (885-5206-17). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method 8021B: The following samples were diluted due to the nature of the sample matrix: BH24-24 0.0' (885-5206-9) and BH24-28 0.0' (885-5206-17). Elevated reporting limits (RLs) are provided.

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

Diesel Range Organics

Method 8015D_DRO: The following samples were diluted due to the nature of the sample matrix: BH24-23 0.0' (885-5206-7), BH24-23 2.0' (885-5206-8), BH24-24 0.0' (885-5206-9), BH24-24 2.0' (885-5206-10) and BH24-28 0.0' (885-5206-17). Elevated reporting limits (RLs) are provided.

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.

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-20 0.0'

Lab Sample ID: 885-5206-1

Date Collected: 05/24/24 09:40

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		05/29/24 14:32	06/03/24 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		35 - 166			05/29/24 14:32	06/03/24 19:24	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		05/29/24 14:32	06/03/24 19:24	1
Ethylbenzene	ND		0.047	mg/Kg		05/29/24 14:32	06/03/24 19:24	1
Toluene	ND		0.047	mg/Kg		05/29/24 14:32	06/03/24 19:24	1
Xylenes, Total	ND		0.093	mg/Kg		05/29/24 14:32	06/03/24 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			05/29/24 14:32	06/03/24 19:24	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	65		9.8	mg/Kg		05/30/24 14:51	05/31/24 15:22	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 14:51	05/31/24 15:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			05/30/24 14:51	05/31/24 15:22	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1800		60	mg/Kg		05/31/24 07:03	05/31/24 11:37	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-20 2.0'

Lab Sample ID: 885-5206-2

Date Collected: 05/24/24 09:45

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		05/29/24 14:32	06/03/24 19:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		35 - 166			05/29/24 14:32	06/03/24 19:48	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/29/24 14:32	06/03/24 19:48	1
Ethylbenzene	ND		0.048	mg/Kg		05/29/24 14:32	06/03/24 19:48	1
Toluene	ND		0.048	mg/Kg		05/29/24 14:32	06/03/24 19:48	1
Xylenes, Total	ND		0.096	mg/Kg		05/29/24 14:32	06/03/24 19:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			05/29/24 14:32	06/03/24 19:48	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		05/30/24 14:51	05/31/24 15:33	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/30/24 14:51	05/31/24 15:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	120		62 - 134			05/30/24 14:51	05/31/24 15:33	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		60	mg/Kg		05/31/24 07:03	05/31/24 11:49	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-21 0.0'

Lab Sample ID: 885-5206-3

Date Collected: 05/24/24 09:55

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		05/29/24 14:32	06/03/24 20:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		35 - 166			05/29/24 14:32	06/03/24 20:11	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		05/29/24 14:32	06/03/24 20:11	1
Ethylbenzene	ND		0.047	mg/Kg		05/29/24 14:32	06/03/24 20:11	1
Toluene	ND		0.047	mg/Kg		05/29/24 14:32	06/03/24 20:11	1
Xylenes, Total	ND		0.094	mg/Kg		05/29/24 14:32	06/03/24 20:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			05/29/24 14:32	06/03/24 20:11	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	81		9.9	mg/Kg		05/30/24 14:51	05/31/24 15:44	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 14:51	05/31/24 15:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	115		62 - 134			05/30/24 14:51	05/31/24 15:44	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		60	mg/Kg		05/31/24 07:03	05/31/24 12:01	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-21 2.0'

Lab Sample ID: 885-5206-4

Date Collected: 05/24/24 10:00

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/30/24 10:27	06/05/24 00:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		35 - 166			05/30/24 10:27	06/05/24 00:28	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 10:27	06/05/24 00:28	1
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 10:27	06/05/24 00:28	1
Toluene	ND		0.050	mg/Kg		05/30/24 10:27	06/05/24 00:28	1
Xylenes, Total	ND		0.099	mg/Kg		05/30/24 10:27	06/05/24 00:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		48 - 145			05/30/24 10:27	06/05/24 00:28	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13		9.2	mg/Kg		05/30/24 12:06	05/31/24 17:34	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		05/30/24 12:06	05/31/24 17:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		62 - 134			05/30/24 12:06	05/31/24 17:34	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	480		60	mg/Kg		05/30/24 14:06	05/30/24 22:11	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-22 0.0'

Lab Sample ID: 885-5206-5

Date Collected: 05/24/24 10:05

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 10:27	06/05/24 00:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166			05/30/24 10:27	06/05/24 00:52	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 10:27	06/05/24 00:52	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 10:27	06/05/24 00:52	1
Toluene	ND		0.049	mg/Kg		05/30/24 10:27	06/05/24 00:52	1
Xylenes, Total	ND		0.099	mg/Kg		05/30/24 10:27	06/05/24 00:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		48 - 145			05/30/24 10:27	06/05/24 00:52	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	280		9.7	mg/Kg		05/30/24 12:06	05/31/24 18:08	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/30/24 12:06	05/31/24 18:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			05/30/24 12:06	05/31/24 18:08	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	420		60	mg/Kg		05/30/24 14:06	05/30/24 22:24	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-22 2.0'

Lab Sample ID: 885-5206-6

Date Collected: 05/24/24 10:15

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		05/30/24 10:27	06/05/24 01:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		35 - 166			05/30/24 10:27	06/05/24 01:15	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/30/24 10:27	06/05/24 01:15	1
Ethylbenzene	ND		0.048	mg/Kg		05/30/24 10:27	06/05/24 01:15	1
Toluene	ND		0.048	mg/Kg		05/30/24 10:27	06/05/24 01:15	1
Xylenes, Total	ND		0.096	mg/Kg		05/30/24 10:27	06/05/24 01:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 10:27	06/05/24 01:15	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		05/30/24 12:06	05/31/24 18:19	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/30/24 12:06	05/31/24 18:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			05/30/24 12:06	05/31/24 18:19	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		60	mg/Kg		05/30/24 14:06	05/30/24 22:36	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-23 0.0'

Lab Sample ID: 885-5206-7

Date Collected: 05/24/24 10:20

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	22		4.8	mg/Kg		05/30/24 10:27	06/05/24 23:38	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	236	S1+	35 - 166			05/30/24 10:27	06/05/24 23:38	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		05/30/24 10:27	06/05/24 23:38	1	
Ethylbenzene	0.060		0.048	mg/Kg		05/30/24 10:27	06/05/24 23:38	1	
Toluene	ND		0.048	mg/Kg		05/30/24 10:27	06/05/24 23:38	1	
Xylenes, Total	0.34		0.095	mg/Kg		05/30/24 10:27	06/05/24 23:38	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		48 - 145			05/30/24 10:27	06/05/24 23:38	1	
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	19000		450	mg/Kg		05/30/24 12:06	06/03/24 14:39	50	
Motor Oil Range Organics [C28-C40]	ND	D	2300	mg/Kg		05/30/24 12:06	06/03/24 14:39	50	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	0	S1- D	62 - 134			05/30/24 12:06	06/03/24 14:39	50	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	420		60	mg/Kg		05/30/24 14:06	05/30/24 23:38	20	

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-23 2.0'

Lab Sample ID: 885-5206-8

Date Collected: 05/24/24 10:30

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 10:27	06/05/24 02:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		35 - 166			05/30/24 10:27	06/05/24 02:02	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/30/24 10:27	06/05/24 02:02	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 10:27	06/05/24 02:02	1
Toluene	ND		0.049	mg/Kg		05/30/24 10:27	06/05/24 02:02	1
Xylenes, Total	ND		0.097	mg/Kg		05/30/24 10:27	06/05/24 02:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 10:27	06/05/24 02:02	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1300		49	mg/Kg		05/30/24 12:06	06/03/24 14:50	5
Motor Oil Range Organics [C28-C40]	ND	D	240	mg/Kg		05/30/24 12:06	06/03/24 14:50	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134			05/30/24 12:06	06/03/24 14:50	5

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	650		60	mg/Kg		05/30/24 14:06	05/30/24 23:50	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-24 0.0'
Date Collected: 05/24/24 10:35
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-9
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	46		9.4	mg/Kg		05/30/24 10:27	06/05/24 22:51	2	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	233	S1+	35 - 166			05/30/24 10:27	06/05/24 22:51	2	

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.047	mg/Kg		05/30/24 10:27	06/05/24 22:51	2	
Ethylbenzene	0.13		0.094	mg/Kg		05/30/24 10:27	06/05/24 22:51	2	
Toluene	ND		0.094	mg/Kg		05/30/24 10:27	06/05/24 22:51	2	
Xylenes, Total	0.98		0.19	mg/Kg		05/30/24 10:27	06/05/24 22:51	2	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		48 - 145			05/30/24 10:27	06/05/24 22:51	2	

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	16000		180	mg/Kg		05/30/24 12:06	06/03/24 15:01	20	
Motor Oil Range Organics [C28-C40]	ND	D	910	mg/Kg		05/30/24 12:06	06/03/24 15:01	20	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	0	S1- D	62 - 134			05/30/24 12:06	06/03/24 15:01	20	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	470		59	mg/Kg		05/30/24 14:06	05/31/24 00:02	20	

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-24 2.0'

Lab Sample ID: 885-5206-10

Date Collected: 05/24/24 10:45

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	46		9.5	mg/Kg		05/30/24 10:27	06/05/24 02:49	2
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	209	S1+	35 - 166			05/30/24 10:27	06/05/24 02:49	2

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.047	mg/Kg		05/30/24 10:27	06/05/24 02:49	2
Ethylbenzene	ND		0.095	mg/Kg		05/30/24 10:27	06/05/24 02:49	2
Toluene	ND		0.095	mg/Kg		05/30/24 10:27	06/05/24 02:49	2
Xylenes, Total	0.81		0.19	mg/Kg		05/30/24 10:27	06/05/24 02:49	2
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		48 - 145			05/30/24 10:27	06/05/24 02:49	2

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11000		190	mg/Kg		05/30/24 12:06	06/03/24 15:12	20
Motor Oil Range Organics [C28-C40]	ND	D	940	mg/Kg		05/30/24 12:06	06/03/24 15:12	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	0	S1- D	62 - 134			05/30/24 12:06	06/03/24 15:12	20

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		61	mg/Kg		05/30/24 14:06	05/31/24 00:15	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-16 0.0'

Lab Sample ID: 885-5206-11

Date Collected: 05/24/24 14:35

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		05/30/24 10:27	06/05/24 03:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		35 - 166			05/30/24 10:27	06/05/24 03:13	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		05/30/24 10:27	06/05/24 03:13	1
Ethylbenzene	ND		0.047	mg/Kg		05/30/24 10:27	06/05/24 03:13	1
Toluene	ND		0.047	mg/Kg		05/30/24 10:27	06/05/24 03:13	1
Xylenes, Total	ND		0.094	mg/Kg		05/30/24 10:27	06/05/24 03:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			05/30/24 10:27	06/05/24 03:13	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12		9.7	mg/Kg		05/30/24 12:06	05/31/24 19:15	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 12:06	05/31/24 19:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			05/30/24 12:06	05/31/24 19:15	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	740		60	mg/Kg		05/30/24 14:06	05/31/24 00:27	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-22 3.0'

Lab Sample ID: 885-5206-12

Date Collected: 05/25/24 10:00

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 10:27	06/06/24 03:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			05/30/24 10:27	06/06/24 03:10	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 10:27	06/06/24 03:10	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 03:10	1
Toluene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 03:10	1
Xylenes, Total	ND		0.098	mg/Kg		05/30/24 10:27	06/06/24 03:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		48 - 145			05/30/24 10:27	06/06/24 03:10	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		05/30/24 12:06	05/31/24 19:26	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/30/24 12:06	05/31/24 19:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			05/30/24 12:06	05/31/24 19:26	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/30/24 14:06	05/31/24 01:04	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-22 4.0'

