Incident Number: nAPP2318831816

Release Assessment and Closure

James Ranch Unit DI 1A CTB

Section 21, Township 22 South, Range 30 East

County: Eddy

Vertex File Number: 23E-04616

Prepared for:
XTO Energy

Prepared by:
Vertex Resource Services Inc.

Date:
April 2024

Incident Closure
James Ranch Unit DI 1A CTB
Section 21, Township 11 South, Range 30 East
County: Eddy

Prepared for:
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1.0 Introduction

XTO Energy (XTO) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Closure for a produced water release that occurred on June 28, 2023, at James Ranch Unit DI 1A CTB (hereafter referred to as the "site"). XTO submitted an initial C-141 Release Notification (Appendix A) to New Mexico Oil Conservation Division (NMOCD) District 2 on July 7, 2023. Incident ID number nAPP2318831816 was assigned to this incident.

This report provides a description of the release assessment and remediation activities associated with the site. The information presented demonstrates that closure criteria established in Table I of 19.15.29.12 of the *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) related to NMOCD has been met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NMOCD for closure of this release, with the understanding that restoration of the release site will be deferred until such time as all oil and gas activities are terminated and the site is reclaimed as per NMAC 19.15.29.13.

2.0 Incident Description

The release occurred June 28, 2023, due to internal corrosion of the 6" outlet line on the production bulk vessel. The incident was reported on July 7, 2023, and involved the release of approximately 37 barrels (bbl.) of produced water on the pad site. Approximately 30 bbl. of free fluid was removed during the initial clean-up. Additional details relevant to the release are presented in the C-141 Report. The initial Daily Field Report (DFR) with photographs is included in Appendix C.

3.0 Site Characteristics

The site is located approximately 64 miles southeast of Carlsbad, New Mexico. The legal location for the site is Section 21, Township 22 South and Range 30 East in Eddy County, New Mexico. The release area is located on State property. An aerial photograph and site schematic are presented in Figure 1.

The location is typical of oil and gas exploration and production sites in the Permian Basin and is currently used for oil and gas production and storage. The following sections specifically describe the release area Location of Release on or in proximity to the constructed pad. (Figure 1).

The surrounding landscape is associated with Largo loam with elevations ranging between 2,000 and 5,700 feet. The climate is semiarid with average annual precipitation ranging between 6 and 24 inches. Using information from the United States Department of Agriculture, the dominant vegetation was determined to be black grama, blue grama, sideoats grama, bush muhly, tobosa grass, vine mesquite, mesquite, and creosotebush. Grasses with shrubs and half-shrubs dominate the historic plant community (United States Department of Agriculture, Natural Resources Conservation Service, 2023). Limited to no vegetation is allowed to grow on the compacted production pad, right-of-way and access road.

The surface geology at the site is primarily comprised of Qp - Piedmont alluvial deposits (Holocene to lower Pleistocene), (New Mexico Bureau of Geology and Mineral Resources, 2023) and the soil at the site is characterized as fine-silty and calcareous (United States Department of Agriculture, Natural Resources Conservation Service, 2023). Additional soil

characteristics include a drainage class of well drained with a low runoff class. The karst geology potential for the site is high (United States Department of the Interior, Bureau of Land Management, 2018).

4.0 Closure Criteria Determination

The nearest active well to the site is a New Mexico Office of the State Engineer (NMOSE) monitoring well located approximately 0.23 miles southeast of the location (United States Geological Survey, 2023). Data from 2013 shows the NMOSE borehole recorded a depth to groundwater of 575 feet below ground surface (bgs). Information pertaining to the depth to ground water determination is included in Appendix B.

There is no surface water present at the site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is the Linsey Lake located approximately 1.5 miles west of the site (United States Fish and Wildlife Service, 2023).

At the site, there are no continuously flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

Closure Criteria Worksheet			
Site Name: James Ranch Unit DI 1A CTB			
Spill Coordinates: 32.38001, -103.88664		X: 604730	Y: 3583103
Site Specific Conditions		Value	Unit
1	Depth to Groundwater	**110**	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	912	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	8,198	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	9,724	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, **or**	1,221	feet
	ii) Within 1000 feet of any fresh water well or spring		feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	7,337	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)	**High**	Critical High Medium Low
10	Within a 100-year Floodplain	500	year
11	Soil Type	Largo Loam, 1 to 5 percent slopes	
12	Ecological Classification	Loamy-R070BC007NM	
13	Geology	Qp	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	<50' 51-100' >100'

After closure criteria characterization research was completed, it was determined that the site sits in an area that is categorized as high karst and is unstable. Therefore, the closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

Table 2. Closure Criteria for Soils Impacted by a Release

Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
< 50 feet	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

TDS – total dissolved solids

TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics

BTEX – benzene, toluene, ethylbenzene and xylenes

5.0 Remedial Actions Taken

On August 7, 2023, XTO contracted Vertex to complete release delineation and remediation at the site through field screening procedures, oversight of the remediation fieldwork, and final confirmatory sampling. An initial site inspection of the release area was completed on August 2, 2023, which identified the area of the release specified in the initial C-141 Report. The initial site characterization activities at the site were completed by Vertex on August 7 through 10, 2023. The impacted area was determined to be approximately 692 feet long and 242 feet wide; the total affected area is 36,679 square feet. The DFR associated with the site inspection is included in Appendix C.

Remediation efforts began on February 13, 2024, and were finalized on March 14, 2024. Vertex personnel supervised the excavation of impacted soils. Field screening was completed on a total of 258 sample points and consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and Quantabs (chlorides). Field screening results were used to identify areas requiring further remediation. Soils were removed to a depth of 0.5 to 6 feet bgs. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility as stipulated by the Form C-138 Request for Approval to Accept Solid Waste – New Mexico filed with the NMOCD presented in Appendix G. DFRs documenting the final excavation photos are presented in Appendix C.

Notification that confirmatory samples were being collected was provided to the NMOCD before every sampling event and are included in Appendix D. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. A total of 258 samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Eurofins/Xenco Environmental Testing and Cardinal Laboratories under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Laboratory results are presented in Table 3, and the laboratory data reports are included in Appendix E. All confirmatory samples collected and analyzed were below closure criteria for the site.

6.0 Closure Request

Vertex recommends no additional remediation action to address the release at the site. Laboratory analyses of confirmation samples collected show final confirmatory values below NMOCD closure criteria for areas where depth to groundwater is less than 50 feet bgs as presented in Table 1. There are no anticipated risks to human, ecological, or hydrological receptors at the site.

The excavation was backfilled with non-waste-containing, uncontaminated, earthen material, sources locally, and placed to meet the site's existing grade to prevent water ponding and erosion.

Vertex requests that this incident (nAPP2318831816) be approved for remediation as all closure requirements set forth in 19.15.29.12 NMAC have been met. XTO certifies that all information in this report and the appendices is correct, and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements.

Should you have any questions or concerns, please do not hesitate to contact Chance Dixon at 575.988.1472 or cdixon@vertex.ca.

7.0 References

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8.0 Limitations

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

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

FIGURES



- Base Sample (Excavated) (Prefixed by "BES24-")
- Wall Sample (Excavated) (Prefixed by "WES24-")
- Pipeline (Underground)
- Central Excavation to 1' bgs (~ 14,647 sq. ft.)
- Excavation to 1.5' bgs (~ 185 sq. ft.)
- North Excavation to 1.0' bgs (~ 7,371 sq. ft.)
- North Excavation to 2.5' bgs (~ 780 sq. ft.)
- North Excavation to 3' bgs (~ 983 sq. ft.)
- North-central Excavation to 1' bgs (~ 9,207 sq. ft.)

VERTEX

0 10 20 40 ft
NAD 1983 UTM Zone 13N FT
Date: Apr 24/24

Map Center:
Lat: 32.381403,
Long:-103.886802

N

Confirmatory Sampling Site Schematic
JRU DI 1A CTB

FIGURE: **1a**

XTO ENERGY

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Image from Google Earth Pro, 2023. Boreholes and excavations from GPS by Vertex Professional Services Ltd, 2024.

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\XTO Energy\23E-04616 - JRU DI 1A CTB\Figure 1 Confirmatory Sampling Site Schematic (23E-04616)ID17956.mxd



- Base Sample (Excavated) (Prefixed by "BES24-")
- Wall Sample (Excavated) (Prefixed by "WES24-")
- Pipeline (Aboveground)
- Pipeline (Underground)
- Central Excavation to 1' bgs (~ 14,647 sq. ft.)
- Excavation to 1.25' bgs (~ 588 sq. ft.)
- South Excavation to 0.5 ' bgs (~ 11,866 sq. ft.)

VERTEX

0 10 20 40 ft
NAD 1983 UTM Zone 13N FT
Date: Apr 24/24

Map Center:
Lat: 32.380196,
Long:-103.886865

N

Confirmatory Sampling Site Schematic
JRU DI 1A CTB

FIGURE: **1b**

XTO ENERGY

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VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\XTO Energy\23E-04616 - JRU DI 1A CTB\Figure 1 Confirmatory Sampling Site Schematic (23E-04616)ID17956.mxd

TABLES

Client Name: XTO Energy, Inc.
Site Name: James Ranch Unit DI 1A CTB
NMOCD Tracking #: nAPP2318831816
Project #: 23E-04616
Lab Reports: 890-6208-1; 890-6209-1; 890-6210-1; 890-6232-1; 890-6285-1; 890-6268-1; 890-6298-1; 885-1341-1

Table 3. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-01	0.5	February 14, 2024	0	-	**2,680**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	14	595	ND	ND	ND	ND	ND	ND	ND	269
BES24-02	0.5	February 14, 2024	0	-	**1,820**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	510	ND	ND	ND	ND	ND	ND	ND	201
BES24-03	0.5	February 14, 2024	0	-	**2,462**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	495	ND	ND	ND	ND	ND	ND	ND	164
BES24-04	1	February 15, 2024	0	-	400	ND	ND	ND	ND	ND	ND	ND	189
BES24-05	1	February 15, 2024	0	-	350	ND	ND	ND	ND	ND	ND	ND	173
BES24-06	1	February 15, 2024	0	46	475	ND	ND	ND	ND	ND	ND	ND	171
BES24-07	1	February 15, 2024	0	-	475	ND	ND	ND	ND	ND	ND	ND	186
BES24-08	1	February 15, 2024	0	-	525	ND	ND	ND	ND	ND	ND	ND	218
BES24-09	1	February 15, 2024	0	-	500	ND	ND	ND	ND	ND	ND	ND	226
BES24-10	1	February 15, 2024	0	-	575	ND	ND	ND	ND	ND	ND	ND	352
BES24-11	0.5	February 14, 2024	0	-	**1,923**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	62	565	ND	ND	ND	ND	ND	ND	ND	281
BES24-12	0.5	February 14, 2024	0	-	**2,497**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	575	ND	ND	ND	ND	ND	ND	ND	412
BES24-13	0.5	February 14, 2024	0	-	**3,275**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	550	ND	ND	ND	ND	ND	ND	ND	248
BES24-14	0.5	February 14, 2024	0	-	378	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	595	ND	ND	ND	ND	ND	ND	ND	345
BES24-15	0.5	February 14, 2024	0	-	**935**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	595	ND	ND	ND	ND	ND	ND	ND	287
BES24-16	0.5	February 14, 2024	0	-	**2,023**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	39	596	ND	ND	ND	ND	ND	ND	ND	567
BES24-17	0.5	February 14, 2024	0	-	**665**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	425	ND	ND	ND	ND	ND	ND	ND	54
BES24-18	0.5	February 14, 2024	0	-	**1,998**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	550	ND	ND	ND	ND	ND	ND	ND	281
BES24-19	0.5	February 14, 2024	0	-	**1,300**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	595	ND	ND	ND	ND	ND	ND	ND	379
BES24-20	0.5	February 14, 2024	0	-	**2,805**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	598	ND	ND	ND	ND	ND	ND	ND	319
BES24-21	0.5	February 14, 2024	0	-	**2,900**	-	-	-	-	-	-	-	-
	1	February 15, 2024	52	-	500	ND	ND	ND	52	ND	52	52	80
BES24-22	0.5	February 14, 2024	0	-	**3,045**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	488	ND	ND	ND	ND	ND	ND	ND	225
BES24-23	0.5	February 14, 2024	0	-	**3,593**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	550	ND	ND	ND	ND	ND	ND	ND	234
BES24-24	0.5	February 14, 2024	0	-	**3,590**	-	-	-	-	-	-	-	-
	1	February 15, 2024	0	-	575	ND	ND	ND	ND	ND	ND	ND	283
BES24-25	1	February 15, 2024	35	-	598	ND	ND	ND	ND	ND	ND	ND	172
BES24-26	1	February 16, 2024	0	14	598	ND	ND	ND	ND	ND	ND	ND	70
BES24-27	1	February 16, 2024	0	-	595	ND	ND	ND	ND	ND	ND	ND	437
BES24-28	1	February 16, 2024	0	-	598	ND	ND	ND	ND	ND	ND	ND	**914**
	1.5	February 28, 2024	0	44	410	ND	ND	ND	ND	ND	ND	ND	128
BES24-29	1	February 16, 2024	0	-	564	ND	ND	ND	ND	ND	ND	ND	401
BES24-30	1	February 16, 2024	0	-	575	ND	ND	ND	ND	ND	ND	ND	415
BES24-31	1	February 16, 2024	0	15	500	ND	ND	ND	ND	ND	ND	ND	71
BES24-32	1	February 16, 2024	0	-	522	ND	ND	ND	ND	ND	ND	ND	34
BES24-33	1	February 16, 2024	0	-	550	ND	ND	ND	ND	ND	ND	ND	361
BES24-34	1	February 16, 2024	0	17	598	ND	ND	ND	ND	ND	ND	ND	181
BES24-35	1	February 16, 2024	0	17	370	ND	ND	ND	ND	ND	ND	ND	124
BES24-36	1	February 16, 2024	0	12	358	ND	ND	ND	ND	ND	ND	ND	108

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Site Name: James Ranch Unit DI 1A CTB
NMOCD Tracking #: nAPP2318831816
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Table 3. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-37	1	February 16, 2024	0	20	385	ND	ND	ND	ND	ND	ND	ND	77
BES24-38	2.5	February 16, 2024	0	30	598	ND	ND	ND	ND	ND	ND	ND	**1,810**
	3	February 28, 2024	0	42	202	ND	ND	ND	ND	ND	ND	ND	336
BES24-39	2	February 16, 2024	0	13	222	ND	ND	ND	ND	ND	ND	ND	41
BES24-40	2.5	February 16, 2024	0	23	595	ND	ND	ND	ND	ND	ND	ND	**2,890**
	3	February 28, 2024	0	30	320	ND	ND	ND	ND	ND	ND	ND	48
BES24-41	2	February 16, 2024	0	**103**	292	ND	ND	ND	ND	ND	ND	ND	33
BES24-42	2	February 16, 2024	0	9	288	ND	ND	ND	ND	ND	ND	ND	47
BES24-43	2	February 16, 2024	0	95	325	ND	ND	ND	ND	ND	ND	ND	206
BES24-44	2.5	February 19, 2024	5	**347**	325	-	-	-	-	-	-	-	-
	3.0	February 20, 2024	0	0	295	ND	ND	ND	ND	ND	ND	ND	45
BES24-45	0.5	February 19, 2024	0	-	**3,467**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	15	495	ND	ND	ND	ND	ND	ND	ND	120
BES24-46	0.5	February 19, 2024	0	-	**2,650**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	42	598	ND	ND	ND	ND	ND	ND	ND	476
BES24-47	0.5	February 19, 2024	0	-	**2,845**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	33	598	ND	ND	ND	ND	ND	ND	ND	88
BES24-48	0.5	February 19, 2024	0	-	**2,797**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	30	425	ND	ND	ND	ND	ND	ND	ND	144
BES24-49	0.5	February 19, 2024	0	-	**1,912**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	17	450	ND	ND	ND	ND	ND	ND	ND	233
BES24-50	0.5	February 19, 2024	0	-	**2,820**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	20	500	ND	ND	ND	ND	ND	ND	ND	61
BES24-51	0.5	February 19, 2024	0	-	**2,720**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	25	160	ND	ND	ND	ND	ND	ND	ND	40
BES24-52	0.5	February 19, 2024	0	-	**2,998**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	9	420	ND	ND	ND	ND	ND	ND	ND	139
BES24-53	0.5	February 19, 2024	0	-	**1,173**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	27	155	ND	ND	ND	ND	ND	ND	ND	52
BES24-54	0.5	February 19, 2024	0	-	**3,573**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	-	280	ND	ND	ND	ND	ND	ND	ND	338
BES24-55	0.5	February 19, 2024	0	-	**3,000**	-	-	-	-	-	-	-	-
	1	February 20, 2024	0	-	500	ND	ND	ND	ND	ND	ND	ND	326
BES24-56	0.5	February 19, 2024	0	-	**1,923**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	0	500	ND	ND	ND	ND	ND	ND	ND	272
BES24-57	0.5	February 19, 2024	0	-	**765**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	470	ND	ND	ND	ND	ND	ND	ND	272
BES24-58	0.5	February 19, 2024	0	-	**1,440**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	400	ND	ND	ND	ND	ND	ND	ND	224
BES24-59	0.5	February 19, 2024	0	-	**3,545**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	20	450	ND	ND	ND	ND	ND	ND	ND	176
BES24-60	0.5	February 19, 2024	0	-	**625**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	200	ND	ND	ND	ND	ND	ND	ND	96
BES24-61	0.5	February 19, 2024	0	-	**4,653**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	300	ND	ND	ND	ND	ND	ND	ND	64
BES24-62	0.5	February 19, 2024	0	-	**2,735**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	250	ND	ND	ND	ND	ND	ND	ND	80
BES24-63	0.5	February 19, 2024	0	-	**2,700**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	35	320	ND	ND	ND	ND	ND	ND	ND	144
BES24-64	0.5	February 19, 2024	0	-	**2,060**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	500	ND	ND	ND	ND	ND	ND	ND	176
BES24-65	0.5	February 19, 2024	0	-	**2,030**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	450	ND	ND	ND	ND	ND	ND	ND	224

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Table 3. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-66	0.5	February 19, 2024	0	-	**2,803**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	0	480	ND	ND	ND	ND	ND	ND	ND	256
BES24-67	0.5	February 19, 2024	0	-	**4,248**	-	-	-	-	-	-	-	-
	1	February 21, 2024	25	-	580	ND	ND	ND	ND	ND	ND	ND	87
BES24-68	0.5	February 19, 2024	0	-	**1,158**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	560	ND	ND	ND	ND	ND	ND	ND	281
BES24-69	0.5	February 19, 2024	0	-	**2,125**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	598	ND	ND	ND	ND	ND	ND	ND	259
BES24-70	0.5	February 19, 2024	0	-	**3,972**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	345	ND	ND	ND	ND	ND	ND	ND	261
BES24-71	0.5	February 19, 2024	0	-	**4,955**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	20	500	ND	ND	ND	ND	ND	ND	ND	290
BES24-72	0.5	February 19, 2024	0	-	**3,002**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	598	ND	ND	ND	ND	ND	ND	ND	385
BES24-73	0.5	February 19, 2024	0	-	**2,445**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	338	ND	ND	ND	ND	ND	ND	ND	152
BES24-74	0.5	February 19, 2024	0	-	**2,445**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	383	ND	ND	ND	ND	ND	ND	ND	170
BES24-75	0.5	February 19, 2024	0	-	**4,367**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	15	300	ND	ND	ND	ND	ND	ND	ND	109
BES24-76	0.5	February 19, 2024	0	-	**1,900**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	500	ND	ND	ND	ND	ND	ND	ND	307
BES24-77	0.5	February 19, 2024	0	-	**5,202**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	593	ND	ND	ND	ND	ND	ND	ND	395
BES24-78	0.5	February 19, 2024	0	-	**4,032**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	533	ND	ND	ND	ND	ND	ND	ND	339
BES24-79	0.5	February 19, 2024	0	-	**3,607**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	250	ND	ND	ND	ND	ND	ND	ND	76
BES24-80	0.5	February 19, 2024	0	-	**705**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	-	550	ND	ND	ND	ND	ND	ND	ND	348
BES24-81	0.5	February 19, 2024	0	-	**1,215**	-	-	-	-	-	-	-	-
	1	February 21, 2024	0	23	525	ND	ND	ND	ND	ND	ND	ND	325
BES24-82	1	February 15, 2024	0	-	595	ND	ND	ND	ND	ND	ND	ND	80
BES24-83	1	February 15, 2024	0	-	595	ND	ND	ND	ND	ND	ND	ND	201
BES24-84	1	February 15, 2024	0	36	598	ND	ND	ND	ND	ND	ND	ND	339
BES24-85	2.5	February 19, 2024	2	**514**	373	-	-	-	-	-	-	-	-
	3	February 20, 2024	0	59	300	ND	ND	ND	ND	ND	ND	ND	140
BES24-86	2.5	February 19, 2024	2	**420**	380	-	-	-	-	-	-	-	-
	3	February 20, 2024	0	6	325	ND	ND	ND	ND	ND	ND	ND	266
BES24-87	1	February 21, 2024	0	20	500	ND	ND	ND	ND	ND	ND	ND	240
BES24-88	1	February 21, 2024	0	0	180	ND	ND	ND	ND	ND	ND	ND	188
BES24-89	1	February 21, 2024	0	-	430	ND	ND	ND	ND	ND	ND	ND	192
BES24-90	1	February 21, 2024	0	-	345	ND	ND	ND	ND	ND	ND	ND	128
BES24-91	1	February 21, 2024	0	22	390	ND	ND	ND	ND	ND	ND	ND	144
BES24-92	1	February 21, 2024	0	-	330	ND	ND	ND	ND	ND	ND	ND	48
BES24-93	1	February 21, 2024	0	-	500	ND	ND	ND	ND	ND	ND	ND	304
BES24-94	1	February 21, 2024	0	26	400	ND	ND	ND	ND	ND	ND	ND	240
BES24-95	1	February 21, 2024	0	-	340	ND	ND	ND	ND	ND	ND	ND	96
BES24-96	1	February 21, 2024	0	-	490	ND	ND	ND	ND	ND	ND	ND	160
BES24-97	1	February 21, 2024	0	20	280	ND	ND	ND	ND	ND	ND	ND	16
BES24-98	0.5	February 21, 2024	0	-	385	-	-	-	-	-	-	-	-
	1	February 27, 2024	0	23	345	ND	ND	ND	ND	ND	ND	ND	228
BES24-99	0.5	February 21, 2024	0	-	**1,132**	-	-	-	-	-	-	-	-
	1	February 27, 2024	0		458	ND	ND	ND	ND	ND	ND	ND	291

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Table 3. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-100	0.5	February 21, 2024	0	-	**2,610**	-	-	-	-	-	-	-	-
	1	February 27, 2024	0		420	ND	ND	ND	ND	ND	ND	ND	273
BES24-101	0.5	February 21, 2024	0	-	**2,388**	-	-	-	-	-	-	-	-
	1	February 27, 2024			33	ND	ND	ND	ND	ND	ND	ND	303
BES24-102	0.5	February 21, 2024	0	-	**2,330**	-	-	-	-	-	-	-	-
	1	February 27, 2024			315	ND	ND	ND	ND	ND	ND	ND	216
BES24-103	0.5	February 21, 2024	0	-	**1,885**	-	-	-	-	-	-	-	-
	1	February 27, 2024			315	ND	ND	ND	ND	ND	ND	ND	70
BES24-104	0.5	February 21, 2024	0	-	**2,403**	-	-	-	-	-	-	-	-
	1	February 27, 2024			285	ND	ND	ND	ND	ND	ND	ND	147
BES24-105	0.5	February 21, 2024	0	-	**2,028**	-	-	-	-	-	-	-	-
	1	February 27, 2024			315	ND	ND	ND	ND	ND	ND	ND	104
BES24-106	0.5	February 21, 2024	0	-	**2,973**	-	-	-	-	-	-	-	-
	1	February 27, 2024			420	ND	ND	ND	ND	ND	ND	ND	249
BES24-107	0.5	February 21, 2024	0	-	**2,328**	-	-	-	-	-	-	-	-
	1	February 27, 2024			499	ND	ND	ND	ND	ND	ND	ND	318
BES24-108	0.5	February 21, 2024	0	-	**2,680**	-	-	-	-	-	-	-	-
	1	February 27, 2024			502	ND	ND	ND	ND	ND	ND	ND	281
BES24-109	0.5	February 21, 2024	0	-	**3,385**	-	-	-	-	-	-	-	-
	1	February 27, 2024			435	ND	ND	ND	ND	ND	ND	ND	257
BES24-110	0.5	February 21, 2024	0	-	**1,730**	-	-	-	-	-	-	-	-
	1	February 27, 2024			285	ND	ND	ND	ND	ND	ND	ND	126
BES24-111	0.5	February 21, 2024	0	-	400	-	-	-	-	-	-	-	-
	1	February 27, 2024			418	ND	ND	ND	ND	ND	ND	ND	314
BES24-112	0.5	February 21, 2024	0	-	**2,915**	-	-	-	-	-	-	-	-
	1	February 27, 2024			437	ND	ND	ND	ND	ND	ND	ND	387
BES24-113	0.5	February 21, 2024	0	-	**2,915**	-	-	-	-	-	-	-	-
	1	February 27, 2024			378	ND	ND	ND	ND	ND	ND	ND	425
BES24-114	0.5	February 21, 2024	0	-	**2,380**	-	-	-	-	-	-	-	-
	1	February 27, 2024			318	ND	ND	ND	ND	ND	ND	ND	156
BES24-115	0.5	February 21, 2024	0	-	**3,315**	-	-	-	-	-	-	-	-
	1	February 27, 2024			308	ND	ND	ND	ND	ND	ND	ND	134
BES24-116	0.5	February 21, 2024	0	-	**3,285**	-	-	-	-	-	-	-	-
	1	February 27, 2024			567	ND	ND	ND	ND	ND	ND	ND	385
BES24-117	0.5	February 21, 2024	0	-	**3,790**	-	-	-	-	-	-	-	-
	1	February 27, 2024			486	ND	ND	ND	ND	ND	ND	ND	262
BES24-118	0.5	February 21, 2024	0	-	**3,658**	-	-	-	-	-	-	-	-
	1	February 27, 2024			260	ND	ND	ND	ND	ND	ND	ND	125
BES24-119	0.5	February 21, 2024	0	-	**3,615**	-	-	-	-	-	-	-	-
	1	February 27, 2024			330	ND	ND	ND	ND	ND	ND	ND	129
BES24-120	0.5	February 22, 2024	0	-	**2,103**	-	-	-	-	-	-	-	-
	1	February 27, 2024			497	ND	ND	ND	ND	ND	ND	ND	296
BES24-121	0.5	February 22, 2024	0	-	**1,350**	-	-	-	-	-	-	-	-
	1	February 27, 2024			370	ND	ND	ND	ND	ND	ND	ND	287
BES24-122	0.5	February 22, 2024	0	-	**1,783**	-	-	-	-	-	-	-	-
	1	February 27, 2024			300	ND	ND	ND	ND	ND	ND	ND	144
BES24-123	0.5	February 22, 2024	0	-	**3,480**	-	-	-	-	-	-	-	-
	1	February 27, 2024			530	ND	ND	ND	ND	ND	ND	ND	407
BES24-124	0.5	February 22, 2024	0	-	**2,748**	-	-	-	-	-	-	-	-
	1	February 27, 2024			247	ND	ND	ND	ND	ND	ND	ND	90
BES24-125	0.5	February 22, 2024	0	-	**4,155**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	47	352	ND	ND	ND	ND	ND	ND	ND	208
BES24-126	0.5	February 22, 2024	0	-	**2,490**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	380	ND	ND	ND	ND	ND	ND	ND	224

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			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-127	0.5	February 22, 2024	0	-	**4,380**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	372	ND	ND	ND	ND	ND	ND	ND	256
BES24-128	0.5	February 22, 2024	0	-	**3,980**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	420	ND	ND	ND	ND	ND	ND	ND	192
BES24-129	0.5	February 22, 2024	0	-	**3,018**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	402	ND	ND	ND	ND	ND	ND	ND	176
BES24-130	0.5	February 22, 2024	0	-	575	-	-	-	-	-	-	-	-
	1	February 27, 2024	0	-	240	ND	ND	ND	ND	ND	ND	ND	157
BES24-131	0.5	February 22, 2024	0	-	598	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	56	480	ND	ND	ND	ND	ND	ND	ND	336
BES24-132	0.5	February 22, 2024	0	-	**1,360**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	463	ND	ND	ND	ND	ND	ND	ND	320
BES24-133	0.5	February 22, 2024	0	-	**3,580**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	422	ND	ND	ND	ND	ND	ND	ND	272
BES24-134	0.5	February 22, 2024	0	-	**3,310**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	477	ND	ND	ND	ND	ND	ND	ND	288
BES24-135	0.5	February 22, 2024	0	-	**4,138**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	225	ND	ND	ND	ND	ND	ND	ND	288
BES24-136	0.5	February 22, 2024	0	-	**3,368**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	40	175	ND	ND	ND	ND	ND	ND	ND	112
BES24-137	0.5	February 22, 2024	0	-	**3,998**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	188	ND	ND	ND	ND	ND	ND	ND	80
BES24-138	0.5	February 22, 2024	0	-	**4,498**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	467	ND	ND	ND	ND	ND	ND	ND	80
BES24-139	0.5	February 22, 2024	0	-	**4,225**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	398	ND	ND	ND	ND	ND	ND	ND	256
BES24-140	0.5	February 22, 2024	0	-	**2,498**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	550	ND	ND	ND	ND	ND	ND	ND	272
BES24-141	0.5	February 22, 2024	0	-	**3,938**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	48	312	ND	ND	ND	ND	ND	ND	ND	272
BES24-142	0.5	February 22, 2024	0	-	**6,268**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	323	ND	ND	ND	ND	ND	ND	ND	288
BES24-143	0.5	February 22, 2024	0	-	**6,913**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	308	ND	ND	ND	ND	ND	ND	ND	256
BES24-144	0.5	February 22, 2024	0	-	**4,245**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	408	ND	ND	ND	ND	ND	ND	ND	240
BES24-145	0.5	February 22, 2024	0	-	**5,245**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	343	ND	ND	ND	ND	ND	ND	ND	256
BES24-146	0.5	February 22, 2024	0	-	**5,903**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	44	378	ND	ND	ND	ND	ND	ND	ND	208
BES24-147	0.5	February 22, 2024	0	-	**4,455**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	479	ND	ND	ND	ND	ND	ND	ND	240
BES24-148	0.5	February 22, 2024	0	-	**4,725**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	521	ND	ND	ND	ND	ND	ND	ND	384
BES24-149	0.5	February 22, 2024	0	-	**4,908**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	450	ND	ND	ND	ND	ND	ND	ND	192
BES24-150	0.5	February 22, 2024	0	-	**3,770**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	430	ND	ND	ND	ND	ND	ND	ND	224
BES24-151	0.5	February 22, 2024	0	-	**4,958**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	51	375	ND	ND	ND	ND	ND	ND	ND	176
BES24-152	0.5	February 22, 2024	0	-	**4,205**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	497	ND	ND	ND	ND	ND	ND	ND	160
BES24-153	0.5	February 22, 2024	0	-	**4,423**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	570	ND	ND	ND	ND	ND	ND	ND	384

Client Name: XTO Energy, Inc.
Site Name: James Ranch Unit DI 1A CTB
NMOCD Tracking #: nAPP2318831816
Project #: 23E-04616
Lab Reports: 890-6208-1; 890-6209-1; 890-6210-1; 890-6232-1; 890-6285-1; 890-6268-1; 890-6298-1; 885-1341-1

Table 3. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-154	0.5	February 22, 2024	0	-	**5,168**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	500	ND	ND	ND	ND	ND	ND	ND	336
BES24-155	0.5	February 22, 2024	0	-	**4,458**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	500	ND	ND	ND	ND	ND	ND	ND	64
BES24-156	0.5	February 22, 2024	0	-	**3,663**	-	-	-	-	-	-	-	-
	1	February 28, 2024	0	60	521	ND	ND	ND	ND	ND	ND	ND	64
BES24-157	0.5	February 22, 2024	0			-	-	-	-	-	-	-	-
	1	February 28, 2024	0	-	490	ND	ND	ND	ND	ND	ND	ND	64
BES24-158	0.5	February 23, 2024	0	9	389	ND	ND	ND	ND	ND	ND	ND	164
	1	February 28, 2024	0	-	488	ND	ND	ND	ND	ND	ND	ND	96
BES24-159	0.5	February 23, 2024	0	12	440	ND	ND	ND	ND	ND	ND	ND	93
BES24-160	0.5	February 23, 2024	0	6	459	ND	ND	ND	ND	ND	ND	ND	90
BES24-161	0.5	February 23, 2024	0	10	463	ND	ND	ND	ND	ND	ND	ND	169
BES24-162	0.5	February 23, 2024	0	24	503	ND	ND	ND	ND	ND	ND	ND	114
BES24-163	0.5	February 23, 2024	0	5	598	ND	ND	ND	ND	ND	ND	ND	226
BES24-164	0.5	February 23, 2024	0	12	450	ND	ND	ND	ND	ND	ND	ND	111
BES24-165	0.5	February 23, 2024	0	11	332	ND	ND	ND	ND	ND	ND	ND	147
BES24-166	0.5	February 23, 2024	0	0	400	ND	ND	ND	ND	ND	ND	ND	232
BES24-167	0.5	February 23, 2024	0	14	563	ND	ND	ND	ND	ND	ND	ND	291
BES24-168	0.5	February 23, 2024	0	0	363	ND	ND	ND	ND	ND	ND	ND	198
BES24-169	0.5	February 23, 2024	0	10	425	ND	ND	ND	ND	ND	ND	ND	174
BES24-170	0.5	February 23, 2024	0	0	330	ND	ND	ND	ND	ND	ND	ND	138
BES24-171	0.5	February 23, 2024	0	3	273	ND	ND	ND	ND	ND	ND	ND	47
BES24-172	0.5	February 23, 2024	0	19	295	ND	ND	ND	ND	ND	ND	ND	213
BES24-173	0.5	February 23, 2024	0	25	320	ND	ND	ND	ND	ND	ND	ND	230
BES24-174	0.5	February 23, 2024	0	0	550	ND	ND	ND	ND	ND	ND	ND	181
BES24-175	0.5	February 23, 2024	0	21	500	ND	ND	ND	ND	ND	ND	ND	110
BES24-176	0.5	February 23, 2024	0	15	595	ND	ND	ND	ND	ND	ND	ND	97
BES24-177	0.5	February 23, 2024	0	19	575	ND	ND	ND	ND	ND	ND	ND	347
BES24-178	0.5	February 23, 2024	0	10	598	ND	ND	ND	ND	ND	ND	ND	229
BES24-179	0.5	February 23, 2024	0	26	598	ND	ND	ND	ND	ND	ND	ND	390
BES24-180	0.5	February 23, 2024	0	9	385	ND	ND	ND	ND	ND	ND	ND	151
BES24-181	0.5	February 23, 2024	0	3	400	ND	ND	ND	ND	ND	ND	ND	288
BES24-182	0.5	February 23, 2024	0	13	413	ND	ND	ND	ND	ND	ND	ND	372
BES24-183	0.5	February 23, 2024	0	25	590	ND	ND	ND	ND	ND	ND	ND	275
BES24-184	0.5	February 23, 2024	0	31	550	ND	ND	ND	ND	ND	ND	ND	333
BES24-185	0.5	February 23, 2024	0	18	455	ND	ND	ND	ND	ND	ND	ND	101
BES24-186	0.5	February 23, 2024	0	8	432	ND	ND	ND	ND	ND	ND	ND	204
BES24-187	0.5	February 23, 2024	0	7	292	ND	ND	ND	ND	ND	ND	ND	314
BES24-188	0.5	February 23, 2024	0	12	449	ND	ND	ND	ND	ND	ND	ND	166
BES24-189	0.5	February 23, 2024	0	37	480	ND	ND	ND	ND	ND	ND	ND	244
BES24-190	0.5	February 23, 2024	0	45	420	ND	ND	ND	ND	ND	ND	ND	239
BES24-191	0.5	February 23, 2024	0	36	520	ND	ND	ND	ND	ND	ND	ND	227
BES24-192	0.5	February 23, 2024	0	36	392	ND	ND	ND	ND	ND	ND	ND	245
BES24-193	0.5	February 26, 2024	-	-	**3,650**								-
	1	February 29, 2024	0	33	444	ND	ND	ND	ND	ND	ND	ND	171
BES24-194	0.5	February 26, 2024	-	-	**3,375**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	366	ND	ND	ND	ND	ND	ND	ND	142
BES24-195	0.5	February 26, 2024	-	-	**3,782**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	421	ND	ND	ND	ND	ND	ND	ND	149
BES24-196	0.5	February 26, 2024	-	-	**3,977**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	396	ND	ND	ND	ND	ND	ND	ND	116
BES24-197	0.5	February 26, 2024	-	-	**3,540**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	36	211	ND	ND	ND	ND	ND	ND	ND	152

Client Name: XTO Energy, Inc.
Site Name: James Ranch Unit DI 1A CTB
NMOCD Tracking #: nAPP2318831816
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Lab Reports: 890-6208-1; 890-6209-1; 890-6210-1; 890-6232-1; 890-6285-1; 890-6268-1; 890-6298-1; 885-1341-1

Table 3. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-198	0.5	February 26, 2024	-	-	**3,085**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	533	ND	ND	ND	ND	ND	ND	ND	319
BES24-199	0.5	February 26, 2024	-	-	**3,700**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	333	ND	ND	ND	ND	ND	ND	ND	197
BES24-200	0.5	February 26, 2024	-	-	**2,575**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	524	ND	ND	ND	ND	ND	ND	ND	256
BES24-201	0.5	February 26, 2024	-	-	**2,620**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	34	179	ND	ND	ND	ND	ND	ND	ND	186
BES24-202	0.5	February 26, 2024	-	-	**9,320**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	491	ND	ND	ND	ND	ND	ND	ND	142
BES24-203	0.5	February 26, 2024	-	-	**5,922**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	421	ND	ND	ND	ND	ND	ND	ND	229
BES24-204	0.5	February 26, 2024	-	-	**3,802**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	365	ND	ND	ND	ND	ND	ND	ND	156
BES24-205	0.5	February 26, 2024	-	-	**4,010**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	35	276	ND	ND	ND	ND	ND	ND	ND	251
BES24-206	0.5	February 26, 2024	-	-	**3,625**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	307	ND	ND	ND	ND	ND	ND	ND	134
BES24-207	0.5	February 26, 2024	-	-	**3,420**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	279	ND	ND	ND	ND	ND	ND	ND	230
BES24-208	0.5	February 26, 2024	-	-	**2,810**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	122	ND	ND	ND	ND	ND	ND	ND	220
BES24-209	0.5	February 26, 2024	-	-	**2,243**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	463	ND	ND	ND	ND	ND	ND	ND	74
BES24-210	0.5	February 26, 2024	-	-	**1,350**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	39	321	ND	ND	ND	ND	ND	ND	ND	80
BES24-211	0.5	February 26, 2024	-	-	**947**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	510	ND	ND	ND	ND	ND	ND	ND	95
BES24-212	0.5	February 26, 2024	-	-	**1,062**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	431	ND	ND	ND	ND	ND	ND	ND	93
BES24-213	0.5	February 26, 2024	-	-	**1,453**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	478	ND	ND	ND	ND	ND	ND	ND	**1,020**
	1.25	March 14, 2024	0	21	322	ND	ND	ND	ND	ND	ND	ND	ND
BES24-214	0.5	February 26, 2024	-	-	**1,693**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	473	ND	ND	ND	ND	ND	ND	ND	383
BES24-215	0.5	February 26, 2024	-	-	**3,785**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	35	515	ND	ND	ND	ND	ND	ND	ND	448
BES24-216	0.5	February 26, 2024	-	-	**2,288**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	463	ND	ND	ND	ND	ND	ND	ND	573
BES24-217	0.5	February 26, 2024	-	-	**1,895**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	350	ND	ND	ND	ND	ND	ND	ND	100
BES24-218	0.5	February 26, 2024	-	-	**2,000**	-	-	-	-	-	-	-	-
	1	February 29, 2024	0	-	293	ND	ND	ND	ND	ND	ND	ND	77
BES24-219	1	February 29, 2024	0	-	330	ND	ND	ND	ND	ND	ND	ND	105
BES24-220	1	February 29, 2024	0	30	248	ND	ND	ND	ND	ND	ND	ND	64
BES24-221	1	February 29, 2024	0	-	290	ND	ND	ND	ND	ND	ND	ND	104
BES24-222	1	February 29, 2024	0	-	270	ND	ND	ND	ND	ND	ND	ND	61
BES24-223	1	February 29, 2024	0	-	470	ND	ND	ND	ND	ND	ND	ND	141
BES24-224	1	February 29, 2024	0	-	365	ND	ND	ND	ND	ND	ND	ND	123
BES24-225	1	February 29, 2024	0	43	280	ND	ND	ND	ND	ND	ND	ND	541
	1.25	March 14, 2024	0	32	450	ND	ND	ND	ND	ND	ND	ND	130
BES24-226	1	February 29, 2024	0	-	522	ND	ND	ND	ND	ND	ND	ND	**801**
	1.25	March 14, 2024	0	35	550	ND	ND	ND	ND	ND	ND	ND	120
BES24-227	1	February 29, 2024	0	-	432	ND	ND	ND	ND	ND	ND	ND	**855**

Client Name: XTO Energy, Inc.
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NMOCD Tracking #: nAPP2318831816
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Table 3. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-228	1	February 29, 2024	0	-	345	ND	ND	ND	ND	ND	ND	ND	366
BES24-229	1	February 29, 2024	0	-	538	ND	ND	ND	ND	ND	ND	ND	342
BES24-230	1	February 29, 2024	0	36	500	ND	ND	ND	ND	ND	ND	ND	375
BES24-231	1	February 29, 2024	0	-	423	ND	ND	ND	ND	ND	ND	ND	367
BES24-232	1	February 29, 2024	0	-	471	ND	ND	ND	ND	ND	ND	ND	262
BES24-233	1	February 29, 2024	0	-	482	ND	ND	ND	ND	ND	ND	ND	193
BES24-234	1	February 29, 2024	0	-	511	ND	ND	ND	ND	ND	ND	ND	223
BES24-235	1	February 29, 2024	0	48	293	ND	ND	ND	ND	ND	ND	ND	196
WES24-01	0-1	February 16, 2024	0	**105**	550	ND	ND	ND	ND	ND	ND	ND	94
WES24-02	0-1	February 16, 2024	0	78	595	ND	ND	ND	ND	ND	ND	ND	524
WES24-03	0-1	February 16, 2024	0	59	570	ND	ND	ND	ND	ND	ND	ND	336
WES24-04	1-2.5	February 16, 2024	0	ND	300	ND	ND	ND	ND	ND	ND	ND	37
WES24-05	0-2.5	February 16, 2024	26	**1,253**	300	-	-	-	-	-	-	-	-
WES24-06	0-2.5	February 16, 2024	6	14	280	ND	ND	ND	ND	ND	ND	ND	82
WES24-07	0.5-2.5	February 16, 2024	19	**>1500**	570	-	-	-	-	-	-	-	-
WES24-08	0-2.5	February 19, 2024	6	**329**	523	-	-	-	-	-	-	-	-
WES24-09	1-2.5	February 20, 2024	4	12	538	ND	ND	ND	74	ND	ND	74	143
WES24-10	0-3	February 20, 2024	0	9	380	ND	ND	ND	ND	ND	ND	ND	58
WES24-11	0-1	February 21, 2024	0	44	493	ND	ND	ND	ND	ND	ND	ND	256
WES24-12	0-1	February 21, 2024	0	44	598	ND	ND	ND	ND	ND	ND	ND	320
WES24-13	0-1	February 21, 2024	0	41	598	ND	ND	ND	ND	ND	ND	ND	176
WES24-14	0-1	February 21, 2024	0	36	415	ND	ND	ND	ND	ND	ND	ND	320
WES24-15	0-0.5	February 23, 2024	0	14	563	ND	ND	ND	ND	ND	ND	ND	409
WES24-16	0-0.5	February 23, 2024	0	23	575	ND	ND	ND	ND	ND	ND	ND	326
WES24-17	0-0.5	February 23, 2024	0	35	598	ND	ND	ND	ND	ND	ND	ND	424
WES24-18	0-0.5	February 23, 2024	0	16	598	ND	ND	ND	ND	ND	ND	ND	79
WES24-19	0-0.5	February 23, 2024	0	15	465	ND	ND	ND	ND	ND	ND	ND	166
WES24-20	0-1	February 29, 2024	0	31	293	ND	ND	ND	ND	ND	ND	ND	166
WES24-21	0-1	February 29, 2024	0	39	460	ND	ND	ND	ND	ND	ND	ND	217
WES24-22	0-1	February 29, 2024	0	29	250	ND	ND	ND	ND	ND	ND	ND	94
WES24-23	0-1	February 29, 2024	0	37	320	ND	ND	ND	ND	ND	ND	ND	86

"ND" Not Detected at the Reporting Limit
"-" indicates not analyzed/assessed
Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria

APPENDIX A - NMOCD C-141 Report

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	nAPP2318831816
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Garrett Green	Contact Telephone 575-200-0729
Contact email garrett.green@exxonmobil.com	Incident # *(assigned by OCD)*
Contact mailing address 3104 E. Greene Street, Carlsbad, New Mexico, 88220	

Location of Release Source

Latitude 32.38001 Longitude -103.88664
(NAD 83 in decimal degrees to 5 decimal places)

Site Name James Ranch Unit DI 1A CTB	Site Type Central Tank Battery
Date Release Discovered 06/28/2023	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
F	21	22S	30E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 37.08	Volume Recovered (bbls) 30.00
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Internal corrosion caused a release of fluids from the 6" outlet line on the production bulk vessel. All free fluids were recovered. A third-party contractor has been retained for remediation purposes.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2318831816
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A release equal to or greater than 25 barrels.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, by Melanie Collins to ocd.enviro@emnrd.nm.gov, Mike Bratcher, and Robert Hamlet on Wednesday June 28, 2023 via email.

Initial Response

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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

NA

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Garrett Green Title: SSHE Coordinator

Signature:  Date: 7/7/2023

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

OCD Only

Received by: _____ Date: _____

Location:	**JRU DI 1A CTB**	
Spill Date:	**6/28/2023**	
Area 1		
Approximate Area =	31782.00	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	37.08	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**37.08**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**30.00**	**bbls**

APPENDIX C – Daily Field Reports

Daily Site Visit Report

Site Photos

Viewing Direction: South	**Viewing Direction**: South
	
Northwest of large separator facing south.	North of excavation facing south.
Viewing Direction: South	**Viewing Direction**: South
	
Inside excavation facing south over 2.5 and 3 feet bgs area.	Inside excavation facing south. Collected confirmation samples from 1 feet excavation west of wellheads.

Daily Site Visit Report

Viewing Direction: Southeast	**Viewing Direction**: North
	
Inside excavation facing southeast. Collected confirmation samples from 1 feet excavation west of wellheads.	Inside excavation facing north. Collected confirmation samples from 1 feet excavation west of wellheads.
Viewing Direction: Northeast	**Viewing Direction**: Northwest
	
Inside excavation facing northeast. Collected confirmation samples from 1 feet excavation west of wellheads.	South of excavation facing northwest. Continued excavation to 0.5 feet bgs.

Daily Site Visit Report

Viewing Direction: Northeast



South of excavation facing northeast. Continued excavation to 0.5 feet bgs.

Viewing Direction: East



Southwest of large separator facing east. Started excavation immediately north of equipment.

Viewing Direction: South



North of large separator facing south. Started excavation immediately north of equipment.

Viewing Direction: Southwest



Northwest separators facing southwest. Started excavation immediately north of equipment.

Daily Site Visit Report

Viewing Direction: North



East of equipment facing north. Borehole BH24 -19 hit refusal at 1 feet bgs.

Viewing Direction: South



East of equipment facing south. Borehole BH24 -20 hit refusal at 2 feet bgs.

Viewing Direction: West



East of equipment facing southwest. Borehole BH24-21 hit refusal at 2 feet bgs.

Daily Site Visit Report

Site Photos

Viewing Direction: Southwest



One call areas

Viewing Direction: South



Northern extent of release

Viewing Direction: Southeast



One call areas

Viewing Direction: Southwest



One call areas

Daily Site Visit Report

Viewing Direction: Northwest	**Viewing Direction**: Northeast
	
One call areas	One call areas
Viewing Direction: Northeast	**Viewing Direction**: Southwest
	
One call areas	Release near pressure vessel and separators

Daily Site Visit Report

Viewing Direction: Southwest	**Viewing Direction**: Southeast
	
Release near pressure vessel and separators	Release near pressure vessel and separators
Viewing Direction: North	**Viewing Direction**: North
	
Release near pressure vessel and separators	Release extent into pad areas

Daily Site Visit Report

Site Photos

Viewing Direction: South



Northwest of large separator facing south.

Viewing Direction: West



East of large separator facing west. South excavation to 0.5 feet bgs.

Viewing Direction: Northwest



East of large separator facing northwest. South excavation to 0.5 feet bgs.

Viewing Direction: Southwest



Northeast of large separator facing southwest. South excavation to 0.5 feet bgs.

Daily Site Visit Report

Viewing Direction: Southwest	**Viewing Direction**: North
	
Northeast of large separator facing southwest. Completed hand excavation to 0.5 feet bgs.	Southeast of large separator facing north. Completed hand excavation to 0.5 feet bgs.
Viewing Direction: Southeast	**Viewing Direction**: Southeast
	
North of large separator facing southeast. Completed hand excavation to 0.5 feet bgs.	North of large separator facing southeast. South excavation to 0.5 feet bgs.

Daily Site Visit Report

Viewing Direction: South	**Viewing Direction**: Southwest
	
North of large separator facing south. South excavation to 0.5 feet bgs.	North of large separator facing southwest. South excavation to 0.5 feet bgs.
Viewing Direction: Northeast	**Viewing Direction**: Northeast
	
Northwest of large separator facing northeast. South excavation to 0.5 feet bgs.	West of large separator facing northeast. South excavation to 0.5 feet bgs.

Daily Site Visit Report

Viewing Direction: Southwest	**Viewing Direction**: North
	
Northwest chemical tanks facing southwest. South excavation to 0.5 feet bgs.	Northwest chemical tanks facing north. North excavation yet to be connected.

Daily Site Visit Report

Site Photos

Viewing Direction: Southeast	**Viewing Direction**: Northeast
	
Southwest excavation at 1ft	Connecting area between the south and north sides at 1ft

Viewing Direction: Northeast	**Viewing Direction**: Northeast
	
BES24-38 and 40 collected at 2.5 ft.	BES24-28 collected at 1.5ft

Daily Site Visit Report

Viewing Direction: Southeast

Central Excavation where BES24-125 to 158 were obtained.

















APPENDIX D – Notifications

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

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

QUESTIONS

Action 312372

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 312372
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/12/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Garrett Green 5752000729
Please provide any information necessary for navigation to sampling site	JRU DI 1A CTB F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Action 312372

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 312372
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
ggreen	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/7/2024

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QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 312382
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
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Time sampling will commence	08:00 AM
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Please provide any information necessary for navigation to sampling site	JRU DI 1A CTB F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 312382
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
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QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 312383
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/14/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Garrett Green 5752000729
Please provide any information necessary for navigation to sampling site	JRU DI 1A CTB F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 312383
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
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QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 312384
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/15/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Garrett Green 5752000729
Please provide any information necessary for navigation to sampling site	JRU DI 1A CTB F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 312384
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
ggreen	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/7/2024

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QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 312386
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/16/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Garrett Green 5752000729
Please provide any information necessary for navigation to sampling site	JRU DI 1A CTB F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 312386
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
ggreen	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/7/2024

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QUESTIONS

Action 314819

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 314819
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/19/2024
Time sampling will commence	01:00 PM
Please provide any information necessary for observers to contact samplers	Garrett Green 5752000729
Please provide any information necessary for navigation to sampling site	JRU DI 1A CTB F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 314819
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
ggreen	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/15/2024

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QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 314862
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/20/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Chance Dixon cdixon@vertex.ca
Please provide any information necessary for navigation to sampling site	JRU DI 1A CTB F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 314862
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
ggreen	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/15/2024

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QUESTIONS

Action 314866

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 314866
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/21/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Chance Dixon cdixon@vertex.ca
Please provide any information necessary for navigation to sampling site	JRU DI 1A CTB F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 314866
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
ggreen	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/15/2024

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

QUESTIONS

Action 314876

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 314876
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/22/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Chance Dixon cdixon@vertex.ca
Please provide any information necessary for navigation to sampling site	F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
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Created By	Condition	Condition Date
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QUESTIONS

Action 314879

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 314879
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/23/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Chance Dixon cdixon@vertex.ca
Please provide any information necessary for navigation to sampling site	F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Action 314879

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 314879
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
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QUESTIONS

Action 316408

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 316408
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/26/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	cdixon@vertex.ca
Please provide any information necessary for navigation to sampling site	JRU DI 1A F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Action 316408

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 316408
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
ggreen	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/21/2024

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QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 316417
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/27/2024
Time sampling will commence	01:00 PM
Please provide any information necessary for observers to contact samplers	cdixon@vertex.ca
Please provide any information necessary for navigation to sampling site	JRU DI 1A CTB F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 316417
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/21/2024

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QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 316422
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/28/2024
Time sampling will commence	01:00 PM
Please provide any information necessary for observers to contact samplers	cdixon@vertex.ca
Please provide any information necessary for navigation to sampling site	F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 316422
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/21/2024

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QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 316426
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/29/2024
Time sampling will commence	01:00 PM
Please provide any information necessary for observers to contact samplers	cdixon@vertex.ca
Please provide any information necessary for navigation to sampling site	F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 316426
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/21/2024

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QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 316427
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	38,000
What is the estimated number of samples that will be gathered	215
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/01/2024
Time sampling will commence	01:00 PM
Please provide any information necessary for observers to contact samplers	cdixon@vertex.ca
Please provide any information necessary for navigation to sampling site	F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 316427
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	2/21/2024

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QUESTIONS

Action 322685

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 322685
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Site Name	**JAMES RANCH UNIT DI 1A CTB**
Date Release Discovered	**06/28/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	1,000
What is the estimated number of samples that will be gathered	5
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/14/2024
Time sampling will commence	10:00 AM
Please provide any information necessary for observers to contact samplers	Chance Dixon - cdixon@vertex.ca
Please provide any information necessary for navigation to sampling site	F-21-22S-30E 32.380937, -103.886914

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CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 322685
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	3/12/2024

APPENDIX F – Depth to Groundwater Drilling

APPENDIX G – Waste Manifest(s)

APPENDIX B – Closure Criteria Research Documentation

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 03015	CUB	ED	1	4	3	22	22S	30E	606099	3582353*	1560	1316	262	1054
C 03679 POD1	C	ED	1	4	2	14	24S	33E	603567	3581547	1942	700	575	125
C 02724	CUB	ED	4	4	2	29	22S	30E	603860	3581329*	1975	503		
C 02723	CUB	ED	2	2	3	15	22S	30E	606282	3584363*	1999	651		
C 02111	CUB	ED	2	2	2	33	22S	30E	605505	3580336*	2873	248	155	93
C 03220 EXPLORE	CUB	ED	1	3	4	33	22S	30E	604911	3579127*	3980	224		
C 02950 EXPL	CUB	ED	4	2	4	23	22S	30E	608740	3582576*	4044	845		
C 02637	CUB	ED	1	3	3	24	22S	30E	608950	3582377*	4281	759		
C 03587 POD3	CUB	ED	2	4	1	07	22S	29E	601447	3586271	4562	80	47	33
C 04528 POD1	CUB	ED	1	3	3	12	22S	30E	608886	3585625	4861			

Average Depth to Water: **259 feet**

Minimum Depth: **47 feet**

Maximum Depth: **575 feet**

Record Count: 10

UTMNAD83 Radius Search (in meters):

Easting (X): 604730 **Northing (Y):** 3583103 **Radius:** 5000

***UTM location was derived from PLSS - see Help**

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q q q 6416 4	Sec	Tws	Rng	X	Y	Distance
C 01916	C	PRO	0	PERRY R BASS	ED	C 01916					4 3 2	21	22S	30E	605068	3582947*	372
C 03015	CUB	MON	0	U.S. DEPT OF ENERGY - WIPP	ED	C 03015				Artesian	1 4 3	22	22S	30E	606099	3582353*	1560

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 604730 **Northing (Y):** 3583103 **Radius:** 1610

Sorted by: Distance

***UTM location was derived from PLSS - see Help**

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP:

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: C 01916

Name of well owner: BOPCO L.P.

Mailing address: P.O. Box 2760

City: Midland State: Texas Zip code: 79702

Phone number: 432- 556 -8730 E-mail: TASavoie@Basspet.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Straub Corporation – Raymond Straub

New Mexico Well Driller License No.: WD-1478 Expiration Date: June-2013

IV. WELL INFORMATION:

Note: A copy of the existing Well Record for the well to be plugged should be attached to this plan.

STATE ENGINEER OFFICE ROSWELL 2013 APR -1 P 1:19

1) GPS Well Location: Latitude: 32 deg, 22 min, 54.42 sec
Longitude: -103 deg, 53 min, 00.57 sec, NAD 83

2) Reason(s) for plugging well: Water well is in the path of new construction. Water quality is below useable quality.

3) Was well used for any type of monitoring program? NO If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? YES If yes, provide additional detail, including analytical results and/or laboratory report(s): See Attachments

5) Static water level: ~ 110 feet below land surface / feet above land surface (circle one)

6) Depth of the well: 188 feet

C-1916
4167710

7) Inside diameter of innermost casing: 5 inches.

8) Casing material: Steel

9) The well was constructed with:

UNKWN an open-hole production interval, state the open interval: _____

UNKWN a well screen or perforated pipe, state the screened interval(s): _____

10) What annular interval surrounding the artesian casing of this well is cement-grouted? NA

11) Was the well built with surface casing? UNKWN If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? _____ If yes, please describe: _____

12) Has all pumping equipment and associated piping been removed from the well? yes If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well: The casing will be cut off below ground surface. A tremie line will be install and a Portland Type II/ V Cement grout will be placed from the bottom to within 5' of the surface. A concrete cap will be placed from 5' to 1' and the remainder will be filled with soil.

2) Will well head be cut-off below land surface after plugging? yes

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: 20 Sacks

4) Type of Cement proposed: See Attached Conditions of Approval C.6
5% Fullers Earth / Type II/V Cement
See Attached Conditions of Approval C.6

5) Proposed cement grout mix: 8 gallons of water per 94 pound sack of Portland cement.

6) Will the grout be: _____ batch-mixed and delivered to the site

X mixed on site

7) Grout additives requested, and percent by dry weight relative to cement: Salt water gel – The use of Fuller's Earth is to help with leak-off to the formation. Since the formation water is high in chlorides, Volclay Sodium Bentonite will not be acceptable. 5 LBS. of Gel per 94 LBS. of cement

SEE Attached Conditions of Approval C.G.

8) Additional notes and calculations: ((dia.^{2} * 0.005454)*Depth)/ 1.25 cuft-bag

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

The Public Land Survey is Section 21, Township 22 South, Range 30 East.

VIII. SIGNATURE:

I, Raymond L Straub Jr., P.G. , say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Signature of Applicant

03/28/2013
Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

✓ Approved subject to the attached conditions.
_____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 11th day of April, 13

Scott A. Verhines, State Engineer

By: Tim Williams

Tim Williams
Carlsbad Basin Watermaster

STATE ENGINEER OFFICE
ROSWELL, NM
2013 APR -1 P 1:19

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			5 feet
Bottom of proposed interval of grout placement (ft bgl)			188 feet
Theoretical volume of grout required per interval (gallons)			20 Sacks
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			8 gallons
Mixed on-site or batch-mixed and delivered?			On-site
Grout additive 1 requested			5% Saltwater Bentonite
Additive 1 percent by dry weight relative to cement			5 LBS.
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2013 APR -1 P 1:19

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)			
Bottom of proposed sealant of grout placement (ft bgl)			
Theoretical volume of sealant required per interval (gallons)			
Proposed abandonment sealant (manufacturer and trade name)			

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ROSWELL, NEW MEXICO
2013 APR -1 P 1:19

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL

Scott A. Verhines, P.E.
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623-8559

April 17, 2013

BOPCO, L.P.
P.O. Box 2760
Midland, Texas 79702

RE: *Well Plugging Plan of Operations* for C-1916

Greetings:

Enclosed is your copy of the Well Plugging Plan for the above referenced project. The attached Conditions of Approval modify your Plan in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted August 31, 2005 by the State Engineer. Should you have any questions about the Plan or Conditions of Approval please do not hesitate to contact our office.

Sincerely,

Catherine Goetz
Water Resource Specialist
District II Office of the State Engineer

Enclosures

cc: Office of the State Engineer Santa Fe
Straub Corporation

Analytical Laboratory Report for:
BOPCO

Account Representative:
Willis Mossman

Production Water Analysis

Listed below please find water analysis report from: Perry R Bass Wsw, WATER SUPPLY WELL

Lab Test Number	Sample Date
201301003615	02/13/2013

Specific Gravity:	**1.100**
TDS:	**153402**
pH:	**6.65**

Cations	**mg/L**
Calcium as Ca^{++}	**2669**
Magnesium as Mg^{++}	**2188**
Sodium as Na^{+}	**52812**
Iron as Fe^{++}	**9.49**
Potassium as K^{+}	**7466.0**
Barium as Ba^{++}	**0.28**
Strontium as Sr^{++}	**86.46**
Manganese as Mn^{++}	**0.46**

Anions	**mg/L**
Bicarbonate as HCO_3^{-}	**171**
Sulfate as $SO_4^{=}$	**6500**
Chloride as Cl^{-}	**81500**

Gases	**mg/L**
Carbon Dioxide as CO_2	**30**
Hydrogen Sulfide as H_2S	**0.0**

Lab Comments:
SURFACE TEMP.=65.7°F

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2013 APR -1 P 1:19

Analytical Laboratory Report for:
BOPCO

Account Representative:
Willis Mossman

DownHole SAT™ Scale Prediction @ 250 deg. F

Lab Test Number	Sample Date	Location
201301003615	02/13/2013	WATER SUPPLY WELL

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO3)	0.46	-0.05
Strontianite (SrCO3)	0.00	-25.80
Anhydrite (CaSO4)	6.85	1699.09
Gypsum (CaSO4*2H2O)	1.55	710.25
Barite (BaSO4)	0.07	-6.67
Celestite (SrSO4)	0.23	-487.80
Siderite (FeCO3)	3.44	0.04
Halite (NaCl)	0.04	-545840.63
Iron sulfide (FeS)	0.00	-1.34

Interpretation of DHSat Results:
The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) to positive (precipitating) values. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2013 APR -1 P 1:19

New Mexico Office of the State Engineer
Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 199433 **Transaction Desc:** C 01916 **File Date:** 07/31/1980

Primary Status: EXP Expired Permit
Secondary Status: EXP Expired
Person Assigned: mvigil
Applicant: PERRY R. BASS

Events

Date	Type	Description	Comment	Processed By
07/31/1980	APP	Application Received	*	mvigil
08/04/1980	FIN	Final Action on application		mvigil
08/04/1980	WAP	General Approval Letter		mvigil
09/01/1981	EXP	Expired Permit (well log late)		mvigil

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 01916		3		PRO 72-12-1 PROSPECTING OR DEVELOPMENT OF NATURAL RESOURCE
**Point of Diversion				
C 01916		605068	3582947*	

*An (*) after northing value indicates UTM location was derived from PLSS - see Help

Remarks

WATER SUPPLY WELL FOR THE DRILLING OF JAMES RANCH UNIT #12.

STATE ENGINEER OFFICE ROSWELL, NEW MEXICO 2013 APR -1 P 1:19

Conditions

3 Appropriation and use of water under this permit shall not exceed a period of one year from the date of approval.

5A A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water; pumping records shall be submitted to the District Supervisor for each calendar month on or before the 10th day of the following month.

6 The well shall be plugged upon completion of the permitted use, and a plugging report shall be filed with the State Engineer within 10 days.

Action of the State Engineer

Approval Code: A - Approved
Action Date: 08/04/1980
Log Due Date: 08/31/1981
State Engineer:

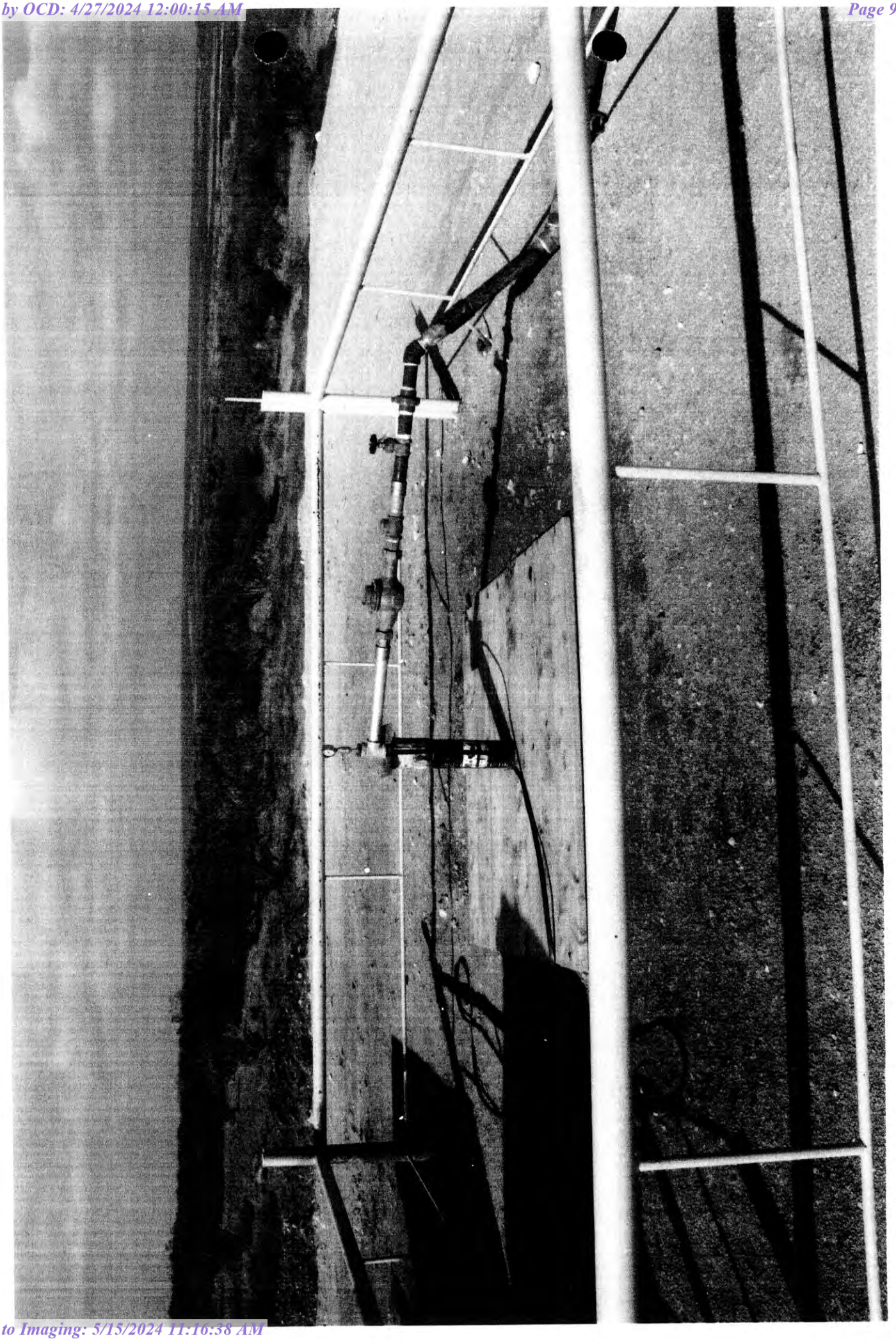
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

Conditions of Approval for C-1916 abandonment:

1) Plugging operations will be conducted in accordance with NMED, NMOCD, or other State or Federal agency having oversight for the above described project.

2) The well shall be plugged using a cement slurry (5.2 gals water per 94lb bag of Portland cement). It is understood that due to the high sulfate content Type V cement will be used as the data provided on water quality indicates 6,500 ppm sulfates. The cement grout will be pumped via tremie line from bottom up.

3) By item 2 above, the plan meets OSE requirements for tremie/grout abandonment, however, well records are not available to confirm well design/annular seals.



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U.S. Fish and Wildlife Service
National Wetlands Inventory

JRU DI 1A CTB watercourse 912 ft



August 28, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

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Received by OCD: 4/27/2024 12:00:15 AM

U.S. Fish and Wildlife Service
National Wetlands Inventory

James Ranch Unit DI 1A CTB Lake



August 3, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

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James Ranch Unit DI 1A CTB

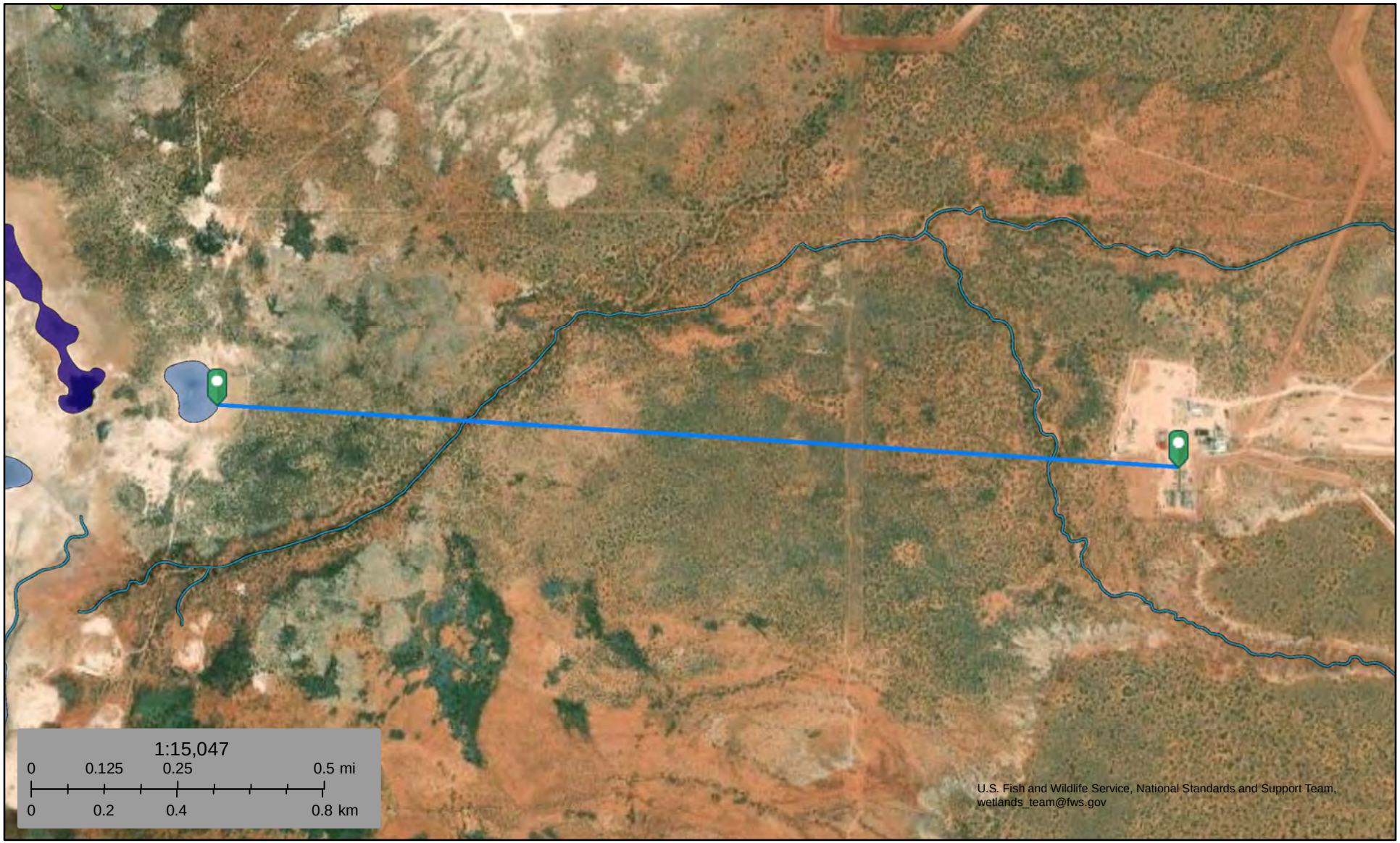
Nearest Occupied Residence: 1.84mi



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U.S. Fish and Wildlife Service
National Wetlands Inventory

James Ranch Unit DI 1A CTB Wetland



August 3, 2023

Wetlands

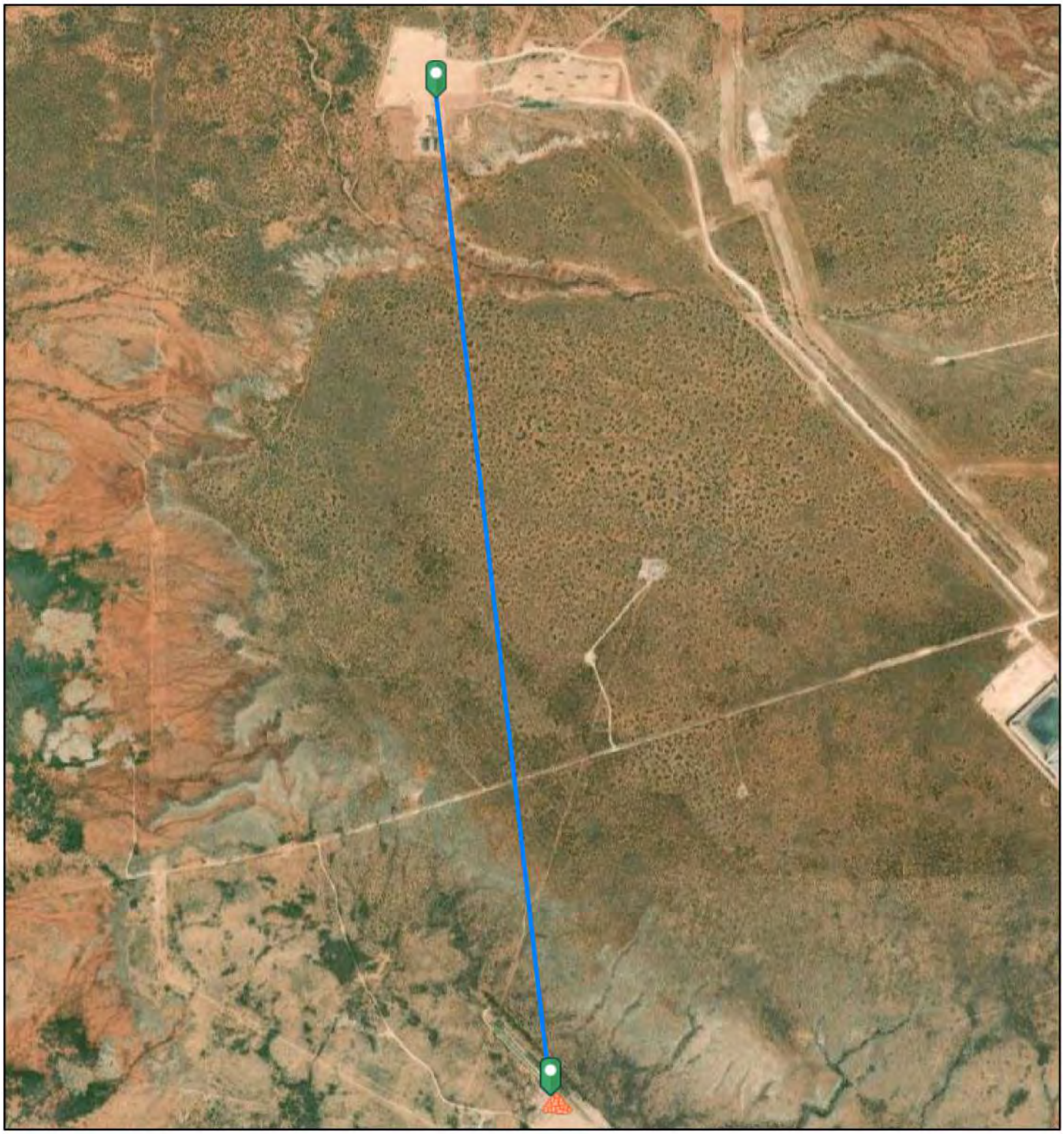
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

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Active Mines in 1.7 miles



3/6/2024, 4:19:18 PM

Registered Mines

Potash

1:18,056

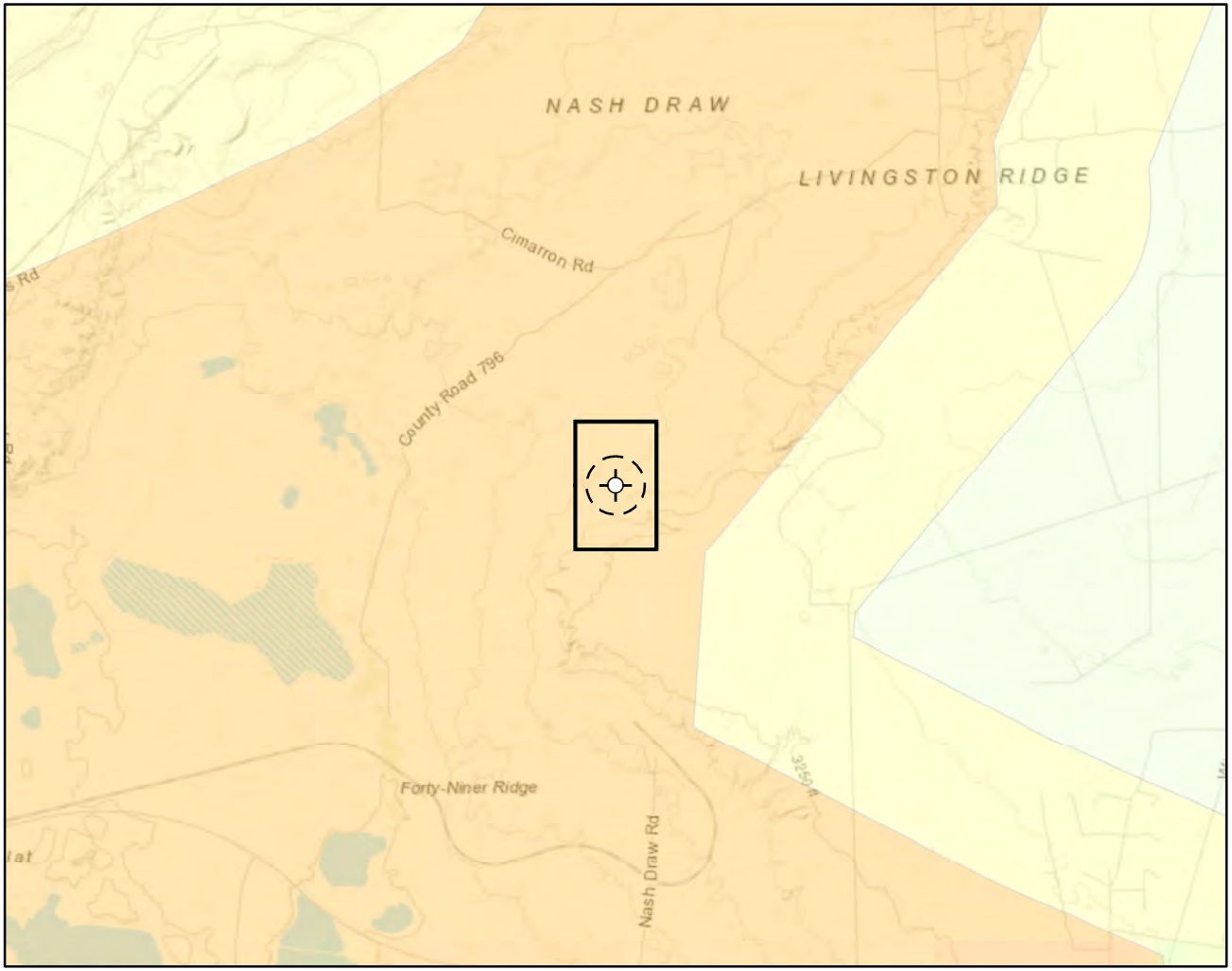
0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Esri, HERE, Garmin, iPC, Maxar

EMNRD MMD GIS Coordinator

New Mexico Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)





Karst Potential

- Critical
- High
- Medium
- Low

- Site Location
- Buffer Location (1,000 ft.)

Overview Map

0 0.25 0.5 1 mi

Detail Map

0 150 300 600 ft

VERTEX

Map Center:
Lat/Long: 32.380010, -103.886640

NAD 1983 UTM Zone 13N
Date: Aug 03/23

N

Karst Potential Map
James Ranch Unit DI 1A CTB

FIGURE:
X

XTO ENERGY

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Inset Map, ESRI 2022; Overview Map: ESRI World Topographic. Karst potential data sourced from Roswell Field Office, Bureau of Land Management, 2020 or United States Department of the Interior, Bureau of Land Management. (2018). Karst Potential.

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\XTO Energy\23E-04616 - JRU DI 1A CTB\Figure X Karst Potential Map (23E-04616).mxd

Received by OCD: 4/27/2024 12:00:15 AM

National Flood Hazard Layer FIRMette

FEMA

103°53'31"W 32°23'3"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

103°52'53"W 32°22'33"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- **SPECIAL FLOOD HAZARD AREAS**
  - Without Base Flood Elevation (BFE) *Zone A, V, A99*
  - With BFE or Depth *Zone AE, AO, AH, VE, AR*
  - Regulatory Floodway
- **OTHER AREAS OF FLOOD HAZARD**
  - 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
  - Future Conditions 1% Annual Chance Flood Hazard *Zone X*
  - Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
  - Area with Flood Risk due to Levee *Zone D*
- **OTHER AREAS**
  - NO SCREEN Area of Minimal Flood Hazard *Zone X*
  - Effective LOMRs
  - Area of Undetermined Flood Hazard *Zone D*
- **GENERAL STRUCTURES**
  - Channel, Culvert, or Storm Sewer
  - Levee, Dike, or Floodwall
- **OTHER FEATURES**
  - 20.2 Cross Sections with 1% Annual Chance
  - 17.5 Water Surface Elevation
  - Coastal Transect
  - Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Feature
- **MAP PANELS**
  - Digital Data Available
  - No Digital Data Available
  - Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

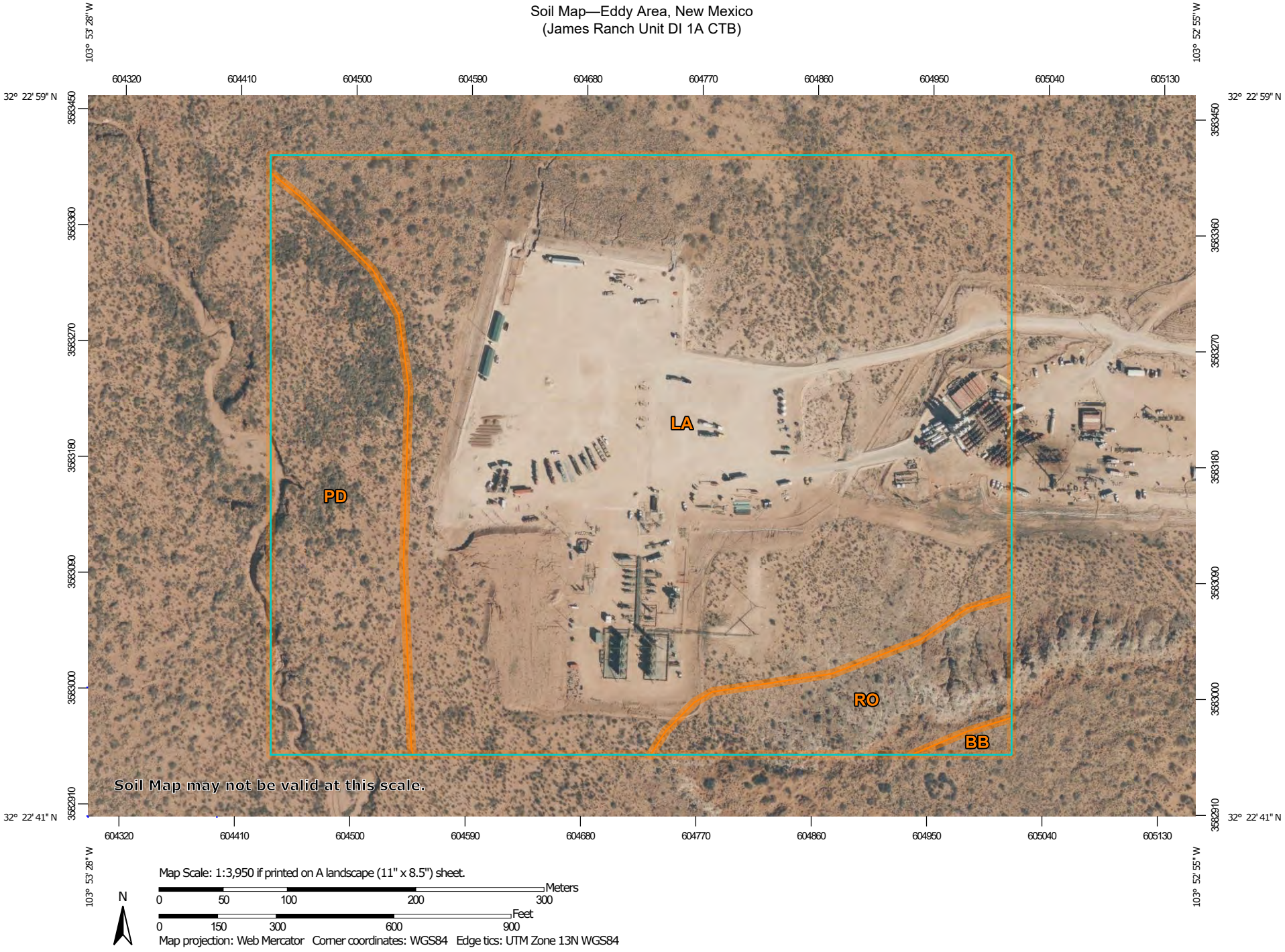
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/3/2023 at 3:23 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

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Soil Map—Eddy Area, New Mexico
(James Ranch Unit DI 1A CTB)



Map Scale: 1:3,950 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

Received by OCD: 4/27/2024 12:00:15 AM

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Released to Imaging: 5/15/2024 11:16:38 AM

Received by OCD: 4/27/2024 12:00:15 AM

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BB	Berino complex, 0 to 3 percent slopes, eroded	0.3	0.4%
LA	Largo loam, 1 to 5 percent slopes	51.4	76.9%
PD	Pajarito-Dune land complex, 0 to 3 percent slopes	10.5	15.8%
RO	Rock land	4.6	6.9%
Totals for Area of Interest		**66.8**	**100.0%**

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United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Eddy Area, New Mexico



August 3, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

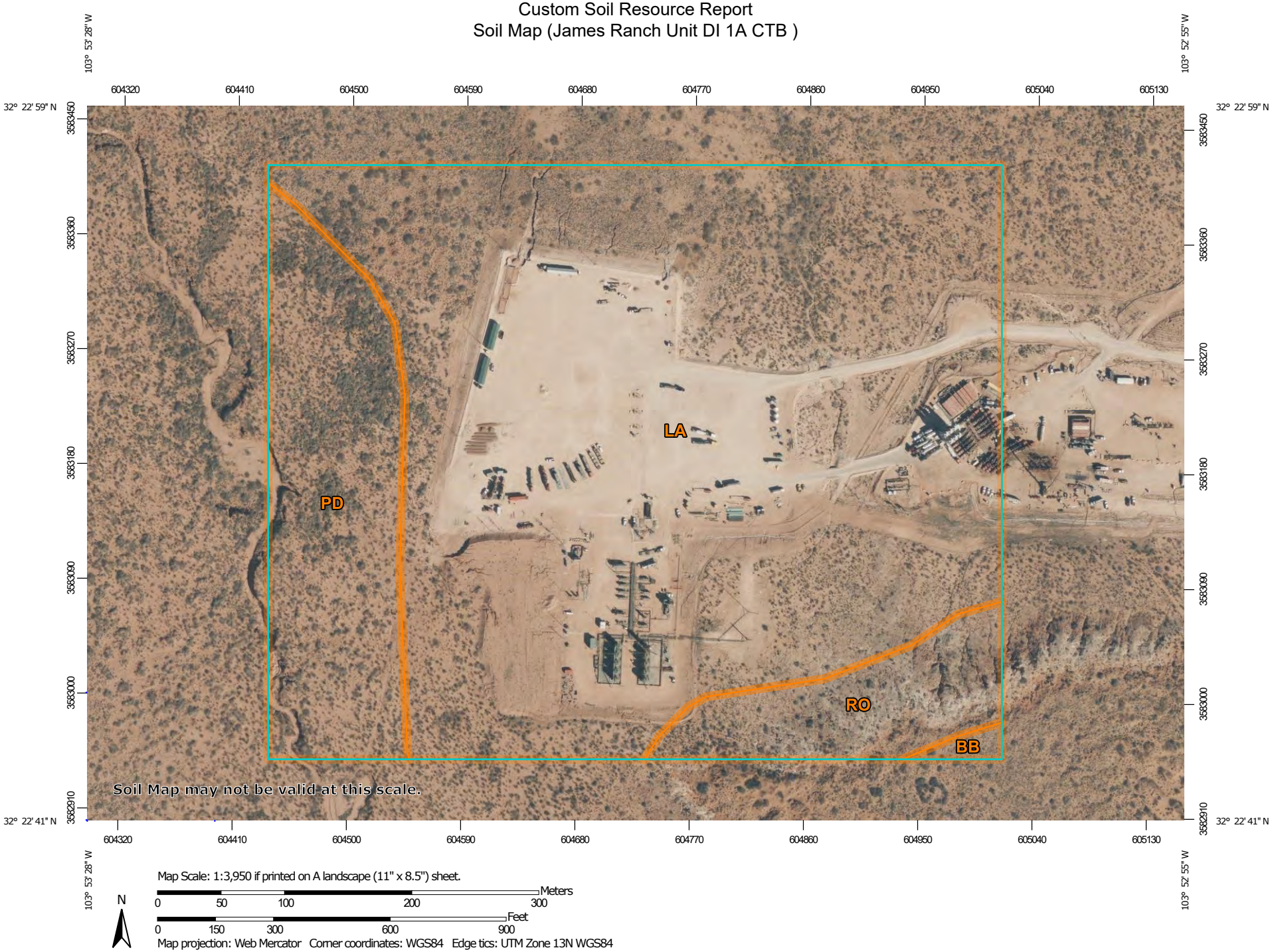
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (James Ranch Unit DI 1A CTB)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (James Ranch Unit DI 1A CTB)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BB	Berino complex, 0 to 3 percent slopes, eroded	0.3	0.4%
LA	Largo loam, 1 to 5 percent slopes	51.4	76.9%
PD	Pajarito-Dune land complex, 0 to 3 percent slopes	10.5	15.8%
RO	Rock land	4.6	6.9%
Totals for Area of Interest		**66.8**	**100.0%**

Map Unit Descriptions (James Ranch Unit DI 1A CTB)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Eddy Area, New Mexico

BB—Berino complex, 0 to 3 percent slopes, eroded

Map Unit Setting

National map unit symbol: 1w43
Elevation: 2,000 to 5,700 feet
Mean annual precipitation: 5 to 15 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 180 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Berino and similar soils: 60 percent
Pajarito and similar soils: 25 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Berino

Setting

Landform: Plains, fan piedmonts
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 17 inches: fine sand
H2 - 17 to 58 inches: sandy clay loam
H3 - 58 to 60 inches: loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Description of Pajarito

Setting

Landform: Dunes, plains, interdunes
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 9 inches: loamy fine sand
H2 - 9 to 72 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Pajarito

Percent of map unit: 4 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Wink

Percent of map unit: 4 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Cacique

Percent of map unit: 4 percent
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

Kermit

Percent of map unit: 3 percent
Ecological site: R070BD005NM - Deep Sand
Hydric soil rating: No

LA—Largo loam, 1 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1w4y
Elevation: 2,000 to 5,700 feet
Mean annual precipitation: 6 to 14 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 180 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Largo and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Largo

Setting

Landform: Plains, alluvial fans
Landform position (three-dimensional): Talf, rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Calcareous alluvium

Typical profile

H1 - 0 to 4 inches: loam
H2 - 4 to 47 inches: silt loam
H3 - 47 to 65 inches: loam

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

Minor Components

Largo

Percent of map unit: 1 percent
Ecological site: R070BC017NM - Bottomland
Hydric soil rating: No

Pajarito

Percent of map unit: 1 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

PD—Pajarito-Dune land complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w55
Elevation: 3,000 to 5,000 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 190 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Pajarito and similar soils: 46 percent
Dune land: 45 percent
Minor components: 9 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pajarito

Setting

Landform: Plains, interdunes, dunes
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 9 inches: fine sandy loam
H2 - 9 to 36 inches: fine sandy loam
H3 - 36 to 72 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Description of Dune Land

Setting

Landform: Dune fields
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Talf
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 6 inches: sandy loam
H2 - 6 to 60 inches: sandy loam

Interpretive groups

Land capability classification (irrigated): None specified
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 5 percent
Hydric soil rating: No

Largo

Percent of map unit: 4 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

RO—Rock land

Map Unit Setting

National map unit symbol: 1w5h
Elevation: 2,000 to 5,700 feet
Mean annual precipitation: 6 to 24 inches

Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 180 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Rock land: 97 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rock Land

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components

Pajarito

Percent of map unit: 1 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Simona

Percent of map unit: 1 percent
Ecological site: R070BD002NM - Shallow Sandy
Hydric soil rating: No

Potter

Percent of map unit: 1 percent
Ecological site: R070BC025NM - Shallow
Hydric soil rating: No

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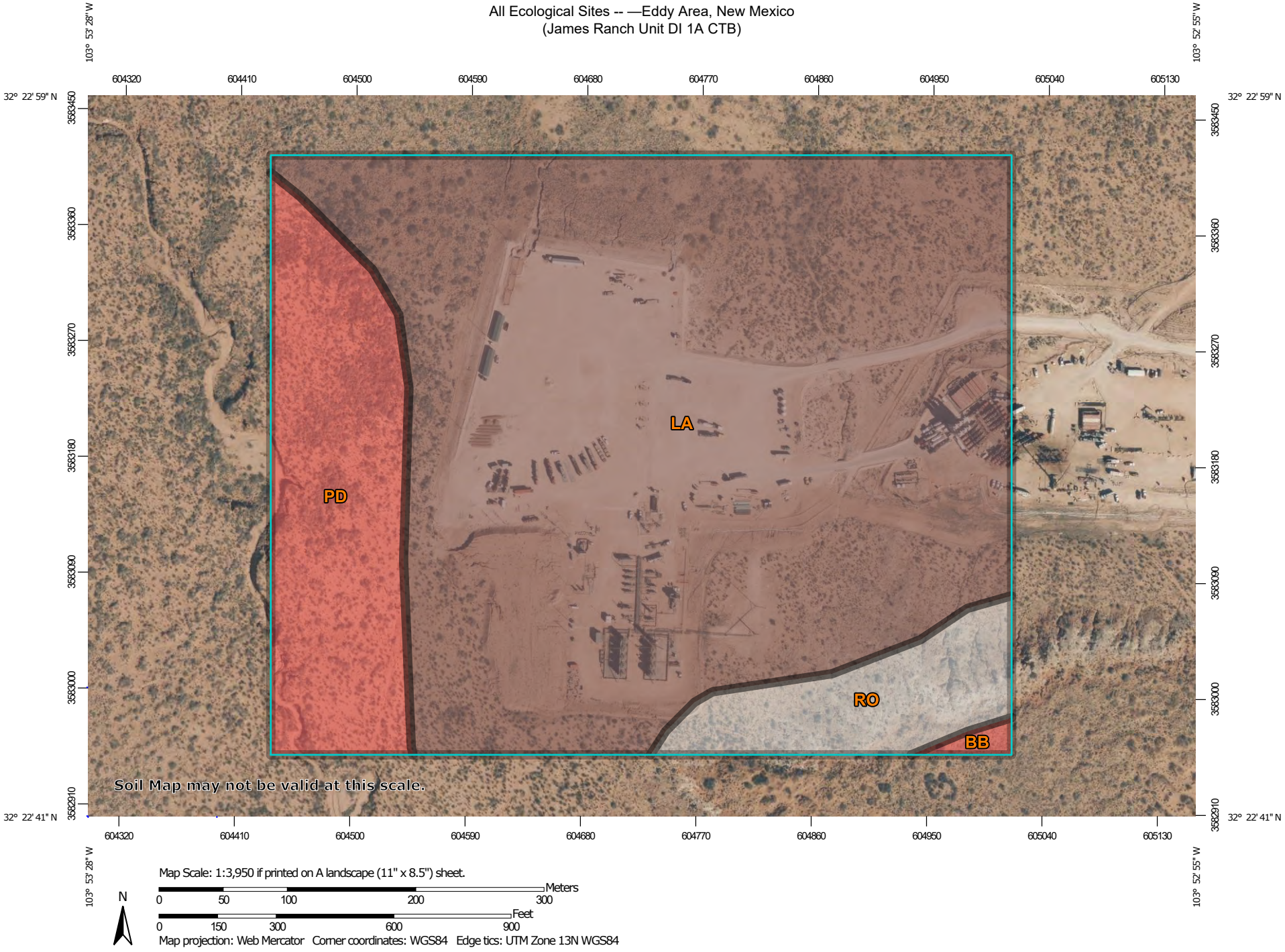
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All Ecological Sites -- —Eddy Area, New Mexico
(James Ranch Unit DI 1A CTB)



Map Scale: 1:3,950 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

Received by OCD: 4/27/2024 12:00:15 AM

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- R070BC007NM
- R070BD003NM
- Not rated or not available

Soil Rating Lines
- R070BC007NM
- R070BD003NM
- Not rated or not available

Soil Rating Points
- R070BC007NM
- R070BD003NM
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

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Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Released to Imaging: 5/15/2024 11:16:38 AM

Received by OCD: 4/27/2024 12:00:15 AM

All Ecological Sites —

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
BB	Berino complex, 0 to 3 percent slopes, eroded	Berino (60%)	R070BD003NM — Loamy Sand	0.3	0.4%
		Pajarito (25%)	R070BD003NM — Loamy Sand		
		Cacique (4%)	R070BD004NM — Sandy		
		Pajarito (4%)	R070BD003NM — Loamy Sand		
		Wink (4%)	R070BD003NM — Loamy Sand		
		Kermit (3%)	R070BD005NM — Deep Sand		
LA	Largo loam, 1 to 5 percent slopes	Largo (98%)	R070BC007NM — Loamy	51.4	76.9%
		Largo (1%)	R070BC017NM — Bottomland		
		Pajarito (1%)	R070BD003NM — Loamy Sand		
PD	Pajarito-Dune land complex, 0 to 3 percent slopes	Pajarito (46%)	R070BD003NM — Loamy Sand	10.5	15.8%
		Dune land (45%)	R070BD003NM — Loamy Sand		
		Rock outcrop (5%)			
		Largo (4%)	R070BC007NM — Loamy		
RO	Rock land	Rock land (97%)		4.6	6.9%
		Pajarito (1%)	R070BD003NM — Loamy Sand		
		Potter (1%)	R070BC025NM — Shallow		
		Simona (1%)	R070BD002NM — Shallow Sandy		
Totals for Area of Interest				**66.8**	**100.0%**

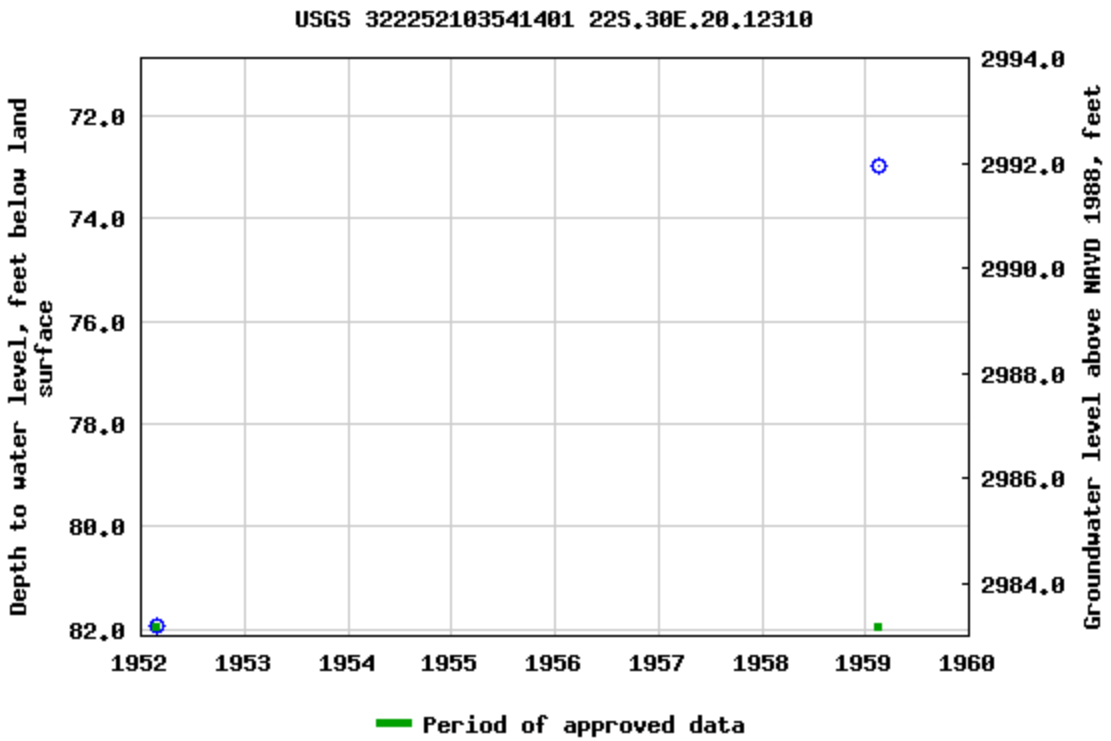
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This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-08-03 14:45:44 EDT
0.6 0.53 nadww02

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APPENDIX E – Laboratory Data Reports and Chain of Custody Forms

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 2/29/2024 10:23:47 AM

JOB DESCRIPTION

JRU DI 1A CTB
23 E - 04616

JOB NUMBER

890-6208-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 5/13/2024 11:16:38 AM

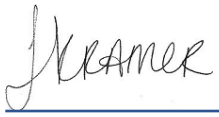
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
2/29/2024 10:23:47 AM

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

Client: Vertex
Project/Site: JRU DI 1A CTB

Laboratory Job ID: 890-6208-1
SDG: 23 E - 04616

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Definitions/Glossary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Definitions/Glossary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: JRU DI 1A CTB

Job ID: 890-6208-1

Job ID: 890-6208-1 Eurofins Carlsbad

Job Narrative
890-6208-1

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 2/16/2024 4:36 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.0°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BES 24 - 01 (890-6208-1), BES 24 -02 (890-6208-2), BES 24 -03 (890-6208-3), BES 24 -04 (890-6208-4), BES 24 -05 (890-6208-5), BES 24 -06 (890-6208-6), BES 24 -07 (890-6208-7), BES 24 -08 (890-6208-8), BES 24 -09 (890-6208-9), BES 24 -10 (890-6208-10), BES 24 -11 (890-6208-11), BES 24 -12 (890-6208-12), BES 24 -13 (890-6208-13), BES 24 -14 (890-6208-14), BES 24 -15 (890-6208-15), BES 24 -16 (890-6208-16), BES 24 -17 (890-6208-17), BES 24 -18 (890-6208-18), BES 24 -19 (890-6208-19), BES 24 -20 (890-6208-20), BES 24 -21 (890-6208-21), BES 24 -22 (890-6208-22), BES 24 -23 (890-6208-23), BES 24 -24 (890-6208-24), BES 24 -25 (890-6208-25), BES 24 -82 (890-6208-26), BES 24 -83 (890-6208-27) and BES 24 -84 (890-6208-28).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-73802 and analytical batch 880-73977 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (MB 880-73802/5-A) and (MB 880-73934/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-73801 and analytical batch 880-73995 recovered outside control limits for the following analytes: Ethylbenzene and m-Xylene & p-Xylene.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-73801 and analytical batch 880-73995 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-73995 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-73995/20).

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-73995 recovered under the lower control limit for Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BES 24 -03 (890-6208-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Case Narrative

Client: Vertex Job ID: 890-6208-1
Project: JRU DI 1A CTB

Job ID: 890-6208-1 (Continued) Eurofins Carlsbad

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-73653 and analytical batch 880-73706 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BES 24 -21 (890-6208-21), BES 24 -22 (890-6208-22), BES 24 -24 (890-6208-24), BES 24 -84 (890-6208-28), (880-39545-A-2-B), (880-39545-A-2-C MS) and (880-39545-A-2-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-73653 and analytical batch 880-73706 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: The method blank for preparation batch 880-73653 and analytical batch 880-73706 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-73899 and analytical batch 880-74227 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-6208-A-2-I MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-73899 and analytical batch 880-74227 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-73899 and analytical batch 880-74227 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 01

Lab Sample ID: 890-6208-1
Matrix: Solid
Date Collected: 02/15/24 15:30
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:25	02/26/24 12:08	1
Toluene	<0.00199	U F2	0.00199		mg/Kg		02/21/24 15:25	02/26/24 12:08	1
Ethylbenzene	<0.00199	U F2 *- F1	0.00199		mg/Kg		02/21/24 15:25	02/26/24 12:08	1
m-Xylene & p-Xylene	<0.00398	U F2 *- F1 *1	0.00398		mg/Kg		02/21/24 15:25	02/26/24 12:08	1
o-Xylene	<0.00199	U F2	0.00199		mg/Kg		02/21/24 15:25	02/26/24 12:08	1
Xylenes, Total	<0.00398	U F2 *- F1 *1	0.00398		mg/Kg		02/21/24 15:25	02/26/24 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*02/21/24 15:25*	*02/26/24 12:08*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*02/21/24 15:25*	*02/26/24 12:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/26/24 12:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			02/21/24 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		02/20/24 12:53	02/21/24 11:36	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		02/20/24 12:53	02/21/24 11:36	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		02/20/24 12:53	02/21/24 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*02/20/24 12:53*	*02/21/24 11:36*	*1*
o-Terphenyl	*98*		*70 - 130*	*02/20/24 12:53*	*02/21/24 11:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**269**		5.04		mg/Kg			02/21/24 08:37	1

Client Sample ID: BES 24 -02

Lab Sample ID: 890-6208-2
Matrix: Solid
Date Collected: 02/15/24 15:30
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 12:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 12:29	1
Ethylbenzene	<0.00201	U *-	0.00201		mg/Kg		02/21/24 15:25	02/26/24 12:29	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402		mg/Kg		02/21/24 15:25	02/26/24 12:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 12:29	1
Xylenes, Total	<0.00402	U *- *1	0.00402		mg/Kg		02/21/24 15:25	02/26/24 12:29	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -02

Date Collected: 02/15/24 15:30
Date Received: 02/16/24 16:36
Sample Depth: 1'

Lab Sample ID: 890-6208-2

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*02/21/24 15:25*	*02/26/24 12:29*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*02/21/24 15:25*	*02/26/24 12:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			02/26/24 12:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			02/28/24 20:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		02/20/24 16:47	02/28/24 20:43	1
Diesel Range Organics (Over C10-C28)	<49.6	U F1 *1	49.6	mg/Kg		02/20/24 16:47	02/28/24 20:43	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		02/20/24 16:47	02/28/24 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*02/20/24 16:47*	*02/28/24 20:43*	*1*
o-Terphenyl	*109*		*70 - 130*	*02/20/24 16:47*	*02/28/24 20:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**201**		5.00	mg/Kg			02/21/24 08:51	1

Client Sample ID: BES 24 -03

Date Collected: 02/15/24 15:25
Date Received: 02/16/24 16:36
Sample Depth: 1'

Lab Sample ID: 890-6208-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:25	02/26/24 12:50	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:25	02/26/24 12:50	1
Ethylbenzene	<0.00202	U *-	0.00202	mg/Kg		02/21/24 15:25	02/26/24 12:50	1
m-Xylene & p-Xylene	<0.00403	U *- *1	0.00403	mg/Kg		02/21/24 15:25	02/26/24 12:50	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:25	02/26/24 12:50	1
Xylenes, Total	<0.00403	U *- *1	0.00403	mg/Kg		02/21/24 15:25	02/26/24 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*02/21/24 15:25*	*02/26/24 12:50*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*02/21/24 15:25*	*02/26/24 12:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			02/26/24 12:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			02/21/24 13:45	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -03

Lab Sample ID: 890-6208-3
Matrix: Solid
Date Collected: 02/15/24 15:25
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/20/24 12:53	02/21/24 13:45	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		02/20/24 12:53	02/21/24 13:45	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/20/24 12:53	02/21/24 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*44*	*S1-*	*70 - 130*	*02/20/24 12:53*	*02/21/24 13:45*	*1*
o-Terphenyl	*42*	*S1-*	*70 - 130*	*02/20/24 12:53*	*02/21/24 13:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**164**		5.01		mg/Kg			02/21/24 08:55	1

Client Sample ID: BES 24 -04

Lab Sample ID: 890-6208-4
Matrix: Solid
Date Collected: 02/15/24 15:25
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:25	02/26/24 13:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:25	02/26/24 13:11	1
Ethylbenzene	<0.00199	U *-	0.00199		mg/Kg		02/21/24 15:25	02/26/24 13:11	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398		mg/Kg		02/21/24 15:25	02/26/24 13:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:25	02/26/24 13:11	1
Xylenes, Total	<0.00398	U *- *1	0.00398		mg/Kg		02/21/24 15:25	02/26/24 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*02/21/24 15:25*	*02/26/24 13:11*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*02/21/24 15:25*	*02/26/24 13:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/26/24 13:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/21/24 14:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 14:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 14:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*02/20/24 12:53*	*02/21/24 14:18*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/20/24 12:53*	*02/21/24 14:18*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -04

Lab Sample ID: 890-6208-4
Matrix: Solid
Date Collected: 02/15/24 15:25
Date Received: 02/16/24 16:36
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	189		5.02		mg/Kg			02/21/24 09:00	1

Client Sample ID: BES 24 -05

Lab Sample ID: 890-6208-5
Matrix: Solid
Date Collected: 02/15/24 15:20
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 13:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 13:32	1
Ethylbenzene	<0.00200	U *-	0.00200		mg/Kg		02/21/24 15:25	02/26/24 13:32	1
m-Xylene & p-Xylene	<0.00399	U *- *1	0.00399		mg/Kg		02/21/24 15:25	02/26/24 13:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 13:32	1
Xylenes, Total	<0.00399	U *- *1	0.00399		mg/Kg		02/21/24 15:25	02/26/24 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*02/21/24 15:25*	*02/26/24 13:32*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*02/21/24 15:25*	*02/26/24 13:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/26/24 13:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			02/21/24 14:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		02/20/24 12:53	02/21/24 14:50	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/20/24 12:53	02/21/24 14:50	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/20/24 12:53	02/21/24 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*02/20/24 12:53*	*02/21/24 14:50*	*1*
o-Terphenyl	*76*		*70 - 130*	*02/20/24 12:53*	*02/21/24 14:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	173		4.97		mg/Kg			02/21/24 09:05	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -06

Lab Sample ID: 890-6208-6
Matrix: Solid
Date Collected: 02/15/24 15:20
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:25	02/26/24 13:53	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:25	02/26/24 13:53	1
Ethylbenzene	<0.00198	U *-	0.00198		mg/Kg		02/21/24 15:25	02/26/24 13:53	1
m-Xylene & p-Xylene	<0.00396	U *- *1	0.00396		mg/Kg		02/21/24 15:25	02/26/24 13:53	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:25	02/26/24 13:53	1
Xylenes, Total	<0.00396	U *- *1	0.00396		mg/Kg		02/21/24 15:25	02/26/24 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*02/21/24 15:25*	*02/26/24 13:53*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*02/21/24 15:25*	*02/26/24 13:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/26/24 13:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			02/21/24 15:27	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		02/20/24 12:53	02/21/24 15:27	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		02/20/24 12:53	02/21/24 15:27	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		02/20/24 12:53	02/21/24 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*02/20/24 12:53*	*02/21/24 15:27*	*1*
o-Terphenyl	*78*		*70 - 130*	*02/20/24 12:53*	*02/21/24 15:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**171**		4.96		mg/Kg			02/21/24 09:18	1

Client Sample ID: BES 24 -07

Lab Sample ID: 890-6208-7
Matrix: Solid
Date Collected: 02/15/24 15:15
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 14:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 14:14	1
Ethylbenzene	<0.00201	U *-	0.00201		mg/Kg		02/21/24 15:25	02/26/24 14:14	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402		mg/Kg		02/21/24 15:25	02/26/24 14:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 14:14	1
Xylenes, Total	<0.00402	U *- *1	0.00402		mg/Kg		02/21/24 15:25	02/26/24 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*02/21/24 15:25*	*02/26/24 14:14*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -07

Lab Sample ID: 890-6208-7
Matrix: Solid
Date Collected: 02/15/24 15:15
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*02/21/24 15:25*	*02/26/24 14:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			02/26/24 14:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			02/21/24 16:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		02/20/24 12:53	02/21/24 16:05	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		02/20/24 12:53	02/21/24 16:05	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		02/20/24 12:53	02/21/24 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*02/20/24 12:53*	*02/21/24 16:05*	*1*
o-Terphenyl	*76*		*70 - 130*	*02/20/24 12:53*	*02/21/24 16:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**186**		5.03	mg/Kg			02/21/24 09:23	1

Client Sample ID: BES 24 -08

Lab Sample ID: 890-6208-8
Matrix: Solid
Date Collected: 02/15/24 15:15
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:25	02/26/24 14:35	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:25	02/26/24 14:35	1
Ethylbenzene	<0.00202	U *-	0.00202	mg/Kg		02/21/24 15:25	02/26/24 14:35	1
m-Xylene & p-Xylene	<0.00404	U *- *1	0.00404	mg/Kg		02/21/24 15:25	02/26/24 14:35	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:25	02/26/24 14:35	1
Xylenes, Total	<0.00404	U *- *1	0.00404	mg/Kg		02/21/24 15:25	02/26/24 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*02/21/24 15:25*	*02/26/24 14:35*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*02/21/24 15:25*	*02/26/24 14:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			02/26/24 14:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			02/21/24 16:44	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -08

Lab Sample ID: 890-6208-8
Matrix: Solid
Date Collected: 02/15/24 15:15
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		02/20/24 12:53	02/21/24 16:44	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		02/20/24 12:53	02/21/24 16:44	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		02/20/24 12:53	02/21/24 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*02/20/24 12:53*	*02/21/24 16:44*	*1*
o-Terphenyl	*78*		*70 - 130*	*02/20/24 12:53*	*02/21/24 16:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**218**		4.98		mg/Kg			02/21/24 09:28	1

Client Sample ID: BES 24 -09

Lab Sample ID: 890-6208-9
Matrix: Solid
Date Collected: 02/15/24 15:10
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 14:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 14:56	1
Ethylbenzene	<0.00200	U *-	0.00200		mg/Kg		02/21/24 15:25	02/26/24 14:56	1
m-Xylene & p-Xylene	<0.00399	U *- *1	0.00399		mg/Kg		02/21/24 15:25	02/26/24 14:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 14:56	1
Xylenes, Total	<0.00399	U *- *1	0.00399		mg/Kg		02/21/24 15:25	02/26/24 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*02/21/24 15:25*	*02/26/24 14:56*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*02/21/24 15:25*	*02/26/24 14:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/26/24 14:56	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			02/21/24 17:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		02/20/24 12:53	02/21/24 17:20	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		02/20/24 12:53	02/21/24 17:20	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/20/24 12:53	02/21/24 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/20/24 12:53*	*02/21/24 17:20*	*1*
o-Terphenyl	*93*		*70 - 130*	*02/20/24 12:53*	*02/21/24 17:20*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -09

Lab Sample ID: 890-6208-9
Matrix: Solid
Date Collected: 02/15/24 15:10
Date Received: 02/16/24 16:36
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	226		4.98		mg/Kg			02/21/24 09:33	1

Client Sample ID: BES 24 -10

Lab Sample ID: 890-6208-10
Matrix: Solid
Date Collected: 02/15/24 15:10
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:25	02/26/24 15:17	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:25	02/26/24 15:17	1
Ethylbenzene	<0.00198	U *-	0.00198		mg/Kg		02/21/24 15:25	02/26/24 15:17	1
m-Xylene & p-Xylene	<0.00396	U *- *1	0.00396		mg/Kg		02/21/24 15:25	02/26/24 15:17	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:25	02/26/24 15:17	1
Xylenes, Total	<0.00396	U *- *1	0.00396		mg/Kg		02/21/24 15:25	02/26/24 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*02/21/24 15:25*	*02/26/24 15:17*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*02/21/24 15:25*	*02/26/24 15:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/26/24 15:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/21/24 17:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 17:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 17:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*02/20/24 12:53*	*02/21/24 17:53*	*1*
o-Terphenyl	*100*		*70 - 130*	*02/20/24 12:53*	*02/21/24 17:53*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	352		5.00		mg/Kg			02/21/24 09:37	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -11

Lab Sample ID: 890-6208-11
Matrix: Solid
Date Collected: 02/15/24 15:05
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 17:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 17:42	1
Ethylbenzene	<0.00200	U *-	0.00200		mg/Kg		02/21/24 15:25	02/26/24 17:42	1
m-Xylene & p-Xylene	<0.00400	U *- *1	0.00400		mg/Kg		02/21/24 15:25	02/26/24 17:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 17:42	1
Xylenes, Total	<0.00400	U *- *1	0.00400		mg/Kg		02/21/24 15:25	02/26/24 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*02/21/24 15:25*	*02/26/24 17:42*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*02/21/24 15:25*	*02/26/24 17:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			02/26/24 17:42	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			02/21/24 18:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		02/20/24 12:53	02/21/24 18:54	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/20/24 12:53	02/21/24 18:54	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/20/24 12:53	02/21/24 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*02/20/24 12:53*	*02/21/24 18:54*	*1*
o-Terphenyl	*85*		*70 - 130*	*02/20/24 12:53*	*02/21/24 18:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**281**		4.97		mg/Kg			02/21/24 09:42	1

Client Sample ID: BES 24 -12

Lab Sample ID: 890-6208-12
Matrix: Solid
Date Collected: 02/15/24 15:05
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:25	02/26/24 18:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:25	02/26/24 18:03	1
Ethylbenzene	<0.00199	U *-	0.00199		mg/Kg		02/21/24 15:25	02/26/24 18:03	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398		mg/Kg		02/21/24 15:25	02/26/24 18:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:25	02/26/24 18:03	1
Xylenes, Total	<0.00398	U *- *1	0.00398		mg/Kg		02/21/24 15:25	02/26/24 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*02/21/24 15:25*	*02/26/24 18:03*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -12

Lab Sample ID: 890-6208-12
Matrix: Solid
Date Collected: 02/15/24 15:05
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*02/21/24 15:25*	*02/26/24 18:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/26/24 18:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			02/21/24 19:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		02/20/24 12:53	02/21/24 19:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		02/20/24 12:53	02/21/24 19:23	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		02/20/24 12:53	02/21/24 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*02/20/24 12:53*	*02/21/24 19:23*	*1*
o-Terphenyl	*87*		*70 - 130*	*02/20/24 12:53*	*02/21/24 19:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**412**		4.95	mg/Kg			02/21/24 09:56	1

Client Sample ID: BES 24 -13

Lab Sample ID: 890-6208-13
Matrix: Solid
Date Collected: 02/15/24 15:00
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		02/21/24 15:25	02/26/24 18:24	1
Toluene	<0.00201	U	0.00201	mg/Kg		02/21/24 15:25	02/26/24 18:24	1
Ethylbenzene	<0.00201	U *-	0.00201	mg/Kg		02/21/24 15:25	02/26/24 18:24	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402	mg/Kg		02/21/24 15:25	02/26/24 18:24	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		02/21/24 15:25	02/26/24 18:24	1
Xylenes, Total	<0.00402	U *- *1	0.00402	mg/Kg		02/21/24 15:25	02/26/24 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*02/21/24 15:25*	*02/26/24 18:24*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*02/21/24 15:25*	*02/26/24 18:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			02/26/24 18:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			02/21/24 19:52	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -13

Lab Sample ID: 890-6208-13
Matrix: Solid
Date Collected: 02/15/24 15:00
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		02/20/24 12:53	02/21/24 19:52	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		02/20/24 12:53	02/21/24 19:52	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		02/20/24 12:53	02/21/24 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*02/20/24 12:53*	*02/21/24 19:52*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/20/24 12:53*	*02/21/24 19:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**248**		5.03		mg/Kg			02/21/24 10:00	1

Client Sample ID: BES 24 -14

Lab Sample ID: 890-6208-14
Matrix: Solid
Date Collected: 02/15/24 15:00
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/21/24 15:25	02/26/24 18:45	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/21/24 15:25	02/26/24 18:45	1
Ethylbenzene	<0.00202	U *-	0.00202		mg/Kg		02/21/24 15:25	02/26/24 18:45	1
m-Xylene & p-Xylene	<0.00403	U *- *1	0.00403		mg/Kg		02/21/24 15:25	02/26/24 18:45	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/21/24 15:25	02/26/24 18:45	1
Xylenes, Total	<0.00403	U *- *1	0.00403		mg/Kg		02/21/24 15:25	02/26/24 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*02/21/24 15:25*	*02/26/24 18:45*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*02/21/24 15:25*	*02/26/24 18:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			02/26/24 18:45	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			02/21/24 20:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		02/20/24 12:53	02/21/24 20:22	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		02/20/24 12:53	02/21/24 20:22	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/20/24 12:53	02/21/24 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*02/20/24 12:53*	*02/21/24 20:22*	*1*
o-Terphenyl	*81*		*70 - 130*	*02/20/24 12:53*	*02/21/24 20:22*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -14

Lab Sample ID: 890-6208-14
Matrix: Solid
Date Collected: 02/15/24 15:00
Date Received: 02/16/24 16:36
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	345		4.99		mg/Kg			02/21/24 10:14	1

Client Sample ID: BES 24 -15

Lab Sample ID: 890-6208-15
Matrix: Solid
Date Collected: 02/15/24 14:55
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 19:06	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 19:06	1
Ethylbenzene	<0.00201	U *-	0.00201		mg/Kg		02/21/24 15:25	02/26/24 19:06	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402		mg/Kg		02/21/24 15:25	02/26/24 19:06	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 19:06	1
Xylenes, Total	<0.00402	U *- *1	0.00402		mg/Kg		02/21/24 15:25	02/26/24 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*02/21/24 15:25*	*02/26/24 19:06*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*02/21/24 15:25*	*02/26/24 19:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/26/24 19:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			02/21/24 20:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		02/20/24 12:53	02/21/24 20:50	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		02/20/24 12:53	02/21/24 20:50	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		02/20/24 12:53	02/21/24 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*02/20/24 12:53*	*02/21/24 20:50*	*1*
o-Terphenyl	*86*		*70 - 130*	*02/20/24 12:53*	*02/21/24 20:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	287		4.98		mg/Kg			02/21/24 10:19	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -16

Lab Sample ID: 890-6208-16
Matrix: Solid
Date Collected: 02/15/24 14:55
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 19:27	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 19:27	1
Ethylbenzene	<0.00201	U *-	0.00201		mg/Kg		02/21/24 15:25	02/26/24 19:27	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402		mg/Kg		02/21/24 15:25	02/26/24 19:27	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:25	02/26/24 19:27	1
Xylenes, Total	<0.00402	U *- *1	0.00402		mg/Kg		02/21/24 15:25	02/26/24 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*02/21/24 15:25*	*02/26/24 19:27*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*02/21/24 15:25*	*02/26/24 19:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/26/24 19:27	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			02/21/24 21:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		02/20/24 12:53	02/21/24 21:18	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		02/20/24 12:53	02/21/24 21:18	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		02/20/24 12:53	02/21/24 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*02/20/24 12:53*	*02/21/24 21:18*	*1*
o-Terphenyl	*82*		*70 - 130*	*02/20/24 12:53*	*02/21/24 21:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**567**		5.00		mg/Kg			02/21/24 10:23	1

Client Sample ID: BES 24 -17

Lab Sample ID: 890-6208-17
Matrix: Solid
Date Collected: 02/15/24 14:50
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:25	02/26/24 19:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:25	02/26/24 19:48	1
Ethylbenzene	<0.00199	U *-	0.00199		mg/Kg		02/21/24 15:25	02/26/24 19:48	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398		mg/Kg		02/21/24 15:25	02/26/24 19:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:25	02/26/24 19:48	1
Xylenes, Total	<0.00398	U *- *1	0.00398		mg/Kg		02/21/24 15:25	02/26/24 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*02/21/24 15:25*	*02/26/24 19:48*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -17

Lab Sample ID: 890-6208-17
Matrix: Solid
Date Collected: 02/15/24 14:50
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*02/21/24 15:25*	*02/26/24 19:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/26/24 19:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			02/21/24 21:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2	mg/Kg		02/20/24 12:53	02/21/24 21:45	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		02/20/24 12:53	02/21/24 21:45	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		02/20/24 12:53	02/21/24 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*02/20/24 12:53*	*02/21/24 21:45*	*1*
o-Terphenyl	*83*		*70 - 130*	*02/20/24 12:53*	*02/21/24 21:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54.4**		4.98	mg/Kg			02/21/24 10:28	1

Client Sample ID: BES 24 -18

Lab Sample ID: 890-6208-18
Matrix: Solid
Date Collected: 02/15/24 14:50
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/21/24 15:25	02/26/24 20:09	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/21/24 15:25	02/26/24 20:09	1
Ethylbenzene	<0.00199	U *-	0.00199	mg/Kg		02/21/24 15:25	02/26/24 20:09	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398	mg/Kg		02/21/24 15:25	02/26/24 20:09	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/21/24 15:25	02/26/24 20:09	1
Xylenes, Total	<0.00398	U *- *1	0.00398	mg/Kg		02/21/24 15:25	02/26/24 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*02/21/24 15:25*	*02/26/24 20:09*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*02/21/24 15:25*	*02/26/24 20:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/26/24 20:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			02/21/24 22:13	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -18

Lab Sample ID: 890-6208-18
Matrix: Solid
Date Collected: 02/15/24 14:50
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/20/24 12:53	02/21/24 22:13	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		02/20/24 12:53	02/21/24 22:13	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/20/24 12:53	02/21/24 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*02/20/24 12:53*	*02/21/24 22:13*	*1*
o-Terphenyl	*82*		*70 - 130*	*02/20/24 12:53*	*02/21/24 22:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**281**		5.04		mg/Kg			02/21/24 10:33	1

Client Sample ID: BES 24 -19

Lab Sample ID: 890-6208-19
Matrix: Solid
Date Collected: 02/15/24 14:45
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:25	02/26/24 20:30	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:25	02/26/24 20:30	1
Ethylbenzene	<0.00198	U *-	0.00198		mg/Kg		02/21/24 15:25	02/26/24 20:30	1
m-Xylene & p-Xylene	<0.00396	U *- *1	0.00396		mg/Kg		02/21/24 15:25	02/26/24 20:30	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:25	02/26/24 20:30	1
Xylenes, Total	<0.00396	U *- *1	0.00396		mg/Kg		02/21/24 15:25	02/26/24 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*02/21/24 15:25*	*02/26/24 20:30*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*02/21/24 15:25*	*02/26/24 20:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/26/24 20:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/21/24 22:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 22:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 22:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 22:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*02/20/24 12:53*	*02/21/24 22:40*	*1*
o-Terphenyl	*87*		*70 - 130*	*02/20/24 12:53*	*02/21/24 22:40*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -19

Lab Sample ID: 890-6208-19
Matrix: Solid
Date Collected: 02/15/24 14:45
Date Received: 02/16/24 16:36
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	379		5.02		mg/Kg			02/21/24 10:37	1

Client Sample ID: BES 24 -20

Lab Sample ID: 890-6208-20
Matrix: Solid
Date Collected: 02/15/24 14:45
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 20:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 20:51	1
Ethylbenzene	<0.00200	U *-	0.00200		mg/Kg		02/21/24 15:25	02/26/24 20:51	1
m-Xylene & p-Xylene	<0.00399	U *- *1	0.00399		mg/Kg		02/21/24 15:25	02/26/24 20:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 20:51	1
Xylenes, Total	<0.00399	U *- *1	0.00399		mg/Kg		02/21/24 15:25	02/26/24 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*02/21/24 15:25*	*02/26/24 20:51*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*02/21/24 15:25*	*02/26/24 20:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/26/24 20:51	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.0500	U	0.0500		mg/Kg			02/21/24 23:07	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.0500	U	0.0500		mg/Kg		02/20/24 12:53	02/21/24 23:07	1
Diesel Range Organics (Over C10-C28)	<0.0500	U	0.0500		mg/Kg		02/20/24 12:53	02/21/24 23:07	1
OII Range Organics (Over C28-C36)	<0.0500	U	0.0500		mg/Kg		02/20/24 12:53	02/21/24 23:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*02/20/24 12:53*	*02/21/24 23:07*	*1*
o-Terphenyl	*88*		*70 - 130*	*02/20/24 12:53*	*02/21/24 23:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	319		5.02		mg/Kg			02/21/24 10:42	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -21

Lab Sample ID: 890-6208-21
Matrix: Solid
Date Collected: 02/15/24 14:40
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		02/21/24 15:27	02/25/24 00:43	1
Toluene	<0.00199	U F2 F1	0.00199		mg/Kg		02/21/24 15:27	02/25/24 00:43	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		02/21/24 15:27	02/25/24 00:43	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		02/21/24 15:27	02/25/24 00:43	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		02/21/24 15:27	02/25/24 00:43	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		02/21/24 15:27	02/25/24 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*02/21/24 15:27*	*02/25/24 00:43*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*02/21/24 15:27*	*02/25/24 00:43*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/25/24 00:43	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**52.0**		49.7		mg/Kg			02/22/24 03:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/20/24 11:29	02/22/24 03:18	1
Diesel Range Organics (Over C10-C28)	**52.0**		49.7		mg/Kg		02/20/24 11:29	02/22/24 03:18	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/20/24 11:29	02/22/24 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*68*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/22/24 03:18*	*1*
o-Terphenyl	*73*		*70 - 130*	*02/20/24 11:29*	*02/22/24 03:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**79.9**		5.01		mg/Kg			02/21/24 19:26	1

Client Sample ID: BES 24 -22

Lab Sample ID: 890-6208-22
Matrix: Solid
Date Collected: 02/15/24 14:40
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:27	02/25/24 01:03	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:27	02/25/24 01:03	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:27	02/25/24 01:03	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/21/24 15:27	02/25/24 01:03	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:27	02/25/24 01:03	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/21/24 15:27	02/25/24 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*02/21/24 15:27*	*02/25/24 01:03*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -22

Lab Sample ID: 890-6208-22
Matrix: Solid
Date Collected: 02/15/24 14:40
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*02/21/24 15:27*	*02/25/24 01:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			02/25/24 01:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/22/24 03:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/20/24 11:29	02/22/24 03:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/20/24 11:29	02/22/24 03:42	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/20/24 11:29	02/22/24 03:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*47*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/22/24 03:42*	*1*
o-Terphenyl	*41*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/22/24 03:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**225**		5.03	mg/Kg			02/21/24 19:39	1

Client Sample ID: BES 24 -23

Lab Sample ID: 890-6208-23
Matrix: Solid
Date Collected: 02/15/24 14:35
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:27	02/25/24 01:24	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:27	02/25/24 01:24	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:27	02/25/24 01:24	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		02/21/24 15:27	02/25/24 01:24	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:27	02/25/24 01:24	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		02/21/24 15:27	02/25/24 01:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*02/21/24 15:27*	*02/25/24 01:24*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/21/24 15:27*	*02/25/24 01:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			02/25/24 01:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			02/22/24 04:04	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -23

Lab Sample ID: 890-6208-23
Matrix: Solid
Date Collected: 02/15/24 14:35
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		02/20/24 11:29	02/22/24 04:04	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		02/20/24 11:29	02/22/24 04:04	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		02/20/24 11:29	02/22/24 04:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*02/20/24 11:29*	*02/22/24 04:04*	*1*
o-Terphenyl	*73*		*70 - 130*	*02/20/24 11:29*	*02/22/24 04:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**234**		4.98		mg/Kg			02/21/24 19:44	1

Client Sample ID: BES 24 -24

Lab Sample ID: 890-6208-24
Matrix: Solid
Date Collected: 02/15/24 14:35
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:27	02/25/24 01:45	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:27	02/25/24 01:45	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:27	02/25/24 01:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/21/24 15:27	02/25/24 01:45	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/21/24 15:27	02/25/24 01:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/21/24 15:27	02/25/24 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*02/21/24 15:27*	*02/25/24 01:45*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*02/21/24 15:27*	*02/25/24 01:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/25/24 01:45	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			02/22/24 04:27	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		02/20/24 11:29	02/22/24 04:27	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		02/20/24 11:29	02/22/24 04:27	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		02/20/24 11:29	02/22/24 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*57*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/22/24 04:27*	*1*
o-Terphenyl	*57*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/22/24 04:27*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -24

Lab Sample ID: 890-6208-24
Matrix: Solid
Date Collected: 02/15/24 14:35
Date Received: 02/16/24 16:36
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	283		5.02		mg/Kg			02/21/24 19:49	1

Client Sample ID: BES 24 -25

Lab Sample ID: 890-6208-25
Matrix: Solid
Date Collected: 02/15/24 14:30
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:27	02/25/24 02:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:27	02/25/24 02:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:27	02/25/24 02:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/21/24 15:27	02/25/24 02:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:27	02/25/24 02:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/21/24 15:27	02/25/24 02:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*02/21/24 15:27*	*02/25/24 02:06*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*02/21/24 15:27*	*02/25/24 02:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/25/24 02:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			02/22/24 04:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		02/20/24 11:29	02/22/24 04:50	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		02/20/24 11:29	02/22/24 04:50	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		02/20/24 11:29	02/22/24 04:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*02/20/24 11:29*	*02/22/24 04:50*	*1*
o-Terphenyl	*102*		*70 - 130*	*02/20/24 11:29*	*02/22/24 04:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	172		4.96		mg/Kg			02/21/24 19:53	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -82

Lab Sample ID: 890-6208-26
Matrix: Solid
Date Collected: 02/15/24 14:30
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:27	02/25/24 02:26	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:27	02/25/24 02:26	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:27	02/25/24 02:26	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/21/24 15:27	02/25/24 02:26	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/21/24 15:27	02/25/24 02:26	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/21/24 15:27	02/25/24 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*02/21/24 15:27*	*02/25/24 02:26*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/21/24 15:27*	*02/25/24 02:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/25/24 02:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			02/22/24 05:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		02/20/24 11:29	02/22/24 05:13	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		02/20/24 11:29	02/22/24 05:13	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/20/24 11:29	02/22/24 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/20/24 11:29*	*02/22/24 05:13*	*1*
o-Terphenyl	*97*		*70 - 130*	*02/20/24 11:29*	*02/22/24 05:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**79.8**		5.00		mg/Kg			02/21/24 20:07	1