Lab Sample ID: 885-5206-13

Date Collected: 05/25/24 10:25

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/30/24 10:27	06/06/24 03:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		35 - 166			05/30/24 10:27	06/06/24 03:34	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 10:27	06/06/24 03:34	1
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 10:27	06/06/24 03:34	1
Toluene	ND		0.050	mg/Kg		05/30/24 10:27	06/06/24 03:34	1
Xylenes, Total	ND		0.099	mg/Kg		05/30/24 10:27	06/06/24 03:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 10:27	06/06/24 03:34	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		05/30/24 12:06	05/31/24 19:38	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 12:06	05/31/24 19:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			05/30/24 12:06	05/31/24 19:38	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/30/24 14:06	05/31/24 01:16	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-27 0.0'

Lab Sample ID: 885-5206-14

Date Collected: 05/25/24 10:45

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		05/30/24 10:27	06/06/24 03:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		35 - 166			05/30/24 10:27	06/06/24 03:57	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		05/30/24 10:27	06/06/24 03:57	1
Ethylbenzene	ND		0.047	mg/Kg		05/30/24 10:27	06/06/24 03:57	1
Toluene	ND		0.047	mg/Kg		05/30/24 10:27	06/06/24 03:57	1
Xylenes, Total	ND		0.094	mg/Kg		05/30/24 10:27	06/06/24 03:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			05/30/24 10:27	06/06/24 03:57	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	63		9.6	mg/Kg		05/30/24 12:06	05/31/24 19:49	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/30/24 12:06	05/31/24 19:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			05/30/24 12:06	05/31/24 19:49	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		61	mg/Kg		05/30/24 14:06	05/31/24 01:29	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-16 2.0'

Lab Sample ID: 885-5206-15

Date Collected: 05/25/24 13:20

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 10:27	06/06/24 04:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		35 - 166			05/30/24 10:27	06/06/24 04:20	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/30/24 10:27	06/06/24 04:20	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 04:20	1
Toluene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 04:20	1
Xylenes, Total	ND		0.098	mg/Kg		05/30/24 10:27	06/06/24 04:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			05/30/24 10:27	06/06/24 04:20	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		05/30/24 12:06	05/31/24 20:00	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/30/24 12:06	05/31/24 20:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			05/30/24 12:06	05/31/24 20:00	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		60	mg/Kg		05/30/24 14:06	05/31/24 02:06	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-27 2.0'

Lab Sample ID: 885-5206-16

Date Collected: 05/25/24 13:40

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		05/30/24 10:27	06/06/24 04:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			05/30/24 10:27	06/06/24 04:44	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/30/24 10:27	06/06/24 04:44	1
Ethylbenzene	ND		0.048	mg/Kg		05/30/24 10:27	06/06/24 04:44	1
Toluene	ND		0.048	mg/Kg		05/30/24 10:27	06/06/24 04:44	1
Xylenes, Total	ND		0.097	mg/Kg		05/30/24 10:27	06/06/24 04:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145			05/30/24 10:27	06/06/24 04:44	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/30/24 12:06	05/31/24 20:11	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/30/24 12:06	05/31/24 20:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			05/30/24 12:06	05/31/24 20:11	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		60	mg/Kg		05/30/24 14:06	05/31/24 02:18	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-28 0.0'
Date Collected: 05/25/24 10:55
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-17
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		9.6	mg/Kg		05/30/24 10:27	06/06/24 05:07	2	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		35 - 166			05/30/24 10:27	06/06/24 05:07	2	

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.048	mg/Kg		05/30/24 10:27	06/06/24 05:07	2	
Ethylbenzene	ND		0.096	mg/Kg		05/30/24 10:27	06/06/24 05:07	2	
Toluene	ND		0.096	mg/Kg		05/30/24 10:27	06/06/24 05:07	2	
Xylenes, Total	ND		0.19	mg/Kg		05/30/24 10:27	06/06/24 05:07	2	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	93		48 - 145			05/30/24 10:27	06/06/24 05:07	2	

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	6400		97	mg/Kg		05/30/24 12:06	06/03/24 15:22	10	
Motor Oil Range Organics [C28-C40]	ND	D	480	mg/Kg		05/30/24 12:06	06/03/24 15:22	10	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	0	S1- D	62 - 134			05/30/24 12:06	06/03/24 15:22	10	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	410		60	mg/Kg		05/30/24 14:06	05/31/24 02:30	20	

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-17 0.0' Lab Sample ID: 885-5206-18
Date Collected: 05/24/24 14:40 Matrix: Solid
Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 10:27	06/06/24 05:31	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	96		35 - 166			05/30/24 10:27	06/06/24 05:31	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		05/30/24 10:27	06/06/24 05:31	1	
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 05:31	1	
Toluene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 05:31	1	
Xylenes, Total	ND		0.097	mg/Kg		05/30/24 10:27	06/06/24 05:31	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	93		48 - 145			05/30/24 10:27	06/06/24 05:31	1	
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	270		9.0	mg/Kg		05/30/24 12:06	05/31/24 20:33	1	
Motor Oil Range Organics [C28-C40]	57		45	mg/Kg		05/30/24 12:06	05/31/24 20:33	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	89		62 - 134			05/30/24 12:06	05/31/24 20:33	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	820		59	mg/Kg		05/30/24 14:06	05/31/24 02:43	20	

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-25 0.0'

Lab Sample ID: 885-5206-19

Date Collected: 05/24/24 14:30

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 10:27	06/06/24 05:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		35 - 166			05/30/24 10:27	06/06/24 05:54	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 10:27	06/06/24 05:54	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 05:54	1
Toluene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 05:54	1
Xylenes, Total	ND		0.099	mg/Kg		05/30/24 10:27	06/06/24 05:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 10:27	06/06/24 05:54	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	120		9.2	mg/Kg		05/30/24 12:06	05/31/24 20:44	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		05/30/24 12:06	05/31/24 20:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			05/30/24 12:06	05/31/24 20:44	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5700		300	mg/Kg		05/30/24 14:06	05/31/24 12:26	100

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-26 0.0'

Lab Sample ID: 885-5206-20

Date Collected: 05/24/24 14:25

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 10:27	06/06/24 06:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		35 - 166			05/30/24 10:27	06/06/24 06:17	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 10:27	06/06/24 06:17	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 06:17	1
Toluene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 06:17	1
Xylenes, Total	ND		0.099	mg/Kg		05/30/24 10:27	06/06/24 06:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			05/30/24 10:27	06/06/24 06:17	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	250		9.3	mg/Kg		05/30/24 12:06	05/31/24 20:56	1
Motor Oil Range Organics [C28-C40]	220		47	mg/Kg		05/30/24 12:06	05/31/24 20:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		62 - 134			05/30/24 12:06	05/31/24 20:56	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1400		60	mg/Kg		05/30/24 14:06	05/31/24 03:07	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-29 0.0'

Lab Sample ID: 885-5206-21

Date Collected: 05/26/24 09:00

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/30/24 10:27	06/06/24 07:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		35 - 166			05/30/24 10:27	06/06/24 07:04	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 10:27	06/06/24 07:04	1
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 10:27	06/06/24 07:04	1
Toluene	ND		0.050	mg/Kg		05/30/24 10:27	06/06/24 07:04	1
Xylenes, Total	ND		0.10	mg/Kg		05/30/24 10:27	06/06/24 07:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		48 - 145			05/30/24 10:27	06/06/24 07:04	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		05/30/24 12:06	05/31/24 21:07	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/30/24 12:06	05/31/24 21:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			05/30/24 12:06	05/31/24 21:07	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		60	mg/Kg		05/30/24 14:06	05/31/24 03:20	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-29 2.0'

Lab Sample ID: 885-5206-22

Date Collected: 05/26/24 11:30

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 10:27	06/06/24 07:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		35 - 166			05/30/24 10:27	06/06/24 07:28	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 10:27	06/06/24 07:28	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 07:28	1
Toluene	ND		0.049	mg/Kg		05/30/24 10:27	06/06/24 07:28	1
Xylenes, Total	ND		0.098	mg/Kg		05/30/24 10:27	06/06/24 07:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 10:27	06/06/24 07:28	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		05/30/24 12:06	05/31/24 21:18	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/30/24 12:06	05/31/24 21:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			05/30/24 12:06	05/31/24 21:18	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		05/30/24 14:06	05/31/24 03:32	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-30 0.0'

Lab Sample ID: 885-5206-23

Date Collected: 05/26/24 09:15

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		05/30/24 10:27	06/06/24 07:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		35 - 166			05/30/24 10:27	06/06/24 07:51	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/30/24 10:27	06/06/24 07:51	1
Ethylbenzene	ND		0.047	mg/Kg		05/30/24 10:27	06/06/24 07:51	1
Toluene	ND		0.047	mg/Kg		05/30/24 10:27	06/06/24 07:51	1
Xylenes, Total	ND		0.094	mg/Kg		05/30/24 10:27	06/06/24 07:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 10:27	06/06/24 07:51	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		05/30/24 12:06	05/31/24 21:29	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		05/30/24 12:06	05/31/24 21:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			05/30/24 12:06	05/31/24 21:29	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	340		59	mg/Kg		05/31/24 07:03	05/31/24 12:14	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-30 2.0'

Lab Sample ID: 885-5206-24

Date Collected: 05/26/24 11:55

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/30/24 12:45	06/04/24 12:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		35 - 166			05/30/24 12:45	06/04/24 12:45	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 12:45	1
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 12:45	1
Toluene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 12:45	1
Xylenes, Total	ND		0.099	mg/Kg		05/30/24 12:45	06/04/24 12:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			05/30/24 12:45	06/04/24 12:45	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		05/30/24 14:54	05/31/24 14:39	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/30/24 14:54	05/31/24 14:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			05/30/24 14:54	05/31/24 14:39	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		60	mg/Kg		05/31/24 08:25	05/31/24 13:28	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-31 0.0'

Lab Sample ID: 885-5206-25

Date Collected: 05/26/24 09:30

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/30/24 12:45	06/04/24 13:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		35 - 166			05/30/24 12:45	06/04/24 13:09	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 13:09	1
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 13:09	1
Toluene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 13:09	1
Xylenes, Total	ND		0.10	mg/Kg		05/30/24 12:45	06/04/24 13:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 12:45	06/04/24 13:09	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		06/03/24 15:57	06/04/24 11:54	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		06/03/24 15:57	06/04/24 11:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	103		62 - 134			06/03/24 15:57	06/04/24 11:54	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		60	mg/Kg		05/31/24 08:25	05/31/24 14:05	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-31 2.0'

Lab Sample ID: 885-5206-26

Date Collected: 05/26/24 12:25

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 12:45	06/04/24 13:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		35 - 166			05/30/24 12:45	06/04/24 13:32	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 13:32	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 13:32	1
Toluene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 13:32	1
Xylenes, Total	ND		0.098	mg/Kg		05/30/24 12:45	06/04/24 13:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		48 - 145			05/30/24 12:45	06/04/24 13:32	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		05/30/24 14:54	05/31/24 15:30	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		05/30/24 14:54	05/31/24 15:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	75		62 - 134			05/30/24 14:54	05/31/24 15:30	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		60	mg/Kg		05/31/24 08:25	05/31/24 14:42	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-11 0FT
Date Collected: 05/24/24 10:00
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-27
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		05/30/24 12:45	06/04/24 13:56	1	
Surrogate									
4-Bromofluorobenzene (Surr)	97		35 - 166			05/30/24 12:45	06/04/24 13:56	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		05/30/24 12:45	06/04/24 13:56	1	
Ethylbenzene	ND		0.048	mg/Kg		05/30/24 12:45	06/04/24 13:56	1	
Toluene	ND		0.048	mg/Kg		05/30/24 12:45	06/04/24 13:56	1	
Xylenes, Total	ND		0.096	mg/Kg		05/30/24 12:45	06/04/24 13:56	1	
Surrogate									
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 12:45	06/04/24 13:56	1	
Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	20		9.9	mg/Kg		05/30/24 14:54	05/31/24 15:43	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 14:54	05/31/24 15:43	1	
Surrogate									
Di-n-octyl phthalate (Surr)	86		62 - 134			05/30/24 14:54	05/31/24 15:43	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1100		60	mg/Kg		05/31/24 08:25	05/31/24 14:54	20	

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-11 2FT

Lab Sample ID: 885-5206-28

Date Collected: 05/24/24 10:15

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 12:45	06/04/24 14:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		35 - 166			05/30/24 12:45	06/04/24 14:19	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 14:19	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 14:19	1
Toluene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 14:19	1
Xylenes, Total	ND		0.098	mg/Kg		05/30/24 12:45	06/04/24 14:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 12:45	06/04/24 14:19	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		05/30/24 14:54	05/31/24 15:55	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/30/24 14:54	05/31/24 15:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	74		62 - 134			05/30/24 14:54	05/31/24 15:55	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	270		60	mg/Kg		05/31/24 08:25	05/31/24 15:07	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-12 0FT

Lab Sample ID: 885-5206-29

Date Collected: 05/24/24 10:30

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		05/30/24 12:45	06/04/24 14:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		35 - 166			05/30/24 12:45	06/04/24 14:43	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		05/30/24 12:45	06/04/24 14:43	1
Ethylbenzene	ND		0.047	mg/Kg		05/30/24 12:45	06/04/24 14:43	1
Toluene	ND		0.047	mg/Kg		05/30/24 12:45	06/04/24 14:43	1
Xylenes, Total	ND		0.094	mg/Kg		05/30/24 12:45	06/04/24 14:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			05/30/24 12:45	06/04/24 14:43	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.4	mg/Kg		06/03/24 15:57	06/04/24 12:05	1
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		06/03/24 15:57	06/04/24 12:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			06/03/24 15:57	06/04/24 12:05	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		61	mg/Kg		05/31/24 08:25	05/31/24 15:19	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-12 2FT

Lab Sample ID: 885-5206-30

Date Collected: 05/24/24 10:45

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/30/24 12:45	06/04/24 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		35 - 166			05/30/24 12:45	06/04/24 15:06	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 15:06	1
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 15:06	1
Toluene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 15:06	1
Xylenes, Total	ND		0.099	mg/Kg		05/30/24 12:45	06/04/24 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		48 - 145			05/30/24 12:45	06/04/24 15:06	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		05/30/24 14:54	05/31/24 16:21	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 14:54	05/31/24 16:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			05/30/24 14:54	05/31/24 16:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		60	mg/Kg		05/31/24 08:25	05/31/24 15:56	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-13 OFT

Lab Sample ID: 885-5206-31

Date Collected: 05/24/24 11:00

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/30/24 12:45	06/04/24 15:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		35 - 166			05/30/24 12:45	06/04/24 15:30	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 15:30	1
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 15:30	1
Toluene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 15:30	1
Xylenes, Total	ND		0.10	mg/Kg		05/30/24 12:45	06/04/24 15:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		48 - 145			05/30/24 12:45	06/04/24 15:30	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	52		8.6	mg/Kg		06/03/24 15:57	06/04/24 13:00	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		06/03/24 15:57	06/04/24 13:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	78		62 - 134			06/03/24 15:57	06/04/24 13:00	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	830		60	mg/Kg		05/31/24 08:25	05/31/24 16:08	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-13 2FT
Date Collected: 05/24/24 11:15
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-32
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 12:45	06/04/24 18:37	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		35 - 166			05/30/24 12:45	06/04/24 18:37	1	

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 18:37	1	
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 18:37	1	
Toluene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 18:37	1	
Xylenes, Total	ND		0.098	mg/Kg		05/30/24 12:45	06/04/24 18:37	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	93		48 - 145			05/30/24 12:45	06/04/24 18:37	1	

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	14		9.2	mg/Kg		06/03/24 15:57	06/04/24 13:11	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		06/03/24 15:57	06/04/24 13:11	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	73		62 - 134			06/03/24 15:57	06/04/24 13:11	1	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	370		60	mg/Kg		05/31/24 08:25	05/31/24 16:21	20	

Client Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Client Sample ID: BH24-14 0FT

Lab Sample ID: 885-5206-33

Date Collected: 05/24/24 11:30

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 12:45	06/04/24 19:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166			05/30/24 12:45	06/04/24 19:01	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 19:01	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 19:01	1
Toluene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 19:01	1
Xylenes, Total	ND		0.098	mg/Kg		05/30/24 12:45	06/04/24 19:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		48 - 145			05/30/24 12:45	06/04/24 19:01	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	370		9.3	mg/Kg		05/30/24 14:54	05/31/24 16:59	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/30/24 14:54	05/31/24 16:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	72		62 - 134			05/30/24 14:54	05/31/24 16:59	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	700		60	mg/Kg		05/31/24 08:25	05/31/24 16:33	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-14 2FT

Lab Sample ID: 885-5206-34

Date Collected: 05/24/24 11:45

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 12:45	06/04/24 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		35 - 166			05/30/24 12:45	06/04/24 19:24	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/30/24 12:45	06/04/24 19:24	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 19:24	1
Toluene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 19:24	1
Xylenes, Total	ND		0.098	mg/Kg		05/30/24 12:45	06/04/24 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			05/30/24 12:45	06/04/24 19:24	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		06/03/24 15:57	06/04/24 13:21	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		06/03/24 15:57	06/04/24 13:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			06/03/24 15:57	06/04/24 13:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		60	mg/Kg		05/31/24 08:25	05/31/24 16:45	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-15 0FT
Date Collected: 05/24/24 12:00
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-35
Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/30/24 12:45	06/04/24 19:48	1
Surrogate								
4-Bromofluorobenzene (Surr)	97		35 - 166			05/30/24 12:45	06/04/24 19:48	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 19:48	1
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 19:48	1
Toluene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 19:48	1
Xylenes, Total	ND		0.099	mg/Kg		05/30/24 12:45	06/04/24 19:48	1
Surrogate								
4-Bromofluorobenzene (Surr)	92		48 - 145			05/30/24 12:45	06/04/24 19:48	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13		9.7	mg/Kg		06/03/24 15:57	06/04/24 13:32	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		06/03/24 15:57	06/04/24 13:32	1
Surrogate								
Di-n-octyl phthalate (Surr)	88		62 - 134			06/03/24 15:57	06/04/24 13:32	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9100		300	mg/Kg		05/31/24 08:25	06/01/24 08:47	100

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-15 2FT

Lab Sample ID: 885-5206-36

Date Collected: 05/24/24 12:15

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		05/30/24 12:45	06/04/24 20:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166			05/30/24 12:45	06/04/24 20:34	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/30/24 12:45	06/04/24 20:34	1
Ethylbenzene	ND		0.048	mg/Kg		05/30/24 12:45	06/04/24 20:34	1
Toluene	ND		0.048	mg/Kg		05/30/24 12:45	06/04/24 20:34	1
Xylenes, Total	ND		0.095	mg/Kg		05/30/24 12:45	06/04/24 20:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		48 - 145			05/30/24 12:45	06/04/24 20:34	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		05/30/24 14:54	05/31/24 17:37	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/30/24 14:54	05/31/24 17:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	79		62 - 134			05/30/24 14:54	05/31/24 17:37	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3200		150	mg/Kg		05/31/24 08:25	06/01/24 08:59	50

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-15 2.5FT

Lab Sample ID: 885-5206-37

Date Collected: 05/24/24 12:20

Matrix: Solid

Date Received: 05/29/24 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		05/30/24 12:45	06/04/24 20:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		35 - 166			05/30/24 12:45	06/04/24 20:58	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 20:58	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 20:58	1
Toluene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 20:58	1
Xylenes, Total	ND		0.098	mg/Kg		05/30/24 12:45	06/04/24 20:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			05/30/24 12:45	06/04/24 20:58	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		05/30/24 14:54	05/31/24 17:51	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 14:54	05/31/24 17:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	75		62 - 134			05/30/24 14:54	05/31/24 17:51	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	410		60	mg/Kg		05/31/24 08:25	05/31/24 17:22	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-5806/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 6025						Prep Batch: 5806			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/29/24 14:32	06/03/24 11:36	1	
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166				05/29/24 14:32	06/03/24 11:36	1

Lab Sample ID: LCS 885-5806/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 6025						Prep Batch: 5806			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			25.0	25.6		mg/Kg		102	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	207	S1+	35 - 166				05/30/24 10:27	06/05/24 00:05	1

Lab Sample ID: MB 885-5866/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 6130						Prep Batch: 5866			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/30/24 10:27	06/05/24 00:05	1	
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		35 - 166				05/30/24 10:27	06/05/24 00:05	1

Lab Sample ID: LCS 885-5866/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 6130						Prep Batch: 5866			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			25.0	23.5		mg/Kg		94	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	204	S1+	35 - 166				05/30/24 10:27	06/05/24 00:05	1

Lab Sample ID: 885-5206-4 MS						Client Sample ID: BH24-21 2.0'			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 6156						Prep Batch: 5866			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		24.8	20.1		mg/Kg		81	70 - 130

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: 885-5206-4 MS
Matrix: Solid
Analysis Batch: 6156

Client Sample ID: BH24-21 2.0'
Prep Type: Total/NA
Prep Batch: 5866

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	197	S1+	35 - 166

Lab Sample ID: 885-5206-4 MSD
Matrix: Solid
Analysis Batch: 6156

Client Sample ID: BH24-21 2.0'
Prep Type: Total/NA
Prep Batch: 5866

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	ND		24.8	21.1		mg/Kg		85	70 - 130	5	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	195	S1+	35 - 166

Lab Sample ID: MB 885-5880/1-A
Matrix: Solid
Analysis Batch: 6130

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5880

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		05/30/24 12:45	06/04/24 11:12	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
4-Bromofluorobenzene (Surr)	96		35 - 166	05/30/24 12:45	06/04/24 11:12	1

Lab Sample ID: LCS 885-5880/2-A
Matrix: Solid
Analysis Batch: 6130

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5880

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	23.9		mg/Kg		95	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	206	S1+	35 - 166

Lab Sample ID: 885-5206-24 MS
Matrix: Solid
Analysis Batch: 6130

Client Sample ID: BH24-30 2.0'
Prep Type: Total/NA
Prep Batch: 5880

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		24.8	20.5		mg/Kg		83	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	198	S1+	35 - 166

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: 885-5206-24 MSD

Matrix: Solid

Analysis Batch: 6130

Client Sample ID: BH24-30 2.0'

Prep Type: Total/NA

Prep Batch: 5880

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Gasoline Range Organics (GRO)-C6-C10	ND		24.8	21.6		mg/Kg		87	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	196	S1+	35 - 166								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-5806/1-A