Client Sample ID: BES 24 -83

Lab Sample ID: 890-6208-27
Matrix: Solid
Date Collected: 02/15/24 14:25
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:27	02/25/24 02:47	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:27	02/25/24 02:47	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:27	02/25/24 02:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/21/24 15:27	02/25/24 02:47	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/21/24 15:27	02/25/24 02:47	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/21/24 15:27	02/25/24 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*02/21/24 15:27*	*02/25/24 02:47*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -83

Lab Sample ID: 890-6208-27
Matrix: Solid
Date Collected: 02/15/24 14:25
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*02/21/24 15:27*	*02/25/24 02:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			02/25/24 02:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			02/22/24 05:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		02/20/24 11:29	02/22/24 05:36	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		02/20/24 11:29	02/22/24 05:36	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		02/20/24 11:29	02/22/24 05:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*02/20/24 11:29*	*02/22/24 05:36*	*1*
o-Terphenyl	*103*		*70 - 130*	*02/20/24 11:29*	*02/22/24 05:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**201**		4.99	mg/Kg			02/21/24 20:12	1

Client Sample ID: BES 24 -84

Lab Sample ID: 890-6208-28
Matrix: Solid
Date Collected: 02/15/24 14:25
Date Received: 02/16/24 16:36
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:27	02/25/24 03:07	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:27	02/25/24 03:07	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:27	02/25/24 03:07	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		02/21/24 15:27	02/25/24 03:07	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/21/24 15:27	02/25/24 03:07	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		02/21/24 15:27	02/25/24 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*02/21/24 15:27*	*02/25/24 03:07*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*02/21/24 15:27*	*02/25/24 03:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			02/25/24 03:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			02/22/24 05:59	1

Eurofins Carlsbad

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -84

Date Collected: 02/15/24 14:25
Date Received: 02/16/24 16:36
Sample Depth: 1'

Lab Sample ID: 890-6208-28

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/20/24 11:29	02/22/24 05:59	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		02/20/24 11:29	02/22/24 05:59	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/20/24 11:29	02/22/24 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*64*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/22/24 05:59*	*1*
o-Terphenyl	*63*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/22/24 05:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**339**		5.01		mg/Kg			02/21/24 20:16	1

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-6208-1	BES 24 - 01	88	103										
890-6208-1 MS	BES 24 - 01	96	102										
890-6208-1 MSD	BES 24 - 01	102	101										
890-6208-2	BES 24 -02	94	110										
890-6208-3	BES 24 -03	88	109										
890-6208-4	BES 24 -04	99	112										
890-6208-5	BES 24 -05	96	113										
890-6208-6	BES 24 -06	87	110										
890-6208-7	BES 24 -07	93	112										
890-6208-8	BES 24 -08	88	113										
890-6208-9	BES 24 -09	91	113										
890-6208-10	BES 24 -10	93	110										
890-6208-11	BES 24 -11	88	110										
890-6208-12	BES 24 -12	98	113										
890-6208-13	BES 24 -13	94	114										
890-6208-14	BES 24 -14	90	114										
890-6208-15	BES 24 -15	97	114										
890-6208-16	BES 24 -16	94	112										
890-6208-17	BES 24 -17	92	110										
890-6208-18	BES 24 -18	97	113										
890-6208-19	BES 24 -19	95	111										
890-6208-20	BES 24 -20	98	113										
890-6208-21	BES 24 -21	87	95										
890-6208-21 MS	BES 24 -21	100	109										
890-6208-21 MSD	BES 24 -21	98	111										
890-6208-22	BES 24 -22	90	91										
890-6208-23	BES 24 -23	95	96										
890-6208-24	BES 24 -24	85	78										
890-6208-25	BES 24 -25	81	91										
890-6208-26	BES 24 -82	96	94										
890-6208-27	BES 24 -83	94	90										
890-6208-28	BES 24 -84	87	95										
LCS 880-73801/1-A	Lab Control Sample	94	97										
LCS 880-73802/1-A	Lab Control Sample	108	112										
LCSD 880-73801/2-A	Lab Control Sample Dup	95	101										
LCSD 880-73802/2-A	Lab Control Sample Dup	110	120										
MB 880-73801/5-A	Method Blank	81	95										
MB 880-73802/5-A	Method Blank	68 S1-	100										
MB 880-73934/5-A	Method Blank	67 S1-	106										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-39545-A-2-C MS	Matrix Spike	74	68 S1-										
880-39545-A-2-D MSD	Matrix Spike Duplicate	74	68 S1-										
890-6208-1	BES 24 - 01	95	98										
890-6208-1 MS	BES 24 - 01	100	97										
890-6208-1 MSD	BES 24 - 01	92	86										
890-6208-2	BES 24 -02	129	109										
890-6208-2 MS	BES 24 -02	157 S1+	117										
890-6208-2 MSD	BES 24 -02	128	100										
890-6208-3	BES 24 -03	44 S1-	42 S1-										
890-6208-4	BES 24 -04	88	91										
890-6208-5	BES 24 -05	73	76										
890-6208-6	BES 24 -06	74	78										
890-6208-7	BES 24 -07	72	76										
890-6208-8	BES 24 -08	74	78										
890-6208-9	BES 24 -09	91	93										
890-6208-10	BES 24 -10	96	100										
890-6208-11	BES 24 -11	82	85										
890-6208-12	BES 24 -12	84	87										
890-6208-13	BES 24 -13	89	92										
890-6208-14	BES 24 -14	77	81										
890-6208-15	BES 24 -15	82	86										
890-6208-16	BES 24 -16	78	82										
890-6208-17	BES 24 -17	76	83										
890-6208-18	BES 24 -18	79	82										
890-6208-19	BES 24 -19	83	87										
890-6208-20	BES 24 -20	82	88										
890-6208-21	BES 24 -21	68 S1-	73										
890-6208-22	BES 24 -22	47 S1-	41 S1-										
890-6208-23	BES 24 -23	73	73										
890-6208-24	BES 24 -24	57 S1-	57 S1-										
890-6208-25	BES 24 -25	97	102										
890-6208-26	BES 24 -82	91	97										
890-6208-27	BES 24 -83	96	103										
890-6208-28	BES 24 -84	64 S1-	63 S1-										
LCS 880-73653/2-A	Lab Control Sample	88	88										
LCS 880-73682/2-A	Lab Control Sample	94	111										
LCS 880-73899/2-A	Lab Control Sample	128	127										
LCSD 880-73653/3-A	Lab Control Sample Dup	88	87										
LCSD 880-73682/3-A	Lab Control Sample Dup	83	96										
LCSD 880-73899/3-A	Lab Control Sample Dup	90	88										
MB 880-73653/1-A	Method Blank	148 S1+	159 S1+										
MB 880-73682/1-A - RA2	Method Blank	103	117										
MB 880-73899/1-A	Method Blank	199 S1+	178 S1+										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73801/5-A
Matrix: Solid
Analysis Batch: 73995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73801

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 11:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 11:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 11:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/21/24 15:25	02/26/24 11:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/21/24 15:25	02/26/24 11:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/21/24 15:25	02/26/24 11:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*02/21/24 15:25*	*02/26/24 11:46*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*02/21/24 15:25*	*02/26/24 11:46*	*1*

Lab Sample ID: LCS 880-73801/1-A
Matrix: Solid
Analysis Batch: 73995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73801

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1015		mg/Kg		102	70 - 130		
Toluene			0.100	0.09470		mg/Kg		95	70 - 130		
Ethylbenzene			0.100	0.09625		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene			0.200	0.1966		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.09813		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-73801/2-A
Matrix: Solid
Analysis Batch: 73995

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73801

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08122		mg/Kg		81	70 - 130	22	35
Toluene			0.100	0.07001		mg/Kg		70	70 - 130	30	35
Ethylbenzene			0.100	0.06735	*-	mg/Kg		67	70 - 130	35	35
m-Xylene & p-Xylene			0.200	0.1332	*- *1	mg/Kg		67	70 - 130	39	35
o-Xylene			0.100	0.07061		mg/Kg		71	70 - 130	33	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-6208-1 MS
Matrix: Solid
Analysis Batch: 73995

Client Sample ID: BES 24 - 01
Prep Type: Total/NA
Prep Batch: 73801

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.101	0.08088		mg/Kg		80	70 - 130		
Toluene	<0.00199	U F2	0.101	0.07010		mg/Kg		70	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

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

Lab Sample ID: 890-6208-1 MS
Matrix: Solid
Analysis Batch: 73995

Client Sample ID: BES 24 - 01
Prep Type: Total/NA
Prep Batch: 73801

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U F2 *- F1	0.101	0.06805	F1	mg/Kg		68	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 *- F1 *1	0.202	0.1346	F1	mg/Kg		67	70 - 130
o-Xylene	<0.00199	U F2	0.101	0.07150		mg/Kg		71	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-6208-1 MSD
Matrix: Solid
Analysis Batch: 73995

Client Sample ID: BES 24 - 01
Prep Type: Total/NA
Prep Batch: 73801

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1137		mg/Kg		114	70 - 130	34	35
Toluene	<0.00199	U F2	0.100	0.1050	F2	mg/Kg		105	70 - 130	40	35
Ethylbenzene	<0.00199	U F2 *- F1	0.100	0.1074	F2	mg/Kg		107	70 - 130	45	35
m-Xylene & p-Xylene	<0.00398	U F2 *- F1 *1	0.200	0.2204	F2	mg/Kg		110	70 - 130	48	35
o-Xylene	<0.00199	U F2	0.100	0.1102	F2	mg/Kg		110	70 - 130	43	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-73802/5-A
Matrix: Solid
Analysis Batch: 73977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73802

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/21/24 15:27	02/25/24 00:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/21/24 15:27	02/25/24 00:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/21/24 15:27	02/25/24 00:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/21/24 15:27	02/25/24 00:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/21/24 15:27	02/25/24 00:21	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/21/24 15:27	02/25/24 00:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*02/21/24 15:27*	*02/25/24 00:21*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/21/24 15:27*	*02/25/24 00:21*	*1*

Lab Sample ID: LCS 880-73802/1-A
Matrix: Solid
Analysis Batch: 73977

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73802

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09199		mg/Kg		92	70 - 130
Toluene	0.100	0.07926		mg/Kg		79	70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

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

Lab Sample ID: LCS 880-73802/1-A
Matrix: Solid
Analysis Batch: 73977

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73802

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ethylbenzene			0.100	0.08616		mg/Kg		86	70 - 130		
m-Xylene & p-Xylene			0.200	0.1798		mg/Kg		90	70 - 130		
o-Xylene			0.100	0.09995		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: LCSD 880-73802/2-A
Matrix: Solid
Analysis Batch: 73977

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73802

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09733		mg/Kg		97	70 - 130	6	35
Toluene			0.100	0.09044		mg/Kg		90	70 - 130	13	35
Ethylbenzene			0.100	0.09546		mg/Kg		95	70 - 130	10	35
m-Xylene & p-Xylene			0.200	0.1997		mg/Kg		100	70 - 130	11	35
o-Xylene			0.100	0.1051		mg/Kg		105	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*

Lab Sample ID: 890-6208-21 MS
Matrix: Solid
Analysis Batch: 73977

Client Sample ID: BES 24 -21
Prep Type: Total/NA
Prep Batch: 73802

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F1	0.101	0.05346	F1	mg/Kg		53	70 - 130		
Toluene	<0.00199	U F2 F1	0.101	0.04211	F1	mg/Kg		42	70 - 130		
Ethylbenzene	<0.00199	U F1	0.101	0.05338	F1	mg/Kg		53	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F1	0.202	0.1094	F1	mg/Kg		54	70 - 130		
o-Xylene	<0.00199	U F1	0.101	0.05727	F1	mg/Kg		57	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 890-6208-21 MSD
Matrix: Solid
Analysis Batch: 73977

Client Sample ID: BES 24 -21
Prep Type: Total/NA
Prep Batch: 73802

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.06937	F1	mg/Kg		69	70 - 130	26	35
Toluene	<0.00199	U F2 F1	0.100	0.06657	F2 F1	mg/Kg		67	70 - 130	45	35
Ethylbenzene	<0.00199	U F1	0.100	0.06720	F1	mg/Kg		67	70 - 130	23	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1375	F1	mg/Kg		69	70 - 130	23	35
o-Xylene	<0.00199	U F1	0.100	0.06853	F1	mg/Kg		69	70 - 130	18	35

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: MB 880-73934/5-A
Matrix: Solid
Analysis Batch: 73977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73934

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/23/24 14:05	02/24/24 13:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/23/24 14:05	02/24/24 13:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/23/24 14:05	02/24/24 13:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/23/24 14:05	02/24/24 13:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/23/24 14:05	02/24/24 13:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/23/24 14:05	02/24/24 13:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	67	S1-	70 - 130	02/23/24 14:05	02/24/24 13:35	1
1,4-Difluorobenzene (Surr)	106		70 - 130	02/23/24 14:05	02/24/24 13:35	1

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

Lab Sample ID: MB 880-73653/1-A
Matrix: Solid
Analysis Batch: 73706

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73653

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/20/24 11:29	02/21/24 20:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/20/24 11:29	02/21/24 20:15	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/20/24 11:29	02/21/24 20:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	148	S1+	70 - 130	02/20/24 11:29	02/21/24 20:15	1
o-Terphenyl	159	S1+	70 - 130	02/20/24 11:29	02/21/24 20:15	1

Lab Sample ID: LCS 880-73653/2-A
Matrix: Solid
Analysis Batch: 73706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73653

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	944.0		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	979.2		mg/Kg		98	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	88		70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

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

Lab Sample ID: LCSD 880-73653/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 73706 — **Prep Batch: 73653**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	964.6		mg/Kg		96	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	984.1		mg/Kg		98	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*87*		*70 - 130*

Lab Sample ID: 880-39545-A-2-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 73706 — **Prep Batch: 73653**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1010	1101		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1010	665.3	F1	mg/Kg		63	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*74*		*70 - 130*
o-Terphenyl	*68*	*S1-*	*70 - 130*

Lab Sample ID: 880-39545-A-2-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 73706 — **Prep Batch: 73653**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1010	1113		mg/Kg		106	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1010	661.7	F1	mg/Kg		63	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*74*		*70 - 130*
o-Terphenyl	*68*	*S1-*	*70 - 130*

Lab Sample ID: LCS 880-73682/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 73708 — **Prep Batch: 73682**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	968.5		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)			1000	995.0		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*94*		*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

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

Lab Sample ID: LCS 880-73682/2-A
Matrix: Solid
Analysis Batch: 73708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73682

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	111		70 - 130

Lab Sample ID: LCSD 880-73682/3-A
Matrix: Solid
Analysis Batch: 73708

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73682

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	968.1		mg/Kg		97	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	928.8		mg/Kg		93	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: 890-6208-1 MS
Matrix: Solid
Analysis Batch: 73708

Client Sample ID: BES 24 - 01
Prep Type: Total/NA
Prep Batch: 73682

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	869.3		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U	1010	1008		mg/Kg		100	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 890-6208-1 MSD
Matrix: Solid
Analysis Batch: 73708

Client Sample ID: BES 24 - 01
Prep Type: Total/NA
Prep Batch: 73682

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	813.2		mg/Kg		81	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.6	U	1010	890.6		mg/Kg		88	70 - 130	12	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	86		70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

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

Lab Sample ID: MB 880-73899/1-A
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73899

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/22/24 17:59	02/28/24 19:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/22/24 17:59	02/28/24 19:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/24 17:59	02/28/24 19:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*199*	*S1+*	*70 - 130*	*02/22/24 17:59*	*02/28/24 19:35*	*1*
o-Terphenyl	*178*	*S1+*	*70 - 130*	*02/22/24 17:59*	*02/28/24 19:35*	*1*

Lab Sample ID: LCS 880-73899/2-A
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1200		mg/Kg		120	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1061		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*128*		*70 - 130*
o-Terphenyl	*127*		*70 - 130*

Lab Sample ID: LCSD 880-73899/3-A
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	15	20
Diesel Range Organics (Over C10-C28)			1000	766.8	*1	mg/Kg		77	70 - 130	32	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Lab Sample ID: 890-6208-2 MS
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: BES 24 -02
Prep Type: Total/NA
Prep Batch: 73899

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1286		mg/Kg		124	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.6	U F1 *1	1010	1781	F1	mg/Kg		174	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

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

Lab Sample ID: 890-6208-2 MS
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: BES 24 -02
Prep Type: Total/NA
Prep Batch: 73899

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*157*	*S1+*	*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: 890-6208-2 MSD
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: BES 24 -02
Prep Type: Total/NA
Prep Batch: 73899

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1088		mg/Kg		104	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1 *1	1010	1523	F1	mg/Kg		149	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*128*		*70 - 130*
o-Terphenyl	*100*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC) - RA2

Lab Sample ID: MB 880-73682/1-A
Matrix: Solid
Analysis Batch: 73708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73682

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 - RA2	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 08:41	1
Diesel Range Organics (Over C10-C28) - RA2	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 08:41	1
OII Range Organics (Over C28-C36) - RA2	<50.0	U	50.0		mg/Kg		02/20/24 12:53	02/21/24 08:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane - RA2	*103*		*70 - 130*	*02/20/24 12:53*	*02/21/24 08:41*	*1*
o-Terphenyl - RA2	*117*		*70 - 130*	*02/20/24 12:53*	*02/21/24 08:41*	*1*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-73612/1-A
Matrix: Solid
Analysis Batch: 73696

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/21/24 08:23	1

Lab Sample ID: LCS 880-73612/2-A
Matrix: Solid
Analysis Batch: 73696

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	231.3		mg/Kg		93	90 - 110		

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-73612/3-A
Matrix: Solid
Analysis Batch: 73696

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	233.0		mg/Kg		93	90 - 110	1	20

Lab Sample ID: 890-6208-1 MS
Matrix: Solid
Analysis Batch: 73696

Client Sample ID: BES 24 - 01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	269		252	501.2		mg/Kg		92	90 - 110		

Lab Sample ID: 890-6208-1 MSD
Matrix: Solid
Analysis Batch: 73696

Client Sample ID: BES 24 - 01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	269		252	502.4		mg/Kg		93	90 - 110	0	20

Lab Sample ID: 890-6208-11 MS
Matrix: Solid
Analysis Batch: 73696

Client Sample ID: BES 24 -11
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	281		249	520.7		mg/Kg		96	90 - 110		

Lab Sample ID: 890-6208-11 MSD
Matrix: Solid
Analysis Batch: 73696

Client Sample ID: BES 24 -11
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	281		249	518.7		mg/Kg		96	90 - 110	0	20

Lab Sample ID: MB 880-73713/1-A
Matrix: Solid
Analysis Batch: 73805

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/21/24 19:12	1

Lab Sample ID: LCS 880-73713/2-A
Matrix: Solid
Analysis Batch: 73805

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	229.0		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-73713/3-A
Matrix: Solid
Analysis Batch: 73805

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	230.7		mg/Kg		92	90 - 110	1	20

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-6208-21 MS
Matrix: Solid
Analysis Batch: 73805

Client Sample ID: BES 24 -21
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	79.9		251	336.3		mg/Kg		102	90 - 110		

Lab Sample ID: 890-6208-21 MSD
Matrix: Solid
Analysis Batch: 73805

Client Sample ID: BES 24 -21
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	79.9		251	337.3		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

GC VOA

Prep Batch: 73801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-1	BES 24 - 01	Total/NA	Solid	5035	
890-6208-2	BES 24 -02	Total/NA	Solid	5035	
890-6208-3	BES 24 -03	Total/NA	Solid	5035	
890-6208-4	BES 24 -04	Total/NA	Solid	5035	
890-6208-5	BES 24 -05	Total/NA	Solid	5035	
890-6208-6	BES 24 -06	Total/NA	Solid	5035	
890-6208-7	BES 24 -07	Total/NA	Solid	5035	
890-6208-8	BES 24 -08	Total/NA	Solid	5035	
890-6208-9	BES 24 -09	Total/NA	Solid	5035	
890-6208-10	BES 24 -10	Total/NA	Solid	5035	
890-6208-11	BES 24 -11	Total/NA	Solid	5035	
890-6208-12	BES 24 -12	Total/NA	Solid	5035	
890-6208-13	BES 24 -13	Total/NA	Solid	5035	
890-6208-14	BES 24 -14	Total/NA	Solid	5035	
890-6208-15	BES 24 -15	Total/NA	Solid	5035	
890-6208-16	BES 24 -16	Total/NA	Solid	5035	
890-6208-17	BES 24 -17	Total/NA	Solid	5035	
890-6208-18	BES 24 -18	Total/NA	Solid	5035	
890-6208-19	BES 24 -19	Total/NA	Solid	5035	
890-6208-20	BES 24 -20	Total/NA	Solid	5035	
MB 880-73801/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-73801/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-73801/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6208-1 MS	BES 24 - 01	Total/NA	Solid	5035	
890-6208-1 MSD	BES 24 - 01	Total/NA	Solid	5035	

Prep Batch: 73802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-21	BES 24 -21	Total/NA	Solid	5035	
890-6208-22	BES 24 -22	Total/NA	Solid	5035	
890-6208-23	BES 24 -23	Total/NA	Solid	5035	
890-6208-24	BES 24 -24	Total/NA	Solid	5035	
890-6208-25	BES 24 -25	Total/NA	Solid	5035	
890-6208-26	BES 24 -82	Total/NA	Solid	5035	
890-6208-27	BES 24 -83	Total/NA	Solid	5035	
890-6208-28	BES 24 -84	Total/NA	Solid	5035	
MB 880-73802/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-73802/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-73802/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6208-21 MS	BES 24 -21	Total/NA	Solid	5035	
890-6208-21 MSD	BES 24 -21	Total/NA	Solid	5035	

Prep Batch: 73934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-73934/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 73977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-21	BES 24 -21	Total/NA	Solid	8021B	73802
890-6208-22	BES 24 -22	Total/NA	Solid	8021B	73802
890-6208-23	BES 24 -23	Total/NA	Solid	8021B	73802

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

GC VOA (Continued)

Analysis Batch: 73977 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-24	BES 24 -24	Total/NA	Solid	8021B	73802
890-6208-25	BES 24 -25	Total/NA	Solid	8021B	73802
890-6208-26	BES 24 -82	Total/NA	Solid	8021B	73802
890-6208-27	BES 24 -83	Total/NA	Solid	8021B	73802
890-6208-28	BES 24 -84	Total/NA	Solid	8021B	73802
MB 880-73802/5-A	Method Blank	Total/NA	Solid	8021B	73802
MB 880-73934/5-A	Method Blank	Total/NA	Solid	8021B	73934
LCS 880-73802/1-A	Lab Control Sample	Total/NA	Solid	8021B	73802
LCSD 880-73802/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73802
890-6208-21 MS	BES 24 -21	Total/NA	Solid	8021B	73802
890-6208-21 MSD	BES 24 -21	Total/NA	Solid	8021B	73802

Analysis Batch: 73995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-1	BES 24 - 01	Total/NA	Solid	8021B	73801
890-6208-2	BES 24 -02	Total/NA	Solid	8021B	73801
890-6208-3	BES 24 -03	Total/NA	Solid	8021B	73801
890-6208-4	BES 24 -04	Total/NA	Solid	8021B	73801
890-6208-5	BES 24 -05	Total/NA	Solid	8021B	73801
890-6208-6	BES 24 -06	Total/NA	Solid	8021B	73801
890-6208-7	BES 24 -07	Total/NA	Solid	8021B	73801
890-6208-8	BES 24 -08	Total/NA	Solid	8021B	73801
890-6208-9	BES 24 -09	Total/NA	Solid	8021B	73801
890-6208-10	BES 24 -10	Total/NA	Solid	8021B	73801
890-6208-11	BES 24 -11	Total/NA	Solid	8021B	73801
890-6208-12	BES 24 -12	Total/NA	Solid	8021B	73801
890-6208-13	BES 24 -13	Total/NA	Solid	8021B	73801
890-6208-14	BES 24 -14	Total/NA	Solid	8021B	73801
890-6208-15	BES 24 -15	Total/NA	Solid	8021B	73801
890-6208-16	BES 24 -16	Total/NA	Solid	8021B	73801
890-6208-17	BES 24 -17	Total/NA	Solid	8021B	73801
890-6208-18	BES 24 -18	Total/NA	Solid	8021B	73801
890-6208-19	BES 24 -19	Total/NA	Solid	8021B	73801
890-6208-20	BES 24 -20	Total/NA	Solid	8021B	73801
MB 880-73801/5-A	Method Blank	Total/NA	Solid	8021B	73801
LCS 880-73801/1-A	Lab Control Sample	Total/NA	Solid	8021B	73801
LCSD 880-73801/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73801
890-6208-1 MS	BES 24 - 01	Total/NA	Solid	8021B	73801
890-6208-1 MSD	BES 24 - 01	Total/NA	Solid	8021B	73801

Analysis Batch: 74034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-1	BES 24 - 01	Total/NA	Solid	Total BTEX	
890-6208-2	BES 24 -02	Total/NA	Solid	Total BTEX	
890-6208-3	BES 24 -03	Total/NA	Solid	Total BTEX	
890-6208-4	BES 24 -04	Total/NA	Solid	Total BTEX	
890-6208-5	BES 24 -05	Total/NA	Solid	Total BTEX	
890-6208-6	BES 24 -06	Total/NA	Solid	Total BTEX	
890-6208-7	BES 24 -07	Total/NA	Solid	Total BTEX	
890-6208-8	BES 24 -08	Total/NA	Solid	Total BTEX	
890-6208-9	BES 24 -09	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

GC VOA (Continued)

Analysis Batch: 74034 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-10	BES 24 -10	Total/NA	Solid	Total BTEX	
890-6208-11	BES 24 -11	Total/NA	Solid	Total BTEX	
890-6208-12	BES 24 -12	Total/NA	Solid	Total BTEX	
890-6208-13	BES 24 -13	Total/NA	Solid	Total BTEX	
890-6208-14	BES 24 -14	Total/NA	Solid	Total BTEX	
890-6208-15	BES 24 -15	Total/NA	Solid	Total BTEX	
890-6208-16	BES 24 -16	Total/NA	Solid	Total BTEX	
890-6208-17	BES 24 -17	Total/NA	Solid	Total BTEX	
890-6208-18	BES 24 -18	Total/NA	Solid	Total BTEX	
890-6208-19	BES 24 -19	Total/NA	Solid	Total BTEX	
890-6208-20	BES 24 -20	Total/NA	Solid	Total BTEX	
890-6208-21	BES 24 -21	Total/NA	Solid	Total BTEX	
890-6208-22	BES 24 -22	Total/NA	Solid	Total BTEX	
890-6208-23	BES 24 -23	Total/NA	Solid	Total BTEX	
890-6208-24	BES 24 -24	Total/NA	Solid	Total BTEX	
890-6208-25	BES 24 -25	Total/NA	Solid	Total BTEX	
890-6208-26	BES 24 -82	Total/NA	Solid	Total BTEX	
890-6208-27	BES 24 -83	Total/NA	Solid	Total BTEX	
890-6208-28	BES 24 -84	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 73653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-21	BES 24 -21	Total/NA	Solid	8015NM Prep	
890-6208-22	BES 24 -22	Total/NA	Solid	8015NM Prep	
890-6208-23	BES 24 -23	Total/NA	Solid	8015NM Prep	
890-6208-24	BES 24 -24	Total/NA	Solid	8015NM Prep	
890-6208-25	BES 24 -25	Total/NA	Solid	8015NM Prep	
890-6208-26	BES 24 -82	Total/NA	Solid	8015NM Prep	
890-6208-27	BES 24 -83	Total/NA	Solid	8015NM Prep	
890-6208-28	BES 24 -84	Total/NA	Solid	8015NM Prep	
MB 880-73653/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73653/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73653/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-39545-A-2-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-39545-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 73682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-1	BES 24 - 01	Total/NA	Solid	8015NM Prep	
890-6208-3	BES 24 -03	Total/NA	Solid	8015NM Prep	
890-6208-4	BES 24 -04	Total/NA	Solid	8015NM Prep	
890-6208-5	BES 24 -05	Total/NA	Solid	8015NM Prep	
890-6208-6	BES 24 -06	Total/NA	Solid	8015NM Prep	
890-6208-7	BES 24 -07	Total/NA	Solid	8015NM Prep	
890-6208-8	BES 24 -08	Total/NA	Solid	8015NM Prep	
890-6208-9	BES 24 -09	Total/NA	Solid	8015NM Prep	
890-6208-10	BES 24 -10	Total/NA	Solid	8015NM Prep	
890-6208-11	BES 24 -11	Total/NA	Solid	8015NM Prep	
890-6208-12	BES 24 -12	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

GC Semi VOA (Continued)

Prep Batch: 73682 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-13	BES 24 -13	Total/NA	Solid	8015NM Prep	
890-6208-14	BES 24 -14	Total/NA	Solid	8015NM Prep	
890-6208-15	BES 24 -15	Total/NA	Solid	8015NM Prep	
890-6208-16	BES 24 -16	Total/NA	Solid	8015NM Prep	
890-6208-17	BES 24 -17	Total/NA	Solid	8015NM Prep	
890-6208-18	BES 24 -18	Total/NA	Solid	8015NM Prep	
890-6208-19	BES 24 -19	Total/NA	Solid	8015NM Prep	
890-6208-20	BES 24 -20	Total/NA	Solid	8015NM Prep	
MB 880-73682/1-A - RA2	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73682/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73682/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6208-1 MS	BES 24 - 01	Total/NA	Solid	8015NM Prep	
890-6208-1 MSD	BES 24 - 01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 73706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-21	BES 24 -21	Total/NA	Solid	8015B NM	73653
890-6208-22	BES 24 -22	Total/NA	Solid	8015B NM	73653
890-6208-23	BES 24 -23	Total/NA	Solid	8015B NM	73653
890-6208-24	BES 24 -24	Total/NA	Solid	8015B NM	73653
890-6208-25	BES 24 -25	Total/NA	Solid	8015B NM	73653
890-6208-26	BES 24 -82	Total/NA	Solid	8015B NM	73653
890-6208-27	BES 24 -83	Total/NA	Solid	8015B NM	73653
890-6208-28	BES 24 -84	Total/NA	Solid	8015B NM	73653
MB 880-73653/1-A	Method Blank	Total/NA	Solid	8015B NM	73653
LCS 880-73653/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73653
LCSD 880-73653/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73653
880-39545-A-2-C MS	Matrix Spike	Total/NA	Solid	8015B NM	73653
880-39545-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	73653

Analysis Batch: 73708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-1	BES 24 - 01	Total/NA	Solid	8015B NM	73682
890-6208-3	BES 24 -03	Total/NA	Solid	8015B NM	73682
890-6208-4	BES 24 -04	Total/NA	Solid	8015B NM	73682
890-6208-5	BES 24 -05	Total/NA	Solid	8015B NM	73682
890-6208-6	BES 24 -06	Total/NA	Solid	8015B NM	73682
890-6208-7	BES 24 -07	Total/NA	Solid	8015B NM	73682
890-6208-8	BES 24 -08	Total/NA	Solid	8015B NM	73682
890-6208-9	BES 24 -09	Total/NA	Solid	8015B NM	73682
890-6208-10	BES 24 -10	Total/NA	Solid	8015B NM	73682
890-6208-11	BES 24 -11	Total/NA	Solid	8015B NM	73682
890-6208-12	BES 24 -12	Total/NA	Solid	8015B NM	73682
890-6208-13	BES 24 -13	Total/NA	Solid	8015B NM	73682
890-6208-14	BES 24 -14	Total/NA	Solid	8015B NM	73682
890-6208-15	BES 24 -15	Total/NA	Solid	8015B NM	73682
890-6208-16	BES 24 -16	Total/NA	Solid	8015B NM	73682
890-6208-17	BES 24 -17	Total/NA	Solid	8015B NM	73682
890-6208-18	BES 24 -18	Total/NA	Solid	8015B NM	73682
890-6208-19	BES 24 -19	Total/NA	Solid	8015B NM	73682
890-6208-20	BES 24 -20	Total/NA	Solid	8015B NM	73682

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

GC Semi VOA (Continued)

Analysis Batch: 73708 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-73682/1-A - RA2	Method Blank	Total/NA	Solid	8015B NM	73682
LCS 880-73682/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73682
LCSD 880-73682/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73682
890-6208-1 MS	BES 24 - 01	Total/NA	Solid	8015B NM	73682
890-6208-1 MSD	BES 24 - 01	Total/NA	Solid	8015B NM	73682

Analysis Batch: 73790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-1	BES 24 - 01	Total/NA	Solid	8015 NM	
890-6208-2	BES 24 -02	Total/NA	Solid	8015 NM	
890-6208-3	BES 24 -03	Total/NA	Solid	8015 NM	
890-6208-4	BES 24 -04	Total/NA	Solid	8015 NM	
890-6208-5	BES 24 -05	Total/NA	Solid	8015 NM	
890-6208-6	BES 24 -06	Total/NA	Solid	8015 NM	
890-6208-7	BES 24 -07	Total/NA	Solid	8015 NM	
890-6208-8	BES 24 -08	Total/NA	Solid	8015 NM	
890-6208-9	BES 24 -09	Total/NA	Solid	8015 NM	
890-6208-10	BES 24 -10	Total/NA	Solid	8015 NM	
890-6208-11	BES 24 -11	Total/NA	Solid	8015 NM	
890-6208-12	BES 24 -12	Total/NA	Solid	8015 NM	
890-6208-13	BES 24 -13	Total/NA	Solid	8015 NM	
890-6208-14	BES 24 -14	Total/NA	Solid	8015 NM	
890-6208-15	BES 24 -15	Total/NA	Solid	8015 NM	
890-6208-16	BES 24 -16	Total/NA	Solid	8015 NM	
890-6208-17	BES 24 -17	Total/NA	Solid	8015 NM	
890-6208-18	BES 24 -18	Total/NA	Solid	8015 NM	
890-6208-19	BES 24 -19	Total/NA	Solid	8015 NM	
890-6208-20	BES 24 -20	Total/NA	Solid	8015 NM	
890-6208-21	BES 24 -21	Total/NA	Solid	8015 NM	
890-6208-22	BES 24 -22	Total/NA	Solid	8015 NM	
890-6208-23	BES 24 -23	Total/NA	Solid	8015 NM	
890-6208-24	BES 24 -24	Total/NA	Solid	8015 NM	
890-6208-25	BES 24 -25	Total/NA	Solid	8015 NM	
890-6208-26	BES 24 -82	Total/NA	Solid	8015 NM	
890-6208-27	BES 24 -83	Total/NA	Solid	8015 NM	
890-6208-28	BES 24 -84	Total/NA	Solid	8015 NM	

Prep Batch: 73899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-2	BES 24 -02	Total/NA	Solid	8015NM Prep	
MB 880-73899/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73899/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73899/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6208-2 MS	BES 24 -02	Total/NA	Solid	8015NM Prep	
890-6208-2 MSD	BES 24 -02	Total/NA	Solid	8015NM Prep	

Analysis Batch: 74227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-2	BES 24 -02	Total/NA	Solid	8015B NM	73899
MB 880-73899/1-A	Method Blank	Total/NA	Solid	8015B NM	73899
LCS 880-73899/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73899

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

GC Semi VOA (Continued)

Analysis Batch: 74227 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-73899/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73899
890-6208-2 MS	BES 24 -02	Total/NA	Solid	8015B NM	73899
890-6208-2 MSD	BES 24 -02	Total/NA	Solid	8015B NM	73899

HPLC/IC

Leach Batch: 73612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-1	BES 24 - 01	Soluble	Solid	DI Leach	
890-6208-2	BES 24 -02	Soluble	Solid	DI Leach	
890-6208-3	BES 24 -03	Soluble	Solid	DI Leach	
890-6208-4	BES 24 -04	Soluble	Solid	DI Leach	
890-6208-5	BES 24 -05	Soluble	Solid	DI Leach	
890-6208-6	BES 24 -06	Soluble	Solid	DI Leach	
890-6208-7	BES 24 -07	Soluble	Solid	DI Leach	
890-6208-8	BES 24 -08	Soluble	Solid	DI Leach	
890-6208-9	BES 24 -09	Soluble	Solid	DI Leach	
890-6208-10	BES 24 -10	Soluble	Solid	DI Leach	
890-6208-11	BES 24 -11	Soluble	Solid	DI Leach	
890-6208-12	BES 24 -12	Soluble	Solid	DI Leach	
890-6208-13	BES 24 -13	Soluble	Solid	DI Leach	
890-6208-14	BES 24 -14	Soluble	Solid	DI Leach	
890-6208-15	BES 24 -15	Soluble	Solid	DI Leach	
890-6208-16	BES 24 -16	Soluble	Solid	DI Leach	
890-6208-17	BES 24 -17	Soluble	Solid	DI Leach	
890-6208-18	BES 24 -18	Soluble	Solid	DI Leach	
890-6208-19	BES 24 -19	Soluble	Solid	DI Leach	
890-6208-20	BES 24 -20	Soluble	Solid	DI Leach	
MB 880-73612/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73612/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73612/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6208-1 MS	BES 24 - 01	Soluble	Solid	DI Leach	
890-6208-1 MSD	BES 24 - 01	Soluble	Solid	DI Leach	
890-6208-11 MS	BES 24 -11	Soluble	Solid	DI Leach	
890-6208-11 MSD	BES 24 -11	Soluble	Solid	DI Leach	

Analysis Batch: 73696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-1	BES 24 - 01	Soluble	Solid	300.0	73612
890-6208-2	BES 24 -02	Soluble	Solid	300.0	73612
890-6208-3	BES 24 -03	Soluble	Solid	300.0	73612
890-6208-4	BES 24 -04	Soluble	Solid	300.0	73612
890-6208-5	BES 24 -05	Soluble	Solid	300.0	73612
890-6208-6	BES 24 -06	Soluble	Solid	300.0	73612
890-6208-7	BES 24 -07	Soluble	Solid	300.0	73612
890-6208-8	BES 24 -08	Soluble	Solid	300.0	73612
890-6208-9	BES 24 -09	Soluble	Solid	300.0	73612
890-6208-10	BES 24 -10	Soluble	Solid	300.0	73612
890-6208-11	BES 24 -11	Soluble	Solid	300.0	73612
890-6208-12	BES 24 -12	Soluble	Solid	300.0	73612
890-6208-13	BES 24 -13	Soluble	Solid	300.0	73612

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

HPLC/IC (Continued)

Analysis Batch: 73696 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-14	BES 24 -14	Soluble	Solid	300.0	73612
890-6208-15	BES 24 -15	Soluble	Solid	300.0	73612
890-6208-16	BES 24 -16	Soluble	Solid	300.0	73612
890-6208-17	BES 24 -17	Soluble	Solid	300.0	73612
890-6208-18	BES 24 -18	Soluble	Solid	300.0	73612
890-6208-19	BES 24 -19	Soluble	Solid	300.0	73612
890-6208-20	BES 24 -20	Soluble	Solid	300.0	73612
MB 880-73612/1-A	Method Blank	Soluble	Solid	300.0	73612
LCS 880-73612/2-A	Lab Control Sample	Soluble	Solid	300.0	73612
LCSD 880-73612/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73612
890-6208-1 MS	BES 24 - 01	Soluble	Solid	300.0	73612
890-6208-1 MSD	BES 24 - 01	Soluble	Solid	300.0	73612
890-6208-11 MS	BES 24 -11	Soluble	Solid	300.0	73612
890-6208-11 MSD	BES 24 -11	Soluble	Solid	300.0	73612

Leach Batch: 73713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-21	BES 24 -21	Soluble	Solid	DI Leach	
890-6208-22	BES 24 -22	Soluble	Solid	DI Leach	
890-6208-23	BES 24 -23	Soluble	Solid	DI Leach	
890-6208-24	BES 24 -24	Soluble	Solid	DI Leach	
890-6208-25	BES 24 -25	Soluble	Solid	DI Leach	
890-6208-26	BES 24 -82	Soluble	Solid	DI Leach	
890-6208-27	BES 24 -83	Soluble	Solid	DI Leach	
890-6208-28	BES 24 -84	Soluble	Solid	DI Leach	
MB 880-73713/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73713/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73713/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6208-21 MS	BES 24 -21	Soluble	Solid	DI Leach	
890-6208-21 MSD	BES 24 -21	Soluble	Solid	DI Leach	

Analysis Batch: 73805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6208-21	BES 24 -21	Soluble	Solid	300.0	73713
890-6208-22	BES 24 -22	Soluble	Solid	300.0	73713
890-6208-23	BES 24 -23	Soluble	Solid	300.0	73713
890-6208-24	BES 24 -24	Soluble	Solid	300.0	73713
890-6208-25	BES 24 -25	Soluble	Solid	300.0	73713
890-6208-26	BES 24 -82	Soluble	Solid	300.0	73713
890-6208-27	BES 24 -83	Soluble	Solid	300.0	73713
890-6208-28	BES 24 -84	Soluble	Solid	300.0	73713
MB 880-73713/1-A	Method Blank	Soluble	Solid	300.0	73713
LCS 880-73713/2-A	Lab Control Sample	Soluble	Solid	300.0	73713
LCSD 880-73713/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73713
890-6208-21 MS	BES 24 -21	Soluble	Solid	300.0	73713
890-6208-21 MSD	BES 24 -21	Soluble	Solid	300.0	73713

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 01
Date Collected: 02/15/24 15:30
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 12:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 12:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 11:36	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 08:37	CH	EET MID

Client Sample ID: BES 24 -02
Date Collected: 02/15/24 15:30
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 12:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 12:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/28/24 20:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	73899	02/20/24 16:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/28/24 20:43	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 08:51	CH	EET MID

Client Sample ID: BES 24 -03
Date Collected: 02/15/24 15:25
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 12:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 12:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 13:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 13:45	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 08:55	CH	EET MID

Client Sample ID: BES 24 -04
Date Collected: 02/15/24 15:25
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 13:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 13:11	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -04
Date Collected: 02/15/24 15:25
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			73790	02/21/24 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 14:18	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 09:00	CH	EET MID

Client Sample ID: BES 24 -05
Date Collected: 02/15/24 15:20
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 13:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 13:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 14:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 14:50	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 09:05	CH	EET MID

Client Sample ID: BES 24 -06
Date Collected: 02/15/24 15:20
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 13:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 13:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 15:27	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 15:27	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 09:18	CH	EET MID

Client Sample ID: BES 24 -07
Date Collected: 02/15/24 15:15
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 14:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 14:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 16:05	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 16:05	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -07
Date Collected: 02/15/24 15:15
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 09:23	CH	EET MID

Client Sample ID: BES 24 -08
Date Collected: 02/15/24 15:15
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 14:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 14:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 16:44	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 16:44	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 09:28	CH	EET MID

Client Sample ID: BES 24 -09
Date Collected: 02/15/24 15:10
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 14:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 14:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 17:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 17:20	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 09:33	CH	EET MID

Client Sample ID: BES 24 -10
Date Collected: 02/15/24 15:10
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 15:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 15:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 17:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 17:53	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 09:37	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -11
Date Collected: 02/15/24 15:05
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 17:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 17:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 18:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 18:54	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 09:42	CH	EET MID

Client Sample ID: BES 24 -12
Date Collected: 02/15/24 15:05
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 18:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 18:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 19:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 19:23	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 09:56	CH	EET MID

Client Sample ID: BES 24 -13
Date Collected: 02/15/24 15:00
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 18:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 18:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 19:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 19:52	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 10:00	CH	EET MID

Client Sample ID: BES 24 -14
Date Collected: 02/15/24 15:00
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 18:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 18:45	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -14
Date Collected: 02/15/24 15:00
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			73790	02/21/24 20:22	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 20:22	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 10:14	CH	EET MID

Client Sample ID: BES 24 -15
Date Collected: 02/15/24 14:55
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 19:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 19:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 20:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 20:50	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 10:19	CH	EET MID

Client Sample ID: BES 24 -16
Date Collected: 02/15/24 14:55
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 19:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 19:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 21:18	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 21:18	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 10:23	CH	EET MID

Client Sample ID: BES 24 -17
Date Collected: 02/15/24 14:50
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 19:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 19:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 21:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 21:45	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -17
Date Collected: 02/15/24 14:50
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 10:28	CH	EET MID

Client Sample ID: BES 24 -18
Date Collected: 02/15/24 14:50
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 20:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 20:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 22:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 22:13	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 10:33	CH	EET MID

Client Sample ID: BES 24 -19
Date Collected: 02/15/24 14:45
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 20:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 20:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 22:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 22:40	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 10:37	CH	EET MID

Client Sample ID: BES 24 -20
Date Collected: 02/15/24 14:45
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73801	02/21/24 15:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73995	02/26/24 20:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/26/24 20:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/21/24 23:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10006 g	10 mL	73682	02/20/24 12:53	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/21/24 23:07	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73612	02/20/24 08:41	SA	EET MID
Soluble	Analysis	300.0		1			73696	02/21/24 10:42	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -21
Date Collected: 02/15/24 14:40
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	73802	02/21/24 15:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73977	02/25/24 00:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/25/24 00:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/22/24 03:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/22/24 03:18	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 19:26	CH	EET MID

Client Sample ID: BES 24 -22
Date Collected: 02/15/24 14:40
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73802	02/21/24 15:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73977	02/25/24 01:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/25/24 01:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/22/24 03:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/22/24 03:42	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 19:39	CH	EET MID

Client Sample ID: BES 24 -23
Date Collected: 02/15/24 14:35
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	73802	02/21/24 15:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73977	02/25/24 01:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/25/24 01:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/22/24 04:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/22/24 04:04	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 19:44	CH	EET MID

Client Sample ID: BES 24 -24
Date Collected: 02/15/24 14:35
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	73802	02/21/24 15:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73977	02/25/24 01:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/25/24 01:45	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -24
Date Collected: 02/15/24 14:35
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			73790	02/22/24 04:27	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/22/24 04:27	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 19:49	CH	EET MID

Client Sample ID: BES 24 -25
Date Collected: 02/15/24 14:30
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73802	02/21/24 15:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73977	02/25/24 02:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/25/24 02:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/22/24 04:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/22/24 04:50	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 19:53	CH	EET MID

Client Sample ID: BES 24 -82
Date Collected: 02/15/24 14:30
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	73802	02/21/24 15:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73977	02/25/24 02:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/25/24 02:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/22/24 05:13	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/22/24 05:13	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 20:07	CH	EET MID

Client Sample ID: BES 24 -83
Date Collected: 02/15/24 14:25
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6208-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73802	02/21/24 15:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73977	02/25/24 02:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/25/24 02:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/22/24 05:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/22/24 05:36	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -83

Lab Sample ID: 890-6208-27

Date Collected: 02/15/24 14:25
Matrix: Solid
Date Received: 02/16/24 16:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 20:12	CH	EET MID

Client Sample ID: BES 24 -84

Lab Sample ID: 890-6208-28

Date Collected: 02/15/24 14:25
Matrix: Solid
Date Received: 02/16/24 16:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	73802	02/21/24 15:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73977	02/25/24 03:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74034	02/25/24 03:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			73790	02/22/24 05:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/22/24 05:59	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 20:16	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6208-1
SDG: 23 E - 04616

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6208-1	BES 24 - 01	Solid	02/15/24 15:30	02/16/24 16:36	1'
890-6208-2	BES 24 -02	Solid	02/15/24 15:30	02/16/24 16:36	1'
890-6208-3	BES 24 -03	Solid	02/15/24 15:25	02/16/24 16:36	1'
890-6208-4	BES 24 -04	Solid	02/15/24 15:25	02/16/24 16:36	1'
890-6208-5	BES 24 -05	Solid	02/15/24 15:20	02/16/24 16:36	1'
890-6208-6	BES 24 -06	Solid	02/15/24 15:20	02/16/24 16:36	1'
890-6208-7	BES 24 -07	Solid	02/15/24 15:15	02/16/24 16:36	1'
890-6208-8	BES 24 -08	Solid	02/15/24 15:15	02/16/24 16:36	1'
890-6208-9	BES 24 -09	Solid	02/15/24 15:10	02/16/24 16:36	1'
890-6208-10	BES 24 -10	Solid	02/15/24 15:10	02/16/24 16:36	1'
890-6208-11	BES 24 -11	Solid	02/15/24 15:05	02/16/24 16:36	1'
890-6208-12	BES 24 -12	Solid	02/15/24 15:05	02/16/24 16:36	1'
890-6208-13	BES 24 -13	Solid	02/15/24 15:00	02/16/24 16:36	1'
890-6208-14	BES 24 -14	Solid	02/15/24 15:00	02/16/24 16:36	1'
890-6208-15	BES 24 -15	Solid	02/15/24 14:55	02/16/24 16:36	1'
890-6208-16	BES 24 -16	Solid	02/15/24 14:55	02/16/24 16:36	1'
890-6208-17	BES 24 -17	Solid	02/15/24 14:50	02/16/24 16:36	1'
890-6208-18	BES 24 -18	Solid	02/15/24 14:50	02/16/24 16:36	1'
890-6208-19	BES 24 -19	Solid	02/15/24 14:45	02/16/24 16:36	1'
890-6208-20	BES 24 -20	Solid	02/15/24 14:45	02/16/24 16:36	1'
890-6208-21	BES 24 -21	Solid	02/15/24 14:40	02/16/24 16:36	1'
890-6208-22	BES 24 -22	Solid	02/15/24 14:40	02/16/24 16:36	1'
890-6208-23	BES 24 -23	Solid	02/15/24 14:35	02/16/24 16:36	1'
890-6208-24	BES 24 -24	Solid	02/15/24 14:35	02/16/24 16:36	1'
890-6208-25	BES 24 -25	Solid	02/15/24 14:30	02/16/24 16:36	1'
890-6208-26	BES 24 -82	Solid	02/15/24 14:30	02/16/24 16:36	1'
890-6208-27	BES 24 -83	Solid	02/15/24 14:25	02/16/24 16:36	1'
890-6208-28	BES 24 -84	Solid	02/15/24 14:25	02/16/24 16:36	1'

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
~~Hobbs, NM (575) 392-7550~~, Carlsbad, NM (575) 988-3199

Work Order No: 10821900 1

www.xenco.com Page 1 of 3

Project Manager:	Chance Dixon	Bill to: (if different)	Garrett Green
Company Name:	Vertex/XTO	~~Company Name~~:	XTO
Address:		Address:	on file
City, State ZIP:	on file	City, State ZIP:	
Phone:		Email:	

Work Order Comments

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

Project Name:	SRVDI 1A CTB	Turn Around	
Project Number:	23E-04616	☑ Routine ☐ Rush	
Project Location:	SRV DI 1A CTB	Due Date:	
Sampler's Name:	Colton Henderson	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

~~SAMPLE RECEIPT~~	~~Temp Blank~~: Yes No	Wet Ice: Yes No
Samples Received Intact:	Yes No	Thermometer ID: TAM007
Cooler Custody Seals:	Yes No N/A	Correction Factor: -0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading: -0.2
Total Containers:		Corrected Temperature: 0

ANALYSIS REQUEST

Parameters: BTEX (8021B) | TPH (8015D) | 2L

890-6208 Chain of Custody

Preservative Codes

~~: NO~~ DI Water: H_2O
Cool MeOH: Me
~~HC~~ HNO_3: HN
~~$_4$: H_2~~ NaOH: Na
~~$_4$~~: HP
~~O_4~~: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Sample Comments
BES24-01	1'	Soil	2.15.24	15:30	1'	G	1	
BES24-02	1'			15:20			2	
BES24-03	1'			15:25				
BES24-04	1			15:25				
BES24-05	1'			15:20				
BES24-06	1'			15:20				
BES24-07	1'			15:15				
BES24-08	1'			15:15				
BES24-09	1'			15:10				
BES24-10	1			15:10			1	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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1			2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199
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Work Order No: 1082151001

Page 2 of 3

Project Manager:	Chance Dixon	Bill to: (if different)	Garrett Green
Company Name:	Ameredev / XTO.	Company Name:	XTO
Address:		Address:	
City, State ZIP:	on file.	City, State ZIP:	on file
Phone:	Email:		

Work Order Comments

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

Project Name:	IRU DI 1A CTB	Turn Around	
Project Number:	236-04616	☑ Routine ☐ Rush	
Project Location:	IRU DI 1A CTB	Due Date:	
Sampler's Name:	Lodin Halvorson	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	-0.2
Total Containers:		Corrected Temperature:	0

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
NaHSO 4: NABIS
$Na_2S_2O_3$: NaSO 3
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters: BTEX (8021)	TPH (8015D)		Sample Comments
BES24-11	Soil	2.15.24	13:05	1		1				
BES24-12			13:05							
BES24-13			13:00							
BES24-14			13:00							
BES24-15			14:55							
BES24-16			14:55							
BES24-17			14:50							
BES24-18			14:50							
BES24-19			14:45							
BES24-20			14:45			20				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	2	2/16	1636	2	
3				4	
5				6	

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199
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Work Order No: 1032151001

Page 3 of 3

Project Manager:	Chace Ellerson	Bill to: (if different)	Garrett Green XTO
Company Name:	Vertex/XTO	Company Name:	
Address:		Address:	
City, State ZIP:	on file	City, State ZIP:	on file.
Phone:		Email:	

Work Order Comments

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

Project Name:	SRV DI 1A CTB	Turn Around	
Project Number:	236-04616	☑ Routine ☐ Rush	
Project Location:	SRV DI 1A CTB	Due Date:	
Sampler's Name:	Lakin Ellerson	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

~~SAMPLE RECEIPT~~	Temp Blank: Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	T#MCO
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	-0.2
Total Containers:		Corrected Temperature:	8

Parameters: BTEX (8021) | TPH (8015D)

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
NaHSO 4: NABIS
$Na_2S_2O_3$: NaSO 3
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Sample Comments
BES24-21	Soil	2.15.24	14:40	1		21	
BES24-22			14:40				
BES24-23			14:35				
BES24-24			14:35				
BES24-25			14:30				
BES24-82			14:30				
BES24-83			14:25				
BES24-84			14:25			28	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Sunset 2/16	1630			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-6208-1
SDG Number: 23 E - 04616

Login Number: 6208
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
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: 890-6208-1
SDG Number: 23 E - 04616

Login Number: 6208
List Number: 2
Creator: Wheeler, Jazmine

List Source: Eurofins Midland
List Creation: 02/20/24 11:20 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 2/26/2024 3:24:40 PM

JOB DESCRIPTION

JRU DI 1A CTB
23E 04616

JOB NUMBER

890-6209-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 5/13/2024 11:16:38 AM

my EOL

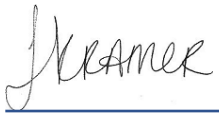
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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2/26/2024 3:24:40 PM

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

Client: Vertex
Project/Site: JRU DI 1A CTB

Laboratory Job ID: 890-6209-1
SDG: 23E 04616

Table of Contents

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Definitions/Glossary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project: JRU DI 1A CTB

Job ID: 890-6209-1

Job ID: 890-6209-1 Eurofins Carlsbad

Job Narrative
890-6209-1

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 2/16/2024 4:36 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.0°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: WES24-01 (890-6209-1), WES24-02 (890-6209-2) and WES24-03 (890-6209-3).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-73795 and analytical batch 880-73826 was outside the upper control limits.

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

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

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

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

Client Sample ID: WES24-01

Lab Sample ID: 890-6209-1
Matrix: Solid
Date Collected: 02/16/24 10:40
Date Received: 02/16/24 16:36
Sample Depth: 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/21/24 14:04	02/24/24 08:40	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/21/24 14:04	02/24/24 08:40	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/21/24 14:04	02/24/24 08:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/21/24 14:04	02/24/24 08:40	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/21/24 14:04	02/24/24 08:40	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/21/24 14:04	02/24/24 08:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*02/21/24 14:04*	*02/24/24 08:40*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*02/21/24 14:04*	*02/24/24 08:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/24/24 08:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			02/22/24 19:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		02/20/24 16:47	02/22/24 19:08	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		02/20/24 16:47	02/22/24 19:08	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/20/24 16:47	02/22/24 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*02/20/24 16:47*	*02/22/24 19:08*	*1*
o-Terphenyl	*83*		*70 - 130*	*02/20/24 16:47*	*02/22/24 19:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**93.8**		4.97		mg/Kg			02/21/24 20:21	1

Client Sample ID: WES24-02

Lab Sample ID: 890-6209-2
Matrix: Solid
Date Collected: 02/16/24 10:50
Date Received: 02/16/24 16:36
Sample Depth: 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/21/24 14:04	02/24/24 09:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/21/24 14:04	02/24/24 09:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/21/24 14:04	02/24/24 09:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/21/24 14:04	02/24/24 09:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/21/24 14:04	02/24/24 09:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/21/24 14:04	02/24/24 09:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*02/21/24 14:04*	*02/24/24 09:01*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

Client Sample ID: WES24-02

Lab Sample ID: 890-6209-2
Matrix: Solid
Date Collected: 02/16/24 10:50
Date Received: 02/16/24 16:36
Sample Depth: 1

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/21/24 14:04*	*02/24/24 09:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			02/24/24 09:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/22/24 19:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/20/24 16:47	02/22/24 19:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/20/24 16:47	02/22/24 19:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/20/24 16:47	02/22/24 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*02/20/24 16:47*	*02/22/24 19:56*	*1*
o-Terphenyl	*89*		*70 - 130*	*02/20/24 16:47*	*02/22/24 19:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**524**		5.05	mg/Kg			02/21/24 20:26	1

Client Sample ID: WES24-03

Lab Sample ID: 890-6209-3
Matrix: Solid
Date Collected: 02/16/24 11:00
Date Received: 02/16/24 16:36
Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/21/24 14:04	02/24/24 09:21	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/21/24 14:04	02/24/24 09:21	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/21/24 14:04	02/24/24 09:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/21/24 14:04	02/24/24 09:21	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/21/24 14:04	02/24/24 09:21	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/21/24 14:04	02/24/24 09:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*02/21/24 14:04*	*02/24/24 09:21*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*02/21/24 14:04*	*02/24/24 09:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/24/24 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			02/22/24 20:21	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

Client Sample ID: WES24-03

Date Collected: 02/16/24 11:00
Date Received: 02/16/24 16:36
Sample Depth: 1

Lab Sample ID: 890-6209-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		02/20/24 16:48	02/22/24 20:21	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		02/20/24 16:48	02/22/24 20:21	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		02/20/24 16:48	02/22/24 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*02/20/24 16:48*	*02/22/24 20:21*	*1*
o-Terphenyl	*84*		*70 - 130*	*02/20/24 16:48*	*02/22/24 20:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**336**		5.04		mg/Kg			02/21/24 20:30	1

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-6201-A-1-C MS	Matrix Spike	129	104
890-6201-A-1-D MSD	Matrix Spike Duplicate	113	97
890-6209-1	WES24-01	106	116
890-6209-2	WES24-02	122	106
890-6209-3	WES24-03	118	112
LCS 880-73795/1-A	Lab Control Sample	104	99
LCSD 880-73795/2-A	Lab Control Sample Dup	108	103
MB 880-73777/5-A	Method Blank	124	123
MB 880-73795/5-A	Method Blank	135 S1+	126

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-39766-A-1-B MS	Matrix Spike	79	71
880-39766-A-1-C MSD	Matrix Spike Duplicate	83	74
890-6209-1	WES24-01	79	83
890-6209-2	WES24-02	88	89
890-6209-3	WES24-03	83	84
LCS 880-73703/2-A	Lab Control Sample	97	113
LCSD 880-73703/3-A	Lab Control Sample Dup	85	97
MB 880-73703/1-A	Method Blank	96	101

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73777/5-A
Matrix: Solid
Analysis Batch: 73826

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73777

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/21/24 12:24	02/23/24 14:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/21/24 12:24	02/23/24 14:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/21/24 12:24	02/23/24 14:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/21/24 12:24	02/23/24 14:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/21/24 12:24	02/23/24 14:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/21/24 12:24	02/23/24 14:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*02/21/24 12:24*	*02/23/24 14:14*	*1*
1,4-Difluorobenzene (Surr)	*123*		*70 - 130*	*02/21/24 12:24*	*02/23/24 14:14*	*1*

Lab Sample ID: MB 880-73795/5-A
Matrix: Solid
Analysis Batch: 73826

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73795

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/21/24 14:04	02/24/24 01:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/21/24 14:04	02/24/24 01:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/21/24 14:04	02/24/24 01:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/21/24 14:04	02/24/24 01:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/21/24 14:04	02/24/24 01:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/21/24 14:04	02/24/24 01:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*02/21/24 14:04*	*02/24/24 01:55*	*1*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*	*02/21/24 14:04*	*02/24/24 01:55*	*1*

Lab Sample ID: LCS 880-73795/1-A
Matrix: Solid
Analysis Batch: 73826

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73795

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1249		mg/Kg		125	70 - 130		
Toluene			0.100	0.1028		mg/Kg		103	70 - 130		
Ethylbenzene			0.100	0.1129		mg/Kg		113	70 - 130		
m-Xylene & p-Xylene			0.200	0.2038		mg/Kg		102	70 - 130		
o-Xylene			0.100	0.1059		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-73795/2-A
Matrix: Solid
Analysis Batch: 73826

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73795

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1249		mg/Kg		125	70 - 130	0	35

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

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

Lab Sample ID: LCSD 880-73795/2-A
Matrix: Solid
Analysis Batch: 73826

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73795

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1061		mg/Kg		106	70 - 130	3	35
Ethylbenzene			0.100	0.1195		mg/Kg		119	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2261		mg/Kg		113	70 - 130	10	35
o-Xylene			0.100	0.1091		mg/Kg		109	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-6201-A-1-C MS
Matrix: Solid
Analysis Batch: 73826

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 73795

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.101	0.09997		mg/Kg		99	70 - 130
Toluene	<0.00199	U	0.101	0.08753		mg/Kg		87	70 - 130
Ethylbenzene	<0.00199	U	0.101	0.1009		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.202	0.2151		mg/Kg		107	70 - 130
o-Xylene	<0.00199	U	0.101	0.1058		mg/Kg		104	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-6201-A-1-D MSD
Matrix: Solid
Analysis Batch: 73826

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 73795

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1010		mg/Kg		101	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.08910		mg/Kg		89	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.100	0.09544		mg/Kg		95	70 - 130	6	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2031		mg/Kg		102	70 - 130	6	35
o-Xylene	<0.00199	U	0.100	0.09952		mg/Kg		99	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 880-73703/1-A
Matrix: Solid
Analysis Batch: 73819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73703

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/20/24 16:46	02/22/24 11:25	1

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QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

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

Lab Sample ID: MB 880-73703/1-A
Matrix: Solid
Analysis Batch: 73819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73703

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/20/24 16:46	02/22/24 11:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/20/24 16:46	02/22/24 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*02/20/24 16:46*	*02/22/24 11:25*	*1*
o-Terphenyl	*101*		*70 - 130*	*02/20/24 16:46*	*02/22/24 11:25*	*1*

Lab Sample ID: LCS 880-73703/2-A
Matrix: Solid
Analysis Batch: 73819

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73703

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	990.6		mg/Kg		99	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1008		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: LCSD 880-73703/3-A
Matrix: Solid
Analysis Batch: 73819

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73703

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	975.2		mg/Kg		98	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	939.9		mg/Kg		94	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*85*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: 880-39766-A-1-B MS
Matrix: Solid
Analysis Batch: 73819

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 73703

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1010	844.6		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	1010	967.4		mg/Kg		93	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*79*		*70 - 130*
o-Terphenyl	*71*		*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

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

Lab Sample ID: 880-39766-A-1-C MSD
Matrix: Solid
Analysis Batch: 73819

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 73703

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1010	886.6		mg/Kg		86	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1010	1069		mg/Kg		103	70 - 130	10	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*83*		*70 - 130*
o-Terphenyl	*74*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-73713/1-A
Matrix: Solid
Analysis Batch: 73805

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/21/24 19:12	1

Lab Sample ID: LCS 880-73713/2-A
Matrix: Solid
Analysis Batch: 73805

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	229.0		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-73713/3-A
Matrix: Solid
Analysis Batch: 73805

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	230.7		mg/Kg		92	90 - 110	1	20

Lab Sample ID: 890-6209-3 MS
Matrix: Solid
Analysis Batch: 73805

Client Sample ID: WES24-03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	336		252	592.3		mg/Kg		102	90 - 110		

Lab Sample ID: 890-6209-3 MSD
Matrix: Solid
Analysis Batch: 73805

Client Sample ID: WES24-03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	336		252	590.1		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

GC VOA

Prep Batch: 73777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-73777/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 73795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6209-1	WES24-01	Total/NA	Solid	5035	
890-6209-2	WES24-02	Total/NA	Solid	5035	
890-6209-3	WES24-03	Total/NA	Solid	5035	
MB 880-73795/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-73795/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-73795/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6201-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-6201-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 73826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6209-1	WES24-01	Total/NA	Solid	8021B	73795
890-6209-2	WES24-02	Total/NA	Solid	8021B	73795
890-6209-3	WES24-03	Total/NA	Solid	8021B	73795
MB 880-73777/5-A	Method Blank	Total/NA	Solid	8021B	73777
MB 880-73795/5-A	Method Blank	Total/NA	Solid	8021B	73795
LCS 880-73795/1-A	Lab Control Sample	Total/NA	Solid	8021B	73795
LCSD 880-73795/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73795
890-6201-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	73795
890-6201-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	73795

Analysis Batch: 74093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6209-1	WES24-01	Total/NA	Solid	Total BTEX	
890-6209-2	WES24-02	Total/NA	Solid	Total BTEX	
890-6209-3	WES24-03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 73703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6209-1	WES24-01	Total/NA	Solid	8015NM Prep	
890-6209-2	WES24-02	Total/NA	Solid	8015NM Prep	
890-6209-3	WES24-03	Total/NA	Solid	8015NM Prep	
MB 880-73703/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73703/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73703/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-39766-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-39766-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 73819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6209-1	WES24-01	Total/NA	Solid	8015B NM	73703
890-6209-2	WES24-02	Total/NA	Solid	8015B NM	73703
890-6209-3	WES24-03	Total/NA	Solid	8015B NM	73703
MB 880-73703/1-A	Method Blank	Total/NA	Solid	8015B NM	73703
LCS 880-73703/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73703

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

GC Semi VOA (Continued)

Analysis Batch: 73819 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-73703/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73703
880-39766-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	73703
880-39766-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	73703

Analysis Batch: 73949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6209-1	WES24-01	Total/NA	Solid	8015 NM	
890-6209-2	WES24-02	Total/NA	Solid	8015 NM	
890-6209-3	WES24-03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 73713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6209-1	WES24-01	Soluble	Solid	DI Leach	
890-6209-2	WES24-02	Soluble	Solid	DI Leach	
890-6209-3	WES24-03	Soluble	Solid	DI Leach	
MB 880-73713/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73713/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73713/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6209-3 MS	WES24-03	Soluble	Solid	DI Leach	
890-6209-3 MSD	WES24-03	Soluble	Solid	DI Leach	

Analysis Batch: 73805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6209-1	WES24-01	Soluble	Solid	300.0	73713
890-6209-2	WES24-02	Soluble	Solid	300.0	73713
890-6209-3	WES24-03	Soluble	Solid	300.0	73713
MB 880-73713/1-A	Method Blank	Soluble	Solid	300.0	73713
LCS 880-73713/2-A	Lab Control Sample	Soluble	Solid	300.0	73713
LCSD 880-73713/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73713
890-6209-3 MS	WES24-03	Soluble	Solid	300.0	73713
890-6209-3 MSD	WES24-03	Soluble	Solid	300.0	73713

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

Client Sample ID: WES24-01
Date Collected: 02/16/24 10:40
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6209-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	73795	02/21/24 14:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73826	02/24/24 08:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74093	02/24/24 08:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			73949	02/22/24 19:08	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	73703	02/20/24 16:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73819	02/22/24 19:08	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 20:21	CH	EET MID

Client Sample ID: WES24-02
Date Collected: 02/16/24 10:50
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6209-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73795	02/21/24 14:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73826	02/24/24 09:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74093	02/24/24 09:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			73949	02/22/24 19:56	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	73703	02/20/24 16:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73819	02/22/24 19:56	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 20:26	CH	EET MID

Client Sample ID: WES24-03
Date Collected: 02/16/24 11:00
Date Received: 02/16/24 16:36

Lab Sample ID: 890-6209-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	73795	02/21/24 14:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73826	02/24/24 09:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74093	02/24/24 09:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			73949	02/22/24 20:21	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	73703	02/20/24 16:48	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73819	02/22/24 20:21	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73713	02/21/24 07:54	SA	EET MID
Soluble	Analysis	300.0		1			73805	02/21/24 20:30	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6209-1
SDG: 23E 04616

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6209-1	WES24-01	Solid	02/16/24 10:40	02/16/24 16:36	1
890-6209-2	WES24-02	Solid	02/16/24 10:50	02/16/24 16:36	1
890-6209-3	WES24-03	Solid	02/16/24 11:00	02/16/24 16:36	1

Released to Imaging: 5/15/2024 11:16:38 AM
Received by OCD: 4/27/2024 12:00:15 AM

02.16.24

nAPP2331041267

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
~~Hobbs, NM (575) 392-7550~~, Carlsbad, NM (575) ~~988-3199~~

Work Order No: 1092151001

www.xenco.com Page 1 of 1

Project Manager:	Chance Dixon	Bill to: (if different)	Garrett Green
Company Name:	Vertex / XTO	Company Name:	XTO
Address:	on file	Address:	on file
City, State ZIP:		City, State ZIP:	
Phone:	Email:		

Work Order Comments

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

Project Name:	JRU DI 1A CTB	Turn Around	
Project Number:	236_04616	☒ Routine ☐ Rush	
Project Location:	JRU DI 1A CTB	Due Date:	
Sampler's Name:	Lakin Ellison	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT

Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TUM005
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	-0.2
Total Containers:		Corrected Temperature:	0

ANALYSIS REQUEST

Pres. Code / Parameters: BTEX (8021), TPH (8015D), Cl

890-6209 Chain of Custody

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont
WES 24-01	Soil	02.16.24	10:40	1		1
WES 24-02			10:50	1		
WES 24-03			11:00	1		

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Brunt 2/16	1630	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-6209-1
SDG Number: 23E 04616

Login Number: 6209
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
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: 890-6209-1
SDG Number: 23E 04616

Login Number: 6209
List Number: 2
Creator: Wheeler, Jazmine

List Source: Eurofins Midland
List Creation: 02/20/24 11:21 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

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JOB DESCRIPTION

JRU DI 1A CTB
23E-04616

JOB NUMBER

890-6210-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 5/13/2024 11:16:38 AM

my EOL

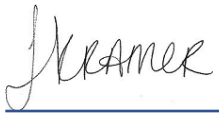
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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2/26/2024 2:51:37 PM

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

Client: Vertex
Project/Site: JRU DI 1A CTB

Laboratory Job ID: 890-6210-1
SDG: 23E-04616

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Definitions/Glossary

Client: Vertex Job ID: 890-6210-1
Project/Site: JRU DI 1A CTB SDG: 23E-04616

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project: JRU DI 1A CTB

Job ID: 890-6210-1

Job ID: 890-6210-1 Eurofins Carlsbad

Job Narrative
890-6210-1

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 2/19/2024 8:16 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 -8.4°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: WES24-04 1-2.5 (890-6210-1), WES24-06 0-2.5 (890-6210-2), BES24-26 1 (890-6210-3), BES24-27 1 (890-6210-4), BES24-28 1 (890-6210-5), BES24-29 1 (890-6210-6), BES24-30 1 (890-6210-7), BES24-31 1 (890-6210-8), BES24-32 1 (890-6210-9), BES24-33 1 (890-6210-10), BES24-34 1 (890-6210-11), BES24-35 1 (890-6210-12), BES24-36 1 (890-6210-13), BES24-37 1 (890-6210-14), BES24-38 2.5 (890-6210-15), BES24-39 2.5 (890-6210-16), BES24-40 2.5 (890-6210-17), BES24-41 2.5 (890-6210-18), BES24-42 2.5 (890-6210-19) and BES24-43 2.5 (890-6210-20).