Matrix: Solid

Analysis Batch: 6078

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5806

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	ND		0.025	mg/Kg		05/29/24 14:32	06/03/24 11:36	1
Ethylbenzene	ND		0.050	mg/Kg		05/29/24 14:32	06/03/24 11:36	1
Toluene	ND		0.050	mg/Kg		05/29/24 14:32	06/03/24 11:36	1
Xylenes, Total	ND		0.10	mg/Kg		05/29/24 14:32	06/03/24 11:36	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			05/29/24 14:32	06/03/24 11:36	1

Lab Sample ID: LCS 885-5806/3-A

Matrix: Solid

Analysis Batch: 6078

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5806

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene			1.00	0.943		mg/Kg		94	70 - 130		
Ethylbenzene			1.00	0.900		mg/Kg		90	70 - 130		
m-Xylene & p-Xylene			2.00	1.83		mg/Kg		91	70 - 130		
o-Xylene			1.00	0.892		mg/Kg		89	70 - 130		
Toluene			1.00	0.887		mg/Kg		89	70 - 130		
Xylenes, Total			3.00	2.72		mg/Kg		91	70 - 130		
			LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	96		48 - 145								

Lab Sample ID: MB 885-5866/1-A

Matrix: Solid

Analysis Batch: 6131

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5866

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	ND		0.025	mg/Kg		05/30/24 10:27	06/05/24 00:05	1
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 10:27	06/05/24 00:05	1
Toluene	ND		0.050	mg/Kg		05/30/24 10:27	06/05/24 00:05	1
Xylenes, Total	ND		0.10	mg/Kg		05/30/24 10:27	06/05/24 00:05	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	92		48 - 145	05/30/24 10:27	06/05/24 00:05	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: LCS 885-5866/3-A

Matrix: Solid

Analysis Batch: 6131

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5866

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.892		mg/Kg		89	70 - 130
Ethylbenzene	1.00	0.847		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	2.00	1.71		mg/Kg		86	70 - 130
o-Xylene	1.00	0.847		mg/Kg		85	70 - 130
Toluene	1.00	0.850		mg/Kg		85	70 - 130
Xylenes, Total	3.00	2.56		mg/Kg		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		48 - 145

Lab Sample ID: 885-5206-5 MS

Matrix: Solid

Analysis Batch: 6157

Client Sample ID: BH24-22 0.0'

Prep Type: Total/NA

Prep Batch: 5866

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.992	0.817		mg/Kg		82	70 - 130
Ethylbenzene	ND		0.992	0.764		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	ND		1.98	1.56		mg/Kg		77	70 - 130
o-Xylene	ND		0.992	0.757		mg/Kg		76	70 - 130
Toluene	ND		0.992	0.769		mg/Kg		78	70 - 130
Xylenes, Total	ND		2.98	2.32		mg/Kg		77	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		48 - 145

Lab Sample ID: 885-5206-5 MSD

Matrix: Solid

Analysis Batch: 6157

Client Sample ID: BH24-22 0.0'

Prep Type: Total/NA

Prep Batch: 5866

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
										RPD	Limit
Benzene	ND		0.992	0.807		mg/Kg		81	70 - 130	1	20
Ethylbenzene	ND		0.992	0.758		mg/Kg		76	70 - 130	1	20
m-Xylene & p-Xylene	ND		1.98	1.54		mg/Kg		76	70 - 130	1	20
o-Xylene	ND		0.992	0.750		mg/Kg		76	70 - 130	1	20
Toluene	ND		0.992	0.763		mg/Kg		77	70 - 130	1	20
Xylenes, Total	ND		2.98	2.29		mg/Kg		76	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		48 - 145

Lab Sample ID: MB 885-5880/1-A

Matrix: Solid

Analysis Batch: 6131

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5880

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 11:12	1
Ethylbenzene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 11:12	1
Toluene	ND		0.050	mg/Kg		05/30/24 12:45	06/04/24 11:12	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

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

Lab Sample ID: MB 885-5880/1-A

Matrix: Solid

Analysis Batch: 6131

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5880

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		05/30/24 12:45	06/04/24 11:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			05/30/24 12:45	06/04/24 11:12	1

Lab Sample ID: LCS 885-5880/3-A

Matrix: Solid

Analysis Batch: 6131

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5880

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.910		mg/Kg		91	70 - 130
Ethylbenzene	1.00	0.868		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	2.00	1.77		mg/Kg		88	70 - 130
o-Xylene	1.00	0.868		mg/Kg		87	70 - 130
Toluene	1.00	0.875		mg/Kg		87	70 - 130
Xylenes, Total	3.00	2.64		mg/Kg		88	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	94		48 - 145				

Lab Sample ID: 885-5206-25 MS

Matrix: Solid

Analysis Batch: 6131

Client Sample ID: BH24-31 0.0'

Prep Type: Total/NA

Prep Batch: 5880

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.996	0.888		mg/Kg		89	70 - 130
Ethylbenzene	ND		0.996	0.860		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	ND		1.99	1.73		mg/Kg		85	70 - 130
o-Xylene	ND		0.996	0.854		mg/Kg		86	70 - 130
Toluene	ND		0.996	0.842		mg/Kg		83	70 - 130
Xylenes, Total	ND		2.99	2.58		mg/Kg		85	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	94		48 - 145						

Lab Sample ID: 885-5206-25 MSD

Matrix: Solid

Analysis Batch: 6131

Client Sample ID: BH24-31 0.0'

Prep Type: Total/NA

Prep Batch: 5880

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.997	0.850		mg/Kg		85	70 - 130	4	20
Ethylbenzene	ND		0.997	0.831		mg/Kg		83	70 - 130	3	20
m-Xylene & p-Xylene	ND		1.99	1.70		mg/Kg		84	70 - 130	2	20
o-Xylene	ND		0.997	0.825		mg/Kg		83	70 - 130	3	20
Toluene	ND		0.997	0.826		mg/Kg		81	70 - 130	2	20
Xylenes, Total	ND		2.99	2.52		mg/Kg		84	70 - 130	2	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

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

Lab Sample ID: 885-5206-25 MSD

Matrix: Solid

Analysis Batch: 6131

Client Sample ID: BH24-31 0.0'

Prep Type: Total/NA

Prep Batch: 5880

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		48 - 145

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-5872/1-A

Matrix: Solid

Analysis Batch: 5949

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5872

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/30/24 12:06	05/31/24 16:39	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/30/24 12:06	05/31/24 16:39	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	85		62 - 134			05/30/24 12:06	05/31/24 16:39	1

Lab Sample ID: LCS 885-5872/2-A

Matrix: Solid

Analysis Batch: 5949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	42.7		mg/Kg		85	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	80		62 - 134				

Lab Sample ID: LCS 885-5872/3-A

Matrix: Solid

Analysis Batch: 5949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	45.9		mg/Kg		92	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	85		62 - 134				

Lab Sample ID: LCS 885-5872/4-A

Matrix: Solid

Analysis Batch: 5949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	46.1		mg/Kg		92	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	86		62 - 134				

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 885-5872/5-A
Matrix: Solid
Analysis Batch: 5949

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	50.8		mg/Kg		102	60 - 135
Surrogate		LCS %Recovery	LCS Qualifier	Limits			
Di-n-octyl phthalate (Surr)		94		62 - 134			

Lab Sample ID: 885-5206-4 MS
Matrix: Solid
Analysis Batch: 5949

Client Sample ID: BH24-21 2.0'
Prep Type: Total/NA
Prep Batch: 5872

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	13		49.3	53.3		mg/Kg		82	44 - 136
Surrogate		MS %Recovery	MS Qualifier	Limits					
Di-n-octyl phthalate (Surr)		96		62 - 134					

Lab Sample ID: 885-5206-4 MSD
Matrix: Solid
Analysis Batch: 5949

Client Sample ID: BH24-21 2.0'
Prep Type: Total/NA
Prep Batch: 5872

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	13		45.0	54.4		mg/Kg		93	44 - 136	2	32
Surrogate		MSD %Recovery	MSD Qualifier	Limits							
Di-n-octyl phthalate (Surr)		94		62 - 134							

Lab Sample ID: MB 885-5887/1-A
Matrix: Solid
Analysis Batch: 5949

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5887

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/30/24 14:51	05/31/24 13:42	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/30/24 14:51	05/31/24 13:42	1
Surrogate		MB %Recovery	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)		113		62 - 134		05/30/24 14:51	05/31/24 13:42	1

Lab Sample ID: LCS 885-5887/2-A
Matrix: Solid
Analysis Batch: 5949

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5887

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	53.5		mg/Kg		107	60 - 135

QC Sample Results

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 885-5887/2-A
Matrix: Solid
Analysis Batch: 5949

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5887

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Di-n-octyl phthalate (Surr)	106		62 - 134

Lab Sample ID: MB 885-5888/1-A
Matrix: Solid
Analysis Batch: 5950

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5888

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/30/24 14:54	05/31/24 14:13	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/30/24 14:54	05/31/24 14:13	1

	MB	MB	
Surrogate	%Recovery	Qualifier	Limits
Di-n-octyl phthalate (Surr)	133		62 - 134

	Prepared	Analyzed	Dil Fac
	05/30/24 14:54	05/31/24 14:13	1

Lab Sample ID: LCS 885-5888/2-A
Matrix: Solid
Analysis Batch: 5950

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5888

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier			Limits	Limits
Diesel Range Organics [C10-C28]	50.0	43.5		mg/Kg		87	60 - 135

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Di-n-octyl phthalate (Surr)	102		62 - 134

Lab Sample ID: 885-5206-24 MS
Matrix: Solid
Analysis Batch: 5950

Client Sample ID: BH24-30 2.0'
Prep Type: Total/NA
Prep Batch: 5888

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier			Limits	Limits
Diesel Range Organics [C10-C28]	ND		45.2	36.9		mg/Kg		82	44 - 136

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Di-n-octyl phthalate (Surr)	78		62 - 134

Lab Sample ID: 885-5206-24 MSD
Matrix: Solid
Analysis Batch: 5950

Client Sample ID: BH24-30 2.0'
Prep Type: Total/NA
Prep Batch: 5888

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier			Limits	Limits		Limit
Diesel Range Organics [C10-C28]	ND		46.6	29.1		mg/Kg		62	44 - 136	24	32

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
Di-n-octyl phthalate (Surr)	62		62 - 134

QC Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 885-6042/1-A

Matrix: Solid

Analysis Batch: 6100

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6042

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		06/03/24 15:57	06/04/24 11:44	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		06/03/24 15:57	06/04/24 11:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134			06/03/24 15:57	06/04/24 11:44	1

Lab Sample ID: LCS 885-6042/2-A

Matrix: Solid

Analysis Batch: 6100

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6042

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	46.4		mg/Kg		93	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	91		62 - 134				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-5883/1-A

Matrix: Solid

Analysis Batch: 5918

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5883

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		05/30/24 14:06	05/30/24 16:38	1

Lab Sample ID: LCS 885-5883/2-A

Matrix: Solid

Analysis Batch: 5918

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5883

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.0		mg/Kg		93	90 - 110

Lab Sample ID: 885-5206-6 MS

Matrix: Solid

Analysis Batch: 5918

Client Sample ID: BH24-22 2.0'

Prep Type: Total/NA

Prep Batch: 5883

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	150		30.1	164	4	mg/Kg		60	50 - 150

Lab Sample ID: 885-5206-6 MSD

Matrix: Solid

Analysis Batch: 5918

Client Sample ID: BH24-22 2.0'