GC VOA
Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-73893 and analytical batch 880-73921 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-73788 and 880-73893 and analytical batch 880-73921 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: WES24-04 1-2.5 (890-6210-1), WES24-06 0-2.5 (890-6210-2), BES24-26 1 (890-6210-3), BES24-29 1 (890-6210-6), BES24-34 1 (890-6210-11), BES24-40 2.5 (890-6210-17), BES24-42 2.5 (890-6210-19), BES24-43 2.5 (890-6210-20) and (LCS 880-73893/1-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BES24-36 1 (890-6210-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-73683 and analytical batch 880-73708 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: WES24-04 1-2.5

Lab Sample ID: 890-6210-1
Matrix: Solid
Date Collected: 02/16/24 14:45
Date Received: 02/19/24 08:16

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1 F2	0.00199		mg/Kg		02/22/24 16:39	02/25/24 02:02	1
Toluene	<0.00199	U F1 F2	0.00199		mg/Kg		02/22/24 16:39	02/25/24 02:02	1
Ethylbenzene	<0.00199	U F1 F2	0.00199		mg/Kg		02/22/24 16:39	02/25/24 02:02	1
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.00398		mg/Kg		02/22/24 16:39	02/25/24 02:02	1
o-Xylene	<0.00199	U F1 F2	0.00199		mg/Kg		02/22/24 16:39	02/25/24 02:02	1
Xylenes, Total	<0.00398	U F1 F2	0.00398		mg/Kg		02/22/24 16:39	02/25/24 02:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/22/24 16:39*	*02/25/24 02:02*	*1*
1,4-Difluorobenzene (Surr)	*159*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 02:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/25/24 02:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			02/22/24 01:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	49.8		mg/Kg		02/20/24 12:56	02/22/24 01:17	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/20/24 12:56	02/22/24 01:17	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/20/24 12:56	02/22/24 01:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*02/20/24 12:56*	*02/22/24 01:17*	*1*
o-Terphenyl	*93*		*70 - 130*	*02/20/24 12:56*	*02/22/24 01:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36.5**		5.01		mg/Kg			02/21/24 18:24	1

Client Sample ID: WES24-06 0-2.5

Lab Sample ID: 890-6210-2
Matrix: Solid
Date Collected: 02/16/24 11:05
Date Received: 02/19/24 08:16

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 02:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 02:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 02:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/22/24 16:39	02/25/24 02:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 02:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/22/24 16:39	02/25/24 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*142*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 02:29*	*1*
1,4-Difluorobenzene (Surr)	*128*		*70 - 130*	*02/22/24 16:39*	*02/25/24 02:29*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: WES24-06 0-2.5

Date Collected: 02/16/24 11:05
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-2

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/25/24 02:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			02/22/24 02:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		02/20/24 12:56	02/22/24 02:30	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		02/20/24 12:56	02/22/24 02:30	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/20/24 12:56	02/22/24 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*02/20/24 12:56*	*02/22/24 02:30*	*1*
o-Terphenyl	*89*		*70 - 130*	*02/20/24 12:56*	*02/22/24 02:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**81.8**		5.04		mg/Kg			02/21/24 18:44	1

Client Sample ID: BES24-26 1

Date Collected: 02/16/24 10:00
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 02:55	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 02:55	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 02:55	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/22/24 16:39	02/25/24 02:55	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 02:55	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/22/24 16:39	02/25/24 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 02:55*	*1*
1,4-Difluorobenzene (Surr)	*125*		*70 - 130*	*02/22/24 16:39*	*02/25/24 02:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			02/25/24 02:55	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/22/24 02:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 02:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 02:54	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-26 1

Lab Sample ID: 890-6210-3
Matrix: Solid
Date Collected: 02/16/24 10:00
Date Received: 02/19/24 08:16

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 02:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*02/20/24 12:56*	*02/22/24 02:54*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/20/24 12:56*	*02/22/24 02:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**70.4**		5.05		mg/Kg			02/21/24 18:51	1

Client Sample ID: BES24-27 1

Lab Sample ID: 890-6210-4
Matrix: Solid
Date Collected: 02/16/24 10:00
Date Received: 02/19/24 08:16

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 03:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 03:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 03:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/22/24 16:39	02/25/24 03:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 03:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/22/24 16:39	02/25/24 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*02/22/24 16:39*	*02/25/24 03:22*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*02/22/24 16:39*	*02/25/24 03:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/25/24 03:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/22/24 03:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/20/24 12:56	02/22/24 03:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/20/24 12:56	02/22/24 03:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/20/24 12:56	02/22/24 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*02/20/24 12:56*	*02/22/24 03:18*	*1*
o-Terphenyl	*87*		*70 - 130*	*02/20/24 12:56*	*02/22/24 03:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**437**		5.03		mg/Kg			02/21/24 18:58	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-28 1

Date Collected: 02/16/24 10:05
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 03:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 03:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 03:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/22/24 16:39	02/25/24 03:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 03:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/22/24 16:39	02/25/24 03:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*02/22/24 16:39*	*02/25/24 03:48*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*02/22/24 16:39*	*02/25/24 03:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/25/24 03:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			02/22/24 03:42	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/20/24 12:56	02/22/24 03:42	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		02/20/24 12:56	02/22/24 03:42	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/20/24 12:56	02/22/24 03:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*02/20/24 12:56*	*02/22/24 03:42*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/20/24 12:56*	*02/22/24 03:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**914**		4.99		mg/Kg			02/21/24 19:05	1

Client Sample ID: BES24-29 1

Date Collected: 02/16/24 10:05
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 04:15	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 04:15	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 04:15	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/22/24 16:39	02/25/24 04:15	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 04:15	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/22/24 16:39	02/25/24 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 04:15*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*02/22/24 16:39*	*02/25/24 04:15*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-29 1

Date Collected: 02/16/24 10:05
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-6

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/25/24 04:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/22/24 04:05	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 04:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 04:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*02/20/24 12:56*	*02/22/24 04:05*	*1*
o-Terphenyl	*88*		*70 - 130*	*02/20/24 12:56*	*02/22/24 04:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**401**		5.02		mg/Kg			02/21/24 19:25	1

Client Sample ID: BES24-30 1

Date Collected: 02/16/24 10:10
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 04:41	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 04:41	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 04:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/22/24 16:39	02/25/24 04:41	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 04:41	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/22/24 16:39	02/25/24 04:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*02/22/24 16:39*	*02/25/24 04:41*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/22/24 16:39*	*02/25/24 04:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/25/24 04:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			02/22/24 04:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		02/20/24 12:56	02/22/24 04:29	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		02/20/24 12:56	02/22/24 04:29	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-30 1

Lab Sample ID: 890-6210-7
Matrix: Solid
Date Collected: 02/16/24 10:10
Date Received: 02/19/24 08:16

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		02/20/24 12:56	02/22/24 04:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/20/24 12:56*	*02/22/24 04:29*	*1*
o-Terphenyl	*95*		*70 - 130*	*02/20/24 12:56*	*02/22/24 04:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**415**		5.05		mg/Kg			02/21/24 19:32	1

Client Sample ID: BES24-31 1

Lab Sample ID: 890-6210-8
Matrix: Solid
Date Collected: 02/16/24 10:10
Date Received: 02/19/24 08:16

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 05:08	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 05:08	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 05:08	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		02/22/24 16:39	02/25/24 05:08	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 05:08	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/22/24 16:39	02/25/24 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*02/22/24 16:39*	*02/25/24 05:08*	*1*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*02/22/24 16:39*	*02/25/24 05:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			02/25/24 05:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			02/22/24 04:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		02/20/24 12:56	02/22/24 04:52	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		02/20/24 12:56	02/22/24 04:52	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		02/20/24 12:56	02/22/24 04:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*02/20/24 12:56*	*02/22/24 04:52*	*1*
o-Terphenyl	*106*		*70 - 130*	*02/20/24 12:56*	*02/22/24 04:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**71.0**		4.98		mg/Kg			02/21/24 19:39	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-32 1

Date Collected: 02/16/24 10:15
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 05:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 05:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 05:34	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/22/24 16:39	02/25/24 05:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 05:34	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/22/24 16:39	02/25/24 05:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*02/22/24 16:39*	*02/25/24 05:34*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*02/22/24 16:39*	*02/25/24 05:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/25/24 05:34	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			02/22/24 05:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 05:15	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 05:15	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 05:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*02/20/24 12:56*	*02/22/24 05:15*	*1*
o-Terphenyl	*84*		*70 - 130*	*02/20/24 12:56*	*02/22/24 05:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.1**		5.04		mg/Kg			02/21/24 19:46	1

Client Sample ID: BES24-33 1

Date Collected: 02/16/24 10:15
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 06:01	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 06:01	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 06:01	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/22/24 16:39	02/25/24 06:01	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 06:01	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/22/24 16:39	02/25/24 06:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*02/22/24 16:39*	*02/25/24 06:01*	*1*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*	*02/22/24 16:39*	*02/25/24 06:01*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-33 1

Date Collected: 02/16/24 10:15
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-10
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/25/24 06:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			02/22/24 05:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 05:38	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 05:38	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*02/20/24 12:56*	*02/22/24 05:38*	*1*
o-Terphenyl	*80*		*70 - 130*	*02/20/24 12:56*	*02/22/24 05:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**361**		5.02		mg/Kg			02/21/24 19:53	1

Client Sample ID: BES24-34 1

Date Collected: 02/16/24 10:20
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 07:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 07:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 07:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/22/24 16:39	02/25/24 07:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 07:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/22/24 16:39	02/25/24 07:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*02/22/24 16:39*	*02/25/24 07:47*	*1*
1,4-Difluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 07:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			02/25/24 07:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			02/22/24 06:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		02/20/24 12:56	02/22/24 06:24	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		02/20/24 12:56	02/22/24 06:24	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-34 1

Date Collected: 02/16/24 10:20
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-11

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		02/20/24 12:56	02/22/24 06:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*02/20/24 12:56*	*02/22/24 06:24*	*1*
o-Terphenyl	*87*		*70 - 130*	*02/20/24 12:56*	*02/22/24 06:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**181**		5.05		mg/Kg			02/21/24 20:00	1

Client Sample ID: BES24-35 1

Date Collected: 02/16/24 10:20
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 08:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 08:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 08:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/22/24 16:39	02/25/24 08:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 08:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/22/24 16:39	02/25/24 08:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/22/24 16:39*	*02/25/24 08:14*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*02/22/24 16:39*	*02/25/24 08:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/25/24 08:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/22/24 06:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 06:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 06:47	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 06:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*02/20/24 12:56*	*02/22/24 06:47*	*1*
o-Terphenyl	*84*		*70 - 130*	*02/20/24 12:56*	*02/22/24 06:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**124**		5.04		mg/Kg			02/21/24 20:20	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-36 1

Date Collected: 02/16/24 10:25
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 08:40	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 08:40	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 08:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/22/24 16:39	02/25/24 08:40	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 08:40	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/22/24 16:39	02/25/24 08:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 08:40*	*1*
1,4-Difluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 08:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/25/24 08:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			02/22/24 07:10	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/20/24 12:56	02/22/24 07:10	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		02/20/24 12:56	02/22/24 07:10	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/20/24 12:56	02/22/24 07:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*02/20/24 12:56*	*02/22/24 07:10*	*1*
o-Terphenyl	*83*		*70 - 130*	*02/20/24 12:56*	*02/22/24 07:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**108**		4.96		mg/Kg			02/21/24 20:27	1

Client Sample ID: BES24-37 1

Date Collected: 02/16/24 14:50
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 09:08	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 09:08	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 09:08	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/22/24 16:39	02/25/24 09:08	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/22/24 16:39	02/25/24 09:08	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/22/24 16:39	02/25/24 09:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*02/22/24 16:39*	*02/25/24 09:08*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/22/24 16:39*	*02/25/24 09:08*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-37 1

Date Collected: 02/16/24 14:50
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-14

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			02/25/24 09:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			02/22/24 07:34	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/20/24 12:56	02/22/24 07:34	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		02/20/24 12:56	02/22/24 07:34	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/20/24 12:56	02/22/24 07:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*02/20/24 12:56*	*02/22/24 07:34*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/20/24 12:56*	*02/22/24 07:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**77.3**		4.99		mg/Kg			02/21/24 20:48	1

Client Sample ID: BES24-38 2.5

Date Collected: 02/16/24 14:55
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-15

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 09:35	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 09:35	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 09:35	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/22/24 16:39	02/25/24 09:35	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 09:35	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/22/24 16:39	02/25/24 09:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*02/22/24 16:39*	*02/25/24 09:35*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/22/24 16:39*	*02/25/24 09:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/25/24 09:35	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/22/24 07:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/20/24 12:56	02/22/24 07:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/20/24 12:56	02/22/24 07:59	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-38 2.5

Lab Sample ID: 890-6210-15
Matrix: Solid
Date Collected: 02/16/24 14:55
Date Received: 02/19/24 08:16

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/20/24 12:56	02/22/24 07:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*02/20/24 12:56*	*02/22/24 07:59*	*1*
o-Terphenyl	*84*		*70 - 130*	*02/20/24 12:56*	*02/22/24 07:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1810**		25.1		mg/Kg			02/21/24 20:55	5

Client Sample ID: BES24-39 2.5

Lab Sample ID: 890-6210-16
Matrix: Solid
Date Collected: 02/16/24 11:10
Date Received: 02/19/24 08:16

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 10:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 10:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 10:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/22/24 16:39	02/25/24 10:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/22/24 16:39	02/25/24 10:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/22/24 16:39	02/25/24 10:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*02/22/24 16:39*	*02/25/24 10:02*	*1*
1,4-Difluorobenzene (Surr)	*129*		*70 - 130*	*02/22/24 16:39*	*02/25/24 10:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/25/24 10:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/22/24 08:35	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 08:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 08:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/20/24 12:56	02/22/24 08:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*02/20/24 12:56*	*02/22/24 08:35*	*1*
o-Terphenyl	*85*		*70 - 130*	*02/20/24 12:56*	*02/22/24 08:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40.8**		5.02		mg/Kg			02/21/24 21:02	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-40 2.5

Date Collected: 02/16/24 11:15
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-17
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 10:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 10:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 10:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/22/24 16:39	02/25/24 10:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 10:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/22/24 16:39	02/25/24 10:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*02/22/24 16:39*	*02/25/24 10:30*	*1*
1,4-Difluorobenzene (Surr)	*154*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 10:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/25/24 10:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			02/22/24 08:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		02/20/24 12:56	02/22/24 08:57	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		02/20/24 12:56	02/22/24 08:57	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		02/20/24 12:56	02/22/24 08:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*02/20/24 12:56*	*02/22/24 08:57*	*1*
o-Terphenyl	*85*		*70 - 130*	*02/20/24 12:56*	*02/22/24 08:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2890**		24.9		mg/Kg			02/22/24 11:30	5

Client Sample ID: BES24-41 2.5

Date Collected: 02/16/24 11:15
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-18
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 10:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 10:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 10:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/22/24 16:39	02/25/24 10:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/22/24 16:39	02/25/24 10:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/22/24 16:39	02/25/24 10:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*02/22/24 16:39*	*02/25/24 10:56*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*02/22/24 16:39*	*02/25/24 10:56*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-41 2.5

Date Collected: 02/16/24 11:15
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-18
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/25/24 10:56	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			02/22/24 09:19	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 09:19	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 09:19	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 09:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*02/20/24 12:56*	*02/22/24 09:19*	*1*
o-Terphenyl	*96*		*70 - 130*	*02/20/24 12:56*	*02/22/24 09:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32.9**		5.00		mg/Kg			02/21/24 21:15	1

Client Sample ID: BES24-42 2.5

Date Collected: 02/16/24 11:20
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-19
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 11:24	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 11:24	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 11:24	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/22/24 16:39	02/25/24 11:24	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/22/24 16:39	02/25/24 11:24	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/22/24 16:39	02/25/24 11:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*02/22/24 16:39*	*02/25/24 11:24*	*1*
1,4-Difluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 11:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/25/24 11:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			02/22/24 09:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 09:41	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 09:41	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-42 2.5

Lab Sample ID: 890-6210-19
Matrix: Solid
Date Collected: 02/16/24 11:20
Date Received: 02/19/24 08:16

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		02/20/24 12:56	02/22/24 09:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*02/20/24 12:56*	*02/22/24 09:41*	*1*
o-Terphenyl	*96*		*70 - 130*	*02/20/24 12:56*	*02/22/24 09:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46.9**		5.03		mg/Kg			02/21/24 21:22	1

Client Sample ID: BES24-43 2.5

Lab Sample ID: 890-6210-20
Matrix: Solid
Date Collected: 02/16/24 15:00
Date Received: 02/19/24 08:16

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 11:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 11:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 11:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/22/24 16:39	02/25/24 11:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 11:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/22/24 16:39	02/25/24 11:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 11:51*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*02/22/24 16:39*	*02/25/24 11:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/25/24 11:51	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			02/22/24 10:04	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		02/20/24 12:56	02/22/24 10:04	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		02/20/24 12:56	02/22/24 10:04	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		02/20/24 12:56	02/22/24 10:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*02/20/24 12:56*	*02/22/24 10:04*	*1*
o-Terphenyl	*89*		*70 - 130*	*02/20/24 12:56*	*02/22/24 10:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**206**		5.04		mg/Kg			02/21/24 21:29	1

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid | **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-6210-1	WES24-04 1-2.5	120	159 S1+
890-6210-1 MS	WES24-04 1-2.5	119	91
890-6210-1 MSD	WES24-04 1-2.5	59 S1-	72
890-6210-2	WES24-06 0-2.5	142 S1+	128
890-6210-3	BES24-26 1	136 S1+	125
890-6210-4	BES24-27 1	110	110
890-6210-5	BES24-28 1	116	91
890-6210-6	BES24-29 1	133 S1+	118
890-6210-7	BES24-30 1	73	105
890-6210-8	BES24-31 1	110	70
890-6210-9	BES24-32 1	83	108
890-6210-10	BES24-33 1	128	122
890-6210-11	BES24-34 1	129	134 S1+
890-6210-12	BES24-35 1	120	119
890-6210-13	BES24-36 1	132 S1+	132 S1+
890-6210-14	BES24-37 1	108	105
890-6210-15	BES24-38 2.5	90	106
890-6210-16	BES24-39 2.5	128	129
890-6210-17	BES24-40 2.5	126	154 S1+
890-6210-18	BES24-41 2.5	107	119
890-6210-19	BES24-42 2.5	130	144 S1+
890-6210-20	BES24-43 2.5	144 S1+	120
LCS 880-73893/1-A	Lab Control Sample	47 S1-	84
LCSD 880-73893/2-A	Lab Control Sample Dup	114	95
MB 880-73788/5-A	Method Blank	68 S1-	130
MB 880-73893/5-A	Method Blank	79	134 S1+

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid | **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-6210-1	WES24-04 1-2.5	90	93
890-6210-1 MS	WES24-04 1-2.5	72	71
890-6210-1 MSD	WES24-04 1-2.5	75	73
890-6210-2	WES24-06 0-2.5	84	89
890-6210-3	BES24-26 1	85	92
890-6210-4	BES24-27 1	84	87
890-6210-5	BES24-28 1	86	92
890-6210-6	BES24-29 1	80	88
890-6210-7	BES24-30 1	91	95
890-6210-8	BES24-31 1	100	106
890-6210-9	BES24-32 1	80	84
890-6210-10	BES24-33 1	76	80
890-6210-11	BES24-34 1	81	87

Surrogate Summary

Client: Vertex Job ID: 890-6210-1
Project/Site: JRU DI 1A CTB SDG: 23E-04616

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
890-6210-12	BES24-35 1	80	84								
890-6210-13	BES24-36 1	78	83								
890-6210-14	BES24-37 1	85	91								
890-6210-15	BES24-38 2.5	78	84								
890-6210-16	BES24-39 2.5	81	85								
890-6210-17	BES24-40 2.5	81	85								
890-6210-18	BES24-41 2.5	90	96								
890-6210-19	BES24-42 2.5	88	96								
890-6210-20	BES24-43 2.5	85	89								
LCS 880-73683/2-A	Lab Control Sample	90	106								
LCSD 880-73683/3-A	Lab Control Sample Dup	79	94								
MB 880-73683/1-A	Method Blank	100	107								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73788/5-A
Matrix: Solid
Analysis Batch: 73921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73788

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/21/24 13:00	02/24/24 11:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/21/24 13:00	02/24/24 11:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/21/24 13:00	02/24/24 11:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/21/24 13:00	02/24/24 11:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/21/24 13:00	02/24/24 11:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/21/24 13:00	02/24/24 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*02/21/24 13:00*	*02/24/24 11:44*	*1*
1,4-Difluorobenzene (Surr)	*130*		*70 - 130*	*02/21/24 13:00*	*02/24/24 11:44*	*1*

Lab Sample ID: MB 880-73893/5-A
Matrix: Solid
Analysis Batch: 73921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73893

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 01:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 01:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 01:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/22/24 16:39	02/25/24 01:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/22/24 16:39	02/25/24 01:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/22/24 16:39	02/25/24 01:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*02/22/24 16:39*	*02/25/24 01:35*	*1*
1,4-Difluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*02/22/24 16:39*	*02/25/24 01:35*	*1*

Lab Sample ID: LCS 880-73893/1-A
Matrix: Solid
Analysis Batch: 73921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73893

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1122		mg/Kg		112	70 - 130		
Toluene			0.100	0.1171		mg/Kg		117	70 - 130		
Ethylbenzene			0.100	0.1078		mg/Kg		108	70 - 130		
m-Xylene & p-Xylene			0.200	0.2433		mg/Kg		122	70 - 130		
o-Xylene			0.100	0.1146		mg/Kg		115	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*47*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*

Lab Sample ID: LCSD 880-73893/2-A
Matrix: Solid
Analysis Batch: 73921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73893

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1003		mg/Kg		100	70 - 130	11	35

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

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

Lab Sample ID: LCSD 880-73893/2-A
Matrix: Solid
Analysis Batch: 73921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73893

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09609		mg/Kg		96	70 - 130	20	35
Ethylbenzene			0.100	0.09613		mg/Kg		96	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.1915		mg/Kg		96	70 - 130	24	35
o-Xylene			0.100	0.1032		mg/Kg		103	70 - 130	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-6210-1 MS
Matrix: Solid
Analysis Batch: 73921

Client Sample ID: WES24-04 1-2.5
Prep Type: Total/NA
Prep Batch: 73893

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F1 F2	0.101	0.07400		mg/Kg		73	70 - 130
Toluene	<0.00199	U F1 F2	0.101	0.07608		mg/Kg		74	70 - 130
Ethylbenzene	<0.00199	U F1 F2	0.101	0.08192		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.202	0.1839		mg/Kg		91	70 - 130
o-Xylene	<0.00199	U F1 F2	0.101	0.08932		mg/Kg		89	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 890-6210-1 MSD
Matrix: Solid
Analysis Batch: 73921

Client Sample ID: WES24-04 1-2.5
Prep Type: Total/NA
Prep Batch: 73893

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.100	0.03207	F1 F2	mg/Kg		32	70 - 130	79	35
Toluene	<0.00199	U F1 F2	0.100	0.04194	F1 F2	mg/Kg		41	70 - 130	58	35
Ethylbenzene	<0.00199	U F1 F2	0.100	0.04565	F1 F2	mg/Kg		46	70 - 130	57	35
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.08567	F1 F2	mg/Kg		43	70 - 130	73	35
o-Xylene	<0.00199	U F1 F2	0.100	0.02578	F1 F2	mg/Kg		26	70 - 130	110	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*59*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*

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

Lab Sample ID: MB 880-73683/1-A
Matrix: Solid
Analysis Batch: 73708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73683

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/20/24 12:56	02/22/24 00:00	1

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

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

Lab Sample ID: MB 880-73683/1-A
Matrix: Solid
Analysis Batch: 73708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73683

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/20/24 12:56	02/22/24 00:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/20/24 12:56	02/22/24 00:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*02/20/24 12:56*	*02/22/24 00:00*	*1*
o-Terphenyl	*107*		*70 - 130*	*02/20/24 12:56*	*02/22/24 00:00*	*1*

Lab Sample ID: LCS 880-73683/2-A
Matrix: Solid
Analysis Batch: 73708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73683

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	927.8		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	943.6		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Lab Sample ID: LCSD 880-73683/3-A
Matrix: Solid
Analysis Batch: 73708

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73683

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	928.0		mg/Kg		93	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	928.9		mg/Kg		93	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*79*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

Lab Sample ID: 890-6210-1 MS
Matrix: Solid
Analysis Batch: 73708

Client Sample ID: WES24-04 1-2.5
Prep Type: Total/NA
Prep Batch: 73683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	1010	650.6	F1	mg/Kg		63	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	1010	766.7		mg/Kg		76	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*72*		*70 - 130*
o-Terphenyl	*71*		*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

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

Lab Sample ID: 890-6210-1 MSD — **Client Sample ID: WES24-04 1-2.5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 73708 — **Prep Batch: 73683**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	1010	683.8	F1	mg/Kg		67	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.8	U	1010	777.8		mg/Kg		77	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*75*		*70 - 130*
o-Terphenyl	*73*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-73701/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73755

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/21/24 18:03	1

Lab Sample ID: LCS 880-73701/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73755

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.1		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-73701/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73755

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	262.5		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-6210-1 MS — **Client Sample ID: WES24-04 1-2.5**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73755

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	36.5		251	304.6		mg/Kg		107	90 - 110		

Lab Sample ID: 890-6210-1 MSD — **Client Sample ID: WES24-04 1-2.5**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73755

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	36.5		251	280.7		mg/Kg		97	90 - 110	8	20

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-6210-11 MS
Matrix: Solid
Analysis Batch: 73755

Client Sample ID: BES24-34 1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	181		249	431.9		mg/Kg		101	90 - 110		

Lab Sample ID: 890-6210-11 MSD
Matrix: Solid
Analysis Batch: 73755

Client Sample ID: BES24-34 1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	181		253	412.6		mg/Kg		92	90 - 110	5	20

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

GC VOA

Prep Batch: 73788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-73788/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 73893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-1	WES24-04 1-2.5	Total/NA	Solid	5035	
890-6210-2	WES24-06 0-2.5	Total/NA	Solid	5035	
890-6210-3	BES24-26 1	Total/NA	Solid	5035	
890-6210-4	BES24-27 1	Total/NA	Solid	5035	
890-6210-5	BES24-28 1	Total/NA	Solid	5035	
890-6210-6	BES24-29 1	Total/NA	Solid	5035	
890-6210-7	BES24-30 1	Total/NA	Solid	5035	
890-6210-8	BES24-31 1	Total/NA	Solid	5035	
890-6210-9	BES24-32 1	Total/NA	Solid	5035	
890-6210-10	BES24-33 1	Total/NA	Solid	5035	
890-6210-11	BES24-34 1	Total/NA	Solid	5035	
890-6210-12	BES24-35 1	Total/NA	Solid	5035	
890-6210-13	BES24-36 1	Total/NA	Solid	5035	
890-6210-14	BES24-37 1	Total/NA	Solid	5035	
890-6210-15	BES24-38 2.5	Total/NA	Solid	5035	
890-6210-16	BES24-39 2.5	Total/NA	Solid	5035	
890-6210-17	BES24-40 2.5	Total/NA	Solid	5035	
890-6210-18	BES24-41 2.5	Total/NA	Solid	5035	
890-6210-19	BES24-42 2.5	Total/NA	Solid	5035	
890-6210-20	BES24-43 2.5	Total/NA	Solid	5035	
MB 880-73893/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-73893/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-73893/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6210-1 MS	WES24-04 1-2.5	Total/NA	Solid	5035	
890-6210-1 MSD	WES24-04 1-2.5	Total/NA	Solid	5035	

Analysis Batch: 73921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-1	WES24-04 1-2.5	Total/NA	Solid	8021B	73893
890-6210-2	WES24-06 0-2.5	Total/NA	Solid	8021B	73893
890-6210-3	BES24-26 1	Total/NA	Solid	8021B	73893
890-6210-4	BES24-27 1	Total/NA	Solid	8021B	73893
890-6210-5	BES24-28 1	Total/NA	Solid	8021B	73893
890-6210-6	BES24-29 1	Total/NA	Solid	8021B	73893
890-6210-7	BES24-30 1	Total/NA	Solid	8021B	73893
890-6210-8	BES24-31 1	Total/NA	Solid	8021B	73893
890-6210-9	BES24-32 1	Total/NA	Solid	8021B	73893
890-6210-10	BES24-33 1	Total/NA	Solid	8021B	73893
890-6210-11	BES24-34 1	Total/NA	Solid	8021B	73893
890-6210-12	BES24-35 1	Total/NA	Solid	8021B	73893
890-6210-13	BES24-36 1	Total/NA	Solid	8021B	73893
890-6210-14	BES24-37 1	Total/NA	Solid	8021B	73893
890-6210-15	BES24-38 2.5	Total/NA	Solid	8021B	73893
890-6210-16	BES24-39 2.5	Total/NA	Solid	8021B	73893
890-6210-17	BES24-40 2.5	Total/NA	Solid	8021B	73893
890-6210-18	BES24-41 2.5	Total/NA	Solid	8021B	73893
890-6210-19	BES24-42 2.5	Total/NA	Solid	8021B	73893

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

GC VOA (Continued)

Analysis Batch: 73921 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-20	BES24-43 2.5	Total/NA	Solid	8021B	73893
MB 880-73788/5-A	Method Blank	Total/NA	Solid	8021B	73788
MB 880-73893/5-A	Method Blank	Total/NA	Solid	8021B	73893
LCS 880-73893/1-A	Lab Control Sample	Total/NA	Solid	8021B	73893
LCSD 880-73893/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73893
890-6210-1 MS	WES24-04 1-2.5	Total/NA	Solid	8021B	73893
890-6210-1 MSD	WES24-04 1-2.5	Total/NA	Solid	8021B	73893

Analysis Batch: 74080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-1	WES24-04 1-2.5	Total/NA	Solid	Total BTEX	
890-6210-2	WES24-06 0-2.5	Total/NA	Solid	Total BTEX	
890-6210-3	BES24-26 1	Total/NA	Solid	Total BTEX	
890-6210-4	BES24-27 1	Total/NA	Solid	Total BTEX	
890-6210-5	BES24-28 1	Total/NA	Solid	Total BTEX	
890-6210-6	BES24-29 1	Total/NA	Solid	Total BTEX	
890-6210-7	BES24-30 1	Total/NA	Solid	Total BTEX	
890-6210-8	BES24-31 1	Total/NA	Solid	Total BTEX	
890-6210-9	BES24-32 1	Total/NA	Solid	Total BTEX	
890-6210-10	BES24-33 1	Total/NA	Solid	Total BTEX	
890-6210-11	BES24-34 1	Total/NA	Solid	Total BTEX	
890-6210-12	BES24-35 1	Total/NA	Solid	Total BTEX	
890-6210-13	BES24-36 1	Total/NA	Solid	Total BTEX	
890-6210-14	BES24-37 1	Total/NA	Solid	Total BTEX	
890-6210-15	BES24-38 2.5	Total/NA	Solid	Total BTEX	
890-6210-16	BES24-39 2.5	Total/NA	Solid	Total BTEX	
890-6210-17	BES24-40 2.5	Total/NA	Solid	Total BTEX	
890-6210-18	BES24-41 2.5	Total/NA	Solid	Total BTEX	
890-6210-19	BES24-42 2.5	Total/NA	Solid	Total BTEX	
890-6210-20	BES24-43 2.5	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 73683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-1	WES24-04 1-2.5	Total/NA	Solid	8015NM Prep	
890-6210-2	WES24-06 0-2.5	Total/NA	Solid	8015NM Prep	
890-6210-3	BES24-26 1	Total/NA	Solid	8015NM Prep	
890-6210-4	BES24-27 1	Total/NA	Solid	8015NM Prep	
890-6210-5	BES24-28 1	Total/NA	Solid	8015NM Prep	
890-6210-6	BES24-29 1	Total/NA	Solid	8015NM Prep	
890-6210-7	BES24-30 1	Total/NA	Solid	8015NM Prep	
890-6210-8	BES24-31 1	Total/NA	Solid	8015NM Prep	
890-6210-9	BES24-32 1	Total/NA	Solid	8015NM Prep	
890-6210-10	BES24-33 1	Total/NA	Solid	8015NM Prep	
890-6210-11	BES24-34 1	Total/NA	Solid	8015NM Prep	
890-6210-12	BES24-35 1	Total/NA	Solid	8015NM Prep	
890-6210-13	BES24-36 1	Total/NA	Solid	8015NM Prep	
890-6210-14	BES24-37 1	Total/NA	Solid	8015NM Prep	
890-6210-15	BES24-38 2.5	Total/NA	Solid	8015NM Prep	
890-6210-16	BES24-39 2.5	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

GC Semi VOA (Continued)

Prep Batch: 73683 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-17	BES24-40 2.5	Total/NA	Solid	8015NM Prep	
890-6210-18	BES24-41 2.5	Total/NA	Solid	8015NM Prep	
890-6210-19	BES24-42 2.5	Total/NA	Solid	8015NM Prep	
890-6210-20	BES24-43 2.5	Total/NA	Solid	8015NM Prep	
MB 880-73683/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73683/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73683/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6210-1 MS	WES24-04 1-2.5	Total/NA	Solid	8015NM Prep	
890-6210-1 MSD	WES24-04 1-2.5	Total/NA	Solid	8015NM Prep	

Analysis Batch: 73708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-1	WES24-04 1-2.5	Total/NA	Solid	8015B NM	73683
890-6210-2	WES24-06 0-2.5	Total/NA	Solid	8015B NM	73683
890-6210-3	BES24-26 1	Total/NA	Solid	8015B NM	73683
890-6210-4	BES24-27 1	Total/NA	Solid	8015B NM	73683
890-6210-5	BES24-28 1	Total/NA	Solid	8015B NM	73683
890-6210-6	BES24-29 1	Total/NA	Solid	8015B NM	73683
890-6210-7	BES24-30 1	Total/NA	Solid	8015B NM	73683
890-6210-8	BES24-31 1	Total/NA	Solid	8015B NM	73683
890-6210-9	BES24-32 1	Total/NA	Solid	8015B NM	73683
890-6210-10	BES24-33 1	Total/NA	Solid	8015B NM	73683
890-6210-11	BES24-34 1	Total/NA	Solid	8015B NM	73683
890-6210-12	BES24-35 1	Total/NA	Solid	8015B NM	73683
890-6210-13	BES24-36 1	Total/NA	Solid	8015B NM	73683
890-6210-14	BES24-37 1	Total/NA	Solid	8015B NM	73683
890-6210-15	BES24-38 2.5	Total/NA	Solid	8015B NM	73683
890-6210-16	BES24-39 2.5	Total/NA	Solid	8015B NM	73683
890-6210-17	BES24-40 2.5	Total/NA	Solid	8015B NM	73683
890-6210-18	BES24-41 2.5	Total/NA	Solid	8015B NM	73683
890-6210-19	BES24-42 2.5	Total/NA	Solid	8015B NM	73683
890-6210-20	BES24-43 2.5	Total/NA	Solid	8015B NM	73683
MB 880-73683/1-A	Method Blank	Total/NA	Solid	8015B NM	73683
LCS 880-73683/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73683
LCSD 880-73683/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73683
890-6210-1 MS	WES24-04 1-2.5	Total/NA	Solid	8015B NM	73683
890-6210-1 MSD	WES24-04 1-2.5	Total/NA	Solid	8015B NM	73683

Analysis Batch: 73833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-1	WES24-04 1-2.5	Total/NA	Solid	8015 NM	
890-6210-2	WES24-06 0-2.5	Total/NA	Solid	8015 NM	
890-6210-3	BES24-26 1	Total/NA	Solid	8015 NM	
890-6210-4	BES24-27 1	Total/NA	Solid	8015 NM	
890-6210-5	BES24-28 1	Total/NA	Solid	8015 NM	
890-6210-6	BES24-29 1	Total/NA	Solid	8015 NM	
890-6210-7	BES24-30 1	Total/NA	Solid	8015 NM	
890-6210-8	BES24-31 1	Total/NA	Solid	8015 NM	
890-6210-9	BES24-32 1	Total/NA	Solid	8015 NM	
890-6210-10	BES24-33 1	Total/NA	Solid	8015 NM	
890-6210-11	BES24-34 1	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

GC Semi VOA (Continued)

Analysis Batch: 73833 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-12	BES24-35 1	Total/NA	Solid	8015 NM	
890-6210-13	BES24-36 1	Total/NA	Solid	8015 NM	
890-6210-14	BES24-37 1	Total/NA	Solid	8015 NM	
890-6210-15	BES24-38 2.5	Total/NA	Solid	8015 NM	
890-6210-16	BES24-39 2.5	Total/NA	Solid	8015 NM	
890-6210-17	BES24-40 2.5	Total/NA	Solid	8015 NM	
890-6210-18	BES24-41 2.5	Total/NA	Solid	8015 NM	
890-6210-19	BES24-42 2.5	Total/NA	Solid	8015 NM	
890-6210-20	BES24-43 2.5	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 73701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-1	WES24-04 1-2.5	Soluble	Solid	DI Leach	
890-6210-2	WES24-06 0-2.5	Soluble	Solid	DI Leach	
890-6210-3	BES24-26 1	Soluble	Solid	DI Leach	
890-6210-4	BES24-27 1	Soluble	Solid	DI Leach	
890-6210-5	BES24-28 1	Soluble	Solid	DI Leach	
890-6210-6	BES24-29 1	Soluble	Solid	DI Leach	
890-6210-7	BES24-30 1	Soluble	Solid	DI Leach	
890-6210-8	BES24-31 1	Soluble	Solid	DI Leach	
890-6210-9	BES24-32 1	Soluble	Solid	DI Leach	
890-6210-10	BES24-33 1	Soluble	Solid	DI Leach	
890-6210-11	BES24-34 1	Soluble	Solid	DI Leach	
890-6210-12	BES24-35 1	Soluble	Solid	DI Leach	
890-6210-13	BES24-36 1	Soluble	Solid	DI Leach	
890-6210-14	BES24-37 1	Soluble	Solid	DI Leach	
890-6210-15	BES24-38 2.5	Soluble	Solid	DI Leach	
890-6210-16	BES24-39 2.5	Soluble	Solid	DI Leach	
890-6210-17	BES24-40 2.5	Soluble	Solid	DI Leach	
890-6210-18	BES24-41 2.5	Soluble	Solid	DI Leach	
890-6210-19	BES24-42 2.5	Soluble	Solid	DI Leach	
890-6210-20	BES24-43 2.5	Soluble	Solid	DI Leach	
MB 880-73701/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73701/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73701/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6210-1 MS	WES24-04 1-2.5	Soluble	Solid	DI Leach	
890-6210-1 MSD	WES24-04 1-2.5	Soluble	Solid	DI Leach	
890-6210-11 MS	BES24-34 1	Soluble	Solid	DI Leach	
890-6210-11 MSD	BES24-34 1	Soluble	Solid	DI Leach	

Analysis Batch: 73755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-1	WES24-04 1-2.5	Soluble	Solid	300.0	73701
890-6210-2	WES24-06 0-2.5	Soluble	Solid	300.0	73701
890-6210-3	BES24-26 1	Soluble	Solid	300.0	73701
890-6210-4	BES24-27 1	Soluble	Solid	300.0	73701
890-6210-5	BES24-28 1	Soluble	Solid	300.0	73701
890-6210-6	BES24-29 1	Soluble	Solid	300.0	73701
890-6210-7	BES24-30 1	Soluble	Solid	300.0	73701

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

HPLC/IC (Continued)

Analysis Batch: 73755 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6210-8	BES24-31 1	Soluble	Solid	300.0	73701
890-6210-9	BES24-32 1	Soluble	Solid	300.0	73701
890-6210-10	BES24-33 1	Soluble	Solid	300.0	73701
890-6210-11	BES24-34 1	Soluble	Solid	300.0	73701
890-6210-12	BES24-35 1	Soluble	Solid	300.0	73701
890-6210-13	BES24-36 1	Soluble	Solid	300.0	73701
890-6210-14	BES24-37 1	Soluble	Solid	300.0	73701
890-6210-15	BES24-38 2.5	Soluble	Solid	300.0	73701
890-6210-16	BES24-39 2.5	Soluble	Solid	300.0	73701
890-6210-17	BES24-40 2.5	Soluble	Solid	300.0	73701
890-6210-18	BES24-41 2.5	Soluble	Solid	300.0	73701
890-6210-19	BES24-42 2.5	Soluble	Solid	300.0	73701
890-6210-20	BES24-43 2.5	Soluble	Solid	300.0	73701
MB 880-73701/1-A	Method Blank	Soluble	Solid	300.0	73701
LCS 880-73701/2-A	Lab Control Sample	Soluble	Solid	300.0	73701
LCSD 880-73701/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73701
890-6210-1 MS	WES24-04 1-2.5	Soluble	Solid	300.0	73701
890-6210-1 MSD	WES24-04 1-2.5	Soluble	Solid	300.0	73701
890-6210-11 MS	BES24-34 1	Soluble	Solid	300.0	73701
890-6210-11 MSD	BES24-34 1	Soluble	Solid	300.0	73701

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: WES24-04 1-2.5
Lab Sample ID: 890-6210-1

Date Collected: 02/16/24 14:45
Matrix: Solid
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 02:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 02:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 01:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 01:17	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 18:24	CH	EET MID

Client Sample ID: WES24-06 0-2.5
Lab Sample ID: 890-6210-2

Date Collected: 02/16/24 11:05
Matrix: Solid
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 02:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 02:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 02:30	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 02:30	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 18:44	CH	EET MID

Client Sample ID: BES24-26 1
Lab Sample ID: 890-6210-3

Date Collected: 02/16/24 10:00
Matrix: Solid
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 02:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 02:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 02:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 02:54	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 18:51	CH	EET MID

Client Sample ID: BES24-27 1
Lab Sample ID: 890-6210-4

Date Collected: 02/16/24 10:00
Matrix: Solid
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 03:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 03:22	SM	EET MID

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Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-27 1
Date Collected: 02/16/24 10:00
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			73833	02/22/24 03:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 03:18	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 18:58	CH	EET MID

Client Sample ID: BES24-28 1
Date Collected: 02/16/24 10:05
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 03:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 03:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 03:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 03:42	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 19:05	CH	EET MID

Client Sample ID: BES24-29 1
Date Collected: 02/16/24 10:05
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 04:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 04:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 04:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 04:05	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 19:25	CH	EET MID

Client Sample ID: BES24-30 1
Date Collected: 02/16/24 10:10
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 04:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 04:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 04:29	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 04:29	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-30 1

Lab Sample ID: 890-6210-7
Matrix: Solid
Date Collected: 02/16/24 10:10
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 19:32	CH	EET MID

Client Sample ID: BES24-31 1

Lab Sample ID: 890-6210-8
Matrix: Solid
Date Collected: 02/16/24 10:10
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 05:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 05:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 04:52	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 04:52	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 19:39	CH	EET MID

Client Sample ID: BES24-32 1

Lab Sample ID: 890-6210-9
Matrix: Solid
Date Collected: 02/16/24 10:15
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 05:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 05:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 05:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 05:15	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 19:46	CH	EET MID

Client Sample ID: BES24-33 1

Lab Sample ID: 890-6210-10
Matrix: Solid
Date Collected: 02/16/24 10:15
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 06:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 06:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 05:38	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 05:38	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 19:53	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-34 1
Date Collected: 02/16/24 10:20
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 07:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 07:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 06:24	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 06:24	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 20:00	CH	EET MID

Client Sample ID: BES24-35 1
Date Collected: 02/16/24 10:20
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 08:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 08:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 06:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 06:47	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 20:20	CH	EET MID

Client Sample ID: BES24-36 1
Date Collected: 02/16/24 10:25
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 08:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 08:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 07:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 07:10	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 20:27	CH	EET MID

Client Sample ID: BES24-37 1
Date Collected: 02/16/24 14:50
Date Received: 02/19/24 08:16

Lab Sample ID: 890-6210-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 09:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 09:08	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-37 1

Lab Sample ID: 890-6210-14
Matrix: Solid
Date Collected: 02/16/24 14:50
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			73833	02/22/24 07:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 07:34	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 20:48	CH	EET MID

Client Sample ID: BES24-38 2.5

Lab Sample ID: 890-6210-15
Matrix: Solid
Date Collected: 02/16/24 14:55
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 09:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 09:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 07:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 07:59	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		5			73755	02/21/24 20:55	CH	EET MID

Client Sample ID: BES24-39 2.5

Lab Sample ID: 890-6210-16
Matrix: Solid
Date Collected: 02/16/24 11:10
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 10:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 10:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 08:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 08:35	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 21:02	CH	EET MID

Client Sample ID: BES24-40 2.5

Lab Sample ID: 890-6210-17
Matrix: Solid
Date Collected: 02/16/24 11:15
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 10:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 10:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 08:57	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 08:57	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Client Sample ID: BES24-40 2.5

Lab Sample ID: 890-6210-17

Date Collected: 02/16/24 11:15
Matrix: Solid
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		5			73755	02/22/24 11:30	CH	EET MID

Client Sample ID: BES24-41 2.5

Lab Sample ID: 890-6210-18

Date Collected: 02/16/24 11:15
Matrix: Solid
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 10:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 10:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 09:19	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 09:19	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 21:15	CH	EET MID

Client Sample ID: BES24-42 2.5

Lab Sample ID: 890-6210-19

Date Collected: 02/16/24 11:20
Matrix: Solid
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 11:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 11:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 09:41	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 09:41	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 21:22	CH	EET MID

Client Sample ID: BES24-43 2.5

Lab Sample ID: 890-6210-20

Date Collected: 02/16/24 15:00
Matrix: Solid
Date Received: 02/19/24 08:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73893	02/22/24 16:39	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73921	02/25/24 11:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74080	02/25/24 11:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			73833	02/22/24 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	73683	02/20/24 12:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73708	02/22/24 10:04	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73701	02/20/24 16:18	SA	EET MID
Soluble	Analysis	300.0		1			73755	02/21/24 21:29	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6210-1
SDG: 23E-04616

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6210-1	WES24-04 1-2.5	Solid	02/16/24 14:45	02/19/24 08:16
890-6210-2	WES24-06 0-2.5	Solid	02/16/24 11:05	02/19/24 08:16
890-6210-3	BES24-26 1	Solid	02/16/24 10:00	02/19/24 08:16
890-6210-4	BES24-27 1	Solid	02/16/24 10:00	02/19/24 08:16
890-6210-5	BES24-28 1	Solid	02/16/24 10:05	02/19/24 08:16
890-6210-6	BES24-29 1	Solid	02/16/24 10:05	02/19/24 08:16
890-6210-7	BES24-30 1	Solid	02/16/24 10:10	02/19/24 08:16
890-6210-8	BES24-31 1	Solid	02/16/24 10:10	02/19/24 08:16
890-6210-9	BES24-32 1	Solid	02/16/24 10:15	02/19/24 08:16
890-6210-10	BES24-33 1	Solid	02/16/24 10:15	02/19/24 08:16
890-6210-11	BES24-34 1	Solid	02/16/24 10:20	02/19/24 08:16
890-6210-12	BES24-35 1	Solid	02/16/24 10:20	02/19/24 08:16
890-6210-13	BES24-36 1	Solid	02/16/24 10:25	02/19/24 08:16
890-6210-14	BES24-37 1	Solid	02/16/24 14:50	02/19/24 08:16
890-6210-15	BES24-38 2.5	Solid	02/16/24 14:55	02/19/24 08:16
890-6210-16	BES24-39 2.5	Solid	02/16/24 11:10	02/19/24 08:16
890-6210-17	BES24-40 2.5	Solid	02/16/24 11:15	02/19/24 08:16
890-6210-18	BES24-41 2.5	Solid	02/16/24 11:15	02/19/24 08:16
890-6210-19	BES24-42 2.5	Solid	02/16/24 11:20	02/19/24 08:16
890-6210-20	BES24-43 2.5	Solid	02/16/24 15:00	02/19/24 08:16

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio TX (210) 509-3334
EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No: Cost Center #: 1082151001,
Incident #: nAPP2318831816

CC: CDixon@vertex.ca for Final Report

www.xenco.com Page 1 of 2

Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	
Project Number:	23E-04616	Routine Rush	
Project Location:		Due Date	
Sampler's Name:	L. Pullman	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RR ☐ Superfund ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRR ☐ Level ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

SAMPLE RECEIPT

Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	IR #001
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	-8.6
Total Containers:		Corrected Temperature:	-8.4

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
WES24-04 1-2.5'	Soil	02.16.24	14:45	1-2.5	Com		X	X	X
WES24-06 0-2.5'	Soil	02.16.24	11:05	0-2.5	Com		X	X	X
BES24-26 1'	Soil	02.16.24	10:00	1	Com		X	X	X
BES24-27 1'	Soil	02.16.24	10:00	1	Com		X	X	X
BES24-28 1'	Soil	02.16.24	10:05	1	Com		X	X	X
BES24-29 1'	Soil	02.16.24	10:05	1	Com		X	X	X
BES24-30 1'	Soil	02.16.24	10:10	1	Com		X	X	X
BES24-31 1'	Soil	02.16.24	10:10	1	Com		X	X	X
BES24-32 1'	Soil	02.16.24	10:15	1	Com		X	X	X
BES24-33 1'	Soil	02.16.24	10:15	1	Com		X	X	X

890-6210 Chain of Custody

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	2/16	8:16	2		
3			4		
5			6		

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Received by OCD: 4/27/2024 12:00:15 AM

Released to Imaging: 5/15/2024 11:16:38 AM

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Chain of Custody

Houston TX (281) 240-4200, Dallas TX (214) 902-0300
Midland TX (432) 704-5440, San Antonio TX (210) 509-3334
El Paso TX (915) 585-3443, Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550, Carlsbad NM (575) 988-3199

CC: CDixon@vertex.ca for Final Report

Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

www.xenco.com Page 2 of 2

Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	
Project Number:	23E-04616	Routine / Rush	
Project Location:		Due Date:	
Sampler's Name:	L. Pullman	TAT starts the day received by the lab, if received by 4 30pm	
PO #:			

Work Order Comments

Program: UST/PST [ ] PRP [ ] Brownfields [ ] RR [ ] Superfund [ ]
State of Project:
Reporting: Level II [ ] Level III [ ] PST/UST [ ] TRR [ ] Level IV [ ]
Deliverables: EDD [ ] ADaPT [ ] Other:

SAMPLE RECEIPT				
Temp Blank:	Yes (circled)	No	Wet Ice:	Yes No
Samples Received Intact:	Yes (circled)	No	Thermometer ID:	TNM007
Cooler Custody Seals:	Yes	No	N/A (circled)	Correction Factor: -0.2
Sample Custody Seals:	Yes	No	N/A (circled)	Temperature Reading: -8.6
Total Containers:				Corrected Temperature: -8.4

Preservative Codes

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

Sample Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
BES24-34 1'	Soil	02.16.24	10:20	1	Com	1	X	X	X
BES24-35 1'	Soil	02.16.24	10:20	1	Com	1	X	X	X
BES24-36 1'	Soil	02.16.24	10:25	1	Com	1	X	X	X
BES24-37 1'	Soil	02.16.24	14:50	1	Com	1	X	X	X
~~BES24-38 2.5'~~	~~Soil~~	~~02.16.24~~	~~14:55~~	~~2.5~~	~~Com~~	~~1~~	~~X~~	~~X~~	~~X~~
BES24-39 2.5'	Soil	02.16.24	11:10	2.5	Com	1	X	X	X
BES24-40 2.5'	Soil	02.16.24	11:15	2.5	Com	1	X	X	X
BES24-41 2.5'	Soil	02.16.24	11:15	2.5	Com	1	X	X	X
BES24-42 2.5'	Soil	02.16.24	11:20	2.5	Com	1	X	X	X
BES24-43 2.5'	Soil	02.16.24	15:00	2.5	Com	1	X	X	X

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		2/19	8	2		
3				4		
5				6		

Received by OCD: 4/27/2024 12:00:15 AM

Released to Imaging: 5/15/2024 11:16:38 AM

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-6210-1
SDG Number: 23E-04616

Login Number: 6210
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
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: 890-6210-1
SDG Number: 23E-04616

Login Number: 6210
List Number: 2
Creator: Wheeler, Jazmine

List Source: Eurofins Midland
List Creation: 02/20/24 11:29 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

CARDINAL Laboratories

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

February 28, 2024

CHANCE DIXON

VERTEX RESOURCE GROUP

420 SOUTH MAIN, SUITE 202

TULSA, OK 74103

RE: JRU DI 1A CTB

Enclosed are the results of analyses for samples received by the laboratory on 02/22/24 13:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/16/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: WES 24 - 11 0-1' (H240889-01)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.7 %* *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	**256**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *82.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *75.7 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/16/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: WES 24 - 12 0-1' (H240889-02)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.1 %* *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	**320**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *77.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.7 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/16/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: WES 24 - 13 0-1' (H240889-03)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.8 %* *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	**176**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *79.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *72.5 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/16/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: WES 24 - 14 0-1' (H240889-04)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.0 %* *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	**320**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *74.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *67.4 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/16/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 56 1' (H240889-05)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.1 %* *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	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *77.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *72.8 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/16/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 57 1' (H240889-06)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.8 %* *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	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *76.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *69.0 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/16/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 58 1' (H240889-07)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.9 %* *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	**224**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *76.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *68.6 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/16/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 59 1' (H240889-08)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.1 %* *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	**176**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *77.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.4 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/16/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 60 1' (H240889-09)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.9 %* *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	**96.0**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *75.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *68.0 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/16/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 61 1' (H240889-10)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.5 %* *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	**64.0**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *61.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *54.6 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 62 1' (H240889-11)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.4 %* *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	**80.0**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *73.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *66.2 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 63 1' (H240889-12)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.9 %* *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	**144**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *77.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *71.4 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 64 1' (H240889-13)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.5 %* *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	**176**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	208	104	200	2.24	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	203	102	200	0.642	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *80.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *80.2 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 65 1' (H240889-14)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.1 %* *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	**224**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *85.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.9 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 66 1' (H240889-15)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.9 %* *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	**256**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *76.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *72.0 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 87 1' (H240889-16)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.2 %* *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	**240**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *78.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *72.8 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 88 1' (H240889-17)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.6 %* *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	**112**	16.0	02/27/2024	ND	464	116	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *71.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *66.4 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 89 1' (H240889-18)

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	02/26/2024	ND	2.14	107	2.00	2.70	
Toluene*	<0.050	0.050	02/26/2024	ND	2.12	106	2.00	2.90	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	3.32	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.07	101	6.00	3.10	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.5 %* *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	**192**	16.0	02/27/2024	ND	432	108	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *74.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *69.0 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 90 1' (H240889-19)

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	02/26/2024	ND	2.05	102	2.00	0.0813	
Toluene*	<0.050	0.050	02/26/2024	ND	2.05	103	2.00	0.240	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	0.824	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.18	103	6.00	1.02	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *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	**128**	16.0	02/27/2024	ND	432	108	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *89.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.2 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 91 1' (H240889-20)

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	02/26/2024	ND	2.05	102	2.00	0.0813	
Toluene*	<0.050	0.050	02/26/2024	ND	2.05	103	2.00	0.240	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	0.824	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.18	103	6.00	1.02	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *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	**144**	16.0	02/27/2024	ND	432	108	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *69.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *63.9 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 92 1' (H240889-21)

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	02/26/2024	ND	2.05	102	2.00	0.0813	
Toluene*	<0.050	0.050	02/26/2024	ND	2.05	103	2.00	0.240	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	0.824	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.18	103	6.00	1.02	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *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	**48.0**	16.0	02/27/2024	ND	432	108	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *71.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *67.2 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 93 1' (H240889-22)

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	02/26/2024	ND	2.05	102	2.00	0.0813	
Toluene*	<0.050	0.050	02/26/2024	ND	2.05	103	2.00	0.240	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	0.824	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.18	103	6.00	1.02	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *114 %* *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	**304**	16.0	02/27/2024	ND	432	108	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *74.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.7 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 94 1' (H240889-23)

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	02/26/2024	ND	2.05	102	2.00	0.0813	
Toluene*	<0.050	0.050	02/26/2024	ND	2.05	103	2.00	0.240	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	0.824	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.18	103	6.00	1.02	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *112 %* *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	**240**	16.0	02/27/2024	ND	432	108	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *81.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *77.6 %* *49.1-148*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 95 1' (H240889-24)

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	02/26/2024	ND	2.05	102	2.00	0.0813	
Toluene*	<0.050	0.050	02/26/2024	ND	2.05	103	2.00	0.240	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	0.824	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.18	103	6.00	1.02	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *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	**96.0**	16.0	02/27/2024	ND	432	108	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *72.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *69.0 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 96 1' (H240889-25)

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	02/26/2024	ND	2.05	102	2.00	0.0813	
Toluene*	<0.050	0.050	02/26/2024	ND	2.05	103	2.00	0.240	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	0.824	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.18	103	6.00	1.02	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *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	**160**	16.0	02/27/2024	ND	432	108	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *82.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *78.1 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/21/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 97 1' (H240889-26)

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	02/26/2024	ND	2.05	102	2.00	0.0813	
Toluene*	<0.050	0.050	02/26/2024	ND	2.05	103	2.00	0.240	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	0.824	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.18	103	6.00	1.02	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *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	**16.0**	16.0	02/27/2024	ND	432	108	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *71.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *66.8 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/22/2024	Sampling Date:	02/20/2024
Reported:	02/28/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Tamara Oldaker
Project Location:	XTO		

Sample ID: BES 24 - 48 1' (H240889-27)

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	02/26/2024	ND	2.05	102	2.00	0.0813	
Toluene*	<0.050	0.050	02/26/2024	ND	2.05	103	2.00	0.240	
Ethylbenzene*	<0.050	0.050	02/26/2024	ND	2.07	103	2.00	0.824	
Total Xylenes*	<0.150	0.150	02/26/2024	ND	6.18	103	6.00	1.02	
Total BTEX	<0.300	0.300	02/26/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *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	**144**	16.0	02/27/2024	ND	432	108	400	0.00	

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	02/26/2024	ND	226	113	200	2.46	
DRO >C10-C28*	<10.0	10.0	02/26/2024	ND	217	109	200	4.90	
EXT DRO >C28-C36	<10.0	10.0	02/26/2024	ND					

Surrogate: 1-Chlorooctane *71.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *67.0 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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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

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CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Vertex Resource Services (Direct Bill to XTO Energy, Inc.)	BILL TO
Project Manager: Chance Dixon	P.O. #:
Address: 3101 Boyd Drive	Company: XTO Energy, Inc.
City: Carlsbad State: NM Zip:	Attn: Garrett Green
Phone #: 575.725.5001 Fax #:	Address: 3104 E. Greene St
Project #: 23E-04616 Project Owner: Garrett Green	City: Carlsbad
Project Name: JRU DI 1A CTB	State: NM Zip: 88220
Project Location:	Phone #: 575-200-0729
Sampler Name: L. Pullman	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride	ANALYSIS REQUEST
H240889																		
1	WES24-11 0-1'	C	1			X							02.16.24	9:40	X	X	X	
2	WES24-12 0-1'	C	1			X							02.16.24	9:40	X	X	X	
3	WES24-13 0-1'	C	1			X							02.16.24	9:50	X	X	X	
4	WES24-14 0-1'	C	1			X							02.16.24	9:50	X	X	X	
5	BES24-56 1'	C	1			X							02.16.24	8:00	X	X	X	
6	BES24-57 1'	C	1			X							02.16.24	8:00	X	X	X	
7	BES24-58 1'	C	1			X							02.16.24	8:05	X	X	X	
8	BES24-59 1'	C	1			X							02.16.24	8:05	X	X	X	
9	BES24-60 1'	C	1			X							02.16.24	9:30	X	X	X	
10	BES24-61 1'	C	1			X							02.16.24	8:10	X	X	X	

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Relinquished By: Lateef Pullman	Date: 2-22-24 Time: 07:00	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: Chance Dixon (CDixon@vertex.ca), Garrett Green (garrett.green@exxonmobil.com)
Relinquished By:	Date: 2-22-24 Time: 1335	Received By: Tamara Oldaker	REMARKS: Direct Bill to XTO Energy, Inc., Cost Center #: 1082151001, Incident #: nAPP2318831816 CC. Chance Dixon (CDixon@vertex.ca) for Final Report.
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.3 Corrected Temp. °C	Sample Condition Cool Intact ☑ Yes ☑ Yes ☐ No ☐ No	CHECKED BY: (Initials)

Turnaround Time: Standard ☒ Bacteria (only) Sample Condition
Rush ☐ Cool Intact Observed Temp. °C
Thermometer ID ~~#113~~ #140
Correction Factor ~~-0.5°C~~
☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Vertex Resource Services (Direct Bill to XTO Energy, Inc.)	BILL TO
Project Manager: Chance Dixon	P.O. #:
Address: 3101 Boyd Drive	Company: XTO Energy, Inc.
City: Carlsbad State: NM Zip:	Attn: Garrett Green
Phone #: 575.725.5001 Fax #:	Address: 3104 E. Greene St
Project #: 23E-04616 Project Owner: Garrett Green	City: Carlsbad
Project Name: JRU DI 1A CTB	State: NM Zip: 88220
Project Location:	Phone #: 575-200-0729
Sampler Name: L. Pullman	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
H240889																	
11	BES24-62 1'	C	1			X							02.21.24	8:10	X	X	X
12	BES24-63 1'	C	1			X							02.21.24	8:15	X	X	X
13	BES24-64 1'	C	1			X							02.21.24	8:15	X	X	X
14	BES24-65 1'	C	1			X							02.21.24	8:20	X	X	X
15	BES24-66 1'	C	1			X							02.21.24	8:20	X	X	X
16	BES24-87 1'	C	1			X							02.21.24	8:30	X	X	X
17	BES24-88 1'	C	1			X							02.21.24	8:30	X	X	X
18	BES24-89 1'	C	1			X							02.21.24	8:35	X	X	X
19	BES24-90 1'	C	1			X							02.21.24	8:35	X	X	X
20	BES24-91 1'	C	1			X							02.21.24	8:40	X	X	X

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Relinquished By: Jakob Pullman	Date: 2-22-24 Time: 07:00	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: Chance Dixon (CDixon@vertex.ca), Garrett Green (garrett.green@exxonmobil.com)
Relinquished By:	Date: 2-22-24 Time: 1335	Received By: Tamara Oldaker	REMARKS: Direct Bill to XTO Energy, Inc., Cost Center #: 1082151001, Incident #: nAPP2318831816 CC. Chance Dixon (CDixon@vertex.ca) for Final Report.
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.3 Corrected Temp. °C	Sample Condition Cool Intact ☑ Yes ☑ Yes ☐ No ☐ No	CHECKED BY: (Initials) T.O.