Prep Type: Total/NA

Prep Batch: 5883

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
Chloride	150		30.0	172	4	mg/Kg		87	50 - 150	5 20

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-5206-11 MS

Matrix: Solid

Analysis Batch: 5918

Client Sample ID: BH24-16 0.0'

Prep Type: Total/NA

Prep Batch: 5883

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	740		30.1	777	4	mg/Kg		135	50 - 150

Lab Sample ID: MB 885-5912/2-A

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5912

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		05/31/24 07:03	05/31/24 08:33	1

Lab Sample ID: LCS 885-5912/3-A

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.2		mg/Kg		95	90 - 110

Lab Sample ID: MRL 885-5912/1-A

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5912

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1.50	1.61		mg/L		107	50 - 150

Lab Sample ID: MB 885-5922/1-A

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5922

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		05/31/24 08:25	05/31/24 12:38	1

Lab Sample ID: LCS 885-5922/2-A

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	28.2		mg/Kg		94	90 - 110

Lab Sample ID: 885-5206-24 MS

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: BH24-30 2.0'

Prep Type: Total/NA

Prep Batch: 5922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	120		30.1	157	4	mg/Kg		108	50 - 150

Lab Sample ID: 885-5206-24 MSD

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: BH24-30 2.0'

Prep Type: Total/NA

Prep Batch: 5922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	120		29.9	149	4	mg/Kg		82	50 - 150	5	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 885-5206-25 MS

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: BH24-31 0.0'

Prep Type: Total/NA

Prep Batch: 5922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	170		30.1	200	4	mg/Kg		109	50 - 150		

Lab Sample ID: 885-5206-25 MSD

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: BH24-31 0.0'

Prep Type: Total/NA

Prep Batch: 5922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	170		30.0	195	4	mg/Kg		92	50 - 150	3	20

Lab Sample ID: MB 885-5977/109

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/Kg			06/01/24 01:36	1

Lab Sample ID: MRL 885-5977/108

Matrix: Solid

Analysis Batch: 5977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			0.500	0.532		mg/L		106	50 - 150		

QC Association Summary

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

GC VOA

Prep Batch: 5806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-1	BH24-20 0.0'	Total/NA	Solid	5030C	
885-5206-2	BH24-20 2.0'	Total/NA	Solid	5030C	
885-5206-3	BH24-21 0.0'	Total/NA	Solid	5030C	
MB 885-5806/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-5806/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-5806/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 5866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-4	BH24-21 2.0'	Total/NA	Solid	5030C	
885-5206-5	BH24-22 0.0'	Total/NA	Solid	5030C	
885-5206-6	BH24-22 2.0'	Total/NA	Solid	5030C	
885-5206-7	BH24-23 0.0'	Total/NA	Solid	5030C	
885-5206-8	BH24-23 2.0'	Total/NA	Solid	5030C	
885-5206-9	BH24-24 0.0'	Total/NA	Solid	5030C	
885-5206-10	BH24-24 2.0'	Total/NA	Solid	5030C	
885-5206-11	BH24-16 0.0'	Total/NA	Solid	5030C	
885-5206-12	BH24-22 3.0'	Total/NA	Solid	5030C	
885-5206-13	BH24-22 4.0'	Total/NA	Solid	5030C	
885-5206-14	BH24-27 0.0'	Total/NA	Solid	5030C	
885-5206-15	BH24-16 2.0'	Total/NA	Solid	5030C	
885-5206-16	BH24-27 2.0'	Total/NA	Solid	5030C	
885-5206-17	BH24-28 0.0'	Total/NA	Solid	5030C	
885-5206-18	BH24-17 0.0'	Total/NA	Solid	5030C	
885-5206-19	BH24-25 0.0'	Total/NA	Solid	5030C	
885-5206-20	BH24-26 0.0'	Total/NA	Solid	5030C	
885-5206-21	BH24-29 0.0'	Total/NA	Solid	5030C	
885-5206-22	BH24-29 2.0'	Total/NA	Solid	5030C	
885-5206-23	BH24-30 0.0'	Total/NA	Solid	5030C	
MB 885-5866/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-5866/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-5866/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-5206-4 MS	BH24-21 2.0'	Total/NA	Solid	5030C	
885-5206-4 MSD	BH24-21 2.0'	Total/NA	Solid	5030C	
885-5206-5 MS	BH24-22 0.0'	Total/NA	Solid	5030C	
885-5206-5 MSD	BH24-22 0.0'	Total/NA	Solid	5030C	

Prep Batch: 5880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-24	BH24-30 2.0'	Total/NA	Solid	5030C	
885-5206-25	BH24-31 0.0'	Total/NA	Solid	5030C	
885-5206-26	BH24-31 2.0'	Total/NA	Solid	5030C	
885-5206-27	BH24-11 0FT	Total/NA	Solid	5030C	
885-5206-28	BH24-11 2FT	Total/NA	Solid	5030C	
885-5206-29	BH24-12 0FT	Total/NA	Solid	5030C	
885-5206-30	BH24-12 2FT	Total/NA	Solid	5030C	
885-5206-31	BH24-13 0FT	Total/NA	Solid	5030C	
885-5206-32	BH24-13 2FT	Total/NA	Solid	5030C	
885-5206-33	BH24-14 0FT	Total/NA	Solid	5030C	
885-5206-34	BH24-14 2FT	Total/NA	Solid	5030C	
885-5206-35	BH24-15 0FT	Total/NA	Solid	5030C	

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

GC VOA (Continued)

Prep Batch: 5880 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-36	BH24-15 2FT	Total/NA	Solid	5030C	
885-5206-37	BH24-15 2.5FT	Total/NA	Solid	5030C	
MB 885-5880/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-5880/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-5880/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-5206-24 MS	BH24-30 2.0'	Total/NA	Solid	5030C	
885-5206-24 MSD	BH24-30 2.0'	Total/NA	Solid	5030C	
885-5206-25 MS	BH24-31 0.0'	Total/NA	Solid	5030C	
885-5206-25 MSD	BH24-31 0.0'	Total/NA	Solid	5030C	

Analysis Batch: 6025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-1	BH24-20 0.0'	Total/NA	Solid	8015M/D	5806
885-5206-2	BH24-20 2.0'	Total/NA	Solid	8015M/D	5806
885-5206-3	BH24-21 0.0'	Total/NA	Solid	8015M/D	5806
MB 885-5806/1-A	Method Blank	Total/NA	Solid	8015M/D	5806
LCS 885-5806/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5806

Analysis Batch: 6078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-1	BH24-20 0.0'	Total/NA	Solid	8021B	5806
885-5206-2	BH24-20 2.0'	Total/NA	Solid	8021B	5806
885-5206-3	BH24-21 0.0'	Total/NA	Solid	8021B	5806
MB 885-5806/1-A	Method Blank	Total/NA	Solid	8021B	5806
LCS 885-5806/3-A	Lab Control Sample	Total/NA	Solid	8021B	5806

Analysis Batch: 6130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-4	BH24-21 2.0'	Total/NA	Solid	8015M/D	5866
885-5206-5	BH24-22 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-6	BH24-22 2.0'	Total/NA	Solid	8015M/D	5866
885-5206-8	BH24-23 2.0'	Total/NA	Solid	8015M/D	5866
885-5206-10	BH24-24 2.0'	Total/NA	Solid	8015M/D	5866
885-5206-11	BH24-16 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-24	BH24-30 2.0'	Total/NA	Solid	8015M/D	5880
885-5206-25	BH24-31 0.0'	Total/NA	Solid	8015M/D	5880
885-5206-26	BH24-31 2.0'	Total/NA	Solid	8015M/D	5880
885-5206-27	BH24-11 0FT	Total/NA	Solid	8015M/D	5880
885-5206-28	BH24-11 2FT	Total/NA	Solid	8015M/D	5880
885-5206-29	BH24-12 0FT	Total/NA	Solid	8015M/D	5880
885-5206-30	BH24-12 2FT	Total/NA	Solid	8015M/D	5880
885-5206-31	BH24-13 0FT	Total/NA	Solid	8015M/D	5880
885-5206-32	BH24-13 2FT	Total/NA	Solid	8015M/D	5880
885-5206-33	BH24-14 0FT	Total/NA	Solid	8015M/D	5880
885-5206-34	BH24-14 2FT	Total/NA	Solid	8015M/D	5880
885-5206-35	BH24-15 0FT	Total/NA	Solid	8015M/D	5880
885-5206-36	BH24-15 2FT	Total/NA	Solid	8015M/D	5880
885-5206-37	BH24-15 2.5FT	Total/NA	Solid	8015M/D	5880
MB 885-5866/1-A	Method Blank	Total/NA	Solid	8015M/D	5866
MB 885-5880/1-A	Method Blank	Total/NA	Solid	8015M/D	5880
LCS 885-5866/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5866

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

GC VOA (Continued)

Analysis Batch: 6130 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-5880/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5880
885-5206-24 MS	BH24-30 2.0'	Total/NA	Solid	8015M/D	5880
885-5206-24 MSD	BH24-30 2.0'	Total/NA	Solid	8015M/D	5880

Analysis Batch: 6131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-4	BH24-21 2.0'	Total/NA	Solid	8021B	5866
885-5206-5	BH24-22 0.0'	Total/NA	Solid	8021B	5866
885-5206-6	BH24-22 2.0'	Total/NA	Solid	8021B	5866
885-5206-8	BH24-23 2.0'	Total/NA	Solid	8021B	5866
885-5206-10	BH24-24 2.0'	Total/NA	Solid	8021B	5866
885-5206-11	BH24-16 0.0'	Total/NA	Solid	8021B	5866
885-5206-24	BH24-30 2.0'	Total/NA	Solid	8021B	5880
885-5206-25	BH24-31 0.0'	Total/NA	Solid	8021B	5880
885-5206-26	BH24-31 2.0'	Total/NA	Solid	8021B	5880
885-5206-27	BH24-11 0FT	Total/NA	Solid	8021B	5880
885-5206-28	BH24-11 2FT	Total/NA	Solid	8021B	5880
885-5206-29	BH24-12 0FT	Total/NA	Solid	8021B	5880
885-5206-30	BH24-12 2FT	Total/NA	Solid	8021B	5880
885-5206-31	BH24-13 0FT	Total/NA	Solid	8021B	5880
885-5206-32	BH24-13 2FT	Total/NA	Solid	8021B	5880
885-5206-33	BH24-14 0FT	Total/NA	Solid	8021B	5880
885-5206-34	BH24-14 2FT	Total/NA	Solid	8021B	5880
885-5206-35	BH24-15 0FT	Total/NA	Solid	8021B	5880
885-5206-36	BH24-15 2FT	Total/NA	Solid	8021B	5880
885-5206-37	BH24-15 2.5FT	Total/NA	Solid	8021B	5880
MB 885-5866/1-A	Method Blank	Total/NA	Solid	8021B	5866
MB 885-5880/1-A	Method Blank	Total/NA	Solid	8021B	5880
LCS 885-5866/3-A	Lab Control Sample	Total/NA	Solid	8021B	5866
LCS 885-5880/3-A	Lab Control Sample	Total/NA	Solid	8021B	5880
885-5206-25 MS	BH24-31 0.0'	Total/NA	Solid	8021B	5880
885-5206-25 MSD	BH24-31 0.0'	Total/NA	Solid	8021B	5880