Turnaround Time: Standard ☒ Bacteria (only) Sample Condition
Rush ☐ Cool Intact Observed Temp. °C
Thermometer ID ~~#113~~ #140
Correction Factor ~~-0.5°C~~
☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Vertex Resource Services (Direct Bill to XTO Energy, Inc.)	**BILL TO**
Project Manager: Chance Dixon	P.O. #:
Address: 3101 Boyd Drive	Company: XTO Energy, Inc.
City: Carlsbad State: NM Zip:	Attn: Garrett Green
Phone #: 575.725.5001 Fax #:	Address: 3104 E. Greene St
Project #: 23E-04616 Project Owner: Garrett Green	City: Carlsbad
Project Name: JRU DI 1A CTB	State: NM Zip: 88220
Project Location:	Phone #: 575-200-0729
Sampler Name: L. Pullman	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
H240889																	
21	BES24-92 1'	C	1			X							02.21.24	8:40	X	X	X
22	BES24-93 1'	C	1			X							02.21.24	8:45	X	X	X
23	BES24-94 1'	C	1			X							02.21.24	8:45	X	X	X
24	BES24-95 1'	C	1			X							02.21.24	8:50	X	X	X
25	BES24-96 1'	C	1			X							02.21.24	8:50	X	X	X
26	BES24-97 1'	C	1			X							02.21.24	8:55	X	X	X
27	BES24-48 1'	C	1			X							02.20.24	9:50	X	X	X

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Relinquished By:	Date: 2-22-2024	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 07:00		All Results are emailed. Please provide Email address: Chance Dixon (CDixon@vertex.ca), Garrett Green (garrett.green@exxonmobil.com)
Relinquished By:	Date: 2-22-24	Received By:	REMARKS: Direct Bill to XTO Energy, Inc., Cost Center #: 1082151001, Incident #: nAPP2318831816 CC. Chance Dixon (CDixon@vertex.ca) for Final Report.
	Time: 1335		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.3 Corrected Temp. °C	Sample Condition Cool Intact ☑ Yes ☐ Yes ☐ No ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☒ Bacteria (only) Sample Condition Rush: ☐ Cool Intact Observed Temp. °C Thermometer ID #140 Correction Factor -0.8°C ☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

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eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 2/29/2024 10:19:14 AM

JOB DESCRIPTION

JRU DI 1A CTB
23E-04616

JOB NUMBER

890-6232-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 5/13/2024 11:16:38 AM

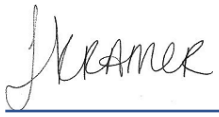
Eurofins Carlsbad

Job Notes

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Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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

Client: Vertex
Project/Site: JRU DI 1A CTB

Laboratory Job ID: 890-6232-1
SDG: 23E-04616

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Definitions/Glossary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project: JRU DI 1A CTB

Job ID: 890-6232-1

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Job Narrative
890-6232-1

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 2/21/2024 8:22 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 0.0°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: WES24-09 1-2.5 (890-6232-1), WES24-10 0-3 (890-6232-2), BES24-85 3 (890-6232-3), BES24-86 3 (890-6232-4), BES24-44 3 (890-6232-5), BES24-45 1 (890-6232-6), BES24-46 1 (890-6232-7), BES24-47 1 (890-6232-8), BES24-49 1 (890-6232-9), BES24-50 1 (890-6232-10), BES24-51 1 (890-6232-11), BES24-52 1 (890-6232-12), BES24-53 1 (890-6232-13), BES24-54 1 (890-6232-14), BES24-55 1 (890-6232-15), BES24-67 1 (890-6232-16), BES24-68 1 (890-6232-17), BES24-69 1 (890-6232-18), BES24-70 1 (890-6232-19), BES24-71 1 (890-6232-20), BES24-72 1 (890-6232-21), BES24-73 1 (890-6232-22), BES24-74 1 (890-6232-23), BES24-75 1 (890-6232-24), BES24-76 1 (890-6232-25), BES24-77 1 (890-6232-26), BES24-78 1 (890-6232-27), BES24-79 1 (890-6232-28), BES24-80 1 (890-6232-29) and BES24-81 1 (890-6232-30).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-74020 and analytical batch 880-74124 was outside the control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-74020/1-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCS 880-74155/1-A) and (LCSD 880-74155/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-6260-A-1-A MS) and (890-6260-A-1-B MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-74155 and analytical batch 880-74125 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BES24-80 1 (890-6232-29) and BES24-81 1 (890-6232-30). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-73901 and analytical batch 880-74118 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: WES24-09 1-2.5 (890-6232-1), BES24-49 1 (890-6232-9), BES24-50 1 (890-6232-10), BES24-52 1 (890-6232-12), BES24-53 1 (890-6232-13) and BES24-54 1 (890-6232-14). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for

Case Narrative

Client: Vertex Job ID: 890-6232-1
Project: JRU DI 1A CTB

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preparation batch 880-73901 and analytical batch 880-74118 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-73901 and analytical batch 880-74118 was outside control limits. Sample non-homogeneity is suspected.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-74118 recovered below the lower control limit for Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-74118/58).

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-73899 and analytical batch 880-74227 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-6208-A-2-I MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BES24-72 1 (890-6232-21), BES24-73 1 (890-6232-22), BES24-74 1 (890-6232-23), BES24-77 1 (890-6232-26), BES24-78 1 (890-6232-27), BES24-79 1 (890-6232-28), BES24-80 1 (890-6232-29) and BES24-81 1 (890-6232-30). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-73899 and analytical batch 880-74227 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-73899 and analytical batch 880-74227 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-73848 and analytical batch 880-73932 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: WES24-09 1-2.5

Date Collected: 02/20/24 13:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 12:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 12:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 12:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/26/24 11:24	02/27/24 12:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 12:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/26/24 11:24	02/27/24 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*02/26/24 11:24*	*02/27/24 12:18*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*02/26/24 11:24*	*02/27/24 12:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/27/24 12:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**74.2**		50.5		mg/Kg			02/27/24 22:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		02/22/24 18:05	02/27/24 22:11	1
Diesel Range Organics (Over C10-C28)	**74.2**	***1**	50.5		mg/Kg		02/22/24 18:05	02/27/24 22:11	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/22/24 18:05	02/27/24 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*149*	*S1+*	*70 - 130*	*02/22/24 18:05*	*02/27/24 22:11*	*1*
o-Terphenyl	*126*		*70 - 130*	*02/22/24 18:05*	*02/27/24 22:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**143**		4.97		mg/Kg			02/24/24 01:44	1

Client Sample ID: WES24-10 0-3

Date Collected: 02/20/24 10:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 12:38	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 12:38	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 12:38	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/26/24 11:24	02/27/24 12:38	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 12:38	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/26/24 11:24	02/27/24 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*02/26/24 11:24*	*02/27/24 12:38*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*02/26/24 11:24*	*02/27/24 12:38*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: WES24-10 0-3

Lab Sample ID: 890-6232-2
Matrix: Solid
Date Collected: 02/20/24 10:00
Date Received: 02/21/24 08:22

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/27/24 12:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			02/27/24 22:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/22/24 18:05	02/27/24 22:33	1
Diesel Range Organics (Over C10-C28)	<49.7	U *1	49.7		mg/Kg		02/22/24 18:05	02/27/24 22:33	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/22/24 18:05	02/27/24 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*02/22/24 18:05*	*02/27/24 22:33*	*1*
o-Terphenyl	*103*		*70 - 130*	*02/22/24 18:05*	*02/27/24 22:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**57.8**		4.99		mg/Kg			02/24/24 01:49	1

Client Sample ID: BES24-85 3

Lab Sample ID: 890-6232-3
Matrix: Solid
Date Collected: 02/20/24 10:10
Date Received: 02/21/24 08:22

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 12:59	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 12:59	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 12:59	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/26/24 11:24	02/27/24 12:59	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 12:59	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/26/24 11:24	02/27/24 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*02/26/24 11:24*	*02/27/24 12:59*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*02/26/24 11:24*	*02/27/24 12:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			02/27/24 12:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			02/27/24 21:05	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		02/22/24 18:05	02/27/24 21:05	1
Diesel Range Organics (Over C10-C28)	<50.3	U *1 F2	50.3		mg/Kg		02/22/24 18:05	02/27/24 21:05	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-85 3

Date Collected: 02/20/24 10:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-3

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		02/22/24 18:05	02/27/24 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*02/22/24 18:05*	*02/27/24 21:05*	*1*
o-Terphenyl	*96*		*70 - 130*	*02/22/24 18:05*	*02/27/24 21:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**140**		5.04		mg/Kg			02/24/24 01:53	1

Client Sample ID: BES24-86 3

Date Collected: 02/20/24 10:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 13:20	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 13:20	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 13:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/26/24 11:24	02/27/24 13:20	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 13:20	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/26/24 11:24	02/27/24 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*02/26/24 11:24*	*02/27/24 13:20*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*02/26/24 11:24*	*02/27/24 13:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/27/24 13:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			02/27/24 22:55	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		02/22/24 18:05	02/27/24 22:55	1
Diesel Range Organics (Over C10-C28)	<49.6	U *1	49.6		mg/Kg		02/22/24 18:05	02/27/24 22:55	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		02/22/24 18:05	02/27/24 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*02/22/24 18:05*	*02/27/24 22:55*	*1*
o-Terphenyl	*102*		*70 - 130*	*02/22/24 18:05*	*02/27/24 22:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**266**		25.2		mg/Kg			02/24/24 02:07	5

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-44 3

Date Collected: 02/20/24 10:20
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 13:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 13:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 13:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/26/24 11:24	02/27/24 13:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 13:40	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/26/24 11:24	02/27/24 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*02/26/24 11:24*	*02/27/24 13:40*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*02/26/24 11:24*	*02/27/24 13:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/27/24 13:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			02/27/24 23:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		02/22/24 18:05	02/27/24 23:17	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		02/22/24 18:05	02/27/24 23:17	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/22/24 18:05	02/27/24 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*02/22/24 18:05*	*02/27/24 23:17*	*1*
o-Terphenyl	*96*		*70 - 130*	*02/22/24 18:05*	*02/27/24 23:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**45.0**		4.98		mg/Kg			02/24/24 02:12	1

Client Sample ID: BES24-45 1

Date Collected: 02/20/24 10:20
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 14:01	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 14:01	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 14:01	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/26/24 11:24	02/27/24 14:01	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 14:01	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/26/24 11:24	02/27/24 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*02/26/24 11:24*	*02/27/24 14:01*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*02/26/24 11:24*	*02/27/24 14:01*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-45 1

Date Collected: 02/20/24 10:20
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-6

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/27/24 14:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			02/27/24 23:39	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		02/22/24 18:05	02/27/24 23:39	1
Diesel Range Organics (Over C10-C28)	<50.1	U *1	50.1		mg/Kg		02/22/24 18:05	02/27/24 23:39	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		02/22/24 18:05	02/27/24 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*02/22/24 18:05*	*02/27/24 23:39*	*1*
o-Terphenyl	*98*		*70 - 130*	*02/22/24 18:05*	*02/27/24 23:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		4.99		mg/Kg			02/24/24 02:26	1

Client Sample ID: BES24-46 1

Date Collected: 02/20/24 09:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 14:22	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 14:22	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 14:22	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/26/24 11:24	02/27/24 14:22	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 14:22	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/26/24 11:24	02/27/24 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*02/26/24 11:24*	*02/27/24 14:22*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/26/24 11:24*	*02/27/24 14:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/27/24 14:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			02/28/24 00:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		02/22/24 18:05	02/28/24 00:01	1
Diesel Range Organics (Over C10-C28)	<50.2	U *1	50.2		mg/Kg		02/22/24 18:05	02/28/24 00:01	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-46 1

Date Collected: 02/20/24 09:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-7

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		02/22/24 18:05	02/28/24 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*02/22/24 18:05*	*02/28/24 00:01*	*1*
o-Terphenyl	*104*		*70 - 130*	*02/22/24 18:05*	*02/28/24 00:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**476**		4.99		mg/Kg			02/24/24 02:30	1

Client Sample ID: BES24-47 1

Date Collected: 02/20/24 09:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 14:43	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 14:43	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 14:43	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		02/26/24 11:24	02/27/24 14:43	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 14:43	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/26/24 11:24	02/27/24 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*02/26/24 11:24*	*02/27/24 14:43*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*02/26/24 11:24*	*02/27/24 14:43*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			02/27/24 14:43	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			02/28/24 00:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		02/22/24 18:05	02/28/24 00:23	1
Diesel Range Organics (Over C10-C28)	<50.4	U *1	50.4		mg/Kg		02/22/24 18:05	02/28/24 00:23	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		02/22/24 18:05	02/28/24 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*126*		*70 - 130*	*02/22/24 18:05*	*02/28/24 00:23*	*1*
o-Terphenyl	*106*		*70 - 130*	*02/22/24 18:05*	*02/28/24 00:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**87.6**		4.97		mg/Kg			02/24/24 02:35	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-49 1

Date Collected: 02/20/24 10:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 15:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 15:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 15:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/26/24 11:24	02/27/24 15:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 15:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/26/24 11:24	02/27/24 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*02/26/24 11:24*	*02/27/24 15:03*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/26/24 11:24*	*02/27/24 15:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/27/24 15:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			02/28/24 00:45	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		02/22/24 18:05	02/28/24 00:45	1
Diesel Range Organics (Over C10-C28)	<50.5	U *1	50.5		mg/Kg		02/22/24 18:05	02/28/24 00:45	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/22/24 18:05	02/28/24 00:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*02/22/24 18:05*	*02/28/24 00:45*	*1*
o-Terphenyl	*111*		*70 - 130*	*02/22/24 18:05*	*02/28/24 00:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**233**		25.2		mg/Kg			02/24/24 02:40	5

Client Sample ID: BES24-50 1

Date Collected: 02/20/24 10:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 15:24	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 15:24	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 15:24	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/26/24 11:24	02/27/24 15:24	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 15:24	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/26/24 11:24	02/27/24 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*02/26/24 11:24*	*02/27/24 15:24*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/26/24 11:24*	*02/27/24 15:24*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-50 1

Date Collected: 02/20/24 10:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-10
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/27/24 15:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/28/24 01:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/22/24 18:05	02/28/24 01:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		02/22/24 18:05	02/28/24 01:08	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/24 18:05	02/28/24 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*141*	*S1+*	*70 - 130*	*02/22/24 18:05*	*02/28/24 01:08*	*1*
o-Terphenyl	*122*		*70 - 130*	*02/22/24 18:05*	*02/28/24 01:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**60.8**		5.01		mg/Kg			02/24/24 02:44	1

Client Sample ID: BES24-51 1

Date Collected: 02/20/24 10:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 16:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 16:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 16:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/26/24 11:24	02/27/24 16:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 16:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/26/24 11:24	02/27/24 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*02/26/24 11:24*	*02/27/24 16:48*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/26/24 11:24*	*02/27/24 16:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			02/27/24 16:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/28/24 01:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/22/24 18:05	02/28/24 01:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		02/22/24 18:05	02/28/24 01:52	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-51 1

Date Collected: 02/20/24 10:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-11

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/24 18:05	02/28/24 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*02/22/24 18:05*	*02/28/24 01:52*	*1*
o-Terphenyl	*112*		*70 - 130*	*02/22/24 18:05*	*02/28/24 01:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39.3**		5.02		mg/Kg			02/24/24 02:49	1

Client Sample ID: BES24-52 1

Date Collected: 02/20/24 10:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 17:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 17:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 17:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/26/24 11:24	02/27/24 17:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 17:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/26/24 11:24	02/27/24 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*02/26/24 11:24*	*02/27/24 17:08*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*02/26/24 11:24*	*02/27/24 17:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/27/24 17:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/28/24 02:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/22/24 18:05	02/28/24 02:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		02/22/24 18:05	02/28/24 02:14	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/22/24 18:05	02/28/24 02:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*176*	*S1+*	*70 - 130*	*02/22/24 18:05*	*02/28/24 02:14*	*1*
o-Terphenyl	*149*	*S1+*	*70 - 130*	*02/22/24 18:05*	*02/28/24 02:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**139**		5.05		mg/Kg			02/24/24 02:53	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-53 1

Date Collected: 02/20/24 10:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 17:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 17:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 17:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/26/24 11:24	02/27/24 17:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 17:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/26/24 11:24	02/27/24 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*02/26/24 11:24*	*02/27/24 17:29*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*02/26/24 11:24*	*02/27/24 17:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/27/24 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/28/24 02:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/22/24 18:05	02/28/24 02:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		02/22/24 18:05	02/28/24 02:36	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/24 18:05	02/28/24 02:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*02/22/24 18:05*	*02/28/24 02:36*	*1*
o-Terphenyl	*113*		*70 - 130*	*02/22/24 18:05*	*02/28/24 02:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51.5**	**F1**	5.02		mg/Kg			02/25/24 15:11	1

Client Sample ID: BES24-54 1

Date Collected: 02/20/24 10:50
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 17:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 17:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 17:50	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/26/24 11:24	02/27/24 17:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:24	02/27/24 17:50	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/26/24 11:24	02/27/24 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*02/26/24 11:24*	*02/27/24 17:50*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/26/24 11:24*	*02/27/24 17:50*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-54 1

Date Collected: 02/20/24 10:50
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-14
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			02/27/24 17:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			02/28/24 02:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		02/22/24 18:05	02/28/24 02:58	1
Diesel Range Organics (Over C10-C28)	<50.4	U *1	50.4		mg/Kg		02/22/24 18:05	02/28/24 02:58	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		02/22/24 18:05	02/28/24 02:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*162*	*S1+*	*70 - 130*	*02/22/24 18:05*	*02/28/24 02:58*	*1*
o-Terphenyl	*137*	*S1+*	*70 - 130*	*02/22/24 18:05*	*02/28/24 02:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**338**		25.0		mg/Kg			02/25/24 15:25	5

Client Sample ID: BES24-55 1

Date Collected: 02/20/24 11:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-15
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 18:10	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 18:10	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 18:10	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/26/24 11:24	02/27/24 18:10	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 18:10	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/26/24 11:24	02/27/24 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*02/26/24 11:24*	*02/27/24 18:10*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/26/24 11:24*	*02/27/24 18:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/27/24 18:10	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			02/28/24 03:19	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		02/22/24 18:05	02/28/24 03:19	1
Diesel Range Organics (Over C10-C28)	<50.1	U *1	50.1		mg/Kg		02/22/24 18:05	02/28/24 03:19	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-55 1

Date Collected: 02/20/24 11:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-15

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		02/22/24 18:05	02/28/24 03:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*02/22/24 18:05*	*02/28/24 03:19*	*1*
o-Terphenyl	*108*		*70 - 130*	*02/22/24 18:05*	*02/28/24 03:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**326**		24.9		mg/Kg			02/25/24 15:30	5

Client Sample ID: BES24-67 1

Date Collected: 02/20/24 11:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-16

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 18:31	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 18:31	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 18:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/26/24 11:24	02/27/24 18:31	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:24	02/27/24 18:31	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/26/24 11:24	02/27/24 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*02/26/24 11:24*	*02/27/24 18:31*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*02/26/24 11:24*	*02/27/24 18:31*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/27/24 18:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			02/28/24 03:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		02/22/24 18:05	02/28/24 03:41	1
Diesel Range Organics (Over C10-C28)	<50.3	U *1	50.3		mg/Kg		02/22/24 18:05	02/28/24 03:41	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		02/22/24 18:05	02/28/24 03:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*02/22/24 18:05*	*02/28/24 03:41*	*1*
o-Terphenyl	*108*		*70 - 130*	*02/22/24 18:05*	*02/28/24 03:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.4**		5.05		mg/Kg			02/25/24 15:34	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-68 1

Date Collected: 02/20/24 11:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-17

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 18:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 18:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 18:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/26/24 11:24	02/27/24 18:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 18:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/26/24 11:24	02/27/24 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*02/26/24 11:24*	*02/27/24 18:52*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*02/26/24 11:24*	*02/27/24 18:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/27/24 18:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			02/28/24 04:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		02/22/24 18:05	02/28/24 04:03	1
Diesel Range Organics (Over C10-C28)	<50.5	U *1	50.5		mg/Kg		02/22/24 18:05	02/28/24 04:03	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/22/24 18:05	02/28/24 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*02/22/24 18:05*	*02/28/24 04:03*	*1*
o-Terphenyl	*101*		*70 - 130*	*02/22/24 18:05*	*02/28/24 04:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**281**		5.01		mg/Kg			02/25/24 15:39	1

Client Sample ID: BES24-69 1

Date Collected: 02/20/24 11:20
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-18

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 19:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 19:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 19:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/26/24 11:24	02/27/24 19:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:24	02/27/24 19:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/26/24 11:24	02/27/24 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*02/26/24 11:24*	*02/27/24 19:13*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/26/24 11:24*	*02/27/24 19:13*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-69 1

Date Collected: 02/20/24 11:20
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-18
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/27/24 19:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			02/28/24 04:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/22/24 18:05	02/28/24 04:24	1
Diesel Range Organics (Over C10-C28)	<49.7	U *1	49.7		mg/Kg		02/22/24 18:05	02/28/24 04:24	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/22/24 18:05	02/28/24 04:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*02/22/24 18:05*	*02/28/24 04:24*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/22/24 18:05*	*02/28/24 04:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**259**		4.98		mg/Kg			02/25/24 15:53	1

Client Sample ID: BES24-70 1

Date Collected: 02/20/24 11:20
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-19
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 19:33	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 19:33	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 19:33	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/26/24 11:24	02/27/24 19:33	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:24	02/27/24 19:33	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/26/24 11:24	02/27/24 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*02/26/24 11:24*	*02/27/24 19:33*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*02/26/24 11:24*	*02/27/24 19:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/27/24 19:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			02/28/24 04:46	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/22/24 18:05	02/28/24 04:46	1
Diesel Range Organics (Over C10-C28)	<49.7	U *1	49.7		mg/Kg		02/22/24 18:05	02/28/24 04:46	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-70 1

Lab Sample ID: 890-6232-19
Matrix: Solid
Date Collected: 02/20/24 11:20
Date Received: 02/21/24 08:22

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/22/24 18:05	02/28/24 04:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*02/22/24 18:05*	*02/28/24 04:46*	*1*
o-Terphenyl	*96*		*70 - 130*	*02/22/24 18:05*	*02/28/24 04:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**261**		4.99		mg/Kg			02/25/24 15:57	1

Client Sample ID: BES24-71 1

Lab Sample ID: 890-6232-20
Matrix: Solid
Date Collected: 02/20/24 11:30
Date Received: 02/21/24 08:22

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 19:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 19:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 19:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/26/24 11:24	02/27/24 19:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 19:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/26/24 11:24	02/27/24 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*02/26/24 11:24*	*02/27/24 19:54*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*02/26/24 11:24*	*02/27/24 19:54*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/27/24 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			02/28/24 05:07	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		02/22/24 18:05	02/28/24 05:07	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		02/22/24 18:05	02/28/24 05:07	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/22/24 18:05	02/28/24 05:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*02/22/24 18:05*	*02/28/24 05:07*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/22/24 18:05*	*02/28/24 05:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**290**		5.00		mg/Kg			02/25/24 16:02	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-72 1

Date Collected: 02/20/24 11:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-21

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:26	02/27/24 13:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:26	02/27/24 13:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:26	02/27/24 13:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/26/24 11:26	02/27/24 13:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:26	02/27/24 13:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/26/24 11:26	02/27/24 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*02/26/24 11:26*	*02/27/24 13:03*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/26/24 11:26*	*02/27/24 13:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/27/24 13:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/29/24 01:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/22/24 17:59	02/29/24 01:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		02/22/24 17:59	02/29/24 01:20	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/22/24 17:59	02/29/24 01:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*02/22/24 17:59*	*02/29/24 01:20*	*1*
o-Terphenyl	*108*		*70 - 130*	*02/22/24 17:59*	*02/29/24 01:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**385**		5.01		mg/Kg			02/25/24 16:07	1

Client Sample ID: BES24-73 1

Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-22

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:26	02/27/24 13:23	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:26	02/27/24 13:23	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:26	02/27/24 13:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/26/24 11:26	02/27/24 13:23	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:26	02/27/24 13:23	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/26/24 11:26	02/27/24 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*02/26/24 11:26*	*02/27/24 13:23*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/26/24 11:26*	*02/27/24 13:23*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-73 1

Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-22
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/27/24 13:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			02/29/24 01:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		02/22/24 17:59	02/29/24 01:40	1
Diesel Range Organics (Over C10-C28)	<49.6	U *1	49.6		mg/Kg		02/22/24 17:59	02/29/24 01:40	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		02/22/24 17:59	02/29/24 01:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*02/22/24 17:59*	*02/29/24 01:40*	*1*
o-Terphenyl	*110*		*70 - 130*	*02/22/24 17:59*	*02/29/24 01:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**152**		5.04		mg/Kg			02/25/24 16:11	1

Client Sample ID: BES24-74 1

Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-23
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:26	02/27/24 13:44	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:26	02/27/24 13:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:26	02/27/24 13:44	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/26/24 11:26	02/27/24 13:44	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:26	02/27/24 13:44	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/26/24 11:26	02/27/24 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*02/26/24 11:26*	*02/27/24 13:44*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*02/26/24 11:26*	*02/27/24 13:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			02/27/24 13:44	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			02/29/24 02:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		02/22/24 17:59	02/29/24 02:01	1
Diesel Range Organics (Over C10-C28)	<50.1	U *1	50.1		mg/Kg		02/22/24 17:59	02/29/24 02:01	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-74 1

Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-23

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		02/22/24 17:59	02/29/24 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*02/22/24 17:59*	*02/29/24 02:01*	*1*
o-Terphenyl	*107*		*70 - 130*	*02/22/24 17:59*	*02/29/24 02:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**170**		5.04		mg/Kg			02/25/24 16:16	1

Client Sample ID: BES24-75 1

Date Collected: 02/20/24 12:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-24

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:26	02/27/24 14:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:26	02/27/24 14:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:26	02/27/24 14:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/26/24 11:26	02/27/24 14:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/26/24 11:26	02/27/24 14:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/26/24 11:26	02/27/24 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*02/26/24 11:26*	*02/27/24 14:04*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*02/26/24 11:26*	*02/27/24 14:04*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/27/24 14:04	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			02/29/24 02:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		02/22/24 17:59	02/29/24 02:22	1
Diesel Range Organics (Over C10-C28)	<50.4	U *1	50.4		mg/Kg		02/22/24 17:59	02/29/24 02:22	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		02/22/24 17:59	02/29/24 02:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*02/22/24 17:59*	*02/29/24 02:22*	*1*
o-Terphenyl	*99*		*70 - 130*	*02/22/24 17:59*	*02/29/24 02:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**109**		4.97		mg/Kg			02/25/24 16:30	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-76 1

Date Collected: 02/20/24 11:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-25

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:26	02/27/24 14:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:26	02/27/24 14:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:26	02/27/24 14:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/26/24 11:26	02/27/24 14:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:26	02/27/24 14:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/26/24 11:26	02/27/24 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*02/26/24 11:26*	*02/27/24 14:25*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/26/24 11:26*	*02/27/24 14:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/27/24 14:25	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			02/29/24 02:43	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		02/22/24 17:59	02/29/24 02:43	1
Diesel Range Organics (Over C10-C28)	<50.3	U *1	50.3		mg/Kg		02/22/24 17:59	02/29/24 02:43	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		02/22/24 17:59	02/29/24 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*02/22/24 17:59*	*02/29/24 02:43*	*1*
o-Terphenyl	*90*		*70 - 130*	*02/22/24 17:59*	*02/29/24 02:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**307**		4.99		mg/Kg			02/25/24 16:34	1

Client Sample ID: BES24-77 1

Date Collected: 02/20/24 11:50
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-26

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:26	02/27/24 14:45	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:26	02/27/24 14:45	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:26	02/27/24 14:45	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/26/24 11:26	02/27/24 14:45	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/26/24 11:26	02/27/24 14:45	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/26/24 11:26	02/27/24 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*02/26/24 11:26*	*02/27/24 14:45*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/26/24 11:26*	*02/27/24 14:45*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-77 1

Date Collected: 02/20/24 11:50
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-26
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/27/24 14:45	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			02/29/24 03:04	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/22/24 17:59	02/29/24 03:04	1
Diesel Range Organics (Over C10-C28)	<49.7	U *1	49.7		mg/Kg		02/22/24 17:59	02/29/24 03:04	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/22/24 17:59	02/29/24 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*02/22/24 17:59*	*02/29/24 03:04*	*1*
o-Terphenyl	*119*		*70 - 130*	*02/22/24 17:59*	*02/29/24 03:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**395**		5.00		mg/Kg			02/25/24 16:48	1

Client Sample ID: BES24-78 1

Date Collected: 02/20/24 12:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-27
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:26	02/27/24 15:06	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:26	02/27/24 15:06	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:26	02/27/24 15:06	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/26/24 11:26	02/27/24 15:06	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/26/24 11:26	02/27/24 15:06	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/26/24 11:26	02/27/24 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*02/26/24 11:26*	*02/27/24 15:06*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/26/24 11:26*	*02/27/24 15:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/27/24 15:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			02/29/24 03:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		02/22/24 17:59	02/29/24 03:24	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		02/22/24 17:59	02/29/24 03:24	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-78 1

Date Collected: 02/20/24 12:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-27
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/22/24 17:59	02/29/24 03:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*138*	*S1+*	*70 - 130*	*02/22/24 17:59*	*02/29/24 03:24*	*1*
o-Terphenyl	*113*		*70 - 130*	*02/22/24 17:59*	*02/29/24 03:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**339**		5.05		mg/Kg			02/25/24 16:53	1

Client Sample ID: BES24-79 1

Date Collected: 02/20/24 12:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-28
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:26	02/27/24 15:26	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:26	02/27/24 15:26	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:26	02/27/24 15:26	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		02/26/24 11:26	02/27/24 15:26	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/26/24 11:26	02/27/24 15:26	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/26/24 11:26	02/27/24 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*02/26/24 11:26*	*02/27/24 15:26*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/26/24 11:26*	*02/27/24 15:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			02/27/24 15:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/29/24 03:45	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/22/24 17:59	02/29/24 03:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		02/22/24 17:59	02/29/24 03:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/24 17:59	02/29/24 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*155*	*S1+*	*70 - 130*	*02/22/24 17:59*	*02/29/24 03:45*	*1*
o-Terphenyl	*130*		*70 - 130*	*02/22/24 17:59*	*02/29/24 03:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**75.9**		5.03		mg/Kg			02/25/24 16:57	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-80 1

Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-29

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/27/24 11:22	02/28/24 00:56	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/27/24 11:22	02/28/24 00:56	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/27/24 11:22	02/28/24 00:56	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/27/24 11:22	02/28/24 00:56	1
o-Xylene	**0.223**		0.00201		mg/Kg		02/27/24 11:22	02/28/24 00:56	1
Xylenes, Total	**0.223**		0.00402		mg/Kg		02/27/24 11:22	02/28/24 00:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*	*02/27/24 11:22*	*02/28/24 00:56*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*02/27/24 11:22*	*02/28/24 00:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.223**		0.00402		mg/Kg			02/28/24 00:56	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			02/29/24 04:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		02/22/24 17:59	02/29/24 04:06	1
Diesel Range Organics (Over C10-C28)	<49.6	U *1	49.6		mg/Kg		02/22/24 17:59	02/29/24 04:06	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		02/22/24 17:59	02/29/24 04:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*153*	*S1+*	*70 - 130*	*02/22/24 17:59*	*02/29/24 04:06*	*1*
o-Terphenyl	*126*		*70 - 130*	*02/22/24 17:59*	*02/29/24 04:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**348**		5.01		mg/Kg			02/25/24 17:02	1

Client Sample ID: BES24-81 1

Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-30

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/27/24 11:22	02/28/24 01:21	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/27/24 11:22	02/28/24 01:21	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/27/24 11:22	02/28/24 01:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/27/24 11:22	02/28/24 01:21	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/27/24 11:22	02/28/24 01:21	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/27/24 11:22	02/28/24 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*145*	*S1+*	*70 - 130*	*02/27/24 11:22*	*02/28/24 01:21*	*1*
1,4-Difluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*02/27/24 11:22*	*02/28/24 01:21*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-81 1

Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-30

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/28/24 01:21	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			02/29/24 04:27	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		02/22/24 17:59	02/29/24 04:27	1
Diesel Range Organics (Over C10-C28)	<50.4	U *1	50.4		mg/Kg		02/22/24 17:59	02/29/24 04:27	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		02/22/24 17:59	02/29/24 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*02/22/24 17:59*	*02/29/24 04:27*	*1*
o-Terphenyl	*107*		*70 - 130*	*02/22/24 17:59*	*02/29/24 04:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**325**		4.95		mg/Kg			02/25/24 17:07	1

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-6232-1	WES24-09 1-2.5	103	104
890-6232-1 MS	WES24-09 1-2.5	104	101
890-6232-1 MSD	WES24-09 1-2.5	102	101
890-6232-2	WES24-10 0-3	103	112
890-6232-3	BES24-85 3	98	111
890-6232-4	BES24-86 3	93	108
890-6232-5	BES24-44 3	99	108
890-6232-6	BES24-45 1	101	108
890-6232-7	BES24-46 1	94	106
890-6232-8	BES24-47 1	100	107
890-6232-9	BES24-49 1	92	105
890-6232-10	BES24-50 1	94	106
890-6232-11	BES24-51 1	93	105
890-6232-12	BES24-52 1	100	112
890-6232-13	BES24-53 1	102	109
890-6232-14	BES24-54 1	100	105
890-6232-15	BES24-55 1	100	106
890-6232-16	BES24-67 1	107	108
890-6232-17	BES24-68 1	98	109
890-6232-18	BES24-69 1	102	106
890-6232-19	BES24-70 1	102	108
890-6232-20	BES24-71 1	102	107
890-6232-21	BES24-72 1	82	92
890-6232-21 MS	BES24-72 1	104	116
890-6232-21 MSD	BES24-72 1	104	124
890-6232-22	BES24-73 1	78	100
890-6232-23	BES24-74 1	78	99
890-6232-24	BES24-75 1	79	95
890-6232-25	BES24-76 1	78	97
890-6232-26	BES24-77 1	81	92
890-6232-27	BES24-78 1	79	94
890-6232-28	BES24-79 1	78	97
890-6232-29	BES24-80 1	137 S1+	88
890-6232-30	BES24-81 1	145 S1+	135 S1+
890-6260-A-1-A MS	Matrix Spike	135 S1+	128
890-6260-A-1-B MSD	Matrix Spike Duplicate	131 S1+	130
LCS 880-74019/1-A	Lab Control Sample	96	107
LCS 880-74020/1-A	Lab Control Sample	105	132 S1+
LCS 880-74155/1-A	Lab Control Sample	131 S1+	121
LCSD 880-74019/2-A	Lab Control Sample Dup	97	103
LCSD 880-74020/2-A	Lab Control Sample Dup	104	128
LCSD 880-74155/2-A	Lab Control Sample Dup	137 S1+	127
MB 880-74019/5-A	Method Blank	77	98
MB 880-74020/5-A	Method Blank	65 S1-	101
MB 880-74155/5-A	Method Blank	64 S1-	125

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
890-6208-A-2-I MS	Matrix Spike	157 S1+	117										
890-6208-A-2-J MSD	Matrix Spike Duplicate	128	100										
890-6232-1	WES24-09 1-2.5	149 S1+	126										
890-6232-2	WES24-10 0-3	121	103										
890-6232-3	BES24-85 3	118	96										
890-6232-3 MS	BES24-85 3	97	74										
890-6232-3 MSD	BES24-85 3	118	92										
890-6232-4	BES24-86 3	122	102										
890-6232-5	BES24-44 3	116	96										
890-6232-6	BES24-45 1	114	98										
890-6232-7	BES24-46 1	122	104										
890-6232-8	BES24-47 1	126	106										
890-6232-9	BES24-49 1	131 S1+	111										
890-6232-10	BES24-50 1	141 S1+	122										
890-6232-11	BES24-51 1	128	112										
890-6232-12	BES24-52 1	176 S1+	149 S1+										
890-6232-13	BES24-53 1	132 S1+	113										
890-6232-14	BES24-54 1	162 S1+	137 S1+										
890-6232-15	BES24-55 1	128	108										
890-6232-16	BES24-67 1	121	108										
890-6232-17	BES24-68 1	129	101										
890-6232-18	BES24-69 1	117	92										
890-6232-19	BES24-70 1	121	96										
890-6232-20	BES24-71 1	109	91										
890-6232-21	BES24-72 1	135 S1+	108										
890-6232-22	BES24-73 1	137 S1+	110										
890-6232-23	BES24-74 1	135 S1+	107										
890-6232-24	BES24-75 1	124	99										
890-6232-25	BES24-76 1	111	90										
890-6232-26	BES24-77 1	148 S1+	119										
890-6232-27	BES24-78 1	138 S1+	113										
890-6232-28	BES24-79 1	155 S1+	130										
890-6232-29	BES24-80 1	153 S1+	126										
890-6232-30	BES24-81 1	133 S1+	107										
LCS 880-73899/2-A	Lab Control Sample	128	127										
LCS 880-73901/2-A	Lab Control Sample	94	90										
LCSD 880-73899/3-A	Lab Control Sample Dup	90	88										
LCSD 880-73901/3-A	Lab Control Sample Dup	118	120										
MB 880-73899/1-A	Method Blank	199 S1+	178 S1+										
MB 880-73901/1-A	Method Blank	193 S1+	172 S1+										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-74019/5-A
Matrix: Solid
Analysis Batch: 74122

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74019

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 11:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 11:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 11:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/26/24 11:24	02/27/24 11:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/26/24 11:24	02/27/24 11:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/26/24 11:24	02/27/24 11:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*02/26/24 11:24*	*02/27/24 11:56*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/26/24 11:24*	*02/27/24 11:56*	*1*

Lab Sample ID: LCS 880-74019/1-A
Matrix: Solid
Analysis Batch: 74122

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74019

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1198		mg/Kg		120	70 - 130		
Toluene			0.100	0.1005		mg/Kg		101	70 - 130		
Ethylbenzene			0.100	0.09927		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene			0.200	0.2003		mg/Kg		100	70 - 130		
o-Xylene			0.100	0.1013		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 880-74019/2-A
Matrix: Solid
Analysis Batch: 74122

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74019

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1053		mg/Kg		105	70 - 130	13	35
Toluene			0.100	0.09367		mg/Kg		94	70 - 130	7	35
Ethylbenzene			0.100	0.09446		mg/Kg		94	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1929		mg/Kg		96	70 - 130	4	35
o-Xylene			0.100	0.09772		mg/Kg		98	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-6232-1 MS
Matrix: Solid
Analysis Batch: 74122

Client Sample ID: WES24-09 1-2.5
Prep Type: Total/NA
Prep Batch: 74019

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.101	0.09174		mg/Kg		91	70 - 130		
Toluene	<0.00199	U	0.101	0.08195		mg/Kg		81	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

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

Lab Sample ID: 890-6232-1 MS
Matrix: Solid
Analysis Batch: 74122

Client Sample ID: WES24-09 1-2.5
Prep Type: Total/NA
Prep Batch: 74019

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.101	0.08050		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1663		mg/Kg		82	70 - 130
o-Xylene	<0.00199	U	0.101	0.08495		mg/Kg		84	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-6232-1 MSD
Matrix: Solid
Analysis Batch: 74122

Client Sample ID: WES24-09 1-2.5
Prep Type: Total/NA
Prep Batch: 74019

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1034		mg/Kg		103	70 - 130	12	35
Toluene	<0.00199	U	0.100	0.09156		mg/Kg		91	70 - 130	11	35
Ethylbenzene	<0.00199	U	0.100	0.08971		mg/Kg		90	70 - 130	11	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1833		mg/Kg		92	70 - 130	10	35
o-Xylene	<0.00199	U	0.100	0.09463		mg/Kg		94	70 - 130	11	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-74020/5-A
Matrix: Solid
Analysis Batch: 74124

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74020

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/26/24 11:26	02/27/24 12:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/26/24 11:26	02/27/24 12:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/26/24 11:26	02/27/24 12:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/26/24 11:26	02/27/24 12:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/26/24 11:26	02/27/24 12:41	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/26/24 11:26	02/27/24 12:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*65*	*S1-*	*70 - 130*	*02/26/24 11:26*	*02/27/24 12:41*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*02/26/24 11:26*	*02/27/24 12:41*	*1*

Lab Sample ID: LCS 880-74020/1-A
Matrix: Solid
Analysis Batch: 74124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1015		mg/Kg		101	70 - 130
Toluene	0.100	0.09317		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.09768		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2032		mg/Kg		102	70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

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

Lab Sample ID: LCS 880-74020/1-A
Matrix: Solid
Analysis Batch: 74124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74020

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.09901		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*132*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-74020/2-A
Matrix: Solid
Analysis Batch: 74124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74020

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1042		mg/Kg		104	70 - 130	3	35
Toluene			0.100	0.09461		mg/Kg		95	70 - 130	2	35
Ethylbenzene			0.100	0.09975		mg/Kg		100	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2050		mg/Kg		103	70 - 130	1	35
o-Xylene			0.100	0.09950		mg/Kg		100	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*128*		*70 - 130*

Lab Sample ID: 890-6232-21 MS
Matrix: Solid
Analysis Batch: 74124

Client Sample ID: BES24-72 1
Prep Type: Total/NA
Prep Batch: 74020

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.101	0.1015		mg/Kg		101	70 - 130		
Toluene	<0.00199	U	0.101	0.09617		mg/Kg		95	70 - 130		
Ethylbenzene	<0.00199	U	0.101	0.09734		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1974		mg/Kg		98	70 - 130		
o-Xylene	<0.00199	U	0.101	0.09561		mg/Kg		95	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: 890-6232-21 MSD
Matrix: Solid
Analysis Batch: 74124

Client Sample ID: BES24-72 1
Prep Type: Total/NA
Prep Batch: 74020

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.09090		mg/Kg		91	70 - 130	11	35
Toluene	<0.00199	U	0.100	0.08455		mg/Kg		85	70 - 130	13	35
Ethylbenzene	<0.00199	U	0.100	0.08689		mg/Kg		87	70 - 130	11	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1790		mg/Kg		90	70 - 130	10	35
o-Xylene	<0.00199	U	0.100	0.08712		mg/Kg		87	70 - 130	9	35

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

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

Lab Sample ID: 890-6232-21 MSD
Matrix: Solid
Analysis Batch: 74124

Client Sample ID: BES24-72 1
Prep Type: Total/NA
Prep Batch: 74020

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*124*		*70 - 130*

Lab Sample ID: MB 880-74155/5-A
Matrix: Solid
Analysis Batch: 74125

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74155

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/27/24 11:22	02/27/24 17:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/27/24 11:22	02/27/24 17:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/27/24 11:22	02/27/24 17:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/27/24 11:22	02/27/24 17:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/27/24 11:22	02/27/24 17:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/27/24 11:22	02/27/24 17:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*64*	*S1-*	*70 - 130*	*02/27/24 11:22*	*02/27/24 17:08*	*1*
1,4-Difluorobenzene (Surr)	*125*		*70 - 130*	*02/27/24 11:22*	*02/27/24 17:08*	*1*

Lab Sample ID: LCS 880-74155/1-A
Matrix: Solid
Analysis Batch: 74125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74155

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1095		mg/Kg		109	70 - 130		
Toluene			0.100	0.08397		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.09591		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene			0.200	0.1970		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.09597		mg/Kg		96	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*

Lab Sample ID: LCSD 880-74155/2-A
Matrix: Solid
Analysis Batch: 74125

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74155

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1243		mg/Kg		124	70 - 130	13	35
Toluene			0.100	0.1193		mg/Kg		119	70 - 130	35	35
Ethylbenzene			0.100	0.1203		mg/Kg		120	70 - 130	23	35
m-Xylene & p-Xylene			0.200	0.2415		mg/Kg		121	70 - 130	20	35
o-Xylene			0.100	0.1080		mg/Kg		108	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

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

Lab Sample ID: LCSD 880-74155/2-A
Matrix: Solid
Analysis Batch: 74125

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74155

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,4-Difluorobenzene (Surr)	127		70 - 130

Lab Sample ID: 890-6260-A-1-A MS
Matrix: Solid
Analysis Batch: 74125

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 74155

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.101	0.08542		mg/Kg		85	70 - 130
Toluene	<0.00199	U	0.101	0.08550		mg/Kg		85	70 - 130
Ethylbenzene	<0.00199	U	0.101	0.09376		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1752		mg/Kg		87	70 - 130
o-Xylene	<0.00199	U	0.101	0.08784		mg/Kg		87	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130
1,4-Difluorobenzene (Surr)	128		70 - 130

Lab Sample ID: 890-6260-A-1-B MSD
Matrix: Solid
Analysis Batch: 74125

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 74155

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.09846		mg/Kg		98	70 - 130	14	35
Toluene	<0.00199	U	0.100	0.08866		mg/Kg		89	70 - 130	4	35
Ethylbenzene	<0.00199	U	0.100	0.08857		mg/Kg		89	70 - 130	6	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2033		mg/Kg		102	70 - 130	15	35
o-Xylene	<0.00199	U	0.100	0.09469		mg/Kg		95	70 - 130	8	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130
1,4-Difluorobenzene (Surr)	130		70 - 130

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

Lab Sample ID: MB 880-73899/1-A
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73899

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/22/24 17:59	02/28/24 19:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/22/24 17:59	02/28/24 19:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/22/24 17:59	02/28/24 19:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	199	S1+	70 - 130	02/22/24 17:59	02/28/24 19:35	1
o-Terphenyl	178	S1+	70 - 130	02/22/24 17:59	02/28/24 19:35	1

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

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

Lab Sample ID: LCS 880-73899/2-A
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1200		mg/Kg		120	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1061		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*128*		*70 - 130*
o-Terphenyl	*127*		*70 - 130*

Lab Sample ID: LCSD 880-73899/3-A
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	15	20
Diesel Range Organics (Over C10-C28)			1000	766.8	*1	mg/Kg		77	70 - 130	32	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Lab Sample ID: 890-6208-A-2-I MS
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 73899

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1286		mg/Kg		124	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.6	U F1 *1	1010	1781	F1	mg/Kg		174	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*157*	*S1+*	*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: 890-6208-A-2-J MSD
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 73899

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1088		mg/Kg		104	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1 *1	1010	1523	F1	mg/Kg		149	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*128*		*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

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

Lab Sample ID: 890-6208-A-2-J MSD
Matrix: Solid
Analysis Batch: 74227

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 73899

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	100		70 - 130

Lab Sample ID: MB 880-73901/1-A
Matrix: Solid
Analysis Batch: 74118

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73901

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/22/24 18:05	02/27/24 20:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/22/24 18:05	02/27/24 20:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/24 18:05	02/27/24 20:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	193	S1+	70 - 130	02/22/24 18:05	02/27/24 20:00	1
o-Terphenyl	172	S1+	70 - 130	02/22/24 18:05	02/27/24 20:00	1

Lab Sample ID: LCS 880-73901/2-A
Matrix: Solid
Analysis Batch: 74118

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73901

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1162		mg/Kg		116	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	779.4		mg/Kg		78	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-73901/3-A
Matrix: Solid
Analysis Batch: 74118

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73901

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1145		mg/Kg		114	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	999.3	*1	mg/Kg		100	70 - 130	25	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	120		70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

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

Lab Sample ID: 890-6232-3 MS
Matrix: Solid
Analysis Batch: 74118

Client Sample ID: BES24-85 3
Prep Type: Total/NA
Prep Batch: 73901

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	1270		mg/Kg		122	70 - 130
Diesel Range Organics (Over C10-C28)	<50.3	U *1 F2	1010	782.2		mg/Kg		75	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*74*		*70 - 130*

Lab Sample ID: 890-6232-3 MSD
Matrix: Solid
Analysis Batch: 74118

Client Sample ID: BES24-85 3
Prep Type: Total/NA
Prep Batch: 73901

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	<50.3	U	1010	1320		mg/Kg		127	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<50.3	U *1 F2	1010	983.2	F2	mg/Kg		95	70 - 130	23	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-73842/1-A
Matrix: Solid
Analysis Batch: 73931

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/24/24 00:35	1

Lab Sample ID: LCS 880-73842/2-A
Matrix: Solid
Analysis Batch: 73931

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	248.6		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-73842/3-A
Matrix: Solid
Analysis Batch: 73931

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	249.5		mg/Kg		100	90 - 110	0	20

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-6232-3 MS
Matrix: Solid
Analysis Batch: 73931

Client Sample ID: BES24-85 3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	140		252	388.2		mg/Kg		98	90 - 110

Lab Sample ID: 890-6232-3 MSD
Matrix: Solid
Analysis Batch: 73931

Client Sample ID: BES24-85 3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	140		252	389.4		mg/Kg		99	90 - 110	0	20

Lab Sample ID: MB 880-73848/1-A
Matrix: Solid
Analysis Batch: 73932

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/25/24 14:57	1

Lab Sample ID: LCS 880-73848/2-A
Matrix: Solid
Analysis Batch: 73932

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	232.2		mg/Kg		93	90 - 110

Lab Sample ID: LCSD 880-73848/3-A
Matrix: Solid
Analysis Batch: 73932

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	234.1		mg/Kg		94	90 - 110	1	20

Lab Sample ID: 890-6232-13 MS
Matrix: Solid
Analysis Batch: 73932

Client Sample ID: BES24-53 1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	51.5	F1	251	264.7	F1	mg/Kg		85	90 - 110

Lab Sample ID: 890-6232-13 MSD
Matrix: Solid
Analysis Batch: 73932

Client Sample ID: BES24-53 1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	51.5	F1	251	262.2	F1	mg/Kg		84	90 - 110	1	20

Lab Sample ID: 890-6232-23 MS
Matrix: Solid
Analysis Batch: 73932

Client Sample ID: BES24-74 1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	170		252	398.8		mg/Kg		91	90 - 110

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-6232-23 MSD
Matrix: Solid
Analysis Batch: 73932

Client Sample ID: BES24-74 1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	170		252	400.8		mg/Kg		91	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

GC VOA

Prep Batch: 74019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-1	WES24-09 1-2.5	Total/NA	Solid	5035	
890-6232-2	WES24-10 0-3	Total/NA	Solid	5035	
890-6232-3	BES24-85 3	Total/NA	Solid	5035	
890-6232-4	BES24-86 3	Total/NA	Solid	5035	
890-6232-5	BES24-44 3	Total/NA	Solid	5035	
890-6232-6	BES24-45 1	Total/NA	Solid	5035	
890-6232-7	BES24-46 1	Total/NA	Solid	5035	
890-6232-8	BES24-47 1	Total/NA	Solid	5035	
890-6232-9	BES24-49 1	Total/NA	Solid	5035	
890-6232-10	BES24-50 1	Total/NA	Solid	5035	
890-6232-11	BES24-51 1	Total/NA	Solid	5035	
890-6232-12	BES24-52 1	Total/NA	Solid	5035	
890-6232-13	BES24-53 1	Total/NA	Solid	5035	
890-6232-14	BES24-54 1	Total/NA	Solid	5035	
890-6232-15	BES24-55 1	Total/NA	Solid	5035	
890-6232-16	BES24-67 1	Total/NA	Solid	5035	
890-6232-17	BES24-68 1	Total/NA	Solid	5035	
890-6232-18	BES24-69 1	Total/NA	Solid	5035	
890-6232-19	BES24-70 1	Total/NA	Solid	5035	
890-6232-20	BES24-71 1	Total/NA	Solid	5035	
MB 880-74019/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74019/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74019/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6232-1 MS	WES24-09 1-2.5	Total/NA	Solid	5035	
890-6232-1 MSD	WES24-09 1-2.5	Total/NA	Solid	5035	

Prep Batch: 74020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-21	BES24-72 1	Total/NA	Solid	5035	
890-6232-22	BES24-73 1	Total/NA	Solid	5035	
890-6232-23	BES24-74 1	Total/NA	Solid	5035	
890-6232-24	BES24-75 1	Total/NA	Solid	5035	
890-6232-25	BES24-76 1	Total/NA	Solid	5035	
890-6232-26	BES24-77 1	Total/NA	Solid	5035	
890-6232-27	BES24-78 1	Total/NA	Solid	5035	
890-6232-28	BES24-79 1	Total/NA	Solid	5035	
MB 880-74020/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74020/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74020/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6232-21 MS	BES24-72 1	Total/NA	Solid	5035	
890-6232-21 MSD	BES24-72 1	Total/NA	Solid	5035	

Analysis Batch: 74122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-1	WES24-09 1-2.5	Total/NA	Solid	8021B	74019
890-6232-2	WES24-10 0-3	Total/NA	Solid	8021B	74019
890-6232-3	BES24-85 3	Total/NA	Solid	8021B	74019
890-6232-4	BES24-86 3	Total/NA	Solid	8021B	74019
890-6232-5	BES24-44 3	Total/NA	Solid	8021B	74019
890-6232-6	BES24-45 1	Total/NA	Solid	8021B	74019
890-6232-7	BES24-46 1	Total/NA	Solid	8021B	74019

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

GC VOA (Continued)

Analysis Batch: 74122 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-8	BES24-47 1	Total/NA	Solid	8021B	74019
890-6232-9	BES24-49 1	Total/NA	Solid	8021B	74019
890-6232-10	BES24-50 1	Total/NA	Solid	8021B	74019
890-6232-11	BES24-51 1	Total/NA	Solid	8021B	74019
890-6232-12	BES24-52 1	Total/NA	Solid	8021B	74019
890-6232-13	BES24-53 1	Total/NA	Solid	8021B	74019
890-6232-14	BES24-54 1	Total/NA	Solid	8021B	74019
890-6232-15	BES24-55 1	Total/NA	Solid	8021B	74019
890-6232-16	BES24-67 1	Total/NA	Solid	8021B	74019
890-6232-17	BES24-68 1	Total/NA	Solid	8021B	74019
890-6232-18	BES24-69 1	Total/NA	Solid	8021B	74019
890-6232-19	BES24-70 1	Total/NA	Solid	8021B	74019
890-6232-20	BES24-71 1	Total/NA	Solid	8021B	74019
MB 880-74019/5-A	Method Blank	Total/NA	Solid	8021B	74019
LCS 880-74019/1-A	Lab Control Sample	Total/NA	Solid	8021B	74019
LCSD 880-74019/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74019
890-6232-1 MS	WES24-09 1-2.5	Total/NA	Solid	8021B	74019
890-6232-1 MSD	WES24-09 1-2.5	Total/NA	Solid	8021B	74019

Analysis Batch: 74124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-21	BES24-72 1	Total/NA	Solid	8021B	74020
890-6232-22	BES24-73 1	Total/NA	Solid	8021B	74020
890-6232-23	BES24-74 1	Total/NA	Solid	8021B	74020
890-6232-24	BES24-75 1	Total/NA	Solid	8021B	74020
890-6232-25	BES24-76 1	Total/NA	Solid	8021B	74020
890-6232-26	BES24-77 1	Total/NA	Solid	8021B	74020
890-6232-27	BES24-78 1	Total/NA	Solid	8021B	74020
890-6232-28	BES24-79 1	Total/NA	Solid	8021B	74020
MB 880-74020/5-A	Method Blank	Total/NA	Solid	8021B	74020
LCS 880-74020/1-A	Lab Control Sample	Total/NA	Solid	8021B	74020
LCSD 880-74020/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74020
890-6232-21 MS	BES24-72 1	Total/NA	Solid	8021B	74020
890-6232-21 MSD	BES24-72 1	Total/NA	Solid	8021B	74020

Analysis Batch: 74125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-29	BES24-80 1	Total/NA	Solid	8021B	74155
890-6232-30	BES24-81 1	Total/NA	Solid	8021B	74155
MB 880-74155/5-A	Method Blank	Total/NA	Solid	8021B	74155
LCS 880-74155/1-A	Lab Control Sample	Total/NA	Solid	8021B	74155
LCSD 880-74155/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74155
890-6260-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	74155
890-6260-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	74155

Prep Batch: 74155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-29	BES24-80 1	Total/NA	Solid	5035	
890-6232-30	BES24-81 1	Total/NA	Solid	5035	
MB 880-74155/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74155/1-A	Lab Control Sample	Total/NA	Solid	5035	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

GC VOA (Continued)

Prep Batch: 74155 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-74155/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6260-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-6260-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 74210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-1	WES24-09 1-2.5	Total/NA	Solid	Total BTEX	
890-6232-2	WES24-10 0-3	Total/NA	Solid	Total BTEX	
890-6232-3	BES24-85 3	Total/NA	Solid	Total BTEX	
890-6232-4	BES24-86 3	Total/NA	Solid	Total BTEX	
890-6232-5	BES24-44 3	Total/NA	Solid	Total BTEX	
890-6232-6	BES24-45 1	Total/NA	Solid	Total BTEX	
890-6232-7	BES24-46 1	Total/NA	Solid	Total BTEX	
890-6232-8	BES24-47 1	Total/NA	Solid	Total BTEX	
890-6232-9	BES24-49 1	Total/NA	Solid	Total BTEX	
890-6232-10	BES24-50 1	Total/NA	Solid	Total BTEX	
890-6232-11	BES24-51 1	Total/NA	Solid	Total BTEX	
890-6232-12	BES24-52 1	Total/NA	Solid	Total BTEX	
890-6232-13	BES24-53 1	Total/NA	Solid	Total BTEX	
890-6232-14	BES24-54 1	Total/NA	Solid	Total BTEX	
890-6232-15	BES24-55 1	Total/NA	Solid	Total BTEX	
890-6232-16	BES24-67 1	Total/NA	Solid	Total BTEX	
890-6232-17	BES24-68 1	Total/NA	Solid	Total BTEX	
890-6232-18	BES24-69 1	Total/NA	Solid	Total BTEX	
890-6232-19	BES24-70 1	Total/NA	Solid	Total BTEX	
890-6232-20	BES24-71 1	Total/NA	Solid	Total BTEX	
890-6232-21	BES24-72 1	Total/NA	Solid	Total BTEX	
890-6232-22	BES24-73 1	Total/NA	Solid	Total BTEX	
890-6232-23	BES24-74 1	Total/NA	Solid	Total BTEX	
890-6232-24	BES24-75 1	Total/NA	Solid	Total BTEX	
890-6232-25	BES24-76 1	Total/NA	Solid	Total BTEX	
890-6232-26	BES24-77 1	Total/NA	Solid	Total BTEX	
890-6232-27	BES24-78 1	Total/NA	Solid	Total BTEX	
890-6232-28	BES24-79 1	Total/NA	Solid	Total BTEX	
890-6232-29	BES24-80 1	Total/NA	Solid	Total BTEX	
890-6232-30	BES24-81 1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 73899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-21	BES24-72 1	Total/NA	Solid	8015NM Prep	
890-6232-22	BES24-73 1	Total/NA	Solid	8015NM Prep	
890-6232-23	BES24-74 1	Total/NA	Solid	8015NM Prep	
890-6232-24	BES24-75 1	Total/NA	Solid	8015NM Prep	
890-6232-25	BES24-76 1	Total/NA	Solid	8015NM Prep	
890-6232-26	BES24-77 1	Total/NA	Solid	8015NM Prep	
890-6232-27	BES24-78 1	Total/NA	Solid	8015NM Prep	
890-6232-28	BES24-79 1	Total/NA	Solid	8015NM Prep	
890-6232-29	BES24-80 1	Total/NA	Solid	8015NM Prep	
890-6232-30	BES24-81 1	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

GC Semi VOA (Continued)

Prep Batch: 73899 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-73899/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73899/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73899/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6208-A-2-I MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6208-A-2-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 73901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-1	WES24-09 1-2.5	Total/NA	Solid	8015NM Prep	
890-6232-2	WES24-10 0-3	Total/NA	Solid	8015NM Prep	
890-6232-3	BES24-85 3	Total/NA	Solid	8015NM Prep	
890-6232-4	BES24-86 3	Total/NA	Solid	8015NM Prep	
890-6232-5	BES24-44 3	Total/NA	Solid	8015NM Prep	
890-6232-6	BES24-45 1	Total/NA	Solid	8015NM Prep	
890-6232-7	BES24-46 1	Total/NA	Solid	8015NM Prep	
890-6232-8	BES24-47 1	Total/NA	Solid	8015NM Prep	
890-6232-9	BES24-49 1	Total/NA	Solid	8015NM Prep	
890-6232-10	BES24-50 1	Total/NA	Solid	8015NM Prep	
890-6232-11	BES24-51 1	Total/NA	Solid	8015NM Prep	
890-6232-12	BES24-52 1	Total/NA	Solid	8015NM Prep	
890-6232-13	BES24-53 1	Total/NA	Solid	8015NM Prep	
890-6232-14	BES24-54 1	Total/NA	Solid	8015NM Prep	
890-6232-15	BES24-55 1	Total/NA	Solid	8015NM Prep	
890-6232-16	BES24-67 1	Total/NA	Solid	8015NM Prep	
890-6232-17	BES24-68 1	Total/NA	Solid	8015NM Prep	
890-6232-18	BES24-69 1	Total/NA	Solid	8015NM Prep	
890-6232-19	BES24-70 1	Total/NA	Solid	8015NM Prep	
890-6232-20	BES24-71 1	Total/NA	Solid	8015NM Prep	
MB 880-73901/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73901/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73901/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6232-3 MS	BES24-85 3	Total/NA	Solid	8015NM Prep	
890-6232-3 MSD	BES24-85 3	Total/NA	Solid	8015NM Prep	

Analysis Batch: 74118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-1	WES24-09 1-2.5	Total/NA	Solid	8015B NM	73901
890-6232-2	WES24-10 0-3	Total/NA	Solid	8015B NM	73901
890-6232-3	BES24-85 3	Total/NA	Solid	8015B NM	73901
890-6232-4	BES24-86 3	Total/NA	Solid	8015B NM	73901
890-6232-5	BES24-44 3	Total/NA	Solid	8015B NM	73901
890-6232-6	BES24-45 1	Total/NA	Solid	8015B NM	73901
890-6232-7	BES24-46 1	Total/NA	Solid	8015B NM	73901
890-6232-8	BES24-47 1	Total/NA	Solid	8015B NM	73901
890-6232-9	BES24-49 1	Total/NA	Solid	8015B NM	73901
890-6232-10	BES24-50 1	Total/NA	Solid	8015B NM	73901
890-6232-11	BES24-51 1	Total/NA	Solid	8015B NM	73901
890-6232-12	BES24-52 1	Total/NA	Solid	8015B NM	73901
890-6232-13	BES24-53 1	Total/NA	Solid	8015B NM	73901
890-6232-14	BES24-54 1	Total/NA	Solid	8015B NM	73901
890-6232-15	BES24-55 1	Total/NA	Solid	8015B NM	73901

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

GC Semi VOA (Continued)

Analysis Batch: 74118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-16	BES24-67 1	Total/NA	Solid	8015B NM	73901
890-6232-17	BES24-68 1	Total/NA	Solid	8015B NM	73901
890-6232-18	BES24-69 1	Total/NA	Solid	8015B NM	73901
890-6232-19	BES24-70 1	Total/NA	Solid	8015B NM	73901
890-6232-20	BES24-71 1	Total/NA	Solid	8015B NM	73901
MB 880-73901/1-A	Method Blank	Total/NA	Solid	8015B NM	73901
LCS 880-73901/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73901
LCSD 880-73901/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73901
890-6232-3 MS	BES24-85 3	Total/NA	Solid	8015B NM	73901
890-6232-3 MSD	BES24-85 3	Total/NA	Solid	8015B NM	73901

Analysis Batch: 74227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-21	BES24-72 1	Total/NA	Solid	8015B NM	73899
890-6232-22	BES24-73 1	Total/NA	Solid	8015B NM	73899
890-6232-23	BES24-74 1	Total/NA	Solid	8015B NM	73899
890-6232-24	BES24-75 1	Total/NA	Solid	8015B NM	73899
890-6232-25	BES24-76 1	Total/NA	Solid	8015B NM	73899
890-6232-26	BES24-77 1	Total/NA	Solid	8015B NM	73899
890-6232-27	BES24-78 1	Total/NA	Solid	8015B NM	73899
890-6232-28	BES24-79 1	Total/NA	Solid	8015B NM	73899
890-6232-29	BES24-80 1	Total/NA	Solid	8015B NM	73899
890-6232-30	BES24-81 1	Total/NA	Solid	8015B NM	73899
MB 880-73899/1-A	Method Blank	Total/NA	Solid	8015B NM	73899
LCS 880-73899/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73899
LCSD 880-73899/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73899
890-6208-A-2-I MS	Matrix Spike	Total/NA	Solid	8015B NM	73899
890-6208-A-2-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	73899

Analysis Batch: 74276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-1	WES24-09 1-2.5	Total/NA	Solid	8015 NM	
890-6232-2	WES24-10 0-3	Total/NA	Solid	8015 NM	
890-6232-3	BES24-85 3	Total/NA	Solid	8015 NM	
890-6232-4	BES24-86 3	Total/NA	Solid	8015 NM	
890-6232-5	BES24-44 3	Total/NA	Solid	8015 NM	
890-6232-6	BES24-45 1	Total/NA	Solid	8015 NM	
890-6232-7	BES24-46 1	Total/NA	Solid	8015 NM	
890-6232-8	BES24-47 1	Total/NA	Solid	8015 NM	
890-6232-9	BES24-49 1	Total/NA	Solid	8015 NM	
890-6232-10	BES24-50 1	Total/NA	Solid	8015 NM	
890-6232-11	BES24-51 1	Total/NA	Solid	8015 NM	
890-6232-12	BES24-52 1	Total/NA	Solid	8015 NM	
890-6232-13	BES24-53 1	Total/NA	Solid	8015 NM	
890-6232-14	BES24-54 1	Total/NA	Solid	8015 NM	
890-6232-15	BES24-55 1	Total/NA	Solid	8015 NM	
890-6232-16	BES24-67 1	Total/NA	Solid	8015 NM	
890-6232-17	BES24-68 1	Total/NA	Solid	8015 NM	
890-6232-18	BES24-69 1	Total/NA	Solid	8015 NM	
890-6232-19	BES24-70 1	Total/NA	Solid	8015 NM	
890-6232-20	BES24-71 1	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

GC Semi VOA (Continued)

Analysis Batch: 74276 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-21	BES24-72 1	Total/NA	Solid	8015 NM	
890-6232-22	BES24-73 1	Total/NA	Solid	8015 NM	
890-6232-23	BES24-74 1	Total/NA	Solid	8015 NM	
890-6232-24	BES24-75 1	Total/NA	Solid	8015 NM	
890-6232-25	BES24-76 1	Total/NA	Solid	8015 NM	
890-6232-26	BES24-77 1	Total/NA	Solid	8015 NM	
890-6232-27	BES24-78 1	Total/NA	Solid	8015 NM	
890-6232-28	BES24-79 1	Total/NA	Solid	8015 NM	
890-6232-29	BES24-80 1	Total/NA	Solid	8015 NM	
890-6232-30	BES24-81 1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 73842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-1	WES24-09 1-2.5	Soluble	Solid	DI Leach	
890-6232-2	WES24-10 0-3	Soluble	Solid	DI Leach	
890-6232-3	BES24-85 3	Soluble	Solid	DI Leach	
890-6232-4	BES24-86 3	Soluble	Solid	DI Leach	
890-6232-5	BES24-44 3	Soluble	Solid	DI Leach	
890-6232-6	BES24-45 1	Soluble	Solid	DI Leach	
890-6232-7	BES24-46 1	Soluble	Solid	DI Leach	
890-6232-8	BES24-47 1	Soluble	Solid	DI Leach	
890-6232-9	BES24-49 1	Soluble	Solid	DI Leach	
890-6232-10	BES24-50 1	Soluble	Solid	DI Leach	
890-6232-11	BES24-51 1	Soluble	Solid	DI Leach	
890-6232-12	BES24-52 1	Soluble	Solid	DI Leach	
MB 880-73842/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73842/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73842/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6232-3 MS	BES24-85 3	Soluble	Solid	DI Leach	
890-6232-3 MSD	BES24-85 3	Soluble	Solid	DI Leach	

Leach Batch: 73848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-13	BES24-53 1	Soluble	Solid	DI Leach	
890-6232-14	BES24-54 1	Soluble	Solid	DI Leach	
890-6232-15	BES24-55 1	Soluble	Solid	DI Leach	
890-6232-16	BES24-67 1	Soluble	Solid	DI Leach	
890-6232-17	BES24-68 1	Soluble	Solid	DI Leach	
890-6232-18	BES24-69 1	Soluble	Solid	DI Leach	
890-6232-19	BES24-70 1	Soluble	Solid	DI Leach	
890-6232-20	BES24-71 1	Soluble	Solid	DI Leach	
890-6232-21	BES24-72 1	Soluble	Solid	DI Leach	
890-6232-22	BES24-73 1	Soluble	Solid	DI Leach	
890-6232-23	BES24-74 1	Soluble	Solid	DI Leach	
890-6232-24	BES24-75 1	Soluble	Solid	DI Leach	
890-6232-25	BES24-76 1	Soluble	Solid	DI Leach	
890-6232-26	BES24-77 1	Soluble	Solid	DI Leach	
890-6232-27	BES24-78 1	Soluble	Solid	DI Leach	
890-6232-28	BES24-79 1	Soluble	Solid	DI Leach	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