Analysis Batch: 6156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-7	BH24-23 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-9	BH24-24 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-12	BH24-22 3.0'	Total/NA	Solid	8015M/D	5866
885-5206-13	BH24-22 4.0'	Total/NA	Solid	8015M/D	5866
885-5206-14	BH24-27 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-15	BH24-16 2.0'	Total/NA	Solid	8015M/D	5866
885-5206-16	BH24-27 2.0'	Total/NA	Solid	8015M/D	5866
885-5206-17	BH24-28 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-18	BH24-17 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-19	BH24-25 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-20	BH24-26 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-21	BH24-29 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-22	BH24-29 2.0'	Total/NA	Solid	8015M/D	5866
885-5206-23	BH24-30 0.0'	Total/NA	Solid	8015M/D	5866
885-5206-4 MS	BH24-21 2.0'	Total/NA	Solid	8015M/D	5866
885-5206-4 MSD	BH24-21 2.0'	Total/NA	Solid	8015M/D	5866

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

GC VOA

Analysis Batch: 6157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-7	BH24-23 0.0'	Total/NA	Solid	8021B	5866
885-5206-9	BH24-24 0.0'	Total/NA	Solid	8021B	5866
885-5206-12	BH24-22 3.0'	Total/NA	Solid	8021B	5866
885-5206-13	BH24-22 4.0'	Total/NA	Solid	8021B	5866
885-5206-14	BH24-27 0.0'	Total/NA	Solid	8021B	5866
885-5206-15	BH24-16 2.0'	Total/NA	Solid	8021B	5866
885-5206-16	BH24-27 2.0'	Total/NA	Solid	8021B	5866
885-5206-17	BH24-28 0.0'	Total/NA	Solid	8021B	5866
885-5206-18	BH24-17 0.0'	Total/NA	Solid	8021B	5866
885-5206-19	BH24-25 0.0'	Total/NA	Solid	8021B	5866
885-5206-20	BH24-26 0.0'	Total/NA	Solid	8021B	5866
885-5206-21	BH24-29 0.0'	Total/NA	Solid	8021B	5866
885-5206-22	BH24-29 2.0'	Total/NA	Solid	8021B	5866
885-5206-23	BH24-30 0.0'	Total/NA	Solid	8021B	5866
885-5206-5 MS	BH24-22 0.0'	Total/NA	Solid	8021B	5866
885-5206-5 MSD	BH24-22 0.0'	Total/NA	Solid	8021B	5866

GC Semi VOA

Prep Batch: 5872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-4	BH24-21 2.0'	Total/NA	Solid	SHAKE	
885-5206-5	BH24-22 0.0'	Total/NA	Solid	SHAKE	
885-5206-6	BH24-22 2.0'	Total/NA	Solid	SHAKE	
885-5206-7	BH24-23 0.0'	Total/NA	Solid	SHAKE	
885-5206-8	BH24-23 2.0'	Total/NA	Solid	SHAKE	
885-5206-9	BH24-24 0.0'	Total/NA	Solid	SHAKE	
885-5206-10	BH24-24 2.0'	Total/NA	Solid	SHAKE	
885-5206-11	BH24-16 0.0'	Total/NA	Solid	SHAKE	
885-5206-12	BH24-22 3.0'	Total/NA	Solid	SHAKE	
885-5206-13	BH24-22 4.0'	Total/NA	Solid	SHAKE	
885-5206-14	BH24-27 0.0'	Total/NA	Solid	SHAKE	
885-5206-15	BH24-16 2.0'	Total/NA	Solid	SHAKE	
885-5206-16	BH24-27 2.0'	Total/NA	Solid	SHAKE	
885-5206-17	BH24-28 0.0'	Total/NA	Solid	SHAKE	
885-5206-18	BH24-17 0.0'	Total/NA	Solid	SHAKE	
885-5206-19	BH24-25 0.0'	Total/NA	Solid	SHAKE	
885-5206-20	BH24-26 0.0'	Total/NA	Solid	SHAKE	
885-5206-21	BH24-29 0.0'	Total/NA	Solid	SHAKE	
885-5206-22	BH24-29 2.0'	Total/NA	Solid	SHAKE	
885-5206-23	BH24-30 0.0'	Total/NA	Solid	SHAKE	
MB 885-5872/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-5872/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
LCS 885-5872/3-A	Lab Control Sample	Total/NA	Solid	SHAKE	
LCS 885-5872/4-A	Lab Control Sample	Total/NA	Solid	SHAKE	
LCS 885-5872/5-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-5206-4 MS	BH24-21 2.0'	Total/NA	Solid	SHAKE	
885-5206-4 MSD	BH24-21 2.0'	Total/NA	Solid	SHAKE	

QC Association Summary

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

GC Semi VOA

Prep Batch: 5887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-1	BH24-20 0.0'	Total/NA	Solid	SHAKE	
885-5206-2	BH24-20 2.0'	Total/NA	Solid	SHAKE	
885-5206-3	BH24-21 0.0'	Total/NA	Solid	SHAKE	
MB 885-5887/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-5887/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Prep Batch: 5888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-24	BH24-30 2.0'	Total/NA	Solid	SHAKE	
885-5206-26	BH24-31 2.0'	Total/NA	Solid	SHAKE	
885-5206-27	BH24-11 0FT	Total/NA	Solid	SHAKE	
885-5206-28	BH24-11 2FT	Total/NA	Solid	SHAKE	
885-5206-30	BH24-12 2FT	Total/NA	Solid	SHAKE	
885-5206-33	BH24-14 0FT	Total/NA	Solid	SHAKE	
885-5206-36	BH24-15 2FT	Total/NA	Solid	SHAKE	
885-5206-37	BH24-15 2.5FT	Total/NA	Solid	SHAKE	
MB 885-5888/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-5888/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-5206-24 MS	BH24-30 2.0'	Total/NA	Solid	SHAKE	
885-5206-24 MSD	BH24-30 2.0'	Total/NA	Solid	SHAKE	

Analysis Batch: 5949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-1	BH24-20 0.0'	Total/NA	Solid	8015M/D	5887
885-5206-2	BH24-20 2.0'	Total/NA	Solid	8015M/D	5887
885-5206-3	BH24-21 0.0'	Total/NA	Solid	8015M/D	5887
885-5206-4	BH24-21 2.0'	Total/NA	Solid	8015M/D	5872
885-5206-5	BH24-22 0.0'	Total/NA	Solid	8015M/D	5872
885-5206-6	BH24-22 2.0'	Total/NA	Solid	8015M/D	5872
885-5206-11	BH24-16 0.0'	Total/NA	Solid	8015M/D	5872
885-5206-12	BH24-22 3.0'	Total/NA	Solid	8015M/D	5872
885-5206-13	BH24-22 4.0'	Total/NA	Solid	8015M/D	5872
885-5206-14	BH24-27 0.0'	Total/NA	Solid	8015M/D	5872
885-5206-15	BH24-16 2.0'	Total/NA	Solid	8015M/D	5872
885-5206-16	BH24-27 2.0'	Total/NA	Solid	8015M/D	5872
885-5206-18	BH24-17 0.0'	Total/NA	Solid	8015M/D	5872
885-5206-19	BH24-25 0.0'	Total/NA	Solid	8015M/D	5872
885-5206-20	BH24-26 0.0'	Total/NA	Solid	8015M/D	5872
885-5206-21	BH24-29 0.0'	Total/NA	Solid	8015M/D	5872
885-5206-22	BH24-29 2.0'	Total/NA	Solid	8015M/D	5872
885-5206-23	BH24-30 0.0'	Total/NA	Solid	8015M/D	5872
MB 885-5872/1-A	Method Blank	Total/NA	Solid	8015M/D	5872
MB 885-5887/1-A	Method Blank	Total/NA	Solid	8015M/D	5887
LCS 885-5872/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5872
LCS 885-5872/3-A	Lab Control Sample	Total/NA	Solid	8015M/D	5872
LCS 885-5872/4-A	Lab Control Sample	Total/NA	Solid	8015M/D	5872
LCS 885-5872/5-A	Lab Control Sample	Total/NA	Solid	8015M/D	5872
LCS 885-5887/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5887
885-5206-4 MS	BH24-21 2.0'	Total/NA	Solid	8015M/D	5872
885-5206-4 MSD	BH24-21 2.0'	Total/NA	Solid	8015M/D	5872

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

GC Semi VOA

Analysis Batch: 5950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-24	BH24-30 2.0'	Total/NA	Solid	8015M/D	5888
885-5206-26	BH24-31 2.0'	Total/NA	Solid	8015M/D	5888
885-5206-27	BH24-11 0FT	Total/NA	Solid	8015M/D	5888
885-5206-28	BH24-11 2FT	Total/NA	Solid	8015M/D	5888
885-5206-30	BH24-12 2FT	Total/NA	Solid	8015M/D	5888
885-5206-33	BH24-14 0FT	Total/NA	Solid	8015M/D	5888
885-5206-36	BH24-15 2FT	Total/NA	Solid	8015M/D	5888
885-5206-37	BH24-15 2.5FT	Total/NA	Solid	8015M/D	5888
MB 885-5888/1-A	Method Blank	Total/NA	Solid	8015M/D	5888
LCS 885-5888/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5888
885-5206-24 MS	BH24-30 2.0'	Total/NA	Solid	8015M/D	5888
885-5206-24 MSD	BH24-30 2.0'	Total/NA	Solid	8015M/D	5888

Prep Batch: 6042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-25	BH24-31 0.0'	Total/NA	Solid	SHAKE	
885-5206-29	BH24-12 0FT	Total/NA	Solid	SHAKE	
885-5206-31	BH24-13 0FT	Total/NA	Solid	SHAKE	
885-5206-32	BH24-13 2FT	Total/NA	Solid	SHAKE	
885-5206-34	BH24-14 2FT	Total/NA	Solid	SHAKE	
885-5206-35	BH24-15 0FT	Total/NA	Solid	SHAKE	
MB 885-6042/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-6042/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 6080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-7	BH24-23 0.0'	Total/NA	Solid	8015M/D	5872
885-5206-8	BH24-23 2.0'	Total/NA	Solid	8015M/D	5872
885-5206-9	BH24-24 0.0'	Total/NA	Solid	8015M/D	5872
885-5206-10	BH24-24 2.0'	Total/NA	Solid	8015M/D	5872
885-5206-17	BH24-28 0.0'	Total/NA	Solid	8015M/D	5872

Analysis Batch: 6100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-25	BH24-31 0.0'	Total/NA	Solid	8015M/D	6042
885-5206-29	BH24-12 0FT	Total/NA	Solid	8015M/D	6042
885-5206-31	BH24-13 0FT	Total/NA	Solid	8015M/D	6042
885-5206-32	BH24-13 2FT	Total/NA	Solid	8015M/D	6042
885-5206-34	BH24-14 2FT	Total/NA	Solid	8015M/D	6042
885-5206-35	BH24-15 0FT	Total/NA	Solid	8015M/D	6042
MB 885-6042/1-A	Method Blank	Total/NA	Solid	8015M/D	6042
LCS 885-6042/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6042

HPLC/IC

Prep Batch: 5883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-4	BH24-21 2.0'	Total/NA	Solid	300_Prep	
885-5206-5	BH24-22 0.0'	Total/NA	Solid	300_Prep	
885-5206-6	BH24-22 2.0'	Total/NA	Solid	300_Prep	
885-5206-7	BH24-23 0.0'	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-5206-1

Project/Site: PLU 20-8 Brushy Draw 104H

HPLC/IC (Continued)