HPLC/IC (Continued)

Leach Batch: 73848 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-29	BES24-80 1	Soluble	Solid	DI Leach	
890-6232-30	BES24-81 1	Soluble	Solid	DI Leach	
MB 880-73848/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73848/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73848/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6232-13 MS	BES24-53 1	Soluble	Solid	DI Leach	
890-6232-13 MSD	BES24-53 1	Soluble	Solid	DI Leach	
890-6232-23 MS	BES24-74 1	Soluble	Solid	DI Leach	
890-6232-23 MSD	BES24-74 1	Soluble	Solid	DI Leach	

Analysis Batch: 73931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-1	WES24-09 1-2.5	Soluble	Solid	300.0	73842
890-6232-2	WES24-10 0-3	Soluble	Solid	300.0	73842
890-6232-3	BES24-85 3	Soluble	Solid	300.0	73842
890-6232-4	BES24-86 3	Soluble	Solid	300.0	73842
890-6232-5	BES24-44 3	Soluble	Solid	300.0	73842
890-6232-6	BES24-45 1	Soluble	Solid	300.0	73842
890-6232-7	BES24-46 1	Soluble	Solid	300.0	73842
890-6232-8	BES24-47 1	Soluble	Solid	300.0	73842
890-6232-9	BES24-49 1	Soluble	Solid	300.0	73842
890-6232-10	BES24-50 1	Soluble	Solid	300.0	73842
890-6232-11	BES24-51 1	Soluble	Solid	300.0	73842
890-6232-12	BES24-52 1	Soluble	Solid	300.0	73842
MB 880-73842/1-A	Method Blank	Soluble	Solid	300.0	73842
LCS 880-73842/2-A	Lab Control Sample	Soluble	Solid	300.0	73842
LCSD 880-73842/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73842
890-6232-3 MS	BES24-85 3	Soluble	Solid	300.0	73842
890-6232-3 MSD	BES24-85 3	Soluble	Solid	300.0	73842

Analysis Batch: 73932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6232-13	BES24-53 1	Soluble	Solid	300.0	73848
890-6232-14	BES24-54 1	Soluble	Solid	300.0	73848
890-6232-15	BES24-55 1	Soluble	Solid	300.0	73848
890-6232-16	BES24-67 1	Soluble	Solid	300.0	73848
890-6232-17	BES24-68 1	Soluble	Solid	300.0	73848
890-6232-18	BES24-69 1	Soluble	Solid	300.0	73848
890-6232-19	BES24-70 1	Soluble	Solid	300.0	73848
890-6232-20	BES24-71 1	Soluble	Solid	300.0	73848
890-6232-21	BES24-72 1	Soluble	Solid	300.0	73848
890-6232-22	BES24-73 1	Soluble	Solid	300.0	73848
890-6232-23	BES24-74 1	Soluble	Solid	300.0	73848
890-6232-24	BES24-75 1	Soluble	Solid	300.0	73848
890-6232-25	BES24-76 1	Soluble	Solid	300.0	73848
890-6232-26	BES24-77 1	Soluble	Solid	300.0	73848
890-6232-27	BES24-78 1	Soluble	Solid	300.0	73848
890-6232-28	BES24-79 1	Soluble	Solid	300.0	73848
890-6232-29	BES24-80 1	Soluble	Solid	300.0	73848
890-6232-30	BES24-81 1	Soluble	Solid	300.0	73848
MB 880-73848/1-A	Method Blank	Soluble	Solid	300.0	73848

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

HPLC/IC (Continued)

Analysis Batch: 73932 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-73848/2-A	Lab Control Sample	Soluble	Solid	300.0	73848
LCSD 880-73848/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73848
890-6232-13 MS	BES24-53 1	Soluble	Solid	300.0	73848
890-6232-13 MSD	BES24-53 1	Soluble	Solid	300.0	73848
890-6232-23 MS	BES24-74 1	Soluble	Solid	300.0	73848
890-6232-23 MSD	BES24-74 1	Soluble	Solid	300.0	73848

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: WES24-09 1-2.5

Lab Sample ID: 890-6232-1

Date Collected: 02/20/24 13:00
Matrix: Solid
Date Received: 02/21/24 08:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 12:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 12:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/27/24 22:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/27/24 22:11	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			73931	02/24/24 01:44	CH	EET MID

Client Sample ID: WES24-10 0-3

Lab Sample ID: 890-6232-2

Date Collected: 02/20/24 10:00
Matrix: Solid
Date Received: 02/21/24 08:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 12:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 12:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/27/24 22:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/27/24 22:33	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			73931	02/24/24 01:49	CH	EET MID

Client Sample ID: BES24-85 3

Lab Sample ID: 890-6232-3

Date Collected: 02/20/24 10:10
Matrix: Solid
Date Received: 02/21/24 08:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 12:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 12:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/27/24 21:05	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/27/24 21:05	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			73931	02/24/24 01:53	CH	EET MID

Client Sample ID: BES24-86 3

Lab Sample ID: 890-6232-4

Date Collected: 02/20/24 10:10
Matrix: Solid
Date Received: 02/21/24 08:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 13:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 13:20	SM	EET MID

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Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-86 3
Date Collected: 02/20/24 10:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74276	02/27/24 22:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/27/24 22:55	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		5			73931	02/24/24 02:07	CH	EET MID

Client Sample ID: BES24-44 3
Date Collected: 02/20/24 10:20
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 13:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/27/24 23:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/27/24 23:17	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			73931	02/24/24 02:12	CH	EET MID

Client Sample ID: BES24-45 1
Date Collected: 02/20/24 10:20
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 14:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 14:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/27/24 23:39	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/27/24 23:39	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			73931	02/24/24 02:26	CH	EET MID

Client Sample ID: BES24-46 1
Date Collected: 02/20/24 09:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 14:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 14:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 00:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 00:01	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-46 1

Lab Sample ID: 890-6232-7
Matrix: Solid
Date Collected: 02/20/24 09:30
Date Received: 02/21/24 08:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			73931	02/24/24 02:30	CH	EET MID

Client Sample ID: BES24-47 1

Lab Sample ID: 890-6232-8
Matrix: Solid
Date Collected: 02/20/24 09:40
Date Received: 02/21/24 08:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 14:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 14:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 00:23	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 00:23	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			73931	02/24/24 02:35	CH	EET MID

Client Sample ID: BES24-49 1

Lab Sample ID: 890-6232-9
Matrix: Solid
Date Collected: 02/20/24 10:30
Date Received: 02/21/24 08:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 15:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 15:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 00:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 00:45	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		5			73931	02/24/24 02:40	CH	EET MID

Client Sample ID: BES24-50 1

Lab Sample ID: 890-6232-10
Matrix: Solid
Date Collected: 02/20/24 10:30
Date Received: 02/21/24 08:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 15:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 15:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 01:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 01:08	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			73931	02/24/24 02:44	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-51 1
Date Collected: 02/20/24 10:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 16:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 16:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 01:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 01:52	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			73931	02/24/24 02:49	CH	EET MID

Client Sample ID: BES24-52 1
Date Collected: 02/20/24 10:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 17:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 17:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 02:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 02:14	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	73842	02/22/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			73931	02/24/24 02:53	CH	EET MID

Client Sample ID: BES24-53 1
Date Collected: 02/20/24 10:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 17:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 17:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 02:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 02:36	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 15:11	CH	EET MID

Client Sample ID: BES24-54 1
Date Collected: 02/20/24 10:50
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 17:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 17:50	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-54 1
Date Collected: 02/20/24 10:50
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74276	02/28/24 02:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 02:58	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		5			73932	02/25/24 15:25	CH	EET MID

Client Sample ID: BES24-55 1
Date Collected: 02/20/24 11:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 18:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 18:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 03:19	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 03:19	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		5			73932	02/25/24 15:30	CH	EET MID

Client Sample ID: BES24-67 1
Date Collected: 02/20/24 11:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 18:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 18:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 03:41	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 03:41	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 15:34	CH	EET MID

Client Sample ID: BES24-68 1
Date Collected: 02/20/24 11:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 18:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 18:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 04:03	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 04:03	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-68 1
Date Collected: 02/20/24 11:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 15:39	CH	EET MID

Client Sample ID: BES24-69 1
Date Collected: 02/20/24 11:20
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 19:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 19:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 04:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 04:24	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 15:53	CH	EET MID

Client Sample ID: BES24-70 1
Date Collected: 02/20/24 11:20
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 19:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 19:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 04:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 04:46	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 15:57	CH	EET MID

Client Sample ID: BES24-71 1
Date Collected: 02/20/24 11:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74019	02/26/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74122	02/27/24 19:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 19:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/28/24 05:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	73901	02/22/24 18:05	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74118	02/28/24 05:07	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 16:02	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-72 1
Date Collected: 02/20/24 11:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74020	02/26/24 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74124	02/27/24 13:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 13:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/29/24 01:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	73899	02/22/24 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/29/24 01:20	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 16:07	CH	EET MID

Client Sample ID: BES24-73 1
Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74020	02/26/24 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74124	02/27/24 13:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 13:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/29/24 01:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	73899	02/22/24 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/29/24 01:40	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 16:11	CH	EET MID

Client Sample ID: BES24-74 1
Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74020	02/26/24 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74124	02/27/24 13:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 13:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/29/24 02:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	73899	02/22/24 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/29/24 02:01	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 16:16	CH	EET MID

Client Sample ID: BES24-75 1
Date Collected: 02/20/24 12:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74020	02/26/24 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74124	02/27/24 14:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 14:04	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-75 1
Date Collected: 02/20/24 12:10
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74276	02/29/24 02:22	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	73899	02/22/24 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/29/24 02:22	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 16:30	CH	EET MID

Client Sample ID: BES24-76 1
Date Collected: 02/20/24 11:30
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74020	02/26/24 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74124	02/27/24 14:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 14:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/29/24 02:43	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	73899	02/22/24 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/29/24 02:43	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 16:34	CH	EET MID

Client Sample ID: BES24-77 1
Date Collected: 02/20/24 11:50
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74020	02/26/24 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74124	02/27/24 14:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 14:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/29/24 03:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	73899	02/22/24 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/29/24 03:04	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 16:48	CH	EET MID

Client Sample ID: BES24-78 1
Date Collected: 02/20/24 12:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74020	02/26/24 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74124	02/27/24 15:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 15:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/29/24 03:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	73899	02/22/24 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/29/24 03:24	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Client Sample ID: BES24-78 1
Date Collected: 02/20/24 12:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 16:53	CH	EET MID

Client Sample ID: BES24-79 1
Date Collected: 02/20/24 12:00
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-28
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	74020	02/26/24 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74124	02/27/24 15:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/27/24 15:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/29/24 03:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	73899	02/22/24 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/29/24 03:45	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 16:57	CH	EET MID

Client Sample ID: BES24-80 1
Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-29
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74155	02/27/24 11:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74125	02/28/24 00:56	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/28/24 00:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/29/24 04:06	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	73899	02/22/24 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/29/24 04:06	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 17:02	CH	EET MID

Client Sample ID: BES24-81 1
Date Collected: 02/20/24 11:40
Date Received: 02/21/24 08:22

Lab Sample ID: 890-6232-30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74155	02/27/24 11:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74125	02/28/24 01:21	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74210	02/28/24 01:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			74276	02/29/24 04:27	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	73899	02/22/24 17:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74227	02/29/24 04:27	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	73848	02/22/24 12:27	SMC	EET MID
Soluble	Analysis	300.0		1			73932	02/25/24 17:07	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6232-1
SDG: 23E-04616

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6232-1	WES24-09 1-2.5	Solid	02/20/24 13:00	02/21/24 08:22
890-6232-2	WES24-10 0-3	Solid	02/20/24 10:00	02/21/24 08:22
890-6232-3	BES24-85 3	Solid	02/20/24 10:10	02/21/24 08:22
890-6232-4	BES24-86 3	Solid	02/20/24 10:10	02/21/24 08:22
890-6232-5	BES24-44 3	Solid	02/20/24 10:20	02/21/24 08:22
890-6232-6	BES24-45 1	Solid	02/20/24 10:20	02/21/24 08:22
890-6232-7	BES24-46 1	Solid	02/20/24 09:30	02/21/24 08:22
890-6232-8	BES24-47 1	Solid	02/20/24 09:40	02/21/24 08:22
890-6232-9	BES24-49 1	Solid	02/20/24 10:30	02/21/24 08:22
890-6232-10	BES24-50 1	Solid	02/20/24 10:30	02/21/24 08:22
890-6232-11	BES24-51 1	Solid	02/20/24 10:40	02/21/24 08:22
890-6232-12	BES24-52 1	Solid	02/20/24 10:40	02/21/24 08:22
890-6232-13	BES24-53 1	Solid	02/20/24 10:00	02/21/24 08:22
890-6232-14	BES24-54 1	Solid	02/20/24 10:50	02/21/24 08:22
890-6232-15	BES24-55 1	Solid	02/20/24 11:00	02/21/24 08:22
890-6232-16	BES24-67 1	Solid	02/20/24 11:10	02/21/24 08:22
890-6232-17	BES24-68 1	Solid	02/20/24 11:10	02/21/24 08:22
890-6232-18	BES24-69 1	Solid	02/20/24 11:20	02/21/24 08:22
890-6232-19	BES24-70 1	Solid	02/20/24 11:20	02/21/24 08:22
890-6232-20	BES24-71 1	Solid	02/20/24 11:30	02/21/24 08:22
890-6232-21	BES24-72 1	Solid	02/20/24 11:30	02/21/24 08:22
890-6232-22	BES24-73 1	Solid	02/20/24 11:40	02/21/24 08:22
890-6232-23	BES24-74 1	Solid	02/20/24 11:40	02/21/24 08:22
890-6232-24	BES24-75 1	Solid	02/20/24 12:10	02/21/24 08:22
890-6232-25	BES24-76 1	Solid	02/20/24 11:30	02/21/24 08:22
890-6232-26	BES24-77 1	Solid	02/20/24 11:50	02/21/24 08:22
890-6232-27	BES24-78 1	Solid	02/20/24 12:00	02/21/24 08:22
890-6232-28	BES24-79 1	Solid	02/20/24 12:00	02/21/24 08:22
890-6232-29	BES24-80 1	Solid	02/20/24 11:40	02/21/24 08:22
890-6232-30	BES24-81 1	Solid	02/20/24 11:40	02/21/24 08:22

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2/29/2024

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio TX (210) 509-3334
EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

CC: CDixon@vertex.ca for Final Report

Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

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Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	
Project Number:	23E-04616	X Routine Rush	
Project Location:		Due Date:	
Sampler's Name:	L. Pullman	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

Work Order Comments

Program: UST/PST PRP Brownfields RR Superfund

State of Project:

Reporting: Level II Level III PST/UST TRR Level IV

Deliverables: EDD ADaPT Other:

SAMPLE RECEIPT

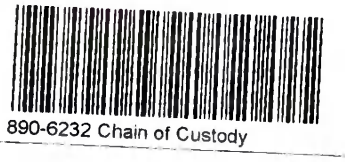
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID	IR#607
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	0.2
Total Containers:		Corrected Temperature:	0.0

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: NaSO3; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	Pres. Code	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
WES24-09 1-2.5'	Soil	02.19.24	13:00	1-2.5	Com			X	X	X
WES24-10 0-3'	Soil	02.20.24	10:00	0-3	Com			X	X	X
BES24-85 3'	Soil	02.20.24	10:10	3	Com			X	X	X
BES24-86 3'	Soil	02.20.24	10:10	3	Com			X	X	X
~~BES24-44 3'~~	~~Soil~~	~~02.20.24~~	~~10:20~~	~~3~~	~~Com~~			X	X	X
BES24-45 1'	Soil	02.20.24	10:20	1	Com			X	X	X
BES24-46 1'	Soil	02.20.24	09:30	1	Com			X	X	X
BES24-47 1'	Soil	02.20.24	09:40	1	Com			X	X	X
BES24-49 1'	Soil	02.20.24	10:30	1	Com			X	X	X
BES24-50 1'	Soil	02.20.24	10:30	1	Com			X	X	X



Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		8:22 2/21	2		
3			4		
5			6		

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Received by OCD: 4/27/2024 12:00:15 AM

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Chain of Custody

Houston TX (281) 240-4200, Dallas TX (214) 902-0300
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EL Paso TX (915) 585-3443, Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550, Carlsbad NM (575) 988-3199

Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

CC: CDixon@vertex.ca for Final Report

www.xenco.com Page 2 of 3

Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	
Project Number:	23E-04616	X Routine Rush	
Project Location:		Due Date:	
Sampler's Name:	L. Pullman	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

Work Order Comments

Program: UST/PST PRP Brownfields RR Superfund

State of Project:

Reporting: Level II Level III PST/UST TRR Level IV

Deliverables: EDD ADaPT Other:

SAMPLE RECEIPT

Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	
Total Containers:		Corrected Temperature:	

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
BES24-51 1'	Soil	02.20.24	10:40	1	Com		X	X	X
BES24-52 1'	Soil	02.20.24	10:40	1	Com		X	X	X
BES24-53 1'	Soil	02.20.24	10:00	1	Com		X	X	X
BES24-54 1'	Soil	02.20.24	10:50	1	Com		X	X	X
BES24-55 1'	Soil	02.20.24	10:50	1	Com		X	X	X
BES24-67 1'	Soil	02.20.24	11:00	1	Com		X	X	X
BES24-68 1'	Soil	02.20.24	11:00	1	Com		X	X	X
BES24-69 1'	Soil	02.20.24	11:10	1	Com		X	X	X
BES24-70 1'	Soil	02.20.24	11:10	1	Com		X	X	X
BES24-71 1'	Soil	02.20.24	11:20	1	Com		X	X	X

ANALYSIS REQUEST

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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1		2/21	4		
3			6		
5					

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El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

CC: CDixon@vertex.ca for Final Report

Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

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Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	
Project Number:	23E-04616	X Routine Rush	
Project Location:		Due Date:	
Sampler's Name:	L. Pullman	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

Work Order Comments

Program: UST/PST PRP Brownfields RR Superfund

State of Project:

Reporting: Level II Level III PST/UST TRR Level IV

Deliverables: EDD ADaPT Other:

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

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride	Sample Comments
BES24-72 1'	Soil	02.20.24	11:20	1	Com		X	X	X	
BES24-73 1'	Soil	02.20.24	11:30	1	Com		X	X	X	
BES24-74 1'	Soil	02.20.24	11:30	1	Com		X	X	X	
BES24-75 1'	Soil	02.20.24	11:40	1	Com		X	X	X	
BES24-76 1'	Soil	02.20.24	11:40	1	Com		X	X	X	
BES24-77 1'	Soil	02.20.24	12:10	1	Com		X	X	X	
BES24-78 1'	Soil	02.20.24	11:30	1	Com		X	X	X	
BES24-79 1'	Soil	02.20.24	11:50	1	Com		X	X	X	
BES24-80 1'	Soil	02.20.24	12:00	1	Com		X	X	X	
BES24-81 1'	Soil	02.20.24	12:00	1	Com		X	X	X	

Parameters

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			8:22 2/22	4		
3				6		
5						

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Received by OCD: 4/27/2024 12:00:15 AM

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Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-6232-1
SDG Number: 23E-04616

Login Number: 6232
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
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: 890-6232-1
SDG Number: 23E-04616

Login Number: 6232
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/22/24 11:22 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

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JOB DESCRIPTION

JRU DI 1A CTB
23E - 04616

JOB NUMBER

890-6285-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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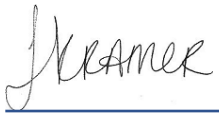
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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3/4/2024 8:28:40 PM

Authorized for release by
Jessica Kramer, Project Manager
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Client: Vertex
Project/Site: JRU DI 1A CTB

Laboratory Job ID: 890-6285-1
SDG: 23E - 04616

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Definitions/Glossary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Qualifiers

GC VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
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Job Narrative
890-6285-1

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 2/29/2024 9:02 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 -10.2°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BES 24 - 158 0.5' (890-6285-1), BES 24 - 159 0.5' (890-6285-2), BES 24 - 160 0.5' (890-6285-3), BES 24 - 161 0.5' (890-6285-4), BES 24 - 162 0.5' (890-6285-5), BES 24 - 163 0.5' (890-6285-6), BES 24 - 164 0.5' (890-6285-7), BES 24 - 165 0.5' (890-6285-8), BES 24 - 166 0.5' (890-6285-9), BES 24 - 167 0.5' (890-6285-10), BES 24 - 168 0.5' (890-6285-11), BES 24 - 169 0.5' (890-6285-12), BES 24 - 170 0.5' (890-6285-13), BES 24 - 171 0.5' (890-6285-14), BES 24 - 172 0.5' (890-6285-15), BES 24 - 173 0.5' (890-6285-16), BES 24 - 174 0.5' (890-6285-17), BES 24 - 175 0.5' (890-6285-18), BES 24 - 176 0.5' (890-6285-19), BES 24 - 177 0.5' (890-6285-20), BES 24 - 178 0.5' (890-6285-21), BES 24 - 179 0.5' (890-6285-22), BES 24 - 180 0.5' (890-6285-23), BES 24 - 181 0.5' (890-6285-24), BES 24 - 182 0.5' (890-6285-25), BES 24 - 183 0.5' (890-6285-26), BES 24 - 184 0.5' (890-6285-27), BES 24 - 185 0.5' (890-6285-28), BES 24 - 186 0.5' (890-6285-29), BES 24 - 187 0.5' (890-6285-30), BES 24 - 188 0.5' (890-6285-31), BES 24 - 189 0.5' (890-6285-32), BES 24 - 190 0.5' (890-6285-33), BES 24 - 191 0.5' (890-6285-34), BES 24 - 192 0.5' (890-6285-35), WES 24 - 15 0-0.5' (890-6285-36), WES 24 - 16 0-0.5' (890-6285-37), WES 24 - 17 0-0.5' (890-6285-38), WES 24 - 18 0-0.5' (890-6285-39) and WES 24 - 19 0-0.5' (890-6285-40).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-74525 and analytical batch 880-74545 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BES 24 - 180 0.5' (890-6285-23). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-74524 and analytical batch 880-74544 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-74524 and analytical batch 880-74544 was outside the control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BES 24 - 167 0.5' (890-6285-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: WES 24 - 16 0-0.5' (890-6285-37). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-74525/1-A). Evidence of matrix interferences is not obvious.

Method 8021B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-74525 and analytical batch 880-74545 recovered outside control limits for the following analytes: Ethylbenzene, m-

Case Narrative

Client: Vertex Job ID: 890-6285-1
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Job ID: 890-6285-1 (Continued) Eurofins Carlsbad

Xylene & p-Xylene and o-Xylene.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BES 24 - 184 0.5' (890-6285-27), BES 24 - 186 0.5' (890-6285-29), WES 24 - 16 0-0.5' (890-6285-37) and (890-6285-A-19-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-74519 and analytical batch 880-74513 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BES 24 - 158 0.5' (890-6285-1), BES 24 - 159 0.5' (890-6285-2), BES 24 - 160 0.5' (890-6285-3), BES 24 - 161 0.5' (890-6285-4), BES 24 - 162 0.5' (890-6285-5), BES 24 - 163 0.5' (890-6285-6), BES 24 - 164 0.5' (890-6285-7), BES 24 - 165 0.5' (890-6285-8), BES 24 - 166 0.5' (890-6285-9), BES 24 - 167 0.5' (890-6285-10), BES 24 - 168 0.5' (890-6285-11), BES 24 - 169 0.5' (890-6285-12), BES 24 - 170 0.5' (890-6285-13), BES 24 - 171 0.5' (890-6285-14), BES 24 - 172 0.5' (890-6285-15), BES 24 - 173 0.5' (890-6285-16), BES 24 - 174 0.5' (890-6285-17), BES 24 - 175 0.5' (890-6285-18), (890-6285-A-18-C MS) and (890-6285-A-18-D MSD). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 158 0.5'

Lab Sample ID: 890-6285-1
Matrix: Solid
Date Collected: 02/23/24 08:30
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		03/02/24 11:18	03/03/24 14:30	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		03/02/24 11:18	03/03/24 14:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/03/24 14:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/02/24 11:18	03/03/24 14:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/03/24 14:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/02/24 11:18	03/03/24 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*03/02/24 11:18*	*03/03/24 14:30*	*1*
1,4-Difluorobenzene (Surr)	*74*		*70 - 130*	*03/02/24 11:18*	*03/03/24 14:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/03/24 14:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/02/24 22:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/02/24 10:33	03/02/24 22:24	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/02/24 10:33	03/02/24 22:24	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/02/24 10:33	03/02/24 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*1*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 22:24*	*1*
o-Terphenyl	*0.5*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 22:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**164**		5.03		mg/Kg			03/03/24 18:46	1

Client Sample ID: BES 24 - 159 0.5'

Lab Sample ID: 890-6285-2
Matrix: Solid
Date Collected: 02/23/24 08:35
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 14:56	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 14:56	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 14:56	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/02/24 11:18	03/03/24 14:56	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 14:56	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/02/24 11:18	03/03/24 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/02/24 11:18*	*03/03/24 14:56*	*1*

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 159 0.5'

Lab Sample ID: 890-6285-2
Matrix: Solid
Date Collected: 02/23/24 08:35
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*03/02/24 11:18*	*03/03/24 14:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/03/24 14:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			03/02/24 22:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3	mg/Kg		03/02/24 10:33	03/02/24 22:46	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		03/02/24 10:33	03/02/24 22:46	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		03/02/24 10:33	03/02/24 22:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*0.9*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 22:46*	*1*
o-Terphenyl	*0.6*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 22:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**92.9**		4.99	mg/Kg			03/03/24 19:02	1

Client Sample ID: BES 24 - 160 0.5'

Lab Sample ID: 890-6285-3
Matrix: Solid
Date Collected: 02/23/24 08:40
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/02/24 11:18	03/03/24 15:24	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/02/24 11:18	03/03/24 15:24	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/02/24 11:18	03/03/24 15:24	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/02/24 11:18	03/03/24 15:24	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/02/24 11:18	03/03/24 15:24	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/02/24 11:18	03/03/24 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/02/24 11:18*	*03/03/24 15:24*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/02/24 11:18*	*03/03/24 15:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/03/24 15:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			03/02/24 23:09	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 160 0.5'

Lab Sample ID: 890-6285-3
Matrix: Solid
Date Collected: 02/23/24 08:40
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/02/24 10:33	03/02/24 23:09	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/02/24 10:33	03/02/24 23:09	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/02/24 10:33	03/02/24 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*1*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 23:09*	*1*
o-Terphenyl	*0.6*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 23:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**90.1**		5.01		mg/Kg			03/03/24 19:08	1

Client Sample ID: BES 24 - 161 0.5'

Lab Sample ID: 890-6285-4
Matrix: Solid
Date Collected: 02/23/24 08:45
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 15:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 15:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 15:52	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/02/24 11:18	03/03/24 15:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 15:52	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/02/24 11:18	03/03/24 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/02/24 11:18*	*03/03/24 15:52*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/02/24 11:18*	*03/03/24 15:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/03/24 15:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/02/24 23:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/02/24 10:33	03/02/24 23:32	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/02/24 10:33	03/02/24 23:32	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/02/24 10:33	03/02/24 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*1*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 23:32*	*1*
o-Terphenyl	*0.2*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 23:32*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 161 0.5'

Lab Sample ID: 890-6285-4
Matrix: Solid
Date Collected: 02/23/24 08:45
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	169		5.02		mg/Kg			03/03/24 19:13	1

Client Sample ID: BES 24 - 162 0.5'

Lab Sample ID: 890-6285-5
Matrix: Solid
Date Collected: 02/23/24 08:50
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/03/24 16:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/03/24 16:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/03/24 16:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/02/24 11:18	03/03/24 16:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/03/24 16:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/02/24 11:18	03/03/24 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*03/02/24 11:18*	*03/03/24 16:18*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/02/24 11:18*	*03/03/24 16:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/03/24 16:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/02/24 23:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/02/24 10:33	03/02/24 23:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/02/24 10:33	03/02/24 23:54	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/02/24 10:33	03/02/24 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.8*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 23:54*	*1*
o-Terphenyl	*0.6*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 23:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	114		5.05		mg/Kg			03/03/24 19:19	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 163 0.5'

Lab Sample ID: 890-6285-6
Matrix: Solid
Date Collected: 02/23/24 08:55
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 16:44	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 16:44	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 16:44	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/02/24 11:18	03/03/24 16:44	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 16:44	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/02/24 11:18	03/03/24 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*03/02/24 11:18*	*03/03/24 16:44*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/02/24 11:18*	*03/03/24 16:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/03/24 16:44	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/24 00:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/02/24 10:33	03/03/24 00:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/02/24 10:33	03/03/24 00:17	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/02/24 10:33	03/03/24 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.9*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 00:17*	*1*
o-Terphenyl	*0.6*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 00:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**226**		4.98		mg/Kg			03/03/24 19:35	1

Client Sample ID: BES 24 - 164 0.5'

Lab Sample ID: 890-6285-7
Matrix: Solid
Date Collected: 02/23/24 09:00
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 17:11	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 17:11	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 17:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/02/24 11:18	03/03/24 17:11	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 17:11	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/02/24 11:18	03/03/24 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/02/24 11:18*	*03/03/24 17:11*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 164 0.5'

Lab Sample ID: 890-6285-7
Matrix: Solid
Date Collected: 02/23/24 09:00
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*03/02/24 11:18*	*03/03/24 17:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/03/24 17:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			03/03/24 00:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		03/02/24 10:33	03/03/24 00:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/02/24 10:33	03/03/24 00:40	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/02/24 10:33	03/03/24 00:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*0.8*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 00:40*	*1*
o-Terphenyl	*0.2*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 00:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**111**		4.96	mg/Kg			03/03/24 19:41	1

Client Sample ID: BES 24 - 165 0.5'

Lab Sample ID: 890-6285-8
Matrix: Solid
Date Collected: 02/23/24 09:05
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:18	03/03/24 17:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:18	03/03/24 17:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:18	03/03/24 17:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/02/24 11:18	03/03/24 17:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:18	03/03/24 17:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/02/24 11:18	03/03/24 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/02/24 11:18*	*03/03/24 17:37*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/02/24 11:18*	*03/03/24 17:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/03/24 17:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			03/03/24 01:02	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 165 0.5'

Lab Sample ID: 890-6285-8
Matrix: Solid
Date Collected: 02/23/24 09:05
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		03/02/24 10:33	03/03/24 01:02	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		03/02/24 10:33	03/03/24 01:02	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		03/02/24 10:33	03/03/24 01:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.9*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 01:02*	*1*
o-Terphenyl	*0.4*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 01:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**147**		5.00		mg/Kg			03/03/24 19:47	1

Client Sample ID: BES 24 - 166 0.5'

Lab Sample ID: 890-6285-9
Matrix: Solid
Date Collected: 02/23/24 09:10
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 18:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 18:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 18:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/02/24 11:18	03/03/24 18:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 18:05	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/02/24 11:18	03/03/24 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/02/24 11:18*	*03/03/24 18:05*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/02/24 11:18*	*03/03/24 18:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/03/24 18:05	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			03/03/24 01:25	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/02/24 10:33	03/03/24 01:25	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/02/24 10:33	03/03/24 01:25	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/02/24 10:33	03/03/24 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.9*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 01:25*	*1*
o-Terphenyl	*0.6*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 01:25*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 166 0.5'

Lab Sample ID: 890-6285-9
Matrix: Solid
Date Collected: 02/23/24 09:10
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	232		5.03		mg/Kg			03/03/24 19:52	1

Client Sample ID: BES 24 - 167 0.5'

Lab Sample ID: 890-6285-10
Matrix: Solid
Date Collected: 02/23/24 09:15
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 19:00	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 19:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 19:00	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/02/24 11:18	03/03/24 19:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 19:00	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/02/24 11:18	03/03/24 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*62*	*S1-*	*70 - 130*	*03/02/24 11:18*	*03/03/24 19:00*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*03/02/24 11:18*	*03/03/24 19:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/03/24 19:00	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/03/24 02:10	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/02/24 10:33	03/03/24 02:10	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/02/24 10:33	03/03/24 02:10	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/02/24 10:33	03/03/24 02:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.9*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 02:10*	*1*
o-Terphenyl	*0.6*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 02:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	291		5.01		mg/Kg			03/03/24 19:58	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 168 0.5'

Lab Sample ID: 890-6285-11
Matrix: Solid
Date Collected: 02/23/24 09:20
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 20:22	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 20:22	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 20:22	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/02/24 11:18	03/03/24 20:22	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 20:22	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/02/24 11:18	03/03/24 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/02/24 11:18*	*03/03/24 20:22*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*03/02/24 11:18*	*03/03/24 20:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/03/24 20:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/03/24 02:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/02/24 10:33	03/03/24 02:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/02/24 10:33	03/03/24 02:32	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/02/24 10:33	03/03/24 02:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.8*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 02:32*	*1*
o-Terphenyl	*0.5*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 02:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**198**		5.00		mg/Kg			03/03/24 20:03	1

Client Sample ID: BES 24 - 169 0.5'

Lab Sample ID: 890-6285-12
Matrix: Solid
Date Collected: 02/23/24 09:25
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/02/24 11:18	03/03/24 20:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/02/24 11:18	03/03/24 20:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/02/24 11:18	03/03/24 20:50	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/02/24 11:18	03/03/24 20:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/02/24 11:18	03/03/24 20:50	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/02/24 11:18	03/03/24 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*03/02/24 11:18*	*03/03/24 20:50*	*1*

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 169 0.5'

Lab Sample ID: 890-6285-12
Matrix: Solid
Date Collected: 02/23/24 09:25
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/02/24 11:18*	*03/03/24 20:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			03/03/24 20:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/03/24 02:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/02/24 10:33	03/03/24 02:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/02/24 10:33	03/03/24 02:55	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/02/24 10:33	03/03/24 02:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*0.9*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 02:55*	*1*
o-Terphenyl	*0.6*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 02:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**174**		4.95	mg/Kg			03/03/24 20:20	1

Client Sample ID: BES 24 - 170 0.5'

Lab Sample ID: 890-6285-13
Matrix: Solid
Date Collected: 02/23/24 09:30
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:18	03/03/24 21:17	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:18	03/03/24 21:17	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:18	03/03/24 21:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/02/24 11:18	03/03/24 21:17	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:18	03/03/24 21:17	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/02/24 11:18	03/03/24 21:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/02/24 11:18*	*03/03/24 21:17*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*03/02/24 11:18*	*03/03/24 21:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/03/24 21:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/03/24 03:18	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 170 0.5'

Lab Sample ID: 890-6285-13
Matrix: Solid
Date Collected: 02/23/24 09:30
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/02/24 10:33	03/03/24 03:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/24 10:33	03/03/24 03:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/24 10:33	03/03/24 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.9*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 03:18*	*1*
o-Terphenyl	*0.5*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 03:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**138**		5.03		mg/Kg			03/03/24 20:25	1

Client Sample ID: BES 24 - 171 0.5'

Lab Sample ID: 890-6285-14
Matrix: Solid
Date Collected: 02/23/24 09:35
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/03/24 21:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/03/24 21:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/03/24 21:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/02/24 11:18	03/03/24 21:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/03/24 21:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/02/24 11:18	03/03/24 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/02/24 11:18*	*03/03/24 21:43*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*03/02/24 11:18*	*03/03/24 21:43*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/03/24 21:43	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/03/24 03:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/02/24 10:33	03/03/24 03:40	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/02/24 10:33	03/03/24 03:40	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/02/24 10:33	03/03/24 03:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.8*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 03:40*	*1*
o-Terphenyl	*0.5*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 03:40*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 171 0.5'

Lab Sample ID: 890-6285-14
Matrix: Solid
Date Collected: 02/23/24 09:35
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.9		5.04		mg/Kg			03/03/24 20:42	1

Client Sample ID: BES 24 - 172 0.5'

Lab Sample ID: 890-6285-15
Matrix: Solid
Date Collected: 02/23/24 09:40
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 22:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 22:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 22:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/24 11:18	03/03/24 22:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 22:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/24 11:18	03/03/24 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*03/02/24 11:18*	*03/03/24 22:10*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/02/24 11:18*	*03/03/24 22:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/03/24 22:10	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/24 04:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/02/24 10:33	03/03/24 04:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/02/24 10:33	03/03/24 04:02	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/02/24 10:33	03/03/24 04:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.6*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 04:02*	*1*
o-Terphenyl	*0.2*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 04:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	213		5.02		mg/Kg			03/03/24 20:47	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 173 0.5'

Lab Sample ID: 890-6285-16
Matrix: Solid
Date Collected: 02/23/24 09:45
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 22:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 22:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 22:36	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/02/24 11:18	03/03/24 22:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:18	03/03/24 22:36	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/02/24 11:18	03/03/24 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*03/02/24 11:18*	*03/03/24 22:36*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/02/24 11:18*	*03/03/24 22:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/03/24 22:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/03/24 04:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/02/24 10:33	03/03/24 04:23	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/02/24 10:33	03/03/24 04:23	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/02/24 10:33	03/03/24 04:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.9*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 04:23*	*1*
o-Terphenyl	*0.6*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 04:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**230**		4.99		mg/Kg			03/03/24 20:53	1

Client Sample ID: BES 24 - 174 0.5'

Lab Sample ID: 890-6285-17
Matrix: Solid
Date Collected: 02/23/24 09:50
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 23:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 23:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 23:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/02/24 11:18	03/03/24 23:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 23:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/02/24 11:18	03/03/24 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*03/02/24 11:18*	*03/03/24 23:01*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 174 0.5'

Lab Sample ID: 890-6285-17
Matrix: Solid
Date Collected: 02/23/24 09:50
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/02/24 11:18*	*03/03/24 23:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/03/24 23:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			03/03/24 04:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		03/02/24 10:33	03/03/24 04:44	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		03/02/24 10:33	03/03/24 04:44	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		03/02/24 10:33	03/03/24 04:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*0.8*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 04:44*	*1*
o-Terphenyl	*0.5*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/03/24 04:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**181**		4.97	mg/Kg			03/03/24 20:58	1

Client Sample ID: BES 24 - 175 0.5'

Lab Sample ID: 890-6285-18
Matrix: Solid
Date Collected: 02/23/24 09:55
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/02/24 11:18	03/03/24 23:27	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/02/24 11:18	03/03/24 23:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/02/24 11:18	03/03/24 23:27	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/02/24 11:18	03/03/24 23:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/02/24 11:18	03/03/24 23:27	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/02/24 11:18	03/03/24 23:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*03/02/24 11:18*	*03/03/24 23:27*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/02/24 11:18*	*03/03/24 23:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/03/24 23:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/02/24 21:19	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 175 0.5'

Lab Sample ID: 890-6285-18
Matrix: Solid
Date Collected: 02/23/24 09:55
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/02/24 10:33	03/02/24 21:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/24 10:33	03/02/24 21:19	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/24 10:33	03/02/24 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.8*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 21:19*	*1*
o-Terphenyl	*0.4*	*S1-*	*70 - 130*	*03/02/24 10:33*	*03/02/24 21:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**110**		5.04		mg/Kg			03/03/24 21:04	1

Client Sample ID: BES 24 - 176 0.5'

Lab Sample ID: 890-6285-19
Matrix: Solid
Date Collected: 02/23/24 10:00
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 23:52	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 23:52	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 23:52	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/02/24 11:18	03/03/24 23:52	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:18	03/03/24 23:52	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/02/24 11:18	03/03/24 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*03/02/24 11:18*	*03/03/24 23:52*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/02/24 11:18*	*03/03/24 23:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/03/24 23:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/24 12:05	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/03/24 00:21	03/03/24 12:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/03/24 00:21	03/03/24 12:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/03/24 00:21	03/03/24 12:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*03/03/24 00:21*	*03/03/24 12:05*	*1*
o-Terphenyl	*102*		*70 - 130*	*03/03/24 00:21*	*03/03/24 12:05*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 176 0.5'

Lab Sample ID: 890-6285-19
Matrix: Solid
Date Collected: 02/23/24 10:00
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.9		5.05		mg/Kg			03/03/24 21:09	1

Client Sample ID: BES 24 - 177 0.5'

Lab Sample ID: 890-6285-20
Matrix: Solid
Date Collected: 02/23/24 10:05
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/04/24 00:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/04/24 00:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/04/24 00:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/02/24 11:18	03/04/24 00:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:18	03/04/24 00:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/02/24 11:18	03/04/24 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/02/24 11:18*	*03/04/24 00:17*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/02/24 11:18*	*03/04/24 00:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/04/24 00:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/03/24 13:10	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/03/24 00:21	03/03/24 13:10	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/03/24 00:21	03/03/24 13:10	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/03/24 00:21	03/03/24 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*03/03/24 00:21*	*03/03/24 13:10*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/03/24 00:21*	*03/03/24 13:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	347		5.02		mg/Kg			03/03/24 21:15	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 178 0.5'

Lab Sample ID: 890-6285-21
Matrix: Solid
Date Collected: 02/23/24 10:10
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1 F2	0.00199		mg/Kg		03/02/24 11:19	03/03/24 14:14	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		03/02/24 11:19	03/03/24 14:14	1
Ethylbenzene	<0.00199	U *1 F1 F2	0.00199		mg/Kg		03/02/24 11:19	03/03/24 14:14	1
m-Xylene & p-Xylene	<0.00398	U *1 F1 F2	0.00398		mg/Kg		03/02/24 11:19	03/03/24 14:14	1
o-Xylene	<0.00199	U *1 F1 F2	0.00199		mg/Kg		03/02/24 11:19	03/03/24 14:14	1
Xylenes, Total	<0.00398	U *1 F1 F2	0.00398		mg/Kg		03/02/24 11:19	03/03/24 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/02/24 11:19*	*03/03/24 14:14*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/02/24 11:19*	*03/03/24 14:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/03/24 14:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/03/24 13:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/03/24 00:21	03/03/24 13:32	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/03/24 00:21	03/03/24 13:32	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/03/24 00:21	03/03/24 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/03/24 00:21*	*03/03/24 13:32*	*1*
o-Terphenyl	*94*		*70 - 130*	*03/03/24 00:21*	*03/03/24 13:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**229**		5.04		mg/Kg			03/03/24 21:59	1

Client Sample ID: BES 24 - 179 0.5'

Lab Sample ID: 890-6285-22
Matrix: Solid
Date Collected: 02/23/24 10:15
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:19	03/03/24 14:35	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:19	03/03/24 14:35	1
Ethylbenzene	<0.00201	U *1	0.00201		mg/Kg		03/02/24 11:19	03/03/24 14:35	1
m-Xylene & p-Xylene	<0.00402	U *1	0.00402		mg/Kg		03/02/24 11:19	03/03/24 14:35	1
o-Xylene	<0.00201	U *1	0.00201		mg/Kg		03/02/24 11:19	03/03/24 14:35	1
Xylenes, Total	<0.00402	U *1	0.00402		mg/Kg		03/02/24 11:19	03/03/24 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/02/24 11:19*	*03/03/24 14:35*	*1*

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 179 0.5'

Lab Sample ID: 890-6285-22
Matrix: Solid
Date Collected: 02/23/24 10:15
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/02/24 11:19*	*03/03/24 14:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/03/24 14:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/03/24 13:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/03/24 00:21	03/03/24 13:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/03/24 00:21	03/03/24 13:54	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/03/24 00:21	03/03/24 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*03/03/24 00:21*	*03/03/24 13:54*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/03/24 00:21*	*03/03/24 13:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**390**		5.00	mg/Kg			03/03/24 22:16	1

Client Sample ID: BES 24 - 180 0.5'

Lab Sample ID: 890-6285-23
Matrix: Solid
Date Collected: 02/23/24 12:30
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/02/24 11:19	03/03/24 14:55	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/02/24 11:19	03/03/24 14:55	1
Ethylbenzene	<0.00202	U *1	0.00202	mg/Kg		03/02/24 11:19	03/03/24 14:55	1
m-Xylene & p-Xylene	<0.00404	U *1	0.00404	mg/Kg		03/02/24 11:19	03/03/24 14:55	1
o-Xylene	<0.00202	U *1	0.00202	mg/Kg		03/02/24 11:19	03/03/24 14:55	1
Xylenes, Total	<0.00404	U *1	0.00404	mg/Kg		03/02/24 11:19	03/03/24 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*267*	*S1+*	*70 - 130*	*03/02/24 11:19*	*03/03/24 14:55*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*03/02/24 11:19*	*03/03/24 14:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/03/24 14:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/03/24 14:16	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 180 0.5'

Lab Sample ID: 890-6285-23
Matrix: Solid
Date Collected: 02/23/24 12:30
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/03/24 00:21	03/03/24 14:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/03/24 00:21	03/03/24 14:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/03/24 00:21	03/03/24 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*03/03/24 00:21*	*03/03/24 14:16*	*1*
o-Terphenyl	*91*		*70 - 130*	*03/03/24 00:21*	*03/03/24 14:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**151**		4.96		mg/Kg			03/03/24 22:21	1

Client Sample ID: BES 24 - 181 0.5'

Lab Sample ID: 890-6285-24
Matrix: Solid
Date Collected: 02/23/24 12:35
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:19	03/03/24 15:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:19	03/03/24 15:16	1
Ethylbenzene	<0.00200	U *1	0.00200		mg/Kg		03/02/24 11:19	03/03/24 15:16	1
m-Xylene & p-Xylene	<0.00401	U *1	0.00401		mg/Kg		03/02/24 11:19	03/03/24 15:16	1
o-Xylene	<0.00200	U *1	0.00200		mg/Kg		03/02/24 11:19	03/03/24 15:16	1
Xylenes, Total	<0.00401	U *1	0.00401		mg/Kg		03/02/24 11:19	03/03/24 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*03/02/24 11:19*	*03/03/24 15:16*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/02/24 11:19*	*03/03/24 15:16*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/03/24 15:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/03/24 14:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/03/24 00:21	03/03/24 14:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/03/24 00:21	03/03/24 14:38	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/03/24 00:21	03/03/24 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/03/24 00:21*	*03/03/24 14:38*	*1*
o-Terphenyl	*89*		*70 - 130*	*03/03/24 00:21*	*03/03/24 14:38*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 181 0.5'

Lab Sample ID: 890-6285-24
Matrix: Solid
Date Collected: 02/23/24 12:35
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	288		4.98		mg/Kg			03/03/24 22:27	1

Client Sample ID: BES 24 - 182 0.5'

Lab Sample ID: 890-6285-25
Matrix: Solid
Date Collected: 02/23/24 12:40
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:19	03/03/24 15:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:19	03/03/24 15:36	1
Ethylbenzene	<0.00199	U *1	0.00199		mg/Kg		03/02/24 11:19	03/03/24 15:36	1
m-Xylene & p-Xylene	<0.00398	U *1	0.00398		mg/Kg		03/02/24 11:19	03/03/24 15:36	1
o-Xylene	<0.00199	U *1	0.00199		mg/Kg		03/02/24 11:19	03/03/24 15:36	1
Xylenes, Total	<0.00398	U *1	0.00398		mg/Kg		03/02/24 11:19	03/03/24 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/02/24 11:19*	*03/03/24 15:36*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/02/24 11:19*	*03/03/24 15:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/03/24 15:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			03/03/24 15:00	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		03/03/24 00:21	03/03/24 15:00	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/03/24 00:21	03/03/24 15:00	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/03/24 00:21	03/03/24 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/03/24 00:21*	*03/03/24 15:00*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/03/24 00:21*	*03/03/24 15:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	372		5.00		mg/Kg			03/03/24 22:32	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 183 0.5'

Lab Sample ID: 890-6285-26
Matrix: Solid
Date Collected: 02/23/24 12:45
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:19	03/03/24 15:57	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:19	03/03/24 15:57	1
Ethylbenzene	<0.00198	U *1	0.00198		mg/Kg		03/02/24 11:19	03/03/24 15:57	1
m-Xylene & p-Xylene	<0.00397	U *1	0.00397		mg/Kg		03/02/24 11:19	03/03/24 15:57	1
o-Xylene	<0.00198	U *1	0.00198		mg/Kg		03/02/24 11:19	03/03/24 15:57	1
Xylenes, Total	<0.00397	U *1	0.00397		mg/Kg		03/02/24 11:19	03/03/24 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/02/24 11:19*	*03/03/24 15:57*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*03/02/24 11:19*	*03/03/24 15:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/03/24 15:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/03/24 15:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/03/24 00:21	03/03/24 15:22	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/03/24 00:21	03/03/24 15:22	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/03/24 00:21	03/03/24 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/03/24 00:21*	*03/03/24 15:22*	*1*
o-Terphenyl	*79*		*70 - 130*	*03/03/24 00:21*	*03/03/24 15:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**275**		5.01		mg/Kg			03/03/24 22:49	1

Client Sample ID: BES 24 - 184 0.5'

Lab Sample ID: 890-6285-27
Matrix: Solid
Date Collected: 02/23/24 12:50
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:19	03/03/24 16:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:19	03/03/24 16:17	1
Ethylbenzene	<0.00201	U *1	0.00201		mg/Kg		03/02/24 11:19	03/03/24 16:17	1
m-Xylene & p-Xylene	<0.00402	U *1	0.00402		mg/Kg		03/02/24 11:19	03/03/24 16:17	1
o-Xylene	<0.00201	U *1	0.00201		mg/Kg		03/02/24 11:19	03/03/24 16:17	1
Xylenes, Total	<0.00402	U *1	0.00402		mg/Kg		03/02/24 11:19	03/03/24 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/02/24 11:19*	*03/03/24 16:17*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 184 0.5'

Lab Sample ID: 890-6285-27
Matrix: Solid
Date Collected: 02/23/24 12:50
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*	*03/02/24 11:19*	*03/03/24 16:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/03/24 16:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			03/03/24 15:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		03/03/24 00:21	03/03/24 15:45	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		03/03/24 00:21	03/03/24 15:45	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		03/03/24 00:21	03/03/24 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*63*	*S1-*	*70 - 130*	*03/03/24 00:21*	*03/03/24 15:45*	*1*
o-Terphenyl	*49*	*S1-*	*70 - 130*	*03/03/24 00:21*	*03/03/24 15:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**333**		5.02	mg/Kg			03/03/24 22:55	1

Client Sample ID: BES 24 - 185 0.5'

Lab Sample ID: 890-6285-28
Matrix: Solid
Date Collected: 02/23/24 12:55
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:19	03/03/24 16:38	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:19	03/03/24 16:38	1
Ethylbenzene	<0.00199	U *1	0.00199	mg/Kg		03/02/24 11:19	03/03/24 16:38	1
m-Xylene & p-Xylene	<0.00398	U *1	0.00398	mg/Kg		03/02/24 11:19	03/03/24 16:38	1
o-Xylene	<0.00199	U *1	0.00199	mg/Kg		03/02/24 11:19	03/03/24 16:38	1
Xylenes, Total	<0.00398	U *1	0.00398	mg/Kg		03/02/24 11:19	03/03/24 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*03/02/24 11:19*	*03/03/24 16:38*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*03/02/24 11:19*	*03/03/24 16:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/03/24 16:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			03/03/24 16:07	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 185 0.5'

Lab Sample ID: 890-6285-28
Matrix: Solid
Date Collected: 02/23/24 12:55
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		03/03/24 00:21	03/03/24 16:07	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		03/03/24 00:21	03/03/24 16:07	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		03/03/24 00:21	03/03/24 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*03/03/24 00:21*	*03/03/24 16:07*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/03/24 00:21*	*03/03/24 16:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**101**		4.99		mg/Kg			03/03/24 23:00	1

Client Sample ID: BES 24 - 186 0.5'

Lab Sample ID: 890-6285-29
Matrix: Solid
Date Collected: 02/23/24 13:00
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:19	03/03/24 16:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:19	03/03/24 16:58	1
Ethylbenzene	<0.00200	U *1	0.00200		mg/Kg		03/02/24 11:19	03/03/24 16:58	1
m-Xylene & p-Xylene	<0.00399	U *1	0.00399		mg/Kg		03/02/24 11:19	03/03/24 16:58	1
o-Xylene	<0.00200	U *1	0.00200		mg/Kg		03/02/24 11:19	03/03/24 16:58	1
Xylenes, Total	<0.00399	U *1	0.00399		mg/Kg		03/02/24 11:19	03/03/24 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*03/02/24 11:19*	*03/03/24 16:58*	*1*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*	*03/02/24 11:19*	*03/03/24 16:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/03/24 16:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/03/24 16:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/03/24 00:21	03/03/24 16:50	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/03/24 00:21	03/03/24 16:50	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/03/24 00:21	03/03/24 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*149*	*S1+*	*70 - 130*	*03/03/24 00:21*	*03/03/24 16:50*	*1*
o-Terphenyl	*128*		*70 - 130*	*03/03/24 00:21*	*03/03/24 16:50*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 186 0.5'

Lab Sample ID: 890-6285-29
Matrix: Solid
Date Collected: 02/23/24 13:00
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	204		5.02		mg/Kg			03/03/24 23:06	1

Client Sample ID: BES 24 - 187 0.5'

Lab Sample ID: 890-6285-30
Matrix: Solid
Date Collected: 02/23/24 13:05
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:19	03/03/24 17:19	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:19	03/03/24 17:19	1
Ethylbenzene	<0.00198	U *1	0.00198		mg/Kg		03/02/24 11:19	03/03/24 17:19	1
m-Xylene & p-Xylene	<0.00396	U *1	0.00396		mg/Kg		03/02/24 11:19	03/03/24 17:19	1
o-Xylene	<0.00198	U *1	0.00198		mg/Kg		03/02/24 11:19	03/03/24 17:19	1
Xylenes, Total	<0.00396	U *1	0.00396		mg/Kg		03/02/24 11:19	03/03/24 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*03/02/24 11:19*	*03/03/24 17:19*	*1*
1,4-Difluorobenzene (Surr)	*124*		*70 - 130*	*03/02/24 11:19*	*03/03/24 17:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/03/24 17:19	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/03/24 17:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/03/24 00:21	03/03/24 17:13	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/03/24 00:21	03/03/24 17:13	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/03/24 00:21	03/03/24 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*03/03/24 00:21*	*03/03/24 17:13*	*1*
o-Terphenyl	*96*		*70 - 130*	*03/03/24 00:21*	*03/03/24 17:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	314		5.03		mg/Kg			03/03/24 23:11	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 188 0.5'

Lab Sample ID: 890-6285-31
Matrix: Solid
Date Collected: 02/23/24 13:10
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:19	03/03/24 19:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:19	03/03/24 19:09	1
Ethylbenzene	<0.00201	U *1	0.00201		mg/Kg		03/02/24 11:19	03/03/24 19:09	1
m-Xylene & p-Xylene	<0.00402	U *1	0.00402		mg/Kg		03/02/24 11:19	03/03/24 19:09	1
o-Xylene	<0.00201	U *1	0.00201		mg/Kg		03/02/24 11:19	03/03/24 19:09	1
Xylenes, Total	<0.00402	U *1	0.00402		mg/Kg		03/02/24 11:19	03/03/24 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/02/24 11:19*	*03/03/24 19:09*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/02/24 11:19*	*03/03/24 19:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/03/24 19:09	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/24 17:35	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/03/24 00:21	03/03/24 17:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/03/24 00:21	03/03/24 17:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/03/24 00:21	03/03/24 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*03/03/24 00:21*	*03/03/24 17:35*	*1*
o-Terphenyl	*99*		*70 - 130*	*03/03/24 00:21*	*03/03/24 17:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**166**		5.04		mg/Kg			03/03/24 23:17	1

Client Sample ID: BES 24 - 189 0.5'

Lab Sample ID: 890-6285-32
Matrix: Solid
Date Collected: 02/23/24 13:15
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/02/24 11:19	03/03/24 19:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/02/24 11:19	03/03/24 19:30	1
Ethylbenzene	<0.00202	U *1	0.00202		mg/Kg		03/02/24 11:19	03/03/24 19:30	1
m-Xylene & p-Xylene	<0.00403	U *1	0.00403		mg/Kg		03/02/24 11:19	03/03/24 19:30	1
o-Xylene	<0.00202	U *1	0.00202		mg/Kg		03/02/24 11:19	03/03/24 19:30	1
Xylenes, Total	<0.00403	U *1	0.00403		mg/Kg		03/02/24 11:19	03/03/24 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*03/02/24 11:19*	*03/03/24 19:30*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 189 0.5'

Lab Sample ID: 890-6285-32
Matrix: Solid
Date Collected: 02/23/24 13:15
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/02/24 11:19*	*03/03/24 19:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			03/03/24 19:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			03/03/24 17:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		03/03/24 00:21	03/03/24 17:57	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		03/03/24 00:21	03/03/24 17:57	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		03/03/24 00:21	03/03/24 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/03/24 00:21*	*03/03/24 17:57*	*1*
o-Terphenyl	*95*		*70 - 130*	*03/03/24 00:21*	*03/03/24 17:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**244**		4.98	mg/Kg			03/03/24 23:33	1

Client Sample ID: BES 24 - 190 0.5'

Lab Sample ID: 890-6285-33
Matrix: Solid
Date Collected: 02/23/24 13:20
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:19	03/03/24 19:51	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/02/24 11:19	03/03/24 19:51	1
Ethylbenzene	<0.00199	U *1	0.00199	mg/Kg		03/02/24 11:19	03/03/24 19:51	1
m-Xylene & p-Xylene	<0.00398	U *1	0.00398	mg/Kg		03/02/24 11:19	03/03/24 19:51	1
o-Xylene	<0.00199	U *1	0.00199	mg/Kg		03/02/24 11:19	03/03/24 19:51	1
Xylenes, Total	<0.00398	U *1	0.00398	mg/Kg		03/02/24 11:19	03/03/24 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*03/02/24 11:19*	*03/03/24 19:51*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/02/24 11:19*	*03/03/24 19:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/03/24 19:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			03/03/24 18:19	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 190 0.5'

Lab Sample ID: 890-6285-33
Matrix: Solid
Date Collected: 02/23/24 13:20
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		03/03/24 00:21	03/03/24 18:19	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		03/03/24 00:21	03/03/24 18:19	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		03/03/24 00:21	03/03/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*03/03/24 00:21*	*03/03/24 18:19*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/03/24 00:21*	*03/03/24 18:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**239**		4.99		mg/Kg			03/03/24 23:39	1

Client Sample ID: BES 24 - 191 0.5'

Lab Sample ID: 890-6285-34
Matrix: Solid
Date Collected: 02/23/24 13:25
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:19	03/03/24 20:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:19	03/03/24 20:11	1
Ethylbenzene	<0.00199	U *1	0.00199		mg/Kg		03/02/24 11:19	03/03/24 20:11	1
m-Xylene & p-Xylene	<0.00398	U *1	0.00398		mg/Kg		03/02/24 11:19	03/03/24 20:11	1
o-Xylene	<0.00199	U *1	0.00199		mg/Kg		03/02/24 11:19	03/03/24 20:11	1
Xylenes, Total	<0.00398	U *1	0.00398		mg/Kg		03/02/24 11:19	03/03/24 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/02/24 11:19*	*03/03/24 20:11*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/02/24 11:19*	*03/03/24 20:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/03/24 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			03/03/24 18:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/03/24 00:21	03/03/24 18:41	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/03/24 00:21	03/03/24 18:41	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/03/24 00:21	03/03/24 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/03/24 00:21*	*03/03/24 18:41*	*1*
o-Terphenyl	*88*		*70 - 130*	*03/03/24 00:21*	*03/03/24 18:41*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 191 0.5'

Lab Sample ID: 890-6285-34
Matrix: Solid
Date Collected: 02/23/24 13:25
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	227		4.97		mg/Kg			03/03/24 23:55	1

Client Sample ID: BES 24 - 192 0.5'

Lab Sample ID: 890-6285-35
Matrix: Solid
Date Collected: 02/23/24 13:30
Date Received: 02/29/24 09:02
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:19	03/03/24 20:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:19	03/03/24 20:32	1
Ethylbenzene	<0.00200	U *1	0.00200		mg/Kg		03/02/24 11:19	03/03/24 20:32	1
m-Xylene & p-Xylene	<0.00400	U *1	0.00400		mg/Kg		03/02/24 11:19	03/03/24 20:32	1
o-Xylene	<0.00200	U *1	0.00200		mg/Kg		03/02/24 11:19	03/03/24 20:32	1
Xylenes, Total	<0.00400	U *1	0.00400		mg/Kg		03/02/24 11:19	03/03/24 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/02/24 11:19*	*03/03/24 20:32*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/02/24 11:19*	*03/03/24 20:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/03/24 20:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			03/03/24 19:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		03/03/24 00:21	03/03/24 19:03	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/03/24 00:21	03/03/24 19:03	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/03/24 00:21	03/03/24 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*03/03/24 00:21*	*03/03/24 19:03*	*1*
o-Terphenyl	*99*		*70 - 130*	*03/03/24 00:21*	*03/03/24 19:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	245		4.96		mg/Kg			03/04/24 00:01	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: WES 24 - 15 0-0.5'

Lab Sample ID: 890-6285-36
Matrix: Solid
Date Collected: 02/23/24 14:05
Date Received: 02/29/24 09:02
Sample Depth: 0-0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:19	03/03/24 20:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:19	03/03/24 20:52	1
Ethylbenzene	<0.00198	U *1	0.00198		mg/Kg		03/02/24 11:19	03/03/24 20:52	1
m-Xylene & p-Xylene	<0.00396	U *1	0.00396		mg/Kg		03/02/24 11:19	03/03/24 20:52	1
o-Xylene	<0.00198	U *1	0.00198		mg/Kg		03/02/24 11:19	03/03/24 20:52	1
Xylenes, Total	<0.00396	U *1	0.00396		mg/Kg		03/02/24 11:19	03/03/24 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*03/02/24 11:19*	*03/03/24 20:52*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/02/24 11:19*	*03/03/24 20:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/03/24 20:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/03/24 19:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/03/24 00:21	03/03/24 19:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/03/24 00:21	03/03/24 19:26	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/03/24 00:21	03/03/24 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/03/24 00:21*	*03/03/24 19:26*	*1*
o-Terphenyl	*84*		*70 - 130*	*03/03/24 00:21*	*03/03/24 19:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**409**		5.03		mg/Kg			03/04/24 00:06	1

Client Sample ID: WES 24 - 16 0-0.5'

Lab Sample ID: 890-6285-37
Matrix: Solid
Date Collected: 02/23/24 14:10
Date Received: 02/29/24 09:02
Sample Depth: 0-0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:19	03/03/24 21:13	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:19	03/03/24 21:13	1
Ethylbenzene	<0.00201	U *1	0.00201		mg/Kg		03/02/24 11:19	03/03/24 21:13	1
m-Xylene & p-Xylene	<0.00402	U *1	0.00402		mg/Kg		03/02/24 11:19	03/03/24 21:13	1
o-Xylene	<0.00201	U *1	0.00201		mg/Kg		03/02/24 11:19	03/03/24 21:13	1
Xylenes, Total	<0.00402	U *1	0.00402		mg/Kg		03/02/24 11:19	03/03/24 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*03/02/24 11:19*	*03/03/24 21:13*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: WES 24 - 16 0-0.5'

Lab Sample ID: 890-6285-37
Matrix: Solid
Date Collected: 02/23/24 14:10
Date Received: 02/29/24 09:02
Sample Depth: 0-0.5'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*03/02/24 11:19*	*03/03/24 21:13*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/03/24 21:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			03/03/24 19:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		03/03/24 00:21	03/03/24 19:48	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		03/03/24 00:21	03/03/24 19:48	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		03/03/24 00:21	03/03/24 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*03/03/24 00:21*	*03/03/24 19:48*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*03/03/24 00:21*	*03/03/24 19:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**326**		5.01	mg/Kg			03/04/24 00:12	1

Client Sample ID: WES 24 - 17 0-0.5'

Lab Sample ID: 890-6285-38
Matrix: Solid
Date Collected: 02/23/24 14:15
Date Received: 02/29/24 09:02
Sample Depth: 0-0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/02/24 11:19	03/03/24 21:34	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/02/24 11:19	03/03/24 21:34	1
Ethylbenzene	<0.00200	U *1	0.00200	mg/Kg		03/02/24 11:19	03/03/24 21:34	1
m-Xylene & p-Xylene	<0.00401	U *1	0.00401	mg/Kg		03/02/24 11:19	03/03/24 21:34	1
o-Xylene	<0.00200	U *1	0.00200	mg/Kg		03/02/24 11:19	03/03/24 21:34	1
Xylenes, Total	<0.00401	U *1	0.00401	mg/Kg		03/02/24 11:19	03/03/24 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*03/02/24 11:19*	*03/03/24 21:34*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/02/24 11:19*	*03/03/24 21:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/03/24 21:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			03/03/24 20:12	1

Eurofins Carlsbad

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: WES 24 - 17 0-0.5'

Lab Sample ID: 890-6285-38
Matrix: Solid
Date Collected: 02/23/24 14:15
Date Received: 02/29/24 09:02
Sample Depth: 0-0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/03/24 00:21	03/03/24 20:12	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/03/24 00:21	03/03/24 20:12	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/03/24 00:21	03/03/24 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/03/24 00:21*	*03/03/24 20:12*	*1*
o-Terphenyl	*89*		*70 - 130*	*03/03/24 00:21*	*03/03/24 20:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**424**		5.02		mg/Kg			03/04/24 00:17	1

Client Sample ID: WES 24 - 18 0-0.5'

Lab Sample ID: 890-6285-39
Matrix: Solid
Date Collected: 02/23/24 14:20
Date Received: 02/29/24 09:02
Sample Depth: 0-0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:19	03/03/24 21:54	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:19	03/03/24 21:54	1
Ethylbenzene	<0.00201	U *1	0.00201		mg/Kg		03/02/24 11:19	03/03/24 21:54	1
m-Xylene & p-Xylene	<0.00402	U *1	0.00402		mg/Kg		03/02/24 11:19	03/03/24 21:54	1
o-Xylene	<0.00201	U *1	0.00201		mg/Kg		03/02/24 11:19	03/03/24 21:54	1
Xylenes, Total	<0.00402	U *1	0.00402		mg/Kg		03/02/24 11:19	03/03/24 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*03/02/24 11:19*	*03/03/24 21:54*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/02/24 11:19*	*03/03/24 21:54*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/03/24 21:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			03/03/24 22:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		03/03/24 00:24	03/03/24 22:02	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/03/24 00:24	03/03/24 22:02	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/03/24 00:24	03/03/24 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*03/03/24 00:24*	*03/03/24 22:02*	*1*
o-Terphenyl	*102*		*70 - 130*	*03/03/24 00:24*	*03/03/24 22:02*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: WES 24 - 18 0-0.5'

Lab Sample ID: 890-6285-39
Matrix: Solid
Date Collected: 02/23/24 14:20
Date Received: 02/29/24 09:02
Sample Depth: 0-0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78.6		4.99		mg/Kg			03/04/24 00:23	1

Client Sample ID: WES 24 - 19 0-0.5'

Lab Sample ID: 890-6285-40
Matrix: Solid
Date Collected: 02/23/24 14:25
Date Received: 02/29/24 09:02
Sample Depth: 0-0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:19	03/03/24 22:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:19	03/03/24 22:15	1
Ethylbenzene	<0.00199	U *1	0.00199		mg/Kg		03/02/24 11:19	03/03/24 22:15	1
m-Xylene & p-Xylene	<0.00398	U *1	0.00398		mg/Kg		03/02/24 11:19	03/03/24 22:15	1
o-Xylene	<0.00199	U *1	0.00199		mg/Kg		03/02/24 11:19	03/03/24 22:15	1
Xylenes, Total	<0.00398	U *1	0.00398		mg/Kg		03/02/24 11:19	03/03/24 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*03/02/24 11:19*	*03/03/24 22:15*	*1*
1,4-Difluorobenzene (Surr)	*127*		*70 - 130*	*03/02/24 11:19*	*03/03/24 22:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/03/24 22:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/03/24 23:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/03/24 00:24	03/03/24 23:06	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/03/24 00:24	03/03/24 23:06	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/03/24 00:24	03/03/24 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*03/03/24 00:24*	*03/03/24 23:06*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/03/24 00:24*	*03/03/24 23:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	166		4.99		mg/Kg			03/04/24 00:28	1