Prep Batch: 5883 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-8	BH24-23 2.0'	Total/NA	Solid	300_Prep	
885-5206-9	BH24-24 0.0'	Total/NA	Solid	300_Prep	
885-5206-10	BH24-24 2.0'	Total/NA	Solid	300_Prep	
885-5206-11	BH24-16 0.0'	Total/NA	Solid	300_Prep	
885-5206-12	BH24-22 3.0'	Total/NA	Solid	300_Prep	
885-5206-13	BH24-22 4.0'	Total/NA	Solid	300_Prep	
885-5206-14	BH24-27 0.0'	Total/NA	Solid	300_Prep	
885-5206-15	BH24-16 2.0'	Total/NA	Solid	300_Prep	
885-5206-16	BH24-27 2.0'	Total/NA	Solid	300_Prep	
885-5206-17	BH24-28 0.0'	Total/NA	Solid	300_Prep	
885-5206-18	BH24-17 0.0'	Total/NA	Solid	300_Prep	
885-5206-19	BH24-25 0.0'	Total/NA	Solid	300_Prep	
885-5206-20	BH24-26 0.0'	Total/NA	Solid	300_Prep	
885-5206-21	BH24-29 0.0'	Total/NA	Solid	300_Prep	
885-5206-22	BH24-29 2.0'	Total/NA	Solid	300_Prep	
MB 885-5883/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-5883/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-5206-6 MS	BH24-22 2.0'	Total/NA	Solid	300_Prep	
885-5206-6 MSD	BH24-22 2.0'	Total/NA	Solid	300_Prep	
885-5206-11 MS	BH24-16 0.0'	Total/NA	Solid	300_Prep	

Prep Batch: 5912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-1	BH24-20 0.0'	Total/NA	Solid	300_Prep	
885-5206-2	BH24-20 2.0'	Total/NA	Solid	300_Prep	
885-5206-3	BH24-21 0.0'	Total/NA	Solid	300_Prep	
885-5206-23	BH24-30 0.0'	Total/NA	Solid	300_Prep	
MB 885-5912/2-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-5912/3-A	Lab Control Sample	Total/NA	Solid	300_Prep	
MRL 885-5912/1-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 5918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-4	BH24-21 2.0'	Total/NA	Solid	300.0	5883
885-5206-5	BH24-22 0.0'	Total/NA	Solid	300.0	5883
885-5206-6	BH24-22 2.0'	Total/NA	Solid	300.0	5883
885-5206-7	BH24-23 0.0'	Total/NA	Solid	300.0	5883
885-5206-8	BH24-23 2.0'	Total/NA	Solid	300.0	5883
885-5206-9	BH24-24 0.0'	Total/NA	Solid	300.0	5883
885-5206-10	BH24-24 2.0'	Total/NA	Solid	300.0	5883
885-5206-11	BH24-16 0.0'	Total/NA	Solid	300.0	5883
885-5206-12	BH24-22 3.0'	Total/NA	Solid	300.0	5883
885-5206-13	BH24-22 4.0'	Total/NA	Solid	300.0	5883
885-5206-14	BH24-27 0.0'	Total/NA	Solid	300.0	5883
885-5206-15	BH24-16 2.0'	Total/NA	Solid	300.0	5883
885-5206-16	BH24-27 2.0'	Total/NA	Solid	300.0	5883
885-5206-17	BH24-28 0.0'	Total/NA	Solid	300.0	5883
885-5206-18	BH24-17 0.0'	Total/NA	Solid	300.0	5883
885-5206-20	BH24-26 0.0'	Total/NA	Solid	300.0	5883
885-5206-21	BH24-29 0.0'	Total/NA	Solid	300.0	5883
885-5206-22	BH24-29 2.0'	Total/NA	Solid	300.0	5883

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-5206-1

HPLC/IC (Continued)

Analysis Batch: 5918 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-5883/1-A	Method Blank	Total/NA	Solid	300.0	5883
LCS 885-5883/2-A	Lab Control Sample	Total/NA	Solid	300.0	5883
885-5206-6 MS	BH24-22 2.0'	Total/NA	Solid	300.0	5883
885-5206-6 MSD	BH24-22 2.0'	Total/NA	Solid	300.0	5883
885-5206-11 MS	BH24-16 0.0'	Total/NA	Solid	300.0	5883

Prep Batch: 5922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-24	BH24-30 2.0'	Total/NA	Solid	300_Prep	
885-5206-25	BH24-31 0.0'	Total/NA	Solid	300_Prep	
885-5206-26	BH24-31 2.0'	Total/NA	Solid	300_Prep	
885-5206-27	BH24-11 0FT	Total/NA	Solid	300_Prep	
885-5206-28	BH24-11 2FT	Total/NA	Solid	300_Prep	
885-5206-29	BH24-12 0FT	Total/NA	Solid	300_Prep	
885-5206-30	BH24-12 2FT	Total/NA	Solid	300_Prep	
885-5206-31	BH24-13 0FT	Total/NA	Solid	300_Prep	
885-5206-32	BH24-13 2FT	Total/NA	Solid	300_Prep	
885-5206-33	BH24-14 0FT	Total/NA	Solid	300_Prep	
885-5206-34	BH24-14 2FT	Total/NA	Solid	300_Prep	
885-5206-35	BH24-15 0FT	Total/NA	Solid	300_Prep	
885-5206-36	BH24-15 2FT	Total/NA	Solid	300_Prep	
885-5206-37	BH24-15 2.5FT	Total/NA	Solid	300_Prep	
MB 885-5922/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-5922/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-5206-24 MS	BH24-30 2.0'	Total/NA	Solid	300_Prep	
885-5206-24 MSD	BH24-30 2.0'	Total/NA	Solid	300_Prep	
885-5206-25 MS	BH24-31 0.0'	Total/NA	Solid	300_Prep	
885-5206-25 MSD	BH24-31 0.0'	Total/NA	Solid	300_Prep	

Analysis Batch: 5977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-1	BH24-20 0.0'	Total/NA	Solid	300.0	5912
885-5206-2	BH24-20 2.0'	Total/NA	Solid	300.0	5912
885-5206-3	BH24-21 0.0'	Total/NA	Solid	300.0	5912
885-5206-19	BH24-25 0.0'	Total/NA	Solid	300.0	5883
885-5206-23	BH24-30 0.0'	Total/NA	Solid	300.0	5912
885-5206-24	BH24-30 2.0'	Total/NA	Solid	300.0	5922
885-5206-25	BH24-31 0.0'	Total/NA	Solid	300.0	5922
885-5206-26	BH24-31 2.0'	Total/NA	Solid	300.0	5922
885-5206-27	BH24-11 0FT	Total/NA	Solid	300.0	5922
885-5206-28	BH24-11 2FT	Total/NA	Solid	300.0	5922
885-5206-29	BH24-12 0FT	Total/NA	Solid	300.0	5922
885-5206-30	BH24-12 2FT	Total/NA	Solid	300.0	5922
885-5206-31	BH24-13 0FT	Total/NA	Solid	300.0	5922
885-5206-32	BH24-13 2FT	Total/NA	Solid	300.0	5922
885-5206-33	BH24-14 0FT	Total/NA	Solid	300.0	5922
885-5206-34	BH24-14 2FT	Total/NA	Solid	300.0	5922
885-5206-37	BH24-15 2.5FT	Total/NA	Solid	300.0	5922
MB 885-5912/2-A	Method Blank	Total/NA	Solid	300.0	5912
MB 885-5922/1-A	Method Blank	Total/NA	Solid	300.0	5922
MB 885-5977/109	Method Blank	Total/NA	Solid	300.0	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

HPLC/IC (Continued)

Analysis Batch: 5977 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-5912/3-A	Lab Control Sample	Total/NA	Solid	300.0	5912
LCS 885-5922/2-A	Lab Control Sample	Total/NA	Solid	300.0	5922
MRL 885-5912/1-A	Lab Control Sample	Total/NA	Solid	300.0	5912
MRL 885-5977/108	Lab Control Sample	Total/NA	Solid	300.0	
885-5206-24 MS	BH24-30 2.0'	Total/NA	Solid	300.0	5922
885-5206-24 MSD	BH24-30 2.0'	Total/NA	Solid	300.0	5922
885-5206-25 MS	BH24-31 0.0'	Total/NA	Solid	300.0	5922
885-5206-25 MSD	BH24-31 0.0'	Total/NA	Solid	300.0	5922

Analysis Batch: 5986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5206-35	BH24-15 0FT	Total/NA	Solid	300.0	5922
885-5206-36	BH24-15 2FT	Total/NA	Solid	300.0	5922

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-20 0.0'
Date Collected: 05/24/24 09:40
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5806	AT	EET ALB	05/29/24 14:32
Total/NA	Analysis	8015M/D		1	6025	JP	EET ALB	06/03/24 19:24
Total/NA	Prep	5030C			5806	AT	EET ALB	05/29/24 14:32
Total/NA	Analysis	8021B		1	6078	JP	EET ALB	06/03/24 19:24
Total/NA	Prep	SHAKE			5887	SB	EET ALB	05/30/24 14:51
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 15:22
Total/NA	Prep	300_Prep			5912	JT	EET ALB	05/31/24 07:03
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 11:37

Client Sample ID: BH24-20 2.0'
Date Collected: 05/24/24 09:45
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5806	AT	EET ALB	05/29/24 14:32
Total/NA	Analysis	8015M/D		1	6025	JP	EET ALB	06/03/24 19:48
Total/NA	Prep	5030C			5806	AT	EET ALB	05/29/24 14:32
Total/NA	Analysis	8021B		1	6078	JP	EET ALB	06/03/24 19:48
Total/NA	Prep	SHAKE			5887	SB	EET ALB	05/30/24 14:51
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 15:33
Total/NA	Prep	300_Prep			5912	JT	EET ALB	05/31/24 07:03
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 11:49

Client Sample ID: BH24-21 0.0'
Date Collected: 05/24/24 09:55
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5806	AT	EET ALB	05/29/24 14:32
Total/NA	Analysis	8015M/D		1	6025	JP	EET ALB	06/03/24 20:11
Total/NA	Prep	5030C			5806	AT	EET ALB	05/29/24 14:32
Total/NA	Analysis	8021B		1	6078	JP	EET ALB	06/03/24 20:11
Total/NA	Prep	SHAKE			5887	SB	EET ALB	05/30/24 14:51
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 15:44
Total/NA	Prep	300_Prep			5912	JT	EET ALB	05/31/24 07:03
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 12:01

Client Sample ID: BH24-21 2.0'
Date Collected: 05/24/24 10:00
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/05/24 00:28

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-21 2.0'
Date Collected: 05/24/24 10:00
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/05/24 00:28
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 17:34
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 22:11

Client Sample ID: BH24-22 0.0'
Date Collected: 05/24/24 10:05
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/05/24 00:52
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/05/24 00:52
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 18:08
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 22:24

Client Sample ID: BH24-22 2.0'
Date Collected: 05/24/24 10:15
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/05/24 01:15
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/05/24 01:15
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 18:19
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 22:36

Client Sample ID: BH24-23 0.0'
Date Collected: 05/24/24 10:20
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/05/24 23:38
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/05/24 23:38

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-23 0.0'
Date Collected: 05/24/24 10:20
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		50	6080	JU	EET ALB	06/03/24 14:39
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 23:38

Client Sample ID: BH24-23 2.0'
Date Collected: 05/24/24 10:30
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/05/24 02:02
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/05/24 02:02
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		5	6080	JU	EET ALB	06/03/24 14:50
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/30/24 23:50