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-6285-1	BES 24 - 158 0.5'	87	74
890-6285-1 MS	BES 24 - 158 0.5'	86	88
890-6285-1 MSD	BES 24 - 158 0.5'	96	95
890-6285-2	BES 24 - 159 0.5'	98	81
890-6285-3	BES 24 - 160 0.5'	104	97
890-6285-4	BES 24 - 161 0.5'	112	93
890-6285-5	BES 24 - 162 0.5'	118	95
890-6285-6	BES 24 - 163 0.5'	114	88
890-6285-7	BES 24 - 164 0.5'	102	84
890-6285-8	BES 24 - 165 0.5'	107	93
890-6285-9	BES 24 - 166 0.5'	105	95
890-6285-10	BES 24 - 167 0.5'	62 S1-	89
890-6285-11	BES 24 - 168 0.5'	98	77
890-6285-12	BES 24 - 169 0.5'	117	92
890-6285-13	BES 24 - 170 0.5'	101	80
890-6285-14	BES 24 - 171 0.5'	104	84
890-6285-15	BES 24 - 172 0.5'	113	95
890-6285-16	BES 24 - 173 0.5'	122	100
890-6285-17	BES 24 - 174 0.5'	114	95
890-6285-18	BES 24 - 175 0.5'	117	96
890-6285-19	BES 24 - 176 0.5'	96	93
890-6285-20	BES 24 - 177 0.5'	111	96
890-6285-21	BES 24 - 178 0.5'	105	111
890-6285-21 MS	BES 24 - 178 0.5'	298 S1+	226 S1+
890-6285-21 MSD	BES 24 - 178 0.5'	118	114
890-6285-22	BES 24 - 179 0.5'	105	106
890-6285-23	BES 24 - 180 0.5'	267 S1+	81
890-6285-24	BES 24 - 181 0.5'	124	102
890-6285-25	BES 24 - 182 0.5'	104	104
890-6285-26	BES 24 - 183 0.5'	107	115
890-6285-27	BES 24 - 184 0.5'	111	126
890-6285-28	BES 24 - 185 0.5'	117	120
890-6285-29	BES 24 - 186 0.5'	129	122
890-6285-30	BES 24 - 187 0.5'	118	124
890-6285-31	BES 24 - 188 0.5'	97	111
890-6285-32	BES 24 - 189 0.5'	116	110
890-6285-33	BES 24 - 190 0.5'	130	103
890-6285-34	BES 24 - 191 0.5'	112	106
890-6285-35	BES 24 - 192 0.5'	111	105
890-6285-36	WES 24 - 15 0-0.5'	119	111
890-6285-37	WES 24 - 16 0-0.5'	121	133 S1+
890-6285-38	WES 24 - 17 0-0.5'	114	105
890-6285-39	WES 24 - 18 0-0.5'	118	99
890-6285-40	WES 24 - 19 0-0.5'	125	127
LCS 880-74524/1-A	Lab Control Sample	88	85
LCS 880-74525/1-A	Lab Control Sample	63 S1-	107
LCSD 880-74524/2-A	Lab Control Sample Dup	105	102
LCSD 880-74525/2-A	Lab Control Sample Dup	98	98
MB 880-74524/5-A	Method Blank	61 S1-	87

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (70-130)	DFBZ1 (70-130)
MB 880-74525/5-A	Method Blank	127	117

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 1CO1 (70-130)	OTPH1 (70-130)
890-6285-1	BES 24 - 158 0.5'	1 S1-	0.5 S1-
890-6285-2	BES 24 - 159 0.5'	0.9 S1-	0.6 S1-
890-6285-3	BES 24 - 160 0.5'	1 S1-	0.6 S1-
890-6285-4	BES 24 - 161 0.5'	1 S1-	0.2 S1-
890-6285-5	BES 24 - 162 0.5'	0.8 S1-	0.6 S1-
890-6285-6	BES 24 - 163 0.5'	0.9 S1-	0.6 S1-
890-6285-7	BES 24 - 164 0.5'	0.8 S1-	0.2 S1-
890-6285-8	BES 24 - 165 0.5'	0.9 S1-	0.4 S1-
890-6285-9	BES 24 - 166 0.5'	0.9 S1-	0.6 S1-
890-6285-10	BES 24 - 167 0.5'	0.9 S1-	0.6 S1-
890-6285-11	BES 24 - 168 0.5'	0.8 S1-	0.5 S1-
890-6285-12	BES 24 - 169 0.5'	0.9 S1-	0.6 S1-
890-6285-13	BES 24 - 170 0.5'	0.9 S1-	0.5 S1-
890-6285-14	BES 24 - 171 0.5'	0.8 S1-	0.5 S1-
890-6285-15	BES 24 - 172 0.5'	0.6 S1-	0.2 S1-
890-6285-16	BES 24 - 173 0.5'	0.9 S1-	0.6 S1-
890-6285-17	BES 24 - 174 0.5'	0.8 S1-	0.5 S1-
890-6285-18	BES 24 - 175 0.5'	0.8 S1-	0.4 S1-
890-6285-18 MS	BES 24 - 175 0.5'	17 S1-	13 S1-
890-6285-18 MSD	BES 24 - 175 0.5'	16 S1-	13 S1-
890-6285-19	BES 24 - 176 0.5'	115	102
890-6285-19 MS	BES 24 - 176 0.5'	110	91
890-6285-19 MSD	BES 24 - 176 0.5'	132 S1+	106
890-6285-20	BES 24 - 177 0.5'	117	100
890-6285-21	BES 24 - 178 0.5'	109	94
890-6285-22	BES 24 - 179 0.5'	121	104
890-6285-23	BES 24 - 180 0.5'	105	91
890-6285-24	BES 24 - 181 0.5'	109	89
890-6285-25	BES 24 - 182 0.5'	109	93
890-6285-26	BES 24 - 183 0.5'	96	79
890-6285-27	BES 24 - 184 0.5'	63 S1-	49 S1-
890-6285-28	BES 24 - 185 0.5'	113	98
890-6285-29	BES 24 - 186 0.5'	149 S1+	128
890-6285-30	BES 24 - 187 0.5'	110	96
890-6285-31	BES 24 - 188 0.5'	111	99
890-6285-32	BES 24 - 189 0.5'	109	95
890-6285-33	BES 24 - 190 0.5'	123	98
890-6285-34	BES 24 - 191 0.5'	102	88
890-6285-35	BES 24 - 192 0.5'	113	99

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-6285-36	WES 24 - 15 0-0.5'	98	84								
890-6285-37	WES 24 - 16 0-0.5'	85	65 S1-								
890-6285-38	WES 24 - 17 0-0.5'	104	89								
890-6285-39	WES 24 - 18 0-0.5'	118	102								
890-6285-39 MS	WES 24 - 18 0-0.5'	119	96								
890-6285-39 MSD	WES 24 - 18 0-0.5'	118	97								
890-6285-40	WES 24 - 19 0-0.5'	115	104								
LCS 880-74519/2-A	Lab Control Sample	91	91								
LCS 880-74526/2-A	Lab Control Sample	121	126								
LCS 880-74527/2-A	Lab Control Sample	83	71								
LCSD 880-74519/3-A	Lab Control Sample Dup	90	88								
LCSD 880-74526/3-A	Lab Control Sample Dup	103	100								
LCSD 880-74527/3-A	Lab Control Sample Dup	97	84								
MB 880-74519/1-A	Method Blank	134 S1+	152 S1+								
MB 880-74526/1-A	Method Blank	128	119								
MB 880-74527/1-A	Method Blank	107	97								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-74524/5-A
Matrix: Solid
Analysis Batch: 74544

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74524

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 14:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 14:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 14:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/24 11:18	03/03/24 14:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:18	03/03/24 14:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/24 11:18	03/03/24 14:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*61*	*S1-*	*70 - 130*	*03/02/24 11:18*	*03/03/24 14:03*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*03/02/24 11:18*	*03/03/24 14:03*	*1*

Lab Sample ID: LCS 880-74524/1-A
Matrix: Solid
Analysis Batch: 74544

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74524

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08009		mg/Kg		80	70 - 130		
Toluene			0.100	0.08421		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.08796		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1737		mg/Kg		87	70 - 130		
o-Xylene			0.100	0.08715		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

Lab Sample ID: LCSD 880-74524/2-A
Matrix: Solid
Analysis Batch: 74544

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74524

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09973		mg/Kg		100	70 - 130	22	35
Toluene			0.100	0.1021		mg/Kg		102	70 - 130	19	35
Ethylbenzene			0.100	0.1108		mg/Kg		111	70 - 130	23	35
m-Xylene & p-Xylene			0.200	0.2222		mg/Kg		111	70 - 130	24	35
o-Xylene			0.100	0.1118		mg/Kg		112	70 - 130	25	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-6285-1 MS
Matrix: Solid
Analysis Batch: 74544

Client Sample ID: BES 24 - 158 0.5'
Prep Type: Total/NA
Prep Batch: 74524

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F1	0.101	0.06837	F1	mg/Kg		68	70 - 130		
Toluene	<0.00199	U F1	0.101	0.06991	F1	mg/Kg		69	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

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

Lab Sample ID: 890-6285-1 MS
Matrix: Solid
Analysis Batch: 74544

Client Sample ID: BES 24 - 158 0.5'
Prep Type: Total/NA
Prep Batch: 74524

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.101	0.07656		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1542		mg/Kg		77	70 - 130
o-Xylene	<0.00199	U	0.101	0.07701		mg/Kg		76	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: 890-6285-1 MSD
Matrix: Solid
Analysis Batch: 74544

Client Sample ID: BES 24 - 158 0.5'
Prep Type: Total/NA
Prep Batch: 74524

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.07747		mg/Kg		77	70 - 130	12	35
Toluene	<0.00199	U F1	0.100	0.07812		mg/Kg		78	70 - 130	11	35
Ethylbenzene	<0.00199	U	0.100	0.08311		mg/Kg		83	70 - 130	8	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1671		mg/Kg		83	70 - 130	8	35
o-Xylene	<0.00199	U	0.100	0.08383		mg/Kg		84	70 - 130	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 880-74525/5-A
Matrix: Solid
Analysis Batch: 74545

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74525

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:19	03/03/24 13:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:19	03/03/24 13:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:19	03/03/24 13:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/24 11:19	03/03/24 13:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:19	03/03/24 13:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/24 11:19	03/03/24 13:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*03/02/24 11:19*	*03/03/24 13:45*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*03/02/24 11:19*	*03/03/24 13:45*	*1*

Lab Sample ID: LCS 880-74525/1-A
Matrix: Solid
Analysis Batch: 74545

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74525

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene			0.100	0.09423		mg/Kg		94	70 - 130
Toluene			0.100	0.09112		mg/Kg		91	70 - 130
Ethylbenzene			0.100	0.07118		mg/Kg		71	70 - 130
m-Xylene & p-Xylene			0.200	0.1424		mg/Kg		71	70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

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

Lab Sample ID: LCS 880-74525/1-A
Matrix: Solid
Analysis Batch: 74545

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74525

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.07032		mg/Kg		70	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 880-74525/2-A
Matrix: Solid
Analysis Batch: 74545

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74525

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1093		mg/Kg		109	70 - 130	15	35
Toluene			0.100	0.09973		mg/Kg		100	70 - 130	9	35
Ethylbenzene			0.100	0.1149	*1	mg/Kg		115	70 - 130	47	35
m-Xylene & p-Xylene			0.200	0.2239	*1	mg/Kg		112	70 - 130	45	35
o-Xylene			0.100	0.1068	*1	mg/Kg		107	70 - 130	41	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-6285-21 MS
Matrix: Solid
Analysis Batch: 74545

Client Sample ID: BES 24 - 178 0.5'
Prep Type: Total/NA
Prep Batch: 74525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F1 F2	0.101	0.2287	F1	mg/Kg		227	70 - 130		
Toluene	<0.00199	U F1	0.101	0.06671	F1	mg/Kg		66	70 - 130		
Ethylbenzene	<0.00199	U *1 F1 F2	0.101	0.1473	F1	mg/Kg		146	70 - 130		
m-Xylene & p-Xylene	<0.00398	U *1 F1 F2	0.202	0.5372	F1	mg/Kg		266	70 - 130		
o-Xylene	<0.00199	U *1 F1 F2	0.101	0.2772	F1	mg/Kg		275	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*298*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*226*	*S1+*	*70 - 130*

Lab Sample ID: 890-6285-21 MSD
Matrix: Solid
Analysis Batch: 74545

Client Sample ID: BES 24 - 178 0.5'
Prep Type: Total/NA
Prep Batch: 74525

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.100	0.1122	F2	mg/Kg		112	70 - 130	68	35
Toluene	<0.00199	U F1	0.100	0.08001		mg/Kg		80	70 - 130	18	35
Ethylbenzene	<0.00199	U *1 F1 F2	0.100	0.09573	F2	mg/Kg		96	70 - 130	42	35

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

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

Lab Sample ID: 890-6285-21 MSD
Matrix: Solid
Analysis Batch: 74545

Client Sample ID: BES 24 - 178 0.5'
Prep Type: Total/NA
Prep Batch: 74525

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00398	U *1 F1 F2	0.200	0.2335	F2	mg/Kg		116	70 - 130	79	35
o-Xylene	<0.00199	U *1 F1 F2	0.100	0.1141	F2	mg/Kg		114	70 - 130	83	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

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

Lab Sample ID: MB 880-74519/1-A
Matrix: Solid
Analysis Batch: 74513

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74519

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/02/24 10:33	03/02/24 20:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/24 10:33	03/02/24 20:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/24 10:33	03/02/24 20:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*134*	*S1+*	*70 - 130*	*03/02/24 10:33*	*03/02/24 20:14*	*1*
o-Terphenyl	*152*	*S1+*	*70 - 130*	*03/02/24 10:33*	*03/02/24 20:14*	*1*

Lab Sample ID: LCS 880-74519/2-A
Matrix: Solid
Analysis Batch: 74513

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74519

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	885.2		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1064		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Lab Sample ID: LCSD 880-74519/3-A
Matrix: Solid
Analysis Batch: 74513

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74519

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	871.7		mg/Kg		87	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	1023		mg/Kg		102	70 - 130	4	20

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

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

Lab Sample ID: LCSD 880-74519/3-A
Matrix: Solid
Analysis Batch: 74513

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74519

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 890-6285-18 MS
Matrix: Solid
Analysis Batch: 74513

Client Sample ID: BES 24 - 175 0.5'
Prep Type: Total/NA
Prep Batch: 74519

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1010	1092		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1010	1105		mg/Kg		109	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	17	S1-	70 - 130
o-Terphenyl	13	S1-	70 - 130

Lab Sample ID: 890-6285-18 MSD
Matrix: Solid
Analysis Batch: 74513

Client Sample ID: BES 24 - 175 0.5'
Prep Type: Total/NA
Prep Batch: 74519

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	<50.0	U	1010	1097		mg/Kg		109	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.0	U	1010	1115		mg/Kg		110	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	16	S1-	70 - 130
o-Terphenyl	13	S1-	70 - 130

Lab Sample ID: MB 880-74526/1-A
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74526

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/03/24 00:20	03/03/24 09:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/03/24 00:20	03/03/24 09:34	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/03/24 00:20	03/03/24 09:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130	03/03/24 00:20	03/03/24 09:34	1
o-Terphenyl	119		70 - 130	03/03/24 00:20	03/03/24 09:34	1

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

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

Lab Sample ID: LCS 880-74526/2-A
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74526

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1156		mg/Kg		116	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1035		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*121*		*70 - 130*
o-Terphenyl	*126*		*70 - 130*

Lab Sample ID: LCSD 880-74526/3-A
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74526

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	858.1		mg/Kg		86	70 - 130	19	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*100*		*70 - 130*

Lab Sample ID: 890-6285-19 MS
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: BES 24 - 176 0.5'
Prep Type: Total/NA
Prep Batch: 74526

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1010	882.7		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	1010	1004		mg/Kg		97	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Lab Sample ID: 890-6285-19 MSD
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: BES 24 - 176 0.5'
Prep Type: Total/NA
Prep Batch: 74526

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1010	1004		mg/Kg		95	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1010	1206		mg/Kg		117	70 - 130	18	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*132*	*S1+*	*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

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

Lab Sample ID: 890-6285-19 MSD
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: BES 24 - 176 0.5'
Prep Type: Total/NA
Prep Batch: 74526

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	106		70 - 130

Lab Sample ID: MB 880-74527/1-A
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74527

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/03/24 20:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/03/24 20:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/03/24 20:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	03/03/24 00:24	03/03/24 20:56	1
o-Terphenyl	97		70 - 130	03/03/24 00:24	03/03/24 20:56	1

Lab Sample ID: LCS 880-74527/2-A
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74527

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	761.7		mg/Kg		76	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1023		mg/Kg		102	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	71		70 - 130

Lab Sample ID: LCSD 880-74527/3-A
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74527

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	805.8		mg/Kg		81	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	1218		mg/Kg		122	70 - 130	17	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	84		70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

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

Lab Sample ID: 890-6285-39 MS
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: WES 24 - 18 0-0.5'
Prep Type: Total/NA
Prep Batch: 74527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	906.2		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1062		mg/Kg		102	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*119*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: 890-6285-39 MSD
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: WES 24 - 18 0-0.5'
Prep Type: Total/NA
Prep Batch: 74527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	923.7		mg/Kg		88	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1070		mg/Kg		103	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-74407/1-A
Matrix: Solid
Analysis Batch: 74556

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/03/24 18:29	1

Lab Sample ID: LCS 880-74407/2-A
Matrix: Solid
Analysis Batch: 74556

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	244.5		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-74407/3-A
Matrix: Solid
Analysis Batch: 74556

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	245.6		mg/Kg		98	90 - 110	0	20

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-6285-1 MS
Matrix: Solid
Analysis Batch: 74556

Client Sample ID: BES 24 - 158 0.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	164		252	398.5		mg/Kg		93	90 - 110

Lab Sample ID: 890-6285-1 MSD
Matrix: Solid
Analysis Batch: 74556

Client Sample ID: BES 24 - 158 0.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	164		252	399.1		mg/Kg		93	90 - 110	0	20

Lab Sample ID: 890-6285-11 MS
Matrix: Solid
Analysis Batch: 74556

Client Sample ID: BES 24 - 168 0.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	198		250	429.8		mg/Kg		93	90 - 110

Lab Sample ID: 890-6285-11 MSD
Matrix: Solid
Analysis Batch: 74556

Client Sample ID: BES 24 - 168 0.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	198		250	432.5		mg/Kg		94	90 - 110	1	20

Lab Sample ID: MB 880-74409/1-A
Matrix: Solid
Analysis Batch: 74558

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/03/24 21:43	1

Lab Sample ID: LCS 880-74409/2-A
Matrix: Solid
Analysis Batch: 74558

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	248.9		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-74409/3-A
Matrix: Solid
Analysis Batch: 74558

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	251.1		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 890-6285-21 MS
Matrix: Solid
Analysis Batch: 74558

Client Sample ID: BES 24 - 178 0.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	229		252	468.4		mg/Kg		95	90 - 110

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-6285-21 MSD
Matrix: Solid
Analysis Batch: 74558

Client Sample ID: BES 24 - 178 0.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	229		252	470.5		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 890-6285-31 MS
Matrix: Solid
Analysis Batch: 74558

Client Sample ID: BES 24 - 188 0.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	166		252	404.1		mg/Kg		94	90 - 110

Lab Sample ID: 890-6285-31 MSD
Matrix: Solid
Analysis Batch: 74558

Client Sample ID: BES 24 - 188 0.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	166		252	401.7		mg/Kg		93	90 - 110	1	20

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

GC VOA

Prep Batch: 74524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-1	BES 24 - 158 0.5'	Total/NA	Solid	5035	
890-6285-2	BES 24 - 159 0.5'	Total/NA	Solid	5035	
890-6285-3	BES 24 - 160 0.5'	Total/NA	Solid	5035	
890-6285-4	BES 24 - 161 0.5'	Total/NA	Solid	5035	
890-6285-5	BES 24 - 162 0.5'	Total/NA	Solid	5035	
890-6285-6	BES 24 - 163 0.5'	Total/NA	Solid	5035	
890-6285-7	BES 24 - 164 0.5'	Total/NA	Solid	5035	
890-6285-8	BES 24 - 165 0.5'	Total/NA	Solid	5035	
890-6285-9	BES 24 - 166 0.5'	Total/NA	Solid	5035	
890-6285-10	BES 24 - 167 0.5'	Total/NA	Solid	5035	
890-6285-11	BES 24 - 168 0.5'	Total/NA	Solid	5035	
890-6285-12	BES 24 - 169 0.5'	Total/NA	Solid	5035	
890-6285-13	BES 24 - 170 0.5'	Total/NA	Solid	5035	
890-6285-14	BES 24 - 171 0.5'	Total/NA	Solid	5035	
890-6285-15	BES 24 - 172 0.5'	Total/NA	Solid	5035	
890-6285-16	BES 24 - 173 0.5'	Total/NA	Solid	5035	
890-6285-17	BES 24 - 174 0.5'	Total/NA	Solid	5035	
890-6285-18	BES 24 - 175 0.5'	Total/NA	Solid	5035	
890-6285-19	BES 24 - 176 0.5'	Total/NA	Solid	5035	
890-6285-20	BES 24 - 177 0.5'	Total/NA	Solid	5035	
MB 880-74524/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74524/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74524/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6285-1 MS	BES 24 - 158 0.5'	Total/NA	Solid	5035	
890-6285-1 MSD	BES 24 - 158 0.5'	Total/NA	Solid	5035	

Prep Batch: 74525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-21	BES 24 - 178 0.5'	Total/NA	Solid	5035	
890-6285-22	BES 24 - 179 0.5'	Total/NA	Solid	5035	
890-6285-23	BES 24 - 180 0.5'	Total/NA	Solid	5035	
890-6285-24	BES 24 - 181 0.5'	Total/NA	Solid	5035	
890-6285-25	BES 24 - 182 0.5'	Total/NA	Solid	5035	
890-6285-26	BES 24 - 183 0.5'	Total/NA	Solid	5035	
890-6285-27	BES 24 - 184 0.5'	Total/NA	Solid	5035	
890-6285-28	BES 24 - 185 0.5'	Total/NA	Solid	5035	
890-6285-29	BES 24 - 186 0.5'	Total/NA	Solid	5035	
890-6285-30	BES 24 - 187 0.5'	Total/NA	Solid	5035	
890-6285-31	BES 24 - 188 0.5'	Total/NA	Solid	5035	
890-6285-32	BES 24 - 189 0.5'	Total/NA	Solid	5035	
890-6285-33	BES 24 - 190 0.5'	Total/NA	Solid	5035	
890-6285-34	BES 24 - 191 0.5'	Total/NA	Solid	5035	
890-6285-35	BES 24 - 192 0.5'	Total/NA	Solid	5035	
890-6285-36	WES 24 - 15 0-0.5'	Total/NA	Solid	5035	
890-6285-37	WES 24 - 16 0-0.5'	Total/NA	Solid	5035	
890-6285-38	WES 24 - 17 0-0.5'	Total/NA	Solid	5035	
890-6285-39	WES 24 - 18 0-0.5'	Total/NA	Solid	5035	
890-6285-40	WES 24 - 19 0-0.5'	Total/NA	Solid	5035	
MB 880-74525/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74525/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74525/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

GC VOA (Continued)

Prep Batch: 74525 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-21 MS	BES 24 - 178 0.5'	Total/NA	Solid	5035	
890-6285-21 MSD	BES 24 - 178 0.5'	Total/NA	Solid	5035	

Analysis Batch: 74544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-1	BES 24 - 158 0.5'	Total/NA	Solid	8021B	74524
890-6285-2	BES 24 - 159 0.5'	Total/NA	Solid	8021B	74524
890-6285-3	BES 24 - 160 0.5'	Total/NA	Solid	8021B	74524
890-6285-4	BES 24 - 161 0.5'	Total/NA	Solid	8021B	74524
890-6285-5	BES 24 - 162 0.5'	Total/NA	Solid	8021B	74524
890-6285-6	BES 24 - 163 0.5'	Total/NA	Solid	8021B	74524
890-6285-7	BES 24 - 164 0.5'	Total/NA	Solid	8021B	74524
890-6285-8	BES 24 - 165 0.5'	Total/NA	Solid	8021B	74524
890-6285-9	BES 24 - 166 0.5'	Total/NA	Solid	8021B	74524
890-6285-10	BES 24 - 167 0.5'	Total/NA	Solid	8021B	74524
890-6285-11	BES 24 - 168 0.5'	Total/NA	Solid	8021B	74524
890-6285-12	BES 24 - 169 0.5'	Total/NA	Solid	8021B	74524
890-6285-13	BES 24 - 170 0.5'	Total/NA	Solid	8021B	74524
890-6285-14	BES 24 - 171 0.5'	Total/NA	Solid	8021B	74524
890-6285-15	BES 24 - 172 0.5'	Total/NA	Solid	8021B	74524
890-6285-16	BES 24 - 173 0.5'	Total/NA	Solid	8021B	74524
890-6285-17	BES 24 - 174 0.5'	Total/NA	Solid	8021B	74524
890-6285-18	BES 24 - 175 0.5'	Total/NA	Solid	8021B	74524
890-6285-19	BES 24 - 176 0.5'	Total/NA	Solid	8021B	74524
890-6285-20	BES 24 - 177 0.5'	Total/NA	Solid	8021B	74524
MB 880-74524/5-A	Method Blank	Total/NA	Solid	8021B	74524
LCS 880-74524/1-A	Lab Control Sample	Total/NA	Solid	8021B	74524
LCSD 880-74524/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74524
890-6285-1 MS	BES 24 - 158 0.5'	Total/NA	Solid	8021B	74524
890-6285-1 MSD	BES 24 - 158 0.5'	Total/NA	Solid	8021B	74524

Analysis Batch: 74545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-21	BES 24 - 178 0.5'	Total/NA	Solid	8021B	74525
890-6285-22	BES 24 - 179 0.5'	Total/NA	Solid	8021B	74525
890-6285-23	BES 24 - 180 0.5'	Total/NA	Solid	8021B	74525
890-6285-24	BES 24 - 181 0.5'	Total/NA	Solid	8021B	74525
890-6285-25	BES 24 - 182 0.5'	Total/NA	Solid	8021B	74525
890-6285-26	BES 24 - 183 0.5'	Total/NA	Solid	8021B	74525
890-6285-27	BES 24 - 184 0.5'	Total/NA	Solid	8021B	74525
890-6285-28	BES 24 - 185 0.5'	Total/NA	Solid	8021B	74525
890-6285-29	BES 24 - 186 0.5'	Total/NA	Solid	8021B	74525
890-6285-30	BES 24 - 187 0.5'	Total/NA	Solid	8021B	74525
890-6285-31	BES 24 - 188 0.5'	Total/NA	Solid	8021B	74525
890-6285-32	BES 24 - 189 0.5'	Total/NA	Solid	8021B	74525
890-6285-33	BES 24 - 190 0.5'	Total/NA	Solid	8021B	74525
890-6285-34	BES 24 - 191 0.5'	Total/NA	Solid	8021B	74525
890-6285-35	BES 24 - 192 0.5'	Total/NA	Solid	8021B	74525
890-6285-36	WES 24 - 15 0-0.5'	Total/NA	Solid	8021B	74525
890-6285-37	WES 24 - 16 0-0.5'	Total/NA	Solid	8021B	74525
890-6285-38	WES 24 - 17 0-0.5'	Total/NA	Solid	8021B	74525

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

GC VOA (Continued)

Analysis Batch: 74545 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-39	WES 24 - 18 0-0.5'	Total/NA	Solid	8021B	74525
890-6285-40	WES 24 - 19 0-0.5'	Total/NA	Solid	8021B	74525
MB 880-74525/5-A	Method Blank	Total/NA	Solid	8021B	74525
LCS 880-74525/1-A	Lab Control Sample	Total/NA	Solid	8021B	74525
LCSD 880-74525/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74525
890-6285-21 MS	BES 24 - 178 0.5'	Total/NA	Solid	8021B	74525
890-6285-21 MSD	BES 24 - 178 0.5'	Total/NA	Solid	8021B	74525

Analysis Batch: 74742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-1	BES 24 - 158 0.5'	Total/NA	Solid	Total BTEX	
890-6285-2	BES 24 - 159 0.5'	Total/NA	Solid	Total BTEX	
890-6285-3	BES 24 - 160 0.5'	Total/NA	Solid	Total BTEX	
890-6285-4	BES 24 - 161 0.5'	Total/NA	Solid	Total BTEX	
890-6285-5	BES 24 - 162 0.5'	Total/NA	Solid	Total BTEX	
890-6285-6	BES 24 - 163 0.5'	Total/NA	Solid	Total BTEX	
890-6285-7	BES 24 - 164 0.5'	Total/NA	Solid	Total BTEX	
890-6285-8	BES 24 - 165 0.5'	Total/NA	Solid	Total BTEX	
890-6285-9	BES 24 - 166 0.5'	Total/NA	Solid	Total BTEX	
890-6285-10	BES 24 - 167 0.5'	Total/NA	Solid	Total BTEX	
890-6285-11	BES 24 - 168 0.5'	Total/NA	Solid	Total BTEX	
890-6285-12	BES 24 - 169 0.5'	Total/NA	Solid	Total BTEX	
890-6285-13	BES 24 - 170 0.5'	Total/NA	Solid	Total BTEX	
890-6285-14	BES 24 - 171 0.5'	Total/NA	Solid	Total BTEX	
890-6285-15	BES 24 - 172 0.5'	Total/NA	Solid	Total BTEX	
890-6285-16	BES 24 - 173 0.5'	Total/NA	Solid	Total BTEX	
890-6285-17	BES 24 - 174 0.5'	Total/NA	Solid	Total BTEX	
890-6285-18	BES 24 - 175 0.5'	Total/NA	Solid	Total BTEX	
890-6285-19	BES 24 - 176 0.5'	Total/NA	Solid	Total BTEX	
890-6285-20	BES 24 - 177 0.5'	Total/NA	Solid	Total BTEX	
890-6285-21	BES 24 - 178 0.5'	Total/NA	Solid	Total BTEX	
890-6285-22	BES 24 - 179 0.5'	Total/NA	Solid	Total BTEX	
890-6285-23	BES 24 - 180 0.5'	Total/NA	Solid	Total BTEX	
890-6285-24	BES 24 - 181 0.5'	Total/NA	Solid	Total BTEX	
890-6285-25	BES 24 - 182 0.5'	Total/NA	Solid	Total BTEX	
890-6285-26	BES 24 - 183 0.5'	Total/NA	Solid	Total BTEX	
890-6285-27	BES 24 - 184 0.5'	Total/NA	Solid	Total BTEX	
890-6285-28	BES 24 - 185 0.5'	Total/NA	Solid	Total BTEX	
890-6285-29	BES 24 - 186 0.5'	Total/NA	Solid	Total BTEX	
890-6285-30	BES 24 - 187 0.5'	Total/NA	Solid	Total BTEX	
890-6285-31	BES 24 - 188 0.5'	Total/NA	Solid	Total BTEX	
890-6285-32	BES 24 - 189 0.5'	Total/NA	Solid	Total BTEX	
890-6285-33	BES 24 - 190 0.5'	Total/NA	Solid	Total BTEX	
890-6285-34	BES 24 - 191 0.5'	Total/NA	Solid	Total BTEX	
890-6285-35	BES 24 - 192 0.5'	Total/NA	Solid	Total BTEX	
890-6285-36	WES 24 - 15 0-0.5'	Total/NA	Solid	Total BTEX	
890-6285-37	WES 24 - 16 0-0.5'	Total/NA	Solid	Total BTEX	
890-6285-38	WES 24 - 17 0-0.5'	Total/NA	Solid	Total BTEX	
890-6285-39	WES 24 - 18 0-0.5'	Total/NA	Solid	Total BTEX	
890-6285-40	WES 24 - 19 0-0.5'	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

GC Semi VOA

Analysis Batch: 74513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-1	BES 24 - 158 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-2	BES 24 - 159 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-3	BES 24 - 160 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-4	BES 24 - 161 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-5	BES 24 - 162 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-6	BES 24 - 163 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-7	BES 24 - 164 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-8	BES 24 - 165 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-9	BES 24 - 166 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-10	BES 24 - 167 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-11	BES 24 - 168 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-12	BES 24 - 169 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-13	BES 24 - 170 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-14	BES 24 - 171 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-15	BES 24 - 172 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-16	BES 24 - 173 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-17	BES 24 - 174 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-18	BES 24 - 175 0.5'	Total/NA	Solid	8015B NM	74519
MB 880-74519/1-A	Method Blank	Total/NA	Solid	8015B NM	74519
LCS 880-74519/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74519
LCSD 880-74519/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74519
890-6285-18 MS	BES 24 - 175 0.5'	Total/NA	Solid	8015B NM	74519
890-6285-18 MSD	BES 24 - 175 0.5'	Total/NA	Solid	8015B NM	74519

Prep Batch: 74519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-1	BES 24 - 158 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-2	BES 24 - 159 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-3	BES 24 - 160 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-4	BES 24 - 161 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-5	BES 24 - 162 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-6	BES 24 - 163 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-7	BES 24 - 164 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-8	BES 24 - 165 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-9	BES 24 - 166 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-10	BES 24 - 167 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-11	BES 24 - 168 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-12	BES 24 - 169 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-13	BES 24 - 170 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-14	BES 24 - 171 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-15	BES 24 - 172 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-16	BES 24 - 173 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-17	BES 24 - 174 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-18	BES 24 - 175 0.5'	Total/NA	Solid	8015NM Prep	
MB 880-74519/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74519/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74519/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6285-18 MS	BES 24 - 175 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-18 MSD	BES 24 - 175 0.5'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

GC Semi VOA

Prep Batch: 74526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-19	BES 24 - 176 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-20	BES 24 - 177 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-21	BES 24 - 178 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-22	BES 24 - 179 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-23	BES 24 - 180 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-24	BES 24 - 181 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-25	BES 24 - 182 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-26	BES 24 - 183 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-27	BES 24 - 184 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-28	BES 24 - 185 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-29	BES 24 - 186 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-30	BES 24 - 187 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-31	BES 24 - 188 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-32	BES 24 - 189 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-33	BES 24 - 190 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-34	BES 24 - 191 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-35	BES 24 - 192 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-36	WES 24 - 15 0-0.5'	Total/NA	Solid	8015NM Prep	
890-6285-37	WES 24 - 16 0-0.5'	Total/NA	Solid	8015NM Prep	
890-6285-38	WES 24 - 17 0-0.5'	Total/NA	Solid	8015NM Prep	
MB 880-74526/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74526/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74526/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6285-19 MS	BES 24 - 176 0.5'	Total/NA	Solid	8015NM Prep	
890-6285-19 MSD	BES 24 - 176 0.5'	Total/NA	Solid	8015NM Prep	

Prep Batch: 74527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-39	WES 24 - 18 0-0.5'	Total/NA	Solid	8015NM Prep	
890-6285-40	WES 24 - 19 0-0.5'	Total/NA	Solid	8015NM Prep	
MB 880-74527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6285-39 MS	WES 24 - 18 0-0.5'	Total/NA	Solid	8015NM Prep	
890-6285-39 MSD	WES 24 - 18 0-0.5'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 74540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-19	BES 24 - 176 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-20	BES 24 - 177 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-21	BES 24 - 178 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-22	BES 24 - 179 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-23	BES 24 - 180 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-24	BES 24 - 181 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-25	BES 24 - 182 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-26	BES 24 - 183 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-27	BES 24 - 184 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-28	BES 24 - 185 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-29	BES 24 - 186 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-30	BES 24 - 187 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-31	BES 24 - 188 0.5'	Total/NA	Solid	8015B NM	74526

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

GC Semi VOA (Continued)

Analysis Batch: 74540 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-32	BES 24 - 189 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-33	BES 24 - 190 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-34	BES 24 - 191 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-35	BES 24 - 192 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-36	WES 24 - 15 0-0.5'	Total/NA	Solid	8015B NM	74526
890-6285-37	WES 24 - 16 0-0.5'	Total/NA	Solid	8015B NM	74526
890-6285-38	WES 24 - 17 0-0.5'	Total/NA	Solid	8015B NM	74526
890-6285-39	WES 24 - 18 0-0.5'	Total/NA	Solid	8015B NM	74527
890-6285-40	WES 24 - 19 0-0.5'	Total/NA	Solid	8015B NM	74527
MB 880-74526/1-A	Method Blank	Total/NA	Solid	8015B NM	74526
MB 880-74527/1-A	Method Blank	Total/NA	Solid	8015B NM	74527
LCS 880-74526/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74526
LCS 880-74527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74527
LCSD 880-74526/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74526
LCSD 880-74527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74527
890-6285-19 MS	BES 24 - 176 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-19 MSD	BES 24 - 176 0.5'	Total/NA	Solid	8015B NM	74526
890-6285-39 MS	WES 24 - 18 0-0.5'	Total/NA	Solid	8015B NM	74527
890-6285-39 MSD	WES 24 - 18 0-0.5'	Total/NA	Solid	8015B NM	74527

Analysis Batch: 74681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-1	BES 24 - 158 0.5'	Total/NA	Solid	8015 NM	
890-6285-2	BES 24 - 159 0.5'	Total/NA	Solid	8015 NM	
890-6285-3	BES 24 - 160 0.5'	Total/NA	Solid	8015 NM	
890-6285-4	BES 24 - 161 0.5'	Total/NA	Solid	8015 NM	
890-6285-5	BES 24 - 162 0.5'	Total/NA	Solid	8015 NM	
890-6285-6	BES 24 - 163 0.5'	Total/NA	Solid	8015 NM	
890-6285-7	BES 24 - 164 0.5'	Total/NA	Solid	8015 NM	
890-6285-8	BES 24 - 165 0.5'	Total/NA	Solid	8015 NM	
890-6285-9	BES 24 - 166 0.5'	Total/NA	Solid	8015 NM	
890-6285-10	BES 24 - 167 0.5'	Total/NA	Solid	8015 NM	
890-6285-11	BES 24 - 168 0.5'	Total/NA	Solid	8015 NM	
890-6285-12	BES 24 - 169 0.5'	Total/NA	Solid	8015 NM	
890-6285-13	BES 24 - 170 0.5'	Total/NA	Solid	8015 NM	
890-6285-14	BES 24 - 171 0.5'	Total/NA	Solid	8015 NM	
890-6285-15	BES 24 - 172 0.5'	Total/NA	Solid	8015 NM	
890-6285-16	BES 24 - 173 0.5'	Total/NA	Solid	8015 NM	
890-6285-17	BES 24 - 174 0.5'	Total/NA	Solid	8015 NM	
890-6285-18	BES 24 - 175 0.5'	Total/NA	Solid	8015 NM	
890-6285-19	BES 24 - 176 0.5'	Total/NA	Solid	8015 NM	
890-6285-20	BES 24 - 177 0.5'	Total/NA	Solid	8015 NM	
890-6285-21	BES 24 - 178 0.5'	Total/NA	Solid	8015 NM	
890-6285-22	BES 24 - 179 0.5'	Total/NA	Solid	8015 NM	
890-6285-23	BES 24 - 180 0.5'	Total/NA	Solid	8015 NM	
890-6285-24	BES 24 - 181 0.5'	Total/NA	Solid	8015 NM	
890-6285-25	BES 24 - 182 0.5'	Total/NA	Solid	8015 NM	
890-6285-26	BES 24 - 183 0.5'	Total/NA	Solid	8015 NM	
890-6285-27	BES 24 - 184 0.5'	Total/NA	Solid	8015 NM	
890-6285-28	BES 24 - 185 0.5'	Total/NA	Solid	8015 NM	
890-6285-29	BES 24 - 186 0.5'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

GC Semi VOA (Continued)

Analysis Batch: 74681 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-30	BES 24 - 187 0.5'	Total/NA	Solid	8015 NM	
890-6285-31	BES 24 - 188 0.5'	Total/NA	Solid	8015 NM	
890-6285-32	BES 24 - 189 0.5'	Total/NA	Solid	8015 NM	
890-6285-33	BES 24 - 190 0.5'	Total/NA	Solid	8015 NM	
890-6285-34	BES 24 - 191 0.5'	Total/NA	Solid	8015 NM	
890-6285-35	BES 24 - 192 0.5'	Total/NA	Solid	8015 NM	
890-6285-36	WES 24 - 15 0-0.5'	Total/NA	Solid	8015 NM	
890-6285-37	WES 24 - 16 0-0.5'	Total/NA	Solid	8015 NM	
890-6285-38	WES 24 - 17 0-0.5'	Total/NA	Solid	8015 NM	
890-6285-39	WES 24 - 18 0-0.5'	Total/NA	Solid	8015 NM	
890-6285-40	WES 24 - 19 0-0.5'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 74407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-1	BES 24 - 158 0.5'	Soluble	Solid	DI Leach	
890-6285-2	BES 24 - 159 0.5'	Soluble	Solid	DI Leach	
890-6285-3	BES 24 - 160 0.5'	Soluble	Solid	DI Leach	
890-6285-4	BES 24 - 161 0.5'	Soluble	Solid	DI Leach	
890-6285-5	BES 24 - 162 0.5'	Soluble	Solid	DI Leach	
890-6285-6	BES 24 - 163 0.5'	Soluble	Solid	DI Leach	
890-6285-7	BES 24 - 164 0.5'	Soluble	Solid	DI Leach	
890-6285-8	BES 24 - 165 0.5'	Soluble	Solid	DI Leach	
890-6285-9	BES 24 - 166 0.5'	Soluble	Solid	DI Leach	
890-6285-10	BES 24 - 167 0.5'	Soluble	Solid	DI Leach	
890-6285-11	BES 24 - 168 0.5'	Soluble	Solid	DI Leach	
890-6285-12	BES 24 - 169 0.5'	Soluble	Solid	DI Leach	
890-6285-13	BES 24 - 170 0.5'	Soluble	Solid	DI Leach	
890-6285-14	BES 24 - 171 0.5'	Soluble	Solid	DI Leach	
890-6285-15	BES 24 - 172 0.5'	Soluble	Solid	DI Leach	
890-6285-16	BES 24 - 173 0.5'	Soluble	Solid	DI Leach	
890-6285-17	BES 24 - 174 0.5'	Soluble	Solid	DI Leach	
890-6285-18	BES 24 - 175 0.5'	Soluble	Solid	DI Leach	
890-6285-19	BES 24 - 176 0.5'	Soluble	Solid	DI Leach	
890-6285-20	BES 24 - 177 0.5'	Soluble	Solid	DI Leach	
MB 880-74407/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-74407/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-74407/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6285-1 MS	BES 24 - 158 0.5'	Soluble	Solid	DI Leach	
890-6285-1 MSD	BES 24 - 158 0.5'	Soluble	Solid	DI Leach	
890-6285-11 MS	BES 24 - 168 0.5'	Soluble	Solid	DI Leach	
890-6285-11 MSD	BES 24 - 168 0.5'	Soluble	Solid	DI Leach	

Leach Batch: 74409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-21	BES 24 - 178 0.5'	Soluble	Solid	DI Leach	
890-6285-22	BES 24 - 179 0.5'	Soluble	Solid	DI Leach	
890-6285-23	BES 24 - 180 0.5'	Soluble	Solid	DI Leach	
890-6285-24	BES 24 - 181 0.5'	Soluble	Solid	DI Leach	
890-6285-25	BES 24 - 182 0.5'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

HPLC/IC (Continued)

Leach Batch: 74409 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-26	BES 24 - 183 0.5'	Soluble	Solid	DI Leach	
890-6285-27	BES 24 - 184 0.5'	Soluble	Solid	DI Leach	
890-6285-28	BES 24 - 185 0.5'	Soluble	Solid	DI Leach	
890-6285-29	BES 24 - 186 0.5'	Soluble	Solid	DI Leach	
890-6285-30	BES 24 - 187 0.5'	Soluble	Solid	DI Leach	
890-6285-31	BES 24 - 188 0.5'	Soluble	Solid	DI Leach	
890-6285-32	BES 24 - 189 0.5'	Soluble	Solid	DI Leach	
890-6285-33	BES 24 - 190 0.5'	Soluble	Solid	DI Leach	
890-6285-34	BES 24 - 191 0.5'	Soluble	Solid	DI Leach	
890-6285-35	BES 24 - 192 0.5'	Soluble	Solid	DI Leach	
890-6285-36	WES 24 - 15 0-0.5'	Soluble	Solid	DI Leach	
890-6285-37	WES 24 - 16 0-0.5'	Soluble	Solid	DI Leach	
890-6285-38	WES 24 - 17 0-0.5'	Soluble	Solid	DI Leach	
890-6285-39	WES 24 - 18 0-0.5'	Soluble	Solid	DI Leach	
890-6285-40	WES 24 - 19 0-0.5'	Soluble	Solid	DI Leach	
MB 880-74409/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-74409/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-74409/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6285-21 MS	BES 24 - 178 0.5'	Soluble	Solid	DI Leach	
890-6285-21 MSD	BES 24 - 178 0.5'	Soluble	Solid	DI Leach	
890-6285-31 MS	BES 24 - 188 0.5'	Soluble	Solid	DI Leach	
890-6285-31 MSD	BES 24 - 188 0.5'	Soluble	Solid	DI Leach	

Analysis Batch: 74556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-1	BES 24 - 158 0.5'	Soluble	Solid	300.0	74407
890-6285-2	BES 24 - 159 0.5'	Soluble	Solid	300.0	74407
890-6285-3	BES 24 - 160 0.5'	Soluble	Solid	300.0	74407
890-6285-4	BES 24 - 161 0.5'	Soluble	Solid	300.0	74407
890-6285-5	BES 24 - 162 0.5'	Soluble	Solid	300.0	74407
890-6285-6	BES 24 - 163 0.5'	Soluble	Solid	300.0	74407
890-6285-7	BES 24 - 164 0.5'	Soluble	Solid	300.0	74407
890-6285-8	BES 24 - 165 0.5'	Soluble	Solid	300.0	74407
890-6285-9	BES 24 - 166 0.5'	Soluble	Solid	300.0	74407
890-6285-10	BES 24 - 167 0.5'	Soluble	Solid	300.0	74407
890-6285-11	BES 24 - 168 0.5'	Soluble	Solid	300.0	74407
890-6285-12	BES 24 - 169 0.5'	Soluble	Solid	300.0	74407
890-6285-13	BES 24 - 170 0.5'	Soluble	Solid	300.0	74407
890-6285-14	BES 24 - 171 0.5'	Soluble	Solid	300.0	74407
890-6285-15	BES 24 - 172 0.5'	Soluble	Solid	300.0	74407
890-6285-16	BES 24 - 173 0.5'	Soluble	Solid	300.0	74407
890-6285-17	BES 24 - 174 0.5'	Soluble	Solid	300.0	74407
890-6285-18	BES 24 - 175 0.5'	Soluble	Solid	300.0	74407
890-6285-19	BES 24 - 176 0.5'	Soluble	Solid	300.0	74407
890-6285-20	BES 24 - 177 0.5'	Soluble	Solid	300.0	74407
MB 880-74407/1-A	Method Blank	Soluble	Solid	300.0	74407
LCS 880-74407/2-A	Lab Control Sample	Soluble	Solid	300.0	74407
LCSD 880-74407/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74407
890-6285-1 MS	BES 24 - 158 0.5'	Soluble	Solid	300.0	74407
890-6285-1 MSD	BES 24 - 158 0.5'	Soluble	Solid	300.0	74407
890-6285-11 MS	BES 24 - 168 0.5'	Soluble	Solid	300.0	74407

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

HPLC/IC (Continued)

Analysis Batch: 74556 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-11 MSD	BES 24 - 168 0.5'	Soluble	Solid	300.0	74407

Analysis Batch: 74558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6285-21	BES 24 - 178 0.5'	Soluble	Solid	300.0	74409
890-6285-22	BES 24 - 179 0.5'	Soluble	Solid	300.0	74409
890-6285-23	BES 24 - 180 0.5'	Soluble	Solid	300.0	74409
890-6285-24	BES 24 - 181 0.5'	Soluble	Solid	300.0	74409
890-6285-25	BES 24 - 182 0.5'	Soluble	Solid	300.0	74409
890-6285-26	BES 24 - 183 0.5'	Soluble	Solid	300.0	74409
890-6285-27	BES 24 - 184 0.5'	Soluble	Solid	300.0	74409
890-6285-28	BES 24 - 185 0.5'	Soluble	Solid	300.0	74409
890-6285-29	BES 24 - 186 0.5'	Soluble	Solid	300.0	74409
890-6285-30	BES 24 - 187 0.5'	Soluble	Solid	300.0	74409
890-6285-31	BES 24 - 188 0.5'	Soluble	Solid	300.0	74409
890-6285-32	BES 24 - 189 0.5'	Soluble	Solid	300.0	74409
890-6285-33	BES 24 - 190 0.5'	Soluble	Solid	300.0	74409
890-6285-34	BES 24 - 191 0.5'	Soluble	Solid	300.0	74409
890-6285-35	BES 24 - 192 0.5'	Soluble	Solid	300.0	74409
890-6285-36	WES 24 - 15 0-0.5'	Soluble	Solid	300.0	74409
890-6285-37	WES 24 - 16 0-0.5'	Soluble	Solid	300.0	74409
890-6285-38	WES 24 - 17 0-0.5'	Soluble	Solid	300.0	74409
890-6285-39	WES 24 - 18 0-0.5'	Soluble	Solid	300.0	74409
890-6285-40	WES 24 - 19 0-0.5'	Soluble	Solid	300.0	74409
MB 880-74409/1-A	Method Blank	Soluble	Solid	300.0	74409
LCS 880-74409/2-A	Lab Control Sample	Soluble	Solid	300.0	74409
LCSD 880-74409/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74409
890-6285-21 MS	BES 24 - 178 0.5'	Soluble	Solid	300.0	74409
890-6285-21 MSD	BES 24 - 178 0.5'	Soluble	Solid	300.0	74409
890-6285-31 MS	BES 24 - 188 0.5'	Soluble	Solid	300.0	74409
890-6285-31 MSD	BES 24 - 188 0.5'	Soluble	Solid	300.0	74409

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 158 0.5'
Lab Sample ID: 890-6285-1
Date Collected: 02/23/24 08:30
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 14:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 14:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/02/24 22:24	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/02/24 22:24	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 18:46	CH	EET MID

Client Sample ID: BES 24 - 159 0.5'
Lab Sample ID: 890-6285-2
Date Collected: 02/23/24 08:35
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 14:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 14:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/02/24 22:46	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/02/24 22:46	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 19:02	CH	EET MID

Client Sample ID: BES 24 - 160 0.5'
Lab Sample ID: 890-6285-3
Date Collected: 02/23/24 08:40
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 15:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 15:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/02/24 23:09	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/02/24 23:09	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 19:08	CH	EET MID

Client Sample ID: BES 24 - 161 0.5'
Lab Sample ID: 890-6285-4
Date Collected: 02/23/24 08:45
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 15:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 15:52	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 161 0.5'
Lab Sample ID: 890-6285-4
Date Collected: 02/23/24 08:45
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74681	03/02/24 23:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/02/24 23:32	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 19:13	CH	EET MID

Client Sample ID: BES 24 - 162 0.5'
Lab Sample ID: 890-6285-5
Date Collected: 02/23/24 08:50
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 16:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 16:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/02/24 23:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/02/24 23:54	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 19:19	CH	EET MID

Client Sample ID: BES 24 - 163 0.5'
Lab Sample ID: 890-6285-6
Date Collected: 02/23/24 08:55
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 16:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 16:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 00:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 00:17	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 19:35	CH	EET MID

Client Sample ID: BES 24 - 164 0.5'
Lab Sample ID: 890-6285-7
Date Collected: 02/23/24 09:00
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 17:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 17:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 00:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 00:40	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 164 0.5'
Lab Sample ID: 890-6285-7
Date Collected: 02/23/24 09:00
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 19:41	CH	EET MID

Client Sample ID: BES 24 - 165 0.5'
Lab Sample ID: 890-6285-8
Date Collected: 02/23/24 09:05
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 17:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 17:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 01:02	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 01:02	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 19:47	CH	EET MID

Client Sample ID: BES 24 - 166 0.5'
Lab Sample ID: 890-6285-9
Date Collected: 02/23/24 09:10
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 18:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 18:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 01:25	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 01:25	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 19:52	CH	EET MID

Client Sample ID: BES 24 - 167 0.5'
Lab Sample ID: 890-6285-10
Date Collected: 02/23/24 09:15
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 19:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 19:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 02:10	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 02:10	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 19:58	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 168 0.5'

Lab Sample ID: 890-6285-11
Matrix: Solid
Date Collected: 02/23/24 09:20
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 20:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 20:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 02:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 02:32	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 20:03	CH	EET MID

Client Sample ID: BES 24 - 169 0.5'

Lab Sample ID: 890-6285-12
Matrix: Solid
Date Collected: 02/23/24 09:25
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 20:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 20:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 02:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 02:55	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 20:20	CH	EET MID

Client Sample ID: BES 24 - 170 0.5'

Lab Sample ID: 890-6285-13
Matrix: Solid
Date Collected: 02/23/24 09:30
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 21:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 21:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 03:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 03:18	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 20:25	CH	EET MID

Client Sample ID: BES 24 - 171 0.5'

Lab Sample ID: 890-6285-14
Matrix: Solid
Date Collected: 02/23/24 09:35
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 21:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 21:43	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 171 0.5'

Lab Sample ID: 890-6285-14
Matrix: Solid
Date Collected: 02/23/24 09:35
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74681	03/03/24 03:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 03:40	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 20:42	CH	EET MID

Client Sample ID: BES 24 - 172 0.5'

Lab Sample ID: 890-6285-15
Matrix: Solid
Date Collected: 02/23/24 09:40
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 22:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 22:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 04:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 04:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 20:47	CH	EET MID

Client Sample ID: BES 24 - 173 0.5'

Lab Sample ID: 890-6285-16
Matrix: Solid
Date Collected: 02/23/24 09:45
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 22:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 22:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 04:23	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 04:23	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 20:53	CH	EET MID

Client Sample ID: BES 24 - 174 0.5'

Lab Sample ID: 890-6285-17
Matrix: Solid
Date Collected: 02/23/24 09:50
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 23:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 23:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 04:44	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/03/24 04:44	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 174 0.5'
Lab Sample ID: 890-6285-17
Date Collected: 02/23/24 09:50
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 20:58	CH	EET MID

Client Sample ID: BES 24 - 175 0.5'
Lab Sample ID: 890-6285-18
Date Collected: 02/23/24 09:55
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 23:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 23:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/02/24 21:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	74519	03/02/24 10:33	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74513	03/02/24 21:19	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 21:04	CH	EET MID

Client Sample ID: BES 24 - 176 0.5'
Lab Sample ID: 890-6285-19
Date Collected: 02/23/24 10:00
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/03/24 23:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 23:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 12:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 12:05	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 21:09	CH	EET MID

Client Sample ID: BES 24 - 177 0.5'
Lab Sample ID: 890-6285-20
Date Collected: 02/23/24 10:05
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74524	03/02/24 11:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74544	03/04/24 00:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/04/24 00:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 13:10	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74407	03/01/24 11:19	SMC	EET MID
Soluble	Analysis	300.0		1			74556	03/03/24 21:15	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 178 0.5'
Lab Sample ID: 890-6285-21
Date Collected: 02/23/24 10:10
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 14:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 14:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 13:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 13:32	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 21:59	CH	EET MID

Client Sample ID: BES 24 - 179 0.5'
Lab Sample ID: 890-6285-22
Date Collected: 02/23/24 10:15
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 14:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 14:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 13:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 13:54	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 22:16	CH	EET MID

Client Sample ID: BES 24 - 180 0.5'
Lab Sample ID: 890-6285-23
Date Collected: 02/23/24 12:30
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 14:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 14:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 14:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 14:16	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 22:21	CH	EET MID

Client Sample ID: BES 24 - 181 0.5'
Lab Sample ID: 890-6285-24
Date Collected: 02/23/24 12:35
Matrix: Solid
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 15:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 15:16	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 181 0.5'

Lab Sample ID: 890-6285-24
Matrix: Solid
Date Collected: 02/23/24 12:35
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74681	03/03/24 14:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 14:38	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 22:27	CH	EET MID

Client Sample ID: BES 24 - 182 0.5'

Lab Sample ID: 890-6285-25
Matrix: Solid
Date Collected: 02/23/24 12:40
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 15:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 15:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 15:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 15:00	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 22:32	CH	EET MID

Client Sample ID: BES 24 - 183 0.5'

Lab Sample ID: 890-6285-26
Matrix: Solid
Date Collected: 02/23/24 12:45
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 15:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 15:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 15:22	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 15:22	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 22:49	CH	EET MID

Client Sample ID: BES 24 - 184 0.5'

Lab Sample ID: 890-6285-27
Matrix: Solid
Date Collected: 02/23/24 12:50
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 16:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 16:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 15:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 15:45	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 184 0.5'

Lab Sample ID: 890-6285-27
Matrix: Solid
Date Collected: 02/23/24 12:50
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 22:55	CH	EET MID

Client Sample ID: BES 24 - 185 0.5'

Lab Sample ID: 890-6285-28
Matrix: Solid
Date Collected: 02/23/24 12:55
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 16:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 16:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 16:07	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 16:07	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 23:00	CH	EET MID

Client Sample ID: BES 24 - 186 0.5'

Lab Sample ID: 890-6285-29
Matrix: Solid
Date Collected: 02/23/24 13:00
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 16:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 16:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 16:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 16:50	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 23:06	CH	EET MID

Client Sample ID: BES 24 - 187 0.5'

Lab Sample ID: 890-6285-30
Matrix: Solid
Date Collected: 02/23/24 13:05
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 17:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 17:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 17:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 17:13	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 23:11	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 188 0.5'

Lab Sample ID: 890-6285-31
Matrix: Solid
Date Collected: 02/23/24 13:10
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 19:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 19:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 17:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 17:35	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 23:17	CH	EET MID

Client Sample ID: BES 24 - 189 0.5'

Lab Sample ID: 890-6285-32
Matrix: Solid
Date Collected: 02/23/24 13:15
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 19:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 19:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 17:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 17:57	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 23:33	CH	EET MID

Client Sample ID: BES 24 - 190 0.5'

Lab Sample ID: 890-6285-33
Matrix: Solid
Date Collected: 02/23/24 13:20
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 19:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 19:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 18:19	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 18:19	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 23:39	CH	EET MID

Client Sample ID: BES 24 - 191 0.5'

Lab Sample ID: 890-6285-34
Matrix: Solid
Date Collected: 02/23/24 13:25
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 20:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 20:11	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: BES 24 - 191 0.5'

Lab Sample ID: 890-6285-34
Matrix: Solid
Date Collected: 02/23/24 13:25
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74681	03/03/24 18:41	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 18:41	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/03/24 23:55	CH	EET MID

Client Sample ID: BES 24 - 192 0.5'

Lab Sample ID: 890-6285-35
Matrix: Solid
Date Collected: 02/23/24 13:30
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 20:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 20:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 19:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 19:03	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/04/24 00:01	CH	EET MID

Client Sample ID: WES 24 - 15 0-0.5'

Lab Sample ID: 890-6285-36
Matrix: Solid
Date Collected: 02/23/24 14:05
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 20:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 20:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 19:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 19:26	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/04/24 00:06	CH	EET MID

Client Sample ID: WES 24 - 16 0-0.5'

Lab Sample ID: 890-6285-37
Matrix: Solid
Date Collected: 02/23/24 14:10
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 21:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 21:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 19:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 19:48	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Client Sample ID: WES 24 - 16 0-0.5'

Lab Sample ID: 890-6285-37
Matrix: Solid
Date Collected: 02/23/24 14:10
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/04/24 00:12	CH	EET MID

Client Sample ID: WES 24 - 17 0-0.5'

Lab Sample ID: 890-6285-38
Matrix: Solid
Date Collected: 02/23/24 14:15
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 21:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 21:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 20:12	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	74526	03/03/24 00:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 20:12	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/04/24 00:17	CH	EET MID

Client Sample ID: WES 24 - 18 0-0.5'

Lab Sample ID: 890-6285-39
Matrix: Solid
Date Collected: 02/23/24 14:20
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 21:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 21:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 22:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 22:02	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/04/24 00:23	CH	EET MID

Client Sample ID: WES 24 - 19 0-0.5'

Lab Sample ID: 890-6285-40
Matrix: Solid
Date Collected: 02/23/24 14:25
Date Received: 02/29/24 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74525	03/02/24 11:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74545	03/03/24 22:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74742	03/03/24 22:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			74681	03/03/24 23:06	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/03/24 23:06	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74409	03/01/24 11:23	SMC	EET MID
Soluble	Analysis	300.0		1			74558	03/04/24 00:28	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6285-1
SDG: 23E - 04616

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6285-1	BES 24 - 158 0.5'	Solid	02/23/24 08:30	02/29/24 09:02	0.5'
890-6285-2	BES 24 - 159 0.5'	Solid	02/23/24 08:35	02/29/24 09:02	0.5'
890-6285-3	BES 24 - 160 0.5'	Solid	02/23/24 08:40	02/29/24 09:02	0.5'
890-6285-4	BES 24 - 161 0.5'	Solid	02/23/24 08:45	02/29/24 09:02	0.5'
890-6285-5	BES 24 - 162 0.5'	Solid	02/23/24 08:50	02/29/24 09:02	0.5'
890-6285-6	BES 24 - 163 0.5'	Solid	02/23/24 08:55	02/29/24 09:02	0.5'
890-6285-7	BES 24 - 164 0.5'	Solid	02/23/24 09:00	02/29/24 09:02	0.5'
890-6285-8	BES 24 - 165 0.5'	Solid	02/23/24 09:05	02/29/24 09:02	0.5'
890-6285-9	BES 24 - 166 0.5'	Solid	02/23/24 09:10	02/29/24 09:02	0.5'
890-6285-10	BES 24 - 167 0.5'	Solid	02/23/24 09:15	02/29/24 09:02	0.5'
890-6285-11	BES 24 - 168 0.5'	Solid	02/23/24 09:20	02/29/24 09:02	0.5'
890-6285-12	BES 24 - 169 0.5'	Solid	02/23/24 09:25	02/29/24 09:02	0.5'
890-6285-13	BES 24 - 170 0.5'	Solid	02/23/24 09:30	02/29/24 09:02	0.5'
890-6285-14	BES 24 - 171 0.5'	Solid	02/23/24 09:35	02/29/24 09:02	0.5'
890-6285-15	BES 24 - 172 0.5'	Solid	02/23/24 09:40	02/29/24 09:02	0.5'
890-6285-16	BES 24 - 173 0.5'	Solid	02/23/24 09:45	02/29/24 09:02	0.5'
890-6285-17	BES 24 - 174 0.5'	Solid	02/23/24 09:50	02/29/24 09:02	0.5'
890-6285-18	BES 24 - 175 0.5'	Solid	02/23/24 09:55	02/29/24 09:02	0.5'
890-6285-19	BES 24 - 176 0.5'	Solid	02/23/24 10:00	02/29/24 09:02	0.5'
890-6285-20	BES 24 - 177 0.5'	Solid	02/23/24 10:05	02/29/24 09:02	0.5'
890-6285-21	BES 24 - 178 0.5'	Solid	02/23/24 10:10	02/29/24 09:02	0.5'
890-6285-22	BES 24 - 179 0.5'	Solid	02/23/24 10:15	02/29/24 09:02	0.5'
890-6285-23	BES 24 - 180 0.5'	Solid	02/23/24 12:30	02/29/24 09:02	0.5'
890-6285-24	BES 24 - 181 0.5'	Solid	02/23/24 12:35	02/29/24 09:02	0.5'
890-6285-25	BES 24 - 182 0.5'	Solid	02/23/24 12:40	02/29/24 09:02	0.5'
890-6285-26	BES 24 - 183 0.5'	Solid	02/23/24 12:45	02/29/24 09:02	0.5'
890-6285-27	BES 24 - 184 0.5'	Solid	02/23/24 12:50	02/29/24 09:02	0.5'
890-6285-28	BES 24 - 185 0.5'	Solid	02/23/24 12:55	02/29/24 09:02	0.5'
890-6285-29	BES 24 - 186 0.5'	Solid	02/23/24 13:00	02/29/24 09:02	0.5'
890-6285-30	BES 24 - 187 0.5'	Solid	02/23/24 13:05	02/29/24 09:02	0.5'
890-6285-31	BES 24 - 188 0.5'	Solid	02/23/24 13:10	02/29/24 09:02	0.5'
890-6285-32	BES 24 - 189 0.5'	Solid	02/23/24 13:15	02/29/24 09:02	0.5'
890-6285-33	BES 24 - 190 0.5'	Solid	02/23/24 13:20	02/29/24 09:02	0.5'
890-6285-34	BES 24 - 191 0.5'	Solid	02/23/24 13:25	02/29/24 09:02	0.5'
890-6285-35	BES 24 - 192 0.5'	Solid	02/23/24 13:30	02/29/24 09:02	0.5'
890-6285-36	WES 24 - 15 0-0.5'	Solid	02/23/24 14:05	02/29/24 09:02	0-0.5'
890-6285-37	WES 24 - 16 0-0.5'	Solid	02/23/24 14:10	02/29/24 09:02	0-0.5'
890-6285-38	WES 24 - 17 0-0.5'	Solid	02/23/24 14:15	02/29/24 09:02	0-0.5'
890-6285-39	WES 24 - 18 0-0.5'	Solid	02/23/24 14:20	02/29/24 09:02	0-0.5'
890-6285-40	WES 24 - 19 0-0.5'	Solid	02/23/24 14:25	02/29/24 09:02	0-0.5'

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EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

CC: CDixon@vertex.ca for Final Report

Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

www.xenco.com Page 1 of 4

Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca and permian@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	Routine / Rush
Project Number:	23E-04616	Due Date:	3/5/24
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	L. Pullman		
PO #:			

Work Order Comments

Program: UST/PST [ ] RRP [ ] Brownfields [ ] RR [ ] Superfund [ ]
State of Project:
Reporting: Level II [ ] Level III [ ] PST/UST [ ] TRR [ ] Level [ ]
Deliverables: EDD [ ] ADaPT [ ] Other:

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	Tw1007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	-10.4
Total Containers:		Corrected Temperature:	-10.2

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	Parameters: BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
BES24-158 0.5'	Soil	02.23.24	8:30	0.5	Com		X	X	X
BES24-159 0.5'	Soil	02.23.24	8:35	0.5	Com		X	X	X
BES24-160 0.5'	Soil	02.23.24	8:40	0.5	Com		X	X	X
BES24-161 0.5'	Soil	02.23.24	8:45	0.5	Com		X	X	X
BES24-162 0.5'	Soil	02.23.24	8:50	0.5	Com		X	X	X
BES24-163 0.5'	Soil	02.23.24	8:55	0.5	Com		X	X	X
BES24-164 0.5'	Soil	02.23.24	9:00	0.5	Com		X	X	X
BES24-165 0.5'	Soil	02.23.24	9:05	0.5	Com		X	X	X
BES24-166 0.5'	Soil	02.23.24	9:10	0.5	Com		X	X	X
BES24-167 0.5'	Soil	02.23.24	9:15	0.5	Com		X	X	X

ANALYSIS REQUEST

890-6285 Chain of Custody

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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3			4		
5			6		

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Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

CC: CDixon@vertex.ca for Final Report

Work Order No: Cost Center #: 1082151001,
Incident #: nAPP2318831816

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Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca and permian@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	Routine / Rush
Project Number:	23E-04616	Due Date:	3/5/24
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	L. Pullman		
PO #:			

Work Order Comments

Program: UST/PST PRP Brownfields RR Superfund
State of Project:
Reporting: Level II Level III PST/UST TRR Level
Deliverables: EDD ADaPT Other:

SAMPLE RECEIPT				
Temp Blank:	Yes / No	Wet Ice:	Yes / No	
Samples Received Intact:	Yes / No	Thermometer ID:	TAMU07	
Cooler Custody Seals:	Yes / No / N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes / No / N/A	Temperature Reading:	-10.4	
Total Containers:		Corrected Temperature:	-10.2	

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	Pres. Code	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride	Sample Comments
BES24-168 0.5'	Soil	02.23.24	9:20	0.5	Com			X	X	X	
BES24-169 0.5'	Soil	02.23.24	9:25	0.5	Com			X	X	X	
BES24-170 0.5'	Soil	02.23.24	9:30	0.5	Com			X	X	X	
BES24-171 0.5'	Soil	02.23.24	9:35	0.5	Com			X	X	X	
BES24-172 0.5'	Soil	02.23.24	9:40	0.5	Com			X	X	X	
BES24-173 0.5'	Soil	02.23.24	9:45	0.5	Com			X	X	X	
BES24-174 0.5'	Soil	02.23.24	9:50	0.5	Com			X	X	X	
BES24-175 0.5'	Soil	02.23.24	9:55	0.5	Com			X	X	X	
BES24-176 0.5'	Soil	02.23.24	10:00	0.5	Com			X	X	X	
BES24-177 0.5'	Soil	02.23.24	10:05	0.5	Com			X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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Work Order No: Cost Center #: 1082151001,
Incident #: nAPP2318831816

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CC: CDixon@vertex.ca for Final Report

Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca and permian@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	Routine / Rush
Project Number:	23E-04616	Due Date:	3/5/24
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	L. Pullman		
PO #:			

Work Order Comments

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

SAMPLE RECEIPT

Temp Blank:	Yes / No	Wet Ice:	Yes / No
Samples Received Intact:	Yes / No	Thermometer ID:	Tnm007
Cooler Custody Seals:	Yes / No / N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes / No / N/A	Temperature Reading:	-10.4
Total Containers:		Corrected Temperature:	-10.2

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride	Sample Comments
BES24-178 0.5'	Soil	02.23.24	10:10	0.5	Com		X	X	X	
BES24-179 0.5'	Soil	02.23.24	10:15	0.5	Com		X	X	X	
BES24-180 0.5'	Soil	02.23.24	12:30	0.5	Com		X	X	X	
BES24-181 0.5'	Soil	02.23.24	12:35	0.5	Com		X	X	X	
BES24-182 0.5'	Soil	02.23.24	12:40	0.5	Com		X	X	X	
BES24-183 0.5'	Soil	02.23.24	12:45	0.5	Com		X	X	X	
BES24-184 0.5'	Soil	02.23.24	12:50	0.5	Com		X	X	X	
BES24-185 0.5'	Soil	02.23.24	12:55	0.5	Com		X	X	X	
BES24-186 0.5'	Soil	02.23.24	13:00	0.5	Com		X	X	X	
BES24-187 0.5'	Soil	02.23.24	13:05	0.5	Com		X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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Work Order No: Cost Center #: 1082151001,
Incident #: nAPP2318831816

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CC: CDixon@vertex.ca for Final Report

Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca and permian@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	Routine / Rush
Project Number:	23E-04616	Due Date	3/5/24
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	L. Pullman		
PO #:			

Work Order Comments

Program: UST/PST [ ] RRP [ ] Brownfields [ ] RR [ ] Superfund [ ]
State of Project:
Reporting: Level II [ ] Level III [ ] PST/UST [ ] TRR [ ] Level IV [ ]
Deliverables: EDD [ ] ADaPT [ ] Other:

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

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
BES24-188 0.5'	Soil	02.23.24	13:10	0.5	Com		X	X	X
BES24-189 0.5'	Soil	02.23.24	13:15	0.5	Com		X	X	X
BES24-190 0.5'	Soil	02.23.24	13:20	0.5	Com		X	X	X
BES24-191 0.5'	Soil	02.23.24	13:25	0.5	Com		X	X	X
BES24-192 0.5'	Soil	02.23.24	13:30	0.5	Com		X	X	X
WES24-15 0-0.5'	Soil	02.23.24	14:05	0-0.5	Com		X	X	X
WES24-16 0-0.5'	Soil	02.23.24	14:10	0-0.5	Com		X	X	X
WES24-17 0-0.5'	Soil	02.23.24	14:15	0-0.5	Com		X	X	X
WES24-18 0-0.5'	Soil	02.23.24	14:20	0-0.5	Com		X	X	X
WES24-19 0-0.5'	Soil	02.23.24	14:25	0-0.5	Com		X	X	X

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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3			4		
5			6		

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-6285-1
SDG Number: 23E - 04616

Login Number: 6285
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
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: 890-6285-1
SDG Number: 23E - 04616

Login Number: 6285
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 03/01/24 12:23 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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

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JOB DESCRIPTION

JRU DI 1A CTB
23E-04616

JOB NUMBER

890-6268-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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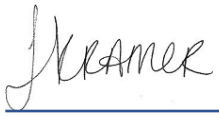
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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

Client: Vertex
Project/Site: JRU DI 1A CTB

Laboratory Job ID: 890-6268-1
SDG: 23E-04616

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Definitions/Glossary

Client: Vertex Job ID: 890-6268-1
Project/Site: JRU DI 1A CTB SDG: 23E-04616

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project: JRU DI 1A CTB

Job ID: 890-6268-1

Job ID: 890-6268-1 Eurofins Carlsbad

Job Narrative
890-6268-1

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 2/27/2024 4:41 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BES24-98 (890-6268-1), BES24-99 (890-6268-2), BES24-100 (890-6268-3), BES24-101 (890-6268-4), BES24-102 (890-6268-5), BES24-103 (890-6268-6), BES24-104 (890-6268-7), BES24-105 (890-6268-8), BES24-106 (890-6268-9), BES24-107 (890-6268-10), BES24-108 (890-6268-11), BES24-109 (890-6268-12), BES24-110 (890-6268-13), BES24-111 (890-6268-14), BES24-112 (890-6268-15), BES24-113 (890-6268-16), BES24-114 (890-6268-17), BES24-115 (890-6268-18), BES24-116 (890-6268-19), BES24-117 (890-6268-20), BES24-118 (890-6268-21), BES24-119 (890-6268-22), BES24-120 (890-6268-23), BES24-121 (890-6268-24), BES24-122 (890-6268-25), BES24-123 (890-6268-26), BES24-124 (890-6268-27) and BES24-130 (890-6268-28).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: BES24-108 (890-6268-11), BES24-117 (890-6268-20) and (890-6268-A-1-D MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-74453 recovered under the lower control limit for Benzene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-74453 recovered under the lower control limit for Benzene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-74452 and analytical batch 880-74453 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BES24-122 (890-6268-25). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BES24-120 (890-6268-23). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The method blank for preparation batch 880-74451, 880-74452 and 880-74472 and analytical batch 880-74453 contained Benzene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BES24-124 (890-6268-27).