Client Sample ID: BH24-24 0.0'
Date Collected: 05/24/24 10:35
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		2	6156	JP	EET ALB	06/05/24 22:51
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		2	6157	JP	EET ALB	06/05/24 22:51
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		20	6080	JU	EET ALB	06/03/24 15:01
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 00:02

Client Sample ID: BH24-24 2.0'
Date Collected: 05/24/24 10:45
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		2	6130	JP	EET ALB	06/05/24 02:49
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		2	6131	JP	EET ALB	06/05/24 02:49
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		20	6080	JU	EET ALB	06/03/24 15:12

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-24 2.0'

Lab Sample ID: 885-5206-10

Date Collected: 05/24/24 10:45

Matrix: Solid

Date Received: 05/29/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 00:15

Client Sample ID: BH24-16 0.0'

Lab Sample ID: 885-5206-11

Date Collected: 05/24/24 14:35

Matrix: Solid

Date Received: 05/29/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/05/24 03:13
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/05/24 03:13
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 19:15
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 00:27

Client Sample ID: BH24-22 3.0'

Lab Sample ID: 885-5206-12

Date Collected: 05/25/24 10:00

Matrix: Solid

Date Received: 05/29/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 03:10
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 03:10
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 19:26
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 01:04

Client Sample ID: BH24-22 4.0'

Lab Sample ID: 885-5206-13

Date Collected: 05/25/24 10:25

Matrix: Solid

Date Received: 05/29/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 03:34
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 03:34
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 19:38
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 01:16

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-27 0.0'
Date Collected: 05/25/24 10:45
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 03:57
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 03:57
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 19:49
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 01:29

Client Sample ID: BH24-16 2.0'
Date Collected: 05/25/24 13:20
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 04:20
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 04:20
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 20:00
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 02:06

Client Sample ID: BH24-27 2.0'
Date Collected: 05/25/24 13:40
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 04:44
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 04:44
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 20:11
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 02:18

Client Sample ID: BH24-28 0.0'
Date Collected: 05/25/24 10:55
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		2	6156	JP	EET ALB	06/06/24 05:07

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-28 0.0'
Date Collected: 05/25/24 10:55
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		2	6157	JP	EET ALB	06/06/24 05:07
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		10	6080	JU	EET ALB	06/03/24 15:22
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 02:30

Client Sample ID: BH24-17 0.0'
Date Collected: 05/24/24 14:40
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 05:31
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 05:31
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 20:33
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 02:43

Client Sample ID: BH24-25 0.0'
Date Collected: 05/24/24 14:30
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 05:54
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 05:54
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 20:44
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		100	5977	JT	EET ALB	05/31/24 12:26

Client Sample ID: BH24-26 0.0'
Date Collected: 05/24/24 14:25
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 06:17
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 06:17

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-26 0.0'
Date Collected: 05/24/24 14:25
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 20:56
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 03:07

Client Sample ID: BH24-29 0.0'
Date Collected: 05/26/24 09:00
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 07:04
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 07:04
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 21:07
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 03:20

Client Sample ID: BH24-29 2.0'
Date Collected: 05/26/24 11:30
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 07:28
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 07:28
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 21:18
Total/NA	Prep	300_Prep			5883	RC	EET ALB	05/30/24 14:06
Total/NA	Analysis	300.0		20	5918	RC	EET ALB	05/31/24 03:32

Client Sample ID: BH24-30 0.0'
Date Collected: 05/26/24 09:15
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8015M/D		1	6156	JP	EET ALB	06/06/24 07:51
Total/NA	Prep	5030C			5866	AT	EET ALB	05/30/24 10:27
Total/NA	Analysis	8021B		1	6157	JP	EET ALB	06/06/24 07:51
Total/NA	Prep	SHAKE			5872	JM	EET ALB	05/30/24 12:06
Total/NA	Analysis	8015M/D		1	5949	JU	EET ALB	05/31/24 21:29

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-30 0.0'
Date Collected: 05/26/24 09:15
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			5912	JT	EET ALB	05/31/24 07:03
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 12:14

Client Sample ID: BH24-30 2.0'
Date Collected: 05/26/24 11:55
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 12:45
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 12:45
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 14:39
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 13:28

Client Sample ID: BH24-31 0.0'
Date Collected: 05/26/24 09:30
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 13:09
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 13:09
Total/NA	Prep	SHAKE			6042	JU	EET ALB	06/03/24 15:57
Total/NA	Analysis	8015M/D		1	6100	JU	EET ALB	06/04/24 11:54
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 14:05

Client Sample ID: BH24-31 2.0'
Date Collected: 05/26/24 12:25
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 13:32
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 13:32
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 15:30
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 14:42

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-11 0FT
Date Collected: 05/24/24 10:00
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 13:56
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 13:56
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 15:43
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 14:54

Client Sample ID: BH24-11 2FT
Date Collected: 05/24/24 10:15
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-28
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 14:19
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 14:19
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 15:55
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 15:07

Client Sample ID: BH24-12 0FT
Date Collected: 05/24/24 10:30
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-29
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 14:43
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 14:43
Total/NA	Prep	SHAKE			6042	JU	EET ALB	06/03/24 15:57
Total/NA	Analysis	8015M/D		1	6100	JU	EET ALB	06/04/24 12:05
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 15:19

Client Sample ID: BH24-12 2FT
Date Collected: 05/24/24 10:45
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 15:06

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-12 2FT
Date Collected: 05/24/24 10:45
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 15:06
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 16:21
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 15:56

Client Sample ID: BH24-13 0FT
Date Collected: 05/24/24 11:00
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-31
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 15:30
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 15:30
Total/NA	Prep	SHAKE			6042	JU	EET ALB	06/03/24 15:57
Total/NA	Analysis	8015M/D		1	6100	JU	EET ALB	06/04/24 13:00
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 16:08

Client Sample ID: BH24-13 2FT
Date Collected: 05/24/24 11:15
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-32
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 18:37
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 18:37
Total/NA	Prep	SHAKE			6042	JU	EET ALB	06/03/24 15:57
Total/NA	Analysis	8015M/D		1	6100	JU	EET ALB	06/04/24 13:11
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 16:21

Client Sample ID: BH24-14 0FT
Date Collected: 05/24/24 11:30
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-33
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 19:01
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 19:01

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-14 0FT
Date Collected: 05/24/24 11:30
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-33
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 16:59
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 16:33

Client Sample ID: BH24-14 2FT
Date Collected: 05/24/24 11:45
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-34
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 19:24
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 19:24
Total/NA	Prep	SHAKE			6042	JU	EET ALB	06/03/24 15:57
Total/NA	Analysis	8015M/D		1	6100	JU	EET ALB	06/04/24 13:21
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 16:45

Client Sample ID: BH24-15 0FT
Date Collected: 05/24/24 12:00
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-35
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 19:48
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 19:48
Total/NA	Prep	SHAKE			6042	JU	EET ALB	06/03/24 15:57
Total/NA	Analysis	8015M/D		1	6100	JU	EET ALB	06/04/24 13:32
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		100	5986	JT	EET ALB	06/01/24 08:47

Client Sample ID: BH24-15 2FT
Date Collected: 05/24/24 12:15
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-36
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 20:34
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 20:34
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 17:37

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Client Sample ID: BH24-15 2FT
Date Collected: 05/24/24 12:15
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-36
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		50	5986	JT	EET ALB	06/01/24 08:59

Client Sample ID: BH24-15 2.5FT
Date Collected: 05/24/24 12:20
Date Received: 05/29/24 07:55

Lab Sample ID: 885-5206-37
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 20:58
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 20:58
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 17:51
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 17:22

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex
Project/Site: PLU 20-8 Brushy Draw 104H

Job ID: 885-5206-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
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
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics (GRO)-C6-C10
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client Vertex XTO Energy)

Mailing Address On File

Phone # On File

email or Fax# Scarttar@vertex.ca

QA/QC Package

☐ Standard ☐ Level 4 (Full Validation)Accreditation ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time

☒ Standard☒ Rush 5 DAY

Project Name PLU20-08 104

Project # 24E-00666

Project Manager Sally Carttar

Sampler Wyatt Wadleigh

On Ice ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CP): 0.6 v = 0.6

Container Type and #

Preservative Type

HEAL No.

Date Time Matrix Sample Name

05/24/24 10 00 Soil BH24-11 0ft

05/24/24 10 15 Soil BH24-11 2ft

05/24/24 10 30 Soil BH24-12 0 ft

05/24/24 10 45 Soil BH24-12 2ft

05/24/24 11 00 Soil BH24-13 0 ft

05/24/24 11 15 Soil BH24-13 2 ft

05/24/24 11 30 Soil BH24-14 0ft

05/24/24 11 45 Soil BH24-14 2ft

05/24/24 12 00 Soil BH24-15 0ft

05/24/24 12 15 Soil BH24-15 2 ft

05/24/24 12 20 Soil BH24-15 2 5 ft

Date Time Requisitioned by Wyatt Wadleigh

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

Date Time Requisitioned by

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMBs (8021)

TPH 8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504 1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Remarks Please CC wwadleigh@vertex.ca
Cost center Number # 2234951001

If necessary samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-5206-1

Login Number: 5206
List Number: 1
Creator: McQuiston, Steven

List Source: Eurofins Albuquerque

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").	True	

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

Action 396840

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 396840
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2404750069
Incident Name	NAPP2404750069 PLU 20-8 BRUSHY DRAW 104H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received

Location of Release Source*Please answer all the questions in this group.*

Site Name	PLU 20-8 Brushy Draw 104H
Date Release Discovered	02/02/2024
Surface Owner	Federal

Incident Details*Please answer all the questions in this group.*

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

Nature and Volume of Release*Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pump Produced Water Released: 52 BBL Recovered: 41 BBL Lost: 11 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.

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, Page 2

Action 396840

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 396840
	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	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
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: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 10/29/2024
--	---

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, Page 3

Action 396840

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 396840
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (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	Between 1 and 5 (mi.)
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	Low
A 100-year floodplain	Between 500 and 1000 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<i>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.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	5700
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	19022
GRO+DRO (EPA SW-846 Method 8015M)	19022
BTEX (EPA SW-846 Method 8021B or 8260B)	1
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>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>	
On what estimated date will the remediation commence	04/02/2024
On what date will (or did) the final sampling or liner inspection occur	01/27/2025
On what date will (or was) the remediation complete(d)	01/27/2025
What is the estimated surface area (in square feet) that will be reclaimed	3275
What is the estimated volume (in cubic yards) that will be reclaimed	375
What is the estimated surface area (in square feet) that will be remediated	3275
What is the estimated volume (in cubic yards) that will be remediated	375
<i>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.</i>	
<i>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.</i>	

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, Page 4

Action 396840

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 396840
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
<i>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.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(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	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
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	Not answered.
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.
<i>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>	
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: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 10/29/2024
<i>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.</i>	

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, Page 5

Action 396840

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 396840
	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

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, Page 6

Action 396840

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 396840
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	391310
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/16/2024
What was the (estimated) number of samples that were to be gathered	12
What was the sampling surface area in square feet	2000

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
--	----

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

Action 396840

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 396840
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards from Table 1 of the OCD Spill Rule for site assessment/characterization/proven depth to water determination. Sidewall/Edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. All sidewall samples should be taken from the sidewall of the excavation. The Variance Request for 400 ft2 floor confirmation sample size is approved. The release area will still need confirmation sidewall samples representing no more than 200 ft2. The work will need to occur in 90 days after the report has been reviewed.	12/4/2024