Case Narrative

Client: Vertex Job ID: 890-6268-1
Project: JRU DI 1A CTB

Job ID: 890-6268-1 (Continued) Eurofins Carlsbad

Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BES24-105 (890-6268-8), BES24-106 (890-6268-9), BES24-111 (890-6268-14), BES24-112 (890-6268-15), BES24-113 (890-6268-16), BES24-114 (890-6268-17), BES24-115 (890-6268-18), BES24-116 (890-6268-19) and BES24-117 (890-6268-20). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-74303 and analytical batch 880-74487 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-98

Lab Sample ID: 890-6268-1
Matrix: Solid
Date Collected: 02/27/24 09:00
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 12:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 12:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 12:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/24 08:34	03/01/24 12:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 12:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/24 08:34	03/01/24 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*03/01/24 08:34*	*03/01/24 12:12*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/01/24 08:34*	*03/01/24 12:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/01/24 12:12	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			03/03/24 12:05	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/03/24 00:28	03/03/24 12:05	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/03/24 00:28	03/03/24 12:05	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/03/24 00:28	03/03/24 12:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/03/24 00:28*	*03/03/24 12:05*	*1*
o-Terphenyl	*105*		*70 - 130*	*03/03/24 00:28*	*03/03/24 12:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**228**	**F1**	4.97		mg/Kg			03/03/24 23:55	1

Client Sample ID: BES24-99

Lab Sample ID: 890-6268-2
Matrix: Solid
Date Collected: 02/27/24 09:00
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 12:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 12:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 12:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 12:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 12:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*03/01/24 08:34*	*03/01/24 12:33*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*03/01/24 08:34*	*03/01/24 12:33*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-99

Date Collected: 02/27/24 09:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/01/24 12:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/24 13:10	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/03/24 00:28	03/03/24 13:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/03/24 00:28	03/03/24 13:10	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/03/24 00:28	03/03/24 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*03/03/24 00:28*	*03/03/24 13:10*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/03/24 00:28*	*03/03/24 13:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**291**		4.98		mg/Kg			03/04/24 00:25	1

Client Sample ID: BES24-100

Date Collected: 02/27/24 09:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 12:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 12:53	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 12:53	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/01/24 08:34	03/01/24 12:53	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 12:53	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/01/24 08:34	03/01/24 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*03/01/24 08:34*	*03/01/24 12:53*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/01/24 08:34*	*03/01/24 12:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/01/24 12:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/03/24 13:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/03/24 00:28	03/03/24 13:32	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/03/24 00:28	03/03/24 13:32	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-100

Lab Sample ID: 890-6268-3
Matrix: Solid
Date Collected: 02/27/24 09:10
Date Received: 02/27/24 16:41

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/03/24 00:28	03/03/24 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*03/03/24 00:28*	*03/03/24 13:32*	*1*
o-Terphenyl	*88*		*70 - 130*	*03/03/24 00:28*	*03/03/24 13:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**273**		5.04		mg/Kg			03/04/24 00:35	1

Client Sample ID: BES24-101

Lab Sample ID: 890-6268-4
Matrix: Solid
Date Collected: 02/27/24 09:10
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 13:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 13:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 13:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 13:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 13:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/01/24 08:34*	*03/01/24 13:14*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*03/01/24 08:34*	*03/01/24 13:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/01/24 13:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/03/24 13:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/03/24 00:28	03/03/24 13:54	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/03/24 00:28	03/03/24 13:54	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/03/24 00:28	03/03/24 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/03/24 00:28*	*03/03/24 13:54*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/03/24 00:28*	*03/03/24 13:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**303**		5.01		mg/Kg			03/04/24 00:44	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-102

Lab Sample ID: 890-6268-5
Matrix: Solid
Date Collected: 02/27/24 09:20
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 13:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 13:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 13:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/01/24 08:34	03/01/24 13:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 13:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/01/24 08:34	03/01/24 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*03/01/24 08:34*	*03/01/24 13:34*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/01/24 08:34*	*03/01/24 13:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/01/24 13:34	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/03/24 14:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/03/24 00:28	03/03/24 14:16	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/03/24 00:28	03/03/24 14:16	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/03/24 00:28	03/03/24 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/03/24 00:28*	*03/03/24 14:16*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/03/24 00:28*	*03/03/24 14:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**216**		5.02		mg/Kg			03/04/24 00:54	1

Client Sample ID: BES24-103

Lab Sample ID: 890-6268-6
Matrix: Solid
Date Collected: 02/27/24 09:20
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 13:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 13:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 13:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/24 08:34	03/01/24 13:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 13:55	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/24 08:34	03/01/24 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/01/24 08:34*	*03/01/24 13:55*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*03/01/24 08:34*	*03/01/24 13:55*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-103

Lab Sample ID: 890-6268-6
Matrix: Solid
Date Collected: 02/27/24 09:20
Date Received: 02/27/24 16:41

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/01/24 13:55	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			03/03/24 14:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		03/03/24 00:28	03/03/24 14:38	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		03/03/24 00:28	03/03/24 14:38	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		03/03/24 00:28	03/03/24 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/03/24 00:28*	*03/03/24 14:38*	*1*
o-Terphenyl	*103*		*70 - 130*	*03/03/24 00:28*	*03/03/24 14:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**70.2**		5.02		mg/Kg			03/04/24 01:24	1

Client Sample ID: BES24-104

Lab Sample ID: 890-6268-7
Matrix: Solid
Date Collected: 02/27/24 09:30
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 14:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 14:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 14:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/01/24 08:34	03/01/24 14:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 14:15	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/01/24 08:34	03/01/24 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*03/01/24 08:34*	*03/01/24 14:15*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*03/01/24 08:34*	*03/01/24 14:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/01/24 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/03/24 15:00	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/03/24 00:28	03/03/24 15:00	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/03/24 00:28	03/03/24 15:00	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-104

Lab Sample ID: 890-6268-7
Matrix: Solid
Date Collected: 02/27/24 09:30
Date Received: 02/27/24 16:41

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/03/24 00:28	03/03/24 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*03/03/24 00:28*	*03/03/24 15:00*	*1*
o-Terphenyl	*83*		*70 - 130*	*03/03/24 00:28*	*03/03/24 15:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**147**		4.99		mg/Kg			03/04/24 01:34	1

Client Sample ID: BES24-105

Lab Sample ID: 890-6268-8
Matrix: Solid
Date Collected: 02/27/24 09:30
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 14:36	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 14:36	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 14:36	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 14:36	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 14:36	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*03/01/24 08:34*	*03/01/24 14:36*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*03/01/24 08:34*	*03/01/24 14:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/01/24 14:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/03/24 15:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/03/24 00:28	03/03/24 15:22	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/03/24 00:28	03/03/24 15:22	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/03/24 00:28	03/03/24 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*18*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 15:22*	*1*
o-Terphenyl	*13*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 15:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**104**		4.98		mg/Kg			03/04/24 01:44	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-106

Lab Sample ID: 890-6268-9
Matrix: Solid
Date Collected: 02/27/24 09:40
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 14:57	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 14:57	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 14:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 14:57	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 14:57	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/01/24 08:34*	*03/01/24 14:57*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*03/01/24 08:34*	*03/01/24 14:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/01/24 14:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/03/24 15:45	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/03/24 00:28	03/03/24 15:45	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/03/24 00:28	03/03/24 15:45	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/03/24 00:28	03/03/24 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*3*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 15:45*	*1*
o-Terphenyl	*0.3*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 15:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**249**		5.03		mg/Kg			03/04/24 01:54	1

Client Sample ID: BES24-107

Lab Sample ID: 890-6268-10
Matrix: Solid
Date Collected: 02/27/24 09:40
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 15:17	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 15:17	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 15:17	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/01/24 08:34	03/01/24 15:17	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 15:17	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/01/24 08:34	03/01/24 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*03/01/24 08:34*	*03/01/24 15:17*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/01/24 08:34*	*03/01/24 15:17*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-107

Lab Sample ID: 890-6268-10
Matrix: Solid
Date Collected: 02/27/24 09:40
Date Received: 02/27/24 16:41

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/01/24 15:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/24 16:07	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/03/24 00:28	03/03/24 16:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/03/24 00:28	03/03/24 16:07	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/03/24 00:28	03/03/24 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/03/24 00:28*	*03/03/24 16:07*	*1*
o-Terphenyl	*110*		*70 - 130*	*03/03/24 00:28*	*03/03/24 16:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**318**		4.96		mg/Kg			03/04/24 02:04	1

Client Sample ID: BES24-108

Lab Sample ID: 890-6268-11
Matrix: Solid
Date Collected: 02/27/24 09:50
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 16:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 16:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 16:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/01/24 08:34	03/01/24 16:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 16:41	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/01/24 08:34	03/01/24 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*03/01/24 08:34*	*03/01/24 16:41*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*03/01/24 08:34*	*03/01/24 16:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/01/24 16:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/24 16:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/03/24 00:28	03/03/24 16:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/03/24 00:28	03/03/24 16:50	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-108
Date Collected: 02/27/24 09:50
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-11
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/03/24 00:28	03/03/24 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*03/03/24 00:28*	*03/03/24 16:50*	*1*
o-Terphenyl	*94*		*70 - 130*	*03/03/24 00:28*	*03/03/24 16:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**281**		4.95		mg/Kg			03/04/24 02:14	1

Client Sample ID: BES24-109
Date Collected: 02/27/24 09:50
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 17:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 17:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 17:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/24 08:34	03/01/24 17:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 17:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/24 08:34	03/01/24 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*03/01/24 08:34*	*03/01/24 17:29*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/01/24 08:34*	*03/01/24 17:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/01/24 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/03/24 17:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/03/24 00:28	03/03/24 17:13	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/03/24 00:28	03/03/24 17:13	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/03/24 00:28	03/03/24 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*03/03/24 00:28*	*03/03/24 17:13*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/03/24 00:28*	*03/03/24 17:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**257**		4.98		mg/Kg			03/04/24 02:43	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-110

Lab Sample ID: 890-6268-13
Matrix: Solid
Date Collected: 02/27/24 10:00
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 17:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 17:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 17:50	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/01/24 08:34	03/01/24 17:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 17:50	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/01/24 08:34	03/01/24 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*03/01/24 08:34*	*03/01/24 17:50*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*03/01/24 08:34*	*03/01/24 17:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/01/24 17:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/24 17:35	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/03/24 00:28	03/03/24 17:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/03/24 00:28	03/03/24 17:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/03/24 00:28	03/03/24 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*03/03/24 00:28*	*03/03/24 17:35*	*1*
o-Terphenyl	*117*		*70 - 130*	*03/03/24 00:28*	*03/03/24 17:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**126**		5.01		mg/Kg			03/04/24 02:53	1

Client Sample ID: BES24-111

Lab Sample ID: 890-6268-14
Matrix: Solid
Date Collected: 02/27/24 10:00
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 18:10	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 18:10	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 18:10	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 18:10	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 18:10	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*03/01/24 08:34*	*03/01/24 18:10*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/01/24 08:34*	*03/01/24 18:10*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-111
Date Collected: 02/27/24 10:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-14
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/01/24 18:10	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/03/24 17:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/03/24 00:28	03/03/24 17:57	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/03/24 00:28	03/03/24 17:57	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/03/24 00:28	03/03/24 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*03/03/24 00:28*	*03/03/24 17:57*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 17:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**314**		4.99		mg/Kg			03/04/24 03:23	1

Client Sample ID: BES24-112
Date Collected: 02/27/24 10:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-15
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 18:31	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 18:31	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 18:31	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/01/24 08:34	03/01/24 18:31	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:34	03/01/24 18:31	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/01/24 08:34	03/01/24 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*03/01/24 08:34*	*03/01/24 18:31*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/01/24 08:34*	*03/01/24 18:31*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/01/24 18:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			03/03/24 18:19	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		03/03/24 00:28	03/03/24 18:19	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		03/03/24 00:28	03/03/24 18:19	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-112

Date Collected: 02/27/24 10:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-15
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		03/03/24 00:28	03/03/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*7*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 18:19*	*1*
o-Terphenyl	*0.4*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 18:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**387**		5.02		mg/Kg			03/04/24 03:33	1

Client Sample ID: BES24-113

Date Collected: 02/27/24 10:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-16
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:34	03/01/24 18:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:34	03/01/24 18:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:34	03/01/24 18:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/01/24 08:34	03/01/24 18:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:34	03/01/24 18:52	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/01/24 08:34	03/01/24 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*03/01/24 08:34*	*03/01/24 18:52*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/01/24 08:34*	*03/01/24 18:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/01/24 18:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			03/03/24 18:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		03/03/24 00:28	03/03/24 18:41	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		03/03/24 00:28	03/03/24 18:41	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		03/03/24 00:28	03/03/24 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*4*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 18:41*	*1*
o-Terphenyl	*0.5*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 18:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**425**		5.00		mg/Kg			03/04/24 03:43	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-114

Date Collected: 02/27/24 10:20
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-17
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 19:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 19:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 19:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/24 08:34	03/01/24 19:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 19:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/24 08:34	03/01/24 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*03/01/24 08:34*	*03/01/24 19:12*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/01/24 08:34*	*03/01/24 19:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/01/24 19:12	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			03/03/24 19:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		03/03/24 00:28	03/03/24 19:03	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		03/03/24 00:28	03/03/24 19:03	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		03/03/24 00:28	03/03/24 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*55*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 19:03*	*1*
o-Terphenyl	*53*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 19:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**156**		4.99		mg/Kg			03/04/24 03:53	1

Client Sample ID: BES24-115

Date Collected: 02/27/24 10:20
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-18
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:34	03/01/24 19:33	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:34	03/01/24 19:33	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:34	03/01/24 19:33	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/01/24 08:34	03/01/24 19:33	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:34	03/01/24 19:33	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/01/24 08:34	03/01/24 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*03/01/24 08:34*	*03/01/24 19:33*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*03/01/24 08:34*	*03/01/24 19:33*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-115

Date Collected: 02/27/24 10:20
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-18
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/01/24 19:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			03/03/24 19:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/03/24 00:28	03/03/24 19:26	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/03/24 00:28	03/03/24 19:26	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/03/24 00:28	03/03/24 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*3*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 19:26*	*1*
o-Terphenyl	*0.4*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 19:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**134**		5.03		mg/Kg			03/04/24 04:03	1

Client Sample ID: BES24-116

Date Collected: 02/27/24 10:30
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-19
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 19:53	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 19:53	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 19:53	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 19:53	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:34	03/01/24 19:53	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/01/24 08:34	03/01/24 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*03/01/24 08:34*	*03/01/24 19:53*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/01/24 08:34*	*03/01/24 19:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/01/24 19:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			03/03/24 19:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/03/24 00:28	03/03/24 19:48	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/03/24 00:28	03/03/24 19:48	1

Eurofins Carlsbad

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-116
Date Collected: 02/27/24 10:30
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-19
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/03/24 00:28	03/03/24 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*2*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 19:48*	*1*
o-Terphenyl	*0.4*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 19:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**385**		5.04		mg/Kg			03/04/24 04:12	1

Client Sample ID: BES24-117
Date Collected: 02/27/24 10:30
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-20
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 20:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 20:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 20:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/24 08:34	03/01/24 20:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:34	03/01/24 20:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/24 08:34	03/01/24 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*57*	*S1-*	*70 - 130*	*03/01/24 08:34*	*03/01/24 20:14*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/01/24 08:34*	*03/01/24 20:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/01/24 20:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5		mg/Kg			03/03/24 20:12	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5		mg/Kg		03/03/24 00:28	03/03/24 20:12	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		03/03/24 00:28	03/03/24 20:12	1
OII Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		03/03/24 00:28	03/03/24 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*8*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 20:12*	*1*
o-Terphenyl	*0.5*	*S1-*	*70 - 130*	*03/03/24 00:28*	*03/03/24 20:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**262**		5.04		mg/Kg			03/04/24 04:22	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-118

Date Collected: 02/27/24 10:40
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-21
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F2 F1	0.00199		mg/Kg		03/01/24 08:42	03/02/24 21:11	1
Toluene	<0.00199	U F2 F1	0.00199		mg/Kg		03/01/24 08:42	03/02/24 21:11	1
Ethylbenzene	<0.00199	U F2 F1	0.00199		mg/Kg		03/01/24 08:42	03/02/24 21:11	1
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.00398		mg/Kg		03/01/24 08:42	03/02/24 21:11	1
o-Xylene	<0.00199	U F2 F1	0.00199		mg/Kg		03/01/24 08:42	03/02/24 21:11	1
Xylenes, Total	<0.00398	U F2 F1	0.00398		mg/Kg		03/01/24 08:42	03/02/24 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*03/01/24 08:42*	*03/02/24 21:11*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*03/01/24 08:42*	*03/02/24 21:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/02/24 21:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/04/24 00:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/03/24 00:24	03/04/24 00:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/03/24 00:24	03/04/24 00:29	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/03/24 00:24	03/04/24 00:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*03/03/24 00:24*	*03/04/24 00:29*	*1*
o-Terphenyl	*101*		*70 - 130*	*03/03/24 00:24*	*03/04/24 00:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**125**		4.95		mg/Kg			03/03/24 15:54	1

Client Sample ID: BES24-119

Date Collected: 02/27/24 10:40
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-22
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:42	03/02/24 21:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:42	03/02/24 21:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:42	03/02/24 21:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/01/24 08:42	03/02/24 21:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:42	03/02/24 21:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/01/24 08:42	03/02/24 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*03/01/24 08:42*	*03/02/24 21:32*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*03/01/24 08:42*	*03/02/24 21:32*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-119
Date Collected: 02/27/24 10:40
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-22
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/02/24 21:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/04/24 00:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/04/24 00:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/04/24 00:50	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/04/24 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/03/24 00:24*	*03/04/24 00:50*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/03/24 00:24*	*03/04/24 00:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**129**		5.05		mg/Kg			03/03/24 16:00	1

Client Sample ID: BES24-120
Date Collected: 02/27/24 10:50
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-23
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:42	03/02/24 21:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:42	03/02/24 21:53	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:42	03/02/24 21:53	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/01/24 08:42	03/02/24 21:53	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/01/24 08:42	03/02/24 21:53	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/01/24 08:42	03/02/24 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*39*	*S1-*	*70 - 130*	*03/01/24 08:42*	*03/02/24 21:53*	*1*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*	*03/01/24 08:42*	*03/02/24 21:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/02/24 21:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/04/24 01:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/03/24 00:24	03/04/24 01:11	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/03/24 00:24	03/04/24 01:11	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-120

Lab Sample ID: 890-6268-23
Matrix: Solid
Date Collected: 02/27/24 10:50
Date Received: 02/27/24 16:41

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/03/24 00:24	03/04/24 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/03/24 00:24*	*03/04/24 01:11*	*1*
o-Terphenyl	*95*		*70 - 130*	*03/03/24 00:24*	*03/04/24 01:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**296**		4.98		mg/Kg			03/03/24 16:06	1

Client Sample ID: BES24-121

Lab Sample ID: 890-6268-24
Matrix: Solid
Date Collected: 02/27/24 10:50
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:42	03/02/24 22:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:42	03/02/24 22:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:42	03/02/24 22:13	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/01/24 08:42	03/02/24 22:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:42	03/02/24 22:13	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/01/24 08:42	03/02/24 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*03/01/24 08:42*	*03/02/24 22:13*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*03/01/24 08:42*	*03/02/24 22:13*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/02/24 22:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/04/24 01:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/03/24 00:24	03/04/24 01:32	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/03/24 00:24	03/04/24 01:32	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/03/24 00:24	03/04/24 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/03/24 00:24*	*03/04/24 01:32*	*1*
o-Terphenyl	*94*		*70 - 130*	*03/03/24 00:24*	*03/04/24 01:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**287**		5.03		mg/Kg			03/03/24 16:12	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-122

Date Collected: 02/27/24 11:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-25
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:42	03/02/24 22:34	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:42	03/02/24 22:34	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:42	03/02/24 22:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/24 08:42	03/02/24 22:34	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:42	03/02/24 22:34	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/24 08:42	03/02/24 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*03/01/24 08:42*	*03/02/24 22:34*	*1*
1,4-Difluorobenzene (Surr)	*74*		*70 - 130*	*03/01/24 08:42*	*03/02/24 22:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/02/24 22:34	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/04/24 01:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/03/24 00:24	03/04/24 01:53	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/03/24 00:24	03/04/24 01:53	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/03/24 00:24	03/04/24 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/03/24 00:24*	*03/04/24 01:53*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/03/24 00:24*	*03/04/24 01:53*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**144**		5.02		mg/Kg			03/03/24 16:29	1

Client Sample ID: BES24-123

Date Collected: 02/27/24 11:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-26
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:42	03/02/24 22:54	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:42	03/02/24 22:54	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:42	03/02/24 22:54	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/01/24 08:42	03/02/24 22:54	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/01/24 08:42	03/02/24 22:54	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/01/24 08:42	03/02/24 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*03/01/24 08:42*	*03/02/24 22:54*	*1*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*03/01/24 08:42*	*03/02/24 22:54*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-123

Lab Sample ID: 890-6268-26
Matrix: Solid
Date Collected: 02/27/24 11:00
Date Received: 02/27/24 16:41

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/02/24 22:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			03/04/24 02:34	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/03/24 00:24	03/04/24 02:34	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/03/24 00:24	03/04/24 02:34	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/03/24 00:24	03/04/24 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/03/24 00:24*	*03/04/24 02:34*	*1*
o-Terphenyl	*96*		*70 - 130*	*03/03/24 00:24*	*03/04/24 02:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**407**		5.01		mg/Kg			03/03/24 16:35	1

Client Sample ID: BES24-124

Lab Sample ID: 890-6268-27
Matrix: Solid
Date Collected: 02/27/24 11:10
Date Received: 02/27/24 16:41

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:42	03/02/24 23:15	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:42	03/02/24 23:15	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:42	03/02/24 23:15	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/01/24 08:42	03/02/24 23:15	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/01/24 08:42	03/02/24 23:15	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/01/24 08:42	03/02/24 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/01/24 08:42*	*03/02/24 23:15*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/01/24 08:42*	*03/02/24 23:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/02/24 23:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/04/24 02:55	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/03/24 00:24	03/04/24 02:55	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/03/24 00:24	03/04/24 02:55	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-124
Date Collected: 02/27/24 11:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-27
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/03/24 00:24	03/04/24 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*141*	*S1+*	*70 - 130*	*03/03/24 00:24*	*03/04/24 02:55*	*1*
o-Terphenyl	*120*		*70 - 130*	*03/03/24 00:24*	*03/04/24 02:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**90.5**		5.01		mg/Kg			03/03/24 16:41	1

Client Sample ID: BES24-130
Date Collected: 02/27/24 11:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-28
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:42	03/02/24 23:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:42	03/02/24 23:36	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:42	03/02/24 23:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/24 08:42	03/02/24 23:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/24 08:42	03/02/24 23:36	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/24 08:42	03/02/24 23:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/01/24 08:42*	*03/02/24 23:36*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*03/01/24 08:42*	*03/02/24 23:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/02/24 23:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/04/24 03:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/04/24 03:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/04/24 03:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/04/24 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*03/03/24 00:24*	*03/04/24 03:16*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/03/24 00:24*	*03/04/24 03:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**157**		5.05		mg/Kg			03/03/24 16:47	1

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-6268-1	BES24-98	83	101
890-6268-1 MS	BES24-98	57 S1-	116
890-6268-1 MSD	BES24-98	112	114
890-6268-2	BES24-99	92	85
890-6268-3	BES24-100	89	93
890-6268-4	BES24-101	100	84
890-6268-5	BES24-102	84	96
890-6268-6	BES24-103	98	81
890-6268-7	BES24-104	99	81
890-6268-8	BES24-105	86	91
890-6268-9	BES24-106	100	84
890-6268-10	BES24-107	81	93
890-6268-11	BES24-108	60 S1-	78
890-6268-12	BES24-109	84	90
890-6268-13	BES24-110	92	73
890-6268-14	BES24-111	84	93
890-6268-15	BES24-112	81	93
890-6268-16	BES24-113	82	92
890-6268-17	BES24-114	87	92
890-6268-18	BES24-115	85	86
890-6268-19	BES24-116	85	90
890-6268-20	BES24-117	57 S1-	97
890-6268-21	BES24-118	83	72
890-6268-21 MS	BES24-118	60 S1-	98
890-6268-21 MSD	BES24-118	105	95
890-6268-22	BES24-119	87	79
890-6268-23	BES24-120	39 S1-	122
890-6268-24	BES24-121	94	83
890-6268-25	BES24-122	94	74
890-6268-26	BES24-123	89	70
890-6268-27	BES24-124	98	90
890-6268-28	BES24-130	98	83
LCS 880-74451/1-A	Lab Control Sample	112	111
LCS 880-74452/1-A	Lab Control Sample	124	102
LCSD 880-74451/2-A	Lab Control Sample Dup	114	116
LCSD 880-74452/2-A	Lab Control Sample Dup	111	117
MB 880-74451/5-A	Method Blank	77	93
MB 880-74452/5-A	Method Blank	73	91
MB 880-74472/5-A	Method Blank	78	84

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-6268-1	BES24-98	101	105
890-6268-1 MS	BES24-98	129	122
890-6268-1 MSD	BES24-98	111	103
890-6268-2	BES24-99	94	98
890-6268-3	BES24-100	84	88
890-6268-4	BES24-101	93	98
890-6268-5	BES24-102	102	106
890-6268-6	BES24-103	99	103
890-6268-7	BES24-104	82	83
890-6268-8	BES24-105	18 S1-	13 S1-
890-6268-9	BES24-106	3 S1-	0.3 S1-
890-6268-10	BES24-107	102	110
890-6268-11	BES24-108	88	94
890-6268-12	BES24-109	107	107
890-6268-13	BES24-110	110	117
890-6268-14	BES24-111	72	69 S1-
890-6268-15	BES24-112	7 S1-	0.4 S1-
890-6268-16	BES24-113	4 S1-	0.5 S1-
890-6268-17	BES24-114	55 S1-	53 S1-
890-6268-18	BES24-115	3 S1-	0.4 S1-
890-6268-19	BES24-116	2 S1-	0.4 S1-
890-6268-20	BES24-117	8 S1-	0.5 S1-
890-6268-21	BES24-118	118	101
890-6268-22	BES24-119	112	97
890-6268-23	BES24-120	109	95
890-6268-24	BES24-121	106	94
890-6268-25	BES24-122	109	100
890-6268-26	BES24-123	112	96
890-6268-27	BES24-124	141 S1+	120
890-6268-28	BES24-130	123	107
890-6285-A-39-D MS	Matrix Spike	119	96
890-6285-A-39-E MSD	Matrix Spike Duplicate	118	97
LCS 880-74527/2-A	Lab Control Sample	83	71
LCS 880-74528/2-A	Lab Control Sample	91	91
LCSD 880-74527/3-A	Lab Control Sample Dup	97	84
LCSD 880-74528/3-A	Lab Control Sample Dup	84	88
MB 880-74527/1-A	Method Blank	107	97
MB 880-74528/1-A	Method Blank	110	123

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-74451/5-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74451

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 11:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 11:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 11:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/01/24 08:34	03/01/24 11:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 11:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/01/24 08:34	03/01/24 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*03/01/24 08:34*	*03/01/24 11:50*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/01/24 08:34*	*03/01/24 11:50*	*1*

Lab Sample ID: LCS 880-74451/1-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74451

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08946		mg/Kg		89	70 - 130		
Toluene			0.100	0.1015		mg/Kg		102	70 - 130		
Ethylbenzene			0.100	0.1101		mg/Kg		110	70 - 130		
m-Xylene & p-Xylene			0.200	0.2239		mg/Kg		112	70 - 130		
o-Xylene			0.100	0.1107		mg/Kg		111	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-74451/2-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74451

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09322		mg/Kg		93	70 - 130	4	35
Toluene			0.100	0.1060		mg/Kg		106	70 - 130	4	35
Ethylbenzene			0.100	0.1135		mg/Kg		113	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2350		mg/Kg		118	70 - 130	5	35
o-Xylene			0.100	0.1162		mg/Kg		116	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: 890-6268-1 MS
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: BES24-98
Prep Type: Total/NA
Prep Batch: 74451

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0996	0.08479		mg/Kg		84	70 - 130		
Toluene	<0.00199	U	0.0996	0.1077		mg/Kg		108	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

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

Lab Sample ID: 890-6268-1 MS
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: BES24-98
Prep Type: Total/NA
Prep Batch: 74451

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.09951		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1709		mg/Kg		85	70 - 130
o-Xylene	<0.00199	U	0.0996	0.08574		mg/Kg		86	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*57*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: 890-6268-1 MSD
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: BES24-98
Prep Type: Total/NA
Prep Batch: 74451

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.08474		mg/Kg		83	70 - 130	0	35
Toluene	<0.00199	U	0.101	0.1042		mg/Kg		103	70 - 130	3	35
Ethylbenzene	<0.00199	U	0.101	0.1158		mg/Kg		115	70 - 130	15	35
m-Xylene & p-Xylene	<0.00398	U	0.202	0.2320		mg/Kg		114	70 - 130	30	35
o-Xylene	<0.00199	U	0.101	0.1155		mg/Kg		114	70 - 130	30	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: MB 880-74452/5-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74452

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:42	03/02/24 20:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:42	03/02/24 20:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:42	03/02/24 20:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/01/24 08:42	03/02/24 20:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:42	03/02/24 20:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/01/24 08:42	03/02/24 20:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*03/01/24 08:42*	*03/02/24 20:50*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*03/01/24 08:42*	*03/02/24 20:50*	*1*

Lab Sample ID: LCS 880-74452/1-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74452

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09161		mg/Kg		92	70 - 130
Toluene	0.100	0.09911		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.1253		mg/Kg		125	70 - 130
m-Xylene & p-Xylene	0.200	0.2501		mg/Kg		125	70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

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

Lab Sample ID: LCS 880-74452/1-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74452

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1258		mg/Kg		126	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-74452/2-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74452

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08061		mg/Kg		81	70 - 130	13	35
Toluene			0.100	0.1001		mg/Kg		100	70 - 130	1	35
Ethylbenzene			0.100	0.1084		mg/Kg		108	70 - 130	14	35
m-Xylene & p-Xylene			0.200	0.2175		mg/Kg		109	70 - 130	14	35
o-Xylene			0.100	0.1087		mg/Kg		109	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*

Lab Sample ID: 890-6268-21 MS
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: BES24-118
Prep Type: Total/NA
Prep Batch: 74452

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F2 F1	0.101	0.02155	F1	mg/Kg		21	70 - 130		
Toluene	<0.00199	U F2 F1	0.101	0.02183	F1	mg/Kg		22	70 - 130		
Ethylbenzene	<0.00199	U F2 F1	0.101	0.01728	F1	mg/Kg		17	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.202	0.03325	F1	mg/Kg		16	70 - 130		
o-Xylene	<0.00199	U F2 F1	0.101	0.01964	F1	mg/Kg		19	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-6268-21 MSD
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: BES24-118
Prep Type: Total/NA
Prep Batch: 74452

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1	0.100	0.04052	F2 F1	mg/Kg		40	70 - 130	61	35
Toluene	<0.00199	U F2 F1	0.100	0.03602	F2 F1	mg/Kg		36	70 - 130	49	35
Ethylbenzene	<0.00199	U F2 F1	0.100	0.02814	F2 F1	mg/Kg		28	70 - 130	48	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.06163	F2 F1	mg/Kg		31	70 - 130	60	35
o-Xylene	<0.00199	U F2 F1	0.100	0.03380	F2 F1	mg/Kg		34	70 - 130	53	35

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

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

Lab Sample ID: 890-6268-21 MSD
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: BES24-118
Prep Type: Total/NA
Prep Batch: 74452

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: MB 880-74472/5-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74472

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:44	03/02/24 09:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:44	03/02/24 09:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:44	03/02/24 09:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/01/24 11:44	03/02/24 09:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:44	03/02/24 09:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/01/24 11:44	03/02/24 09:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	03/01/24 11:44	03/02/24 09:39	1
1,4-Difluorobenzene (Surr)	84		70 - 130	03/01/24 11:44	03/02/24 09:39	1

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

Lab Sample ID: MB 880-74527/1-A
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74527

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/03/24 20:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/03/24 20:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/03/24 00:24	03/03/24 20:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	03/03/24 00:24	03/03/24 20:56	1
o-Terphenyl	97		70 - 130	03/03/24 00:24	03/03/24 20:56	1

Lab Sample ID: LCS 880-74527/2-A
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74527

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	761.7		mg/Kg		76	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1023		mg/Kg		102	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	71		70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

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

Lab Sample ID: LCSD 880-74527/3-A
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74527

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	805.8		mg/Kg		81	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	1218		mg/Kg		122	70 - 130	17	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*84*		*70 - 130*

Lab Sample ID: 890-6285-A-39-D MS
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 74527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	906.2		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1062		mg/Kg		102	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*119*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: 890-6285-A-39-E MSD
Matrix: Solid
Analysis Batch: 74540

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 74527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	923.7		mg/Kg		88	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1070		mg/Kg		103	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: MB 880-74528/1-A
Matrix: Solid
Analysis Batch: 74542

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74528

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/03/24 00:28	03/03/24 09:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/03/24 00:28	03/03/24 09:34	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/03/24 00:28	03/03/24 09:34	1

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

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

Lab Sample ID: MB 880-74528/1-A
Matrix: Solid
Analysis Batch: 74542

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74528

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	03/03/24 00:28	03/03/24 09:34	1
o-Terphenyl	123		70 - 130	03/03/24 00:28	03/03/24 09:34	1

Lab Sample ID: LCS 880-74528/2-A
Matrix: Solid
Analysis Batch: 74542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74528

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	880.4		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1052		mg/Kg		105	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: LCSD 880-74528/3-A
Matrix: Solid
Analysis Batch: 74542

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74528

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	828.0		mg/Kg		83	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	1006		mg/Kg		101	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 890-6268-1 MS
Matrix: Solid
Analysis Batch: 74542

Client Sample ID: BES24-98
Prep Type: Total/NA
Prep Batch: 74528

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	1010	984.4		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.4	U	1010	1123		mg/Kg		108	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	129		70 - 130
o-Terphenyl	122		70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

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

Lab Sample ID: 890-6268-1 MSD
Matrix: Solid
Analysis Batch: 74542

Client Sample ID: BES24-98
Prep Type: Total/NA
Prep Batch: 74528

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	<50.4	U	1010	909.1		mg/Kg		86	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<50.4	U	1010	961.8		mg/Kg		92	70 - 130	15	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*111*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-74304/1-A
Matrix: Solid
Analysis Batch: 74485

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/03/24 15:19	1

Lab Sample ID: LCS 880-74304/2-A
Matrix: Solid
Analysis Batch: 74485

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	244.1		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-74304/3-A
Matrix: Solid
Analysis Batch: 74485

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	245.7		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 820-12250-A-1-B MS
Matrix: Solid
Analysis Batch: 74485

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	70.6		250	304.2		mg/Kg		94	90 - 110		

Lab Sample ID: 820-12250-A-1-C MSD
Matrix: Solid
Analysis Batch: 74485

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	70.6		250	306.2		mg/Kg		94	90 - 110	1	20

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-74303/1-A
Matrix: Solid
Analysis Batch: 74487

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/03/24 23:25	1

Lab Sample ID: LCS 880-74303/2-A
Matrix: Solid
Analysis Batch: 74487

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	256.8		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-74303/3-A
Matrix: Solid
Analysis Batch: 74487

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	259.9		mg/Kg		104	90 - 110	1	20

Lab Sample ID: 890-6268-1 MS
Matrix: Solid
Analysis Batch: 74487

Client Sample ID: BES24-98
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	228	F1	249	432.5	F1	mg/Kg		82	90 - 110		

Lab Sample ID: 890-6268-1 MSD
Matrix: Solid
Analysis Batch: 74487

Client Sample ID: BES24-98
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	228	F1	249	437.8	F1	mg/Kg		85	90 - 110	1	20

Lab Sample ID: 890-6268-11 MS
Matrix: Solid
Analysis Batch: 74487

Client Sample ID: BES24-108
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	281		248	533.7		mg/Kg		102	90 - 110		

Lab Sample ID: 890-6268-11 MSD
Matrix: Solid
Analysis Batch: 74487

Client Sample ID: BES24-108
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	281		248	531.9		mg/Kg		102	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

GC VOA

Prep Batch: 74451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-1	BES24-98	Total/NA	Solid	5035	
890-6268-2	BES24-99	Total/NA	Solid	5035	
890-6268-3	BES24-100	Total/NA	Solid	5035	
890-6268-4	BES24-101	Total/NA	Solid	5035	
890-6268-5	BES24-102	Total/NA	Solid	5035	
890-6268-6	BES24-103	Total/NA	Solid	5035	
890-6268-7	BES24-104	Total/NA	Solid	5035	
890-6268-8	BES24-105	Total/NA	Solid	5035	
890-6268-9	BES24-106	Total/NA	Solid	5035	
890-6268-10	BES24-107	Total/NA	Solid	5035	
890-6268-11	BES24-108	Total/NA	Solid	5035	
890-6268-12	BES24-109	Total/NA	Solid	5035	
890-6268-13	BES24-110	Total/NA	Solid	5035	
890-6268-14	BES24-111	Total/NA	Solid	5035	
890-6268-15	BES24-112	Total/NA	Solid	5035	
890-6268-16	BES24-113	Total/NA	Solid	5035	
890-6268-17	BES24-114	Total/NA	Solid	5035	
890-6268-18	BES24-115	Total/NA	Solid	5035	
890-6268-19	BES24-116	Total/NA	Solid	5035	
890-6268-20	BES24-117	Total/NA	Solid	5035	
MB 880-74451/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74451/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74451/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6268-1 MS	BES24-98	Total/NA	Solid	5035	
890-6268-1 MSD	BES24-98	Total/NA	Solid	5035	

Prep Batch: 74452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-21	BES24-118	Total/NA	Solid	5035	
890-6268-22	BES24-119	Total/NA	Solid	5035	
890-6268-23	BES24-120	Total/NA	Solid	5035	
890-6268-24	BES24-121	Total/NA	Solid	5035	
890-6268-25	BES24-122	Total/NA	Solid	5035	
890-6268-26	BES24-123	Total/NA	Solid	5035	
890-6268-27	BES24-124	Total/NA	Solid	5035	
890-6268-28	BES24-130	Total/NA	Solid	5035	
MB 880-74452/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74452/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74452/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6268-21 MS	BES24-118	Total/NA	Solid	5035	
890-6268-21 MSD	BES24-118	Total/NA	Solid	5035	

Analysis Batch: 74453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-1	BES24-98	Total/NA	Solid	8021B	74451
890-6268-2	BES24-99	Total/NA	Solid	8021B	74451
890-6268-3	BES24-100	Total/NA	Solid	8021B	74451
890-6268-4	BES24-101	Total/NA	Solid	8021B	74451
890-6268-5	BES24-102	Total/NA	Solid	8021B	74451
890-6268-6	BES24-103	Total/NA	Solid	8021B	74451
890-6268-7	BES24-104	Total/NA	Solid	8021B	74451

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

GC VOA (Continued)

Analysis Batch: 74453 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-8	BES24-105	Total/NA	Solid	8021B	74451
890-6268-9	BES24-106	Total/NA	Solid	8021B	74451
890-6268-10	BES24-107	Total/NA	Solid	8021B	74451
890-6268-11	BES24-108	Total/NA	Solid	8021B	74451
890-6268-12	BES24-109	Total/NA	Solid	8021B	74451
890-6268-13	BES24-110	Total/NA	Solid	8021B	74451
890-6268-14	BES24-111	Total/NA	Solid	8021B	74451
890-6268-15	BES24-112	Total/NA	Solid	8021B	74451
890-6268-16	BES24-113	Total/NA	Solid	8021B	74451
890-6268-17	BES24-114	Total/NA	Solid	8021B	74451
890-6268-18	BES24-115	Total/NA	Solid	8021B	74451
890-6268-19	BES24-116	Total/NA	Solid	8021B	74451
890-6268-20	BES24-117	Total/NA	Solid	8021B	74451
890-6268-21	BES24-118	Total/NA	Solid	8021B	74452
890-6268-22	BES24-119	Total/NA	Solid	8021B	74452
890-6268-23	BES24-120	Total/NA	Solid	8021B	74452
890-6268-24	BES24-121	Total/NA	Solid	8021B	74452
890-6268-25	BES24-122	Total/NA	Solid	8021B	74452
890-6268-26	BES24-123	Total/NA	Solid	8021B	74452
890-6268-27	BES24-124	Total/NA	Solid	8021B	74452
890-6268-28	BES24-130	Total/NA	Solid	8021B	74452
MB 880-74451/5-A	Method Blank	Total/NA	Solid	8021B	74451
MB 880-74452/5-A	Method Blank	Total/NA	Solid	8021B	74452
MB 880-74472/5-A	Method Blank	Total/NA	Solid	8021B	74472
LCS 880-74451/1-A	Lab Control Sample	Total/NA	Solid	8021B	74451
LCS 880-74452/1-A	Lab Control Sample	Total/NA	Solid	8021B	74452
LCSD 880-74451/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74451
LCSD 880-74452/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74452
890-6268-1 MS	BES24-98	Total/NA	Solid	8021B	74451
890-6268-1 MSD	BES24-98	Total/NA	Solid	8021B	74451
890-6268-21 MS	BES24-118	Total/NA	Solid	8021B	74452
890-6268-21 MSD	BES24-118	Total/NA	Solid	8021B	74452

Prep Batch: 74472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-74472/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 74716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-1	BES24-98	Total/NA	Solid	Total BTEX	
890-6268-2	BES24-99	Total/NA	Solid	Total BTEX	
890-6268-3	BES24-100	Total/NA	Solid	Total BTEX	
890-6268-4	BES24-101	Total/NA	Solid	Total BTEX	
890-6268-5	BES24-102	Total/NA	Solid	Total BTEX	
890-6268-6	BES24-103	Total/NA	Solid	Total BTEX	
890-6268-7	BES24-104	Total/NA	Solid	Total BTEX	
890-6268-8	BES24-105	Total/NA	Solid	Total BTEX	
890-6268-9	BES24-106	Total/NA	Solid	Total BTEX	
890-6268-10	BES24-107	Total/NA	Solid	Total BTEX	
890-6268-11	BES24-108	Total/NA	Solid	Total BTEX	
890-6268-12	BES24-109	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

GC VOA (Continued)

Analysis Batch: 74716 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-13	BES24-110	Total/NA	Solid	Total BTEX	
890-6268-14	BES24-111	Total/NA	Solid	Total BTEX	
890-6268-15	BES24-112	Total/NA	Solid	Total BTEX	
890-6268-16	BES24-113	Total/NA	Solid	Total BTEX	
890-6268-17	BES24-114	Total/NA	Solid	Total BTEX	
890-6268-18	BES24-115	Total/NA	Solid	Total BTEX	
890-6268-19	BES24-116	Total/NA	Solid	Total BTEX	
890-6268-20	BES24-117	Total/NA	Solid	Total BTEX	
890-6268-21	BES24-118	Total/NA	Solid	Total BTEX	
890-6268-22	BES24-119	Total/NA	Solid	Total BTEX	
890-6268-23	BES24-120	Total/NA	Solid	Total BTEX	
890-6268-24	BES24-121	Total/NA	Solid	Total BTEX	
890-6268-25	BES24-122	Total/NA	Solid	Total BTEX	
890-6268-26	BES24-123	Total/NA	Solid	Total BTEX	
890-6268-27	BES24-124	Total/NA	Solid	Total BTEX	
890-6268-28	BES24-130	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 74527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-21	BES24-118	Total/NA	Solid	8015NM Prep	
890-6268-22	BES24-119	Total/NA	Solid	8015NM Prep	
890-6268-23	BES24-120	Total/NA	Solid	8015NM Prep	
890-6268-24	BES24-121	Total/NA	Solid	8015NM Prep	
890-6268-25	BES24-122	Total/NA	Solid	8015NM Prep	
890-6268-26	BES24-123	Total/NA	Solid	8015NM Prep	
890-6268-27	BES24-124	Total/NA	Solid	8015NM Prep	
890-6268-28	BES24-130	Total/NA	Solid	8015NM Prep	
MB 880-74527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6285-A-39-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6285-A-39-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 74528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-1	BES24-98	Total/NA	Solid	8015NM Prep	
890-6268-2	BES24-99	Total/NA	Solid	8015NM Prep	
890-6268-3	BES24-100	Total/NA	Solid	8015NM Prep	
890-6268-4	BES24-101	Total/NA	Solid	8015NM Prep	
890-6268-5	BES24-102	Total/NA	Solid	8015NM Prep	
890-6268-6	BES24-103	Total/NA	Solid	8015NM Prep	
890-6268-7	BES24-104	Total/NA	Solid	8015NM Prep	
890-6268-8	BES24-105	Total/NA	Solid	8015NM Prep	
890-6268-9	BES24-106	Total/NA	Solid	8015NM Prep	
890-6268-10	BES24-107	Total/NA	Solid	8015NM Prep	
890-6268-11	BES24-108	Total/NA	Solid	8015NM Prep	
890-6268-12	BES24-109	Total/NA	Solid	8015NM Prep	
890-6268-13	BES24-110	Total/NA	Solid	8015NM Prep	
890-6268-14	BES24-111	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

GC Semi VOA (Continued)

Prep Batch: 74528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-15	BES24-112	Total/NA	Solid	8015NM Prep	
890-6268-16	BES24-113	Total/NA	Solid	8015NM Prep	
890-6268-17	BES24-114	Total/NA	Solid	8015NM Prep	
890-6268-18	BES24-115	Total/NA	Solid	8015NM Prep	
890-6268-19	BES24-116	Total/NA	Solid	8015NM Prep	
890-6268-20	BES24-117	Total/NA	Solid	8015NM Prep	
MB 880-74528/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74528/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74528/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6268-1 MS	BES24-98	Total/NA	Solid	8015NM Prep	
890-6268-1 MSD	BES24-98	Total/NA	Solid	8015NM Prep	

Analysis Batch: 74540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-21	BES24-118	Total/NA	Solid	8015B NM	74527
890-6268-22	BES24-119	Total/NA	Solid	8015B NM	74527
890-6268-23	BES24-120	Total/NA	Solid	8015B NM	74527
890-6268-24	BES24-121	Total/NA	Solid	8015B NM	74527
890-6268-25	BES24-122	Total/NA	Solid	8015B NM	74527
890-6268-26	BES24-123	Total/NA	Solid	8015B NM	74527
890-6268-27	BES24-124	Total/NA	Solid	8015B NM	74527
890-6268-28	BES24-130	Total/NA	Solid	8015B NM	74527
MB 880-74527/1-A	Method Blank	Total/NA	Solid	8015B NM	74527
LCS 880-74527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74527
LCSD 880-74527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74527
890-6285-A-39-D MS	Matrix Spike	Total/NA	Solid	8015B NM	74527
890-6285-A-39-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	74527

Analysis Batch: 74542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-1	BES24-98	Total/NA	Solid	8015B NM	74528
890-6268-2	BES24-99	Total/NA	Solid	8015B NM	74528
890-6268-3	BES24-100	Total/NA	Solid	8015B NM	74528
890-6268-4	BES24-101	Total/NA	Solid	8015B NM	74528
890-6268-5	BES24-102	Total/NA	Solid	8015B NM	74528
890-6268-6	BES24-103	Total/NA	Solid	8015B NM	74528
890-6268-7	BES24-104	Total/NA	Solid	8015B NM	74528
890-6268-8	BES24-105	Total/NA	Solid	8015B NM	74528
890-6268-9	BES24-106	Total/NA	Solid	8015B NM	74528
890-6268-10	BES24-107	Total/NA	Solid	8015B NM	74528
890-6268-11	BES24-108	Total/NA	Solid	8015B NM	74528
890-6268-12	BES24-109	Total/NA	Solid	8015B NM	74528
890-6268-13	BES24-110	Total/NA	Solid	8015B NM	74528
890-6268-14	BES24-111	Total/NA	Solid	8015B NM	74528
890-6268-15	BES24-112	Total/NA	Solid	8015B NM	74528
890-6268-16	BES24-113	Total/NA	Solid	8015B NM	74528
890-6268-17	BES24-114	Total/NA	Solid	8015B NM	74528
890-6268-18	BES24-115	Total/NA	Solid	8015B NM	74528
890-6268-19	BES24-116	Total/NA	Solid	8015B NM	74528
890-6268-20	BES24-117	Total/NA	Solid	8015B NM	74528
MB 880-74528/1-A	Method Blank	Total/NA	Solid	8015B NM	74528

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

GC Semi VOA (Continued)

Analysis Batch: 74542 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-74528/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74528
LCSD 880-74528/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74528
890-6268-1 MS	BES24-98	Total/NA	Solid	8015B NM	74528
890-6268-1 MSD	BES24-98	Total/NA	Solid	8015B NM	74528

Analysis Batch: 74682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-1	BES24-98	Total/NA	Solid	8015 NM	
890-6268-2	BES24-99	Total/NA	Solid	8015 NM	
890-6268-3	BES24-100	Total/NA	Solid	8015 NM	
890-6268-4	BES24-101	Total/NA	Solid	8015 NM	
890-6268-5	BES24-102	Total/NA	Solid	8015 NM	
890-6268-6	BES24-103	Total/NA	Solid	8015 NM	
890-6268-7	BES24-104	Total/NA	Solid	8015 NM	
890-6268-8	BES24-105	Total/NA	Solid	8015 NM	
890-6268-9	BES24-106	Total/NA	Solid	8015 NM	
890-6268-10	BES24-107	Total/NA	Solid	8015 NM	
890-6268-11	BES24-108	Total/NA	Solid	8015 NM	
890-6268-12	BES24-109	Total/NA	Solid	8015 NM	
890-6268-13	BES24-110	Total/NA	Solid	8015 NM	
890-6268-14	BES24-111	Total/NA	Solid	8015 NM	
890-6268-15	BES24-112	Total/NA	Solid	8015 NM	
890-6268-16	BES24-113	Total/NA	Solid	8015 NM	
890-6268-17	BES24-114	Total/NA	Solid	8015 NM	
890-6268-18	BES24-115	Total/NA	Solid	8015 NM	
890-6268-19	BES24-116	Total/NA	Solid	8015 NM	
890-6268-20	BES24-117	Total/NA	Solid	8015 NM	
890-6268-21	BES24-118	Total/NA	Solid	8015 NM	
890-6268-22	BES24-119	Total/NA	Solid	8015 NM	
890-6268-23	BES24-120	Total/NA	Solid	8015 NM	
890-6268-24	BES24-121	Total/NA	Solid	8015 NM	
890-6268-25	BES24-122	Total/NA	Solid	8015 NM	
890-6268-26	BES24-123	Total/NA	Solid	8015 NM	
890-6268-27	BES24-124	Total/NA	Solid	8015 NM	
890-6268-28	BES24-130	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 74303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-1	BES24-98	Soluble	Solid	DI Leach	
890-6268-2	BES24-99	Soluble	Solid	DI Leach	
890-6268-3	BES24-100	Soluble	Solid	DI Leach	
890-6268-4	BES24-101	Soluble	Solid	DI Leach	
890-6268-5	BES24-102	Soluble	Solid	DI Leach	
890-6268-6	BES24-103	Soluble	Solid	DI Leach	
890-6268-7	BES24-104	Soluble	Solid	DI Leach	
890-6268-8	BES24-105	Soluble	Solid	DI Leach	
890-6268-9	BES24-106	Soluble	Solid	DI Leach	
890-6268-10	BES24-107	Soluble	Solid	DI Leach	
890-6268-11	BES24-108	Soluble	Solid	DI Leach	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

HPLC/IC (Continued)

Leach Batch: 74303 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-12	BES24-109	Soluble	Solid	DI Leach	
890-6268-13	BES24-110	Soluble	Solid	DI Leach	
890-6268-14	BES24-111	Soluble	Solid	DI Leach	
890-6268-15	BES24-112	Soluble	Solid	DI Leach	
890-6268-16	BES24-113	Soluble	Solid	DI Leach	
890-6268-17	BES24-114	Soluble	Solid	DI Leach	
890-6268-18	BES24-115	Soluble	Solid	DI Leach	
890-6268-19	BES24-116	Soluble	Solid	DI Leach	
890-6268-20	BES24-117	Soluble	Solid	DI Leach	
MB 880-74303/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-74303/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-74303/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6268-1 MS	BES24-98	Soluble	Solid	DI Leach	
890-6268-1 MSD	BES24-98	Soluble	Solid	DI Leach	
890-6268-11 MS	BES24-108	Soluble	Solid	DI Leach	
890-6268-11 MSD	BES24-108	Soluble	Solid	DI Leach	

Leach Batch: 74304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-21	BES24-118	Soluble	Solid	DI Leach	
890-6268-22	BES24-119	Soluble	Solid	DI Leach	
890-6268-23	BES24-120	Soluble	Solid	DI Leach	
890-6268-24	BES24-121	Soluble	Solid	DI Leach	
890-6268-25	BES24-122	Soluble	Solid	DI Leach	
890-6268-26	BES24-123	Soluble	Solid	DI Leach	
890-6268-27	BES24-124	Soluble	Solid	DI Leach	
890-6268-28	BES24-130	Soluble	Solid	DI Leach	
MB 880-74304/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-74304/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-74304/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-12250-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
820-12250-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 74485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-21	BES24-118	Soluble	Solid	300.0	74304
890-6268-22	BES24-119	Soluble	Solid	300.0	74304
890-6268-23	BES24-120	Soluble	Solid	300.0	74304
890-6268-24	BES24-121	Soluble	Solid	300.0	74304
890-6268-25	BES24-122	Soluble	Solid	300.0	74304
890-6268-26	BES24-123	Soluble	Solid	300.0	74304
890-6268-27	BES24-124	Soluble	Solid	300.0	74304
890-6268-28	BES24-130	Soluble	Solid	300.0	74304
MB 880-74304/1-A	Method Blank	Soluble	Solid	300.0	74304
LCS 880-74304/2-A	Lab Control Sample	Soluble	Solid	300.0	74304
LCSD 880-74304/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74304
820-12250-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	74304
820-12250-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	74304

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

HPLC/IC

Analysis Batch: 74487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6268-1	BES24-98	Soluble	Solid	300.0	74303
890-6268-2	BES24-99	Soluble	Solid	300.0	74303
890-6268-3	BES24-100	Soluble	Solid	300.0	74303
890-6268-4	BES24-101	Soluble	Solid	300.0	74303
890-6268-5	BES24-102	Soluble	Solid	300.0	74303
890-6268-6	BES24-103	Soluble	Solid	300.0	74303
890-6268-7	BES24-104	Soluble	Solid	300.0	74303
890-6268-8	BES24-105	Soluble	Solid	300.0	74303
890-6268-9	BES24-106	Soluble	Solid	300.0	74303
890-6268-10	BES24-107	Soluble	Solid	300.0	74303
890-6268-11	BES24-108	Soluble	Solid	300.0	74303
890-6268-12	BES24-109	Soluble	Solid	300.0	74303
890-6268-13	BES24-110	Soluble	Solid	300.0	74303
890-6268-14	BES24-111	Soluble	Solid	300.0	74303
890-6268-15	BES24-112	Soluble	Solid	300.0	74303
890-6268-16	BES24-113	Soluble	Solid	300.0	74303
890-6268-17	BES24-114	Soluble	Solid	300.0	74303
890-6268-18	BES24-115	Soluble	Solid	300.0	74303
890-6268-19	BES24-116	Soluble	Solid	300.0	74303
890-6268-20	BES24-117	Soluble	Solid	300.0	74303
MB 880-74303/1-A	Method Blank	Soluble	Solid	300.0	74303
LCS 880-74303/2-A	Lab Control Sample	Soluble	Solid	300.0	74303
LCSD 880-74303/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74303
890-6268-1 MS	BES24-98	Soluble	Solid	300.0	74303
890-6268-1 MSD	BES24-98	Soluble	Solid	300.0	74303
890-6268-11 MS	BES24-108	Soluble	Solid	300.0	74303
890-6268-11 MSD	BES24-108	Soluble	Solid	300.0	74303

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-98
Date Collected: 02/27/24 09:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 12:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 12:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 12:05	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 12:05	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/03/24 23:55	CH	EET MID

Client Sample ID: BES24-99
Date Collected: 02/27/24 09:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 12:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 12:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 13:10	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 00:25	CH	EET MID

Client Sample ID: BES24-100
Date Collected: 02/27/24 09:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 12:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 12:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 13:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 13:32	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 00:35	CH	EET MID

Client Sample ID: BES24-101
Date Collected: 02/27/24 09:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 13:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 13:14	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-101
Date Collected: 02/27/24 09:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74682	03/03/24 13:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 13:54	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 00:44	CH	EET MID

Client Sample ID: BES24-102
Date Collected: 02/27/24 09:20
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 13:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 13:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 14:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 14:16	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 00:54	CH	EET MID

Client Sample ID: BES24-103
Date Collected: 02/27/24 09:20
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 13:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 13:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 14:38	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 14:38	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 01:24	CH	EET MID

Client Sample ID: BES24-104
Date Collected: 02/27/24 09:30
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 14:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 14:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 15:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 15:00	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-104
Date Collected: 02/27/24 09:30
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 01:34	CH	EET MID

Client Sample ID: BES24-105
Date Collected: 02/27/24 09:30
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 14:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 14:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 15:22	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 15:22	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 01:44	CH	EET MID

Client Sample ID: BES24-106
Date Collected: 02/27/24 09:40
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 14:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 14:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 15:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 15:45	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 01:54	CH	EET MID

Client Sample ID: BES24-107
Date Collected: 02/27/24 09:40
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 15:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 15:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 16:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 16:07	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 02:04	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-108
Date Collected: 02/27/24 09:50
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 16:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 16:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 16:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 16:50	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 02:14	CH	EET MID

Client Sample ID: BES24-109
Date Collected: 02/27/24 09:50
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 17:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 17:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 17:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 17:13	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 02:43	CH	EET MID

Client Sample ID: BES24-110
Date Collected: 02/27/24 10:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 17:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 17:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 17:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 17:35	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 02:53	CH	EET MID

Client Sample ID: BES24-111
Date Collected: 02/27/24 10:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 18:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 18:10	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-111
Date Collected: 02/27/24 10:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74682	03/03/24 17:57	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 17:57	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 03:23	CH	EET MID

Client Sample ID: BES24-112
Date Collected: 02/27/24 10:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 18:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 18:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 18:19	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 18:19	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 03:33	CH	EET MID

Client Sample ID: BES24-113
Date Collected: 02/27/24 10:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 18:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 18:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 18:41	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 18:41	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 03:43	CH	EET MID

Client Sample ID: BES24-114
Date Collected: 02/27/24 10:20
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 19:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 19:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 19:03	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 19:03	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-114
Date Collected: 02/27/24 10:20
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 03:53	CH	EET MID

Client Sample ID: BES24-115
Date Collected: 02/27/24 10:20
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 19:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 19:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 19:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 19:26	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 04:03	CH	EET MID

Client Sample ID: BES24-116
Date Collected: 02/27/24 10:30
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 19:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 19:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 19:48	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 19:48	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 04:12	CH	EET MID

Client Sample ID: BES24-117
Date Collected: 02/27/24 10:30
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74451	03/01/24 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 20:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/01/24 20:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/03/24 20:12	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	74528	03/03/24 00:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 20:12	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74303	02/29/24 11:05	SMC	EET MID
Soluble	Analysis	300.0		1			74487	03/04/24 04:22	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-118
Date Collected: 02/27/24 10:40
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74452	03/01/24 08:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 21:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/02/24 21:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/04/24 00:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 00:29	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	74304	02/29/24 11:10	SMC	EET MID
Soluble	Analysis	300.0		1			74485	03/03/24 15:54	CH	EET MID

Client Sample ID: BES24-119
Date Collected: 02/27/24 10:40
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74452	03/01/24 08:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 21:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/02/24 21:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/04/24 00:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 00:50	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	74304	02/29/24 11:10	SMC	EET MID
Soluble	Analysis	300.0		1			74485	03/03/24 16:00	CH	EET MID

Client Sample ID: BES24-120
Date Collected: 02/27/24 10:50
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	74452	03/01/24 08:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 21:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/02/24 21:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/04/24 01:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 01:11	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74304	02/29/24 11:10	SMC	EET MID
Soluble	Analysis	300.0		1			74485	03/03/24 16:06	CH	EET MID

Client Sample ID: BES24-121
Date Collected: 02/27/24 10:50
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	74452	03/01/24 08:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 22:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/02/24 22:13	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-121
Date Collected: 02/27/24 10:50
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74682	03/04/24 01:32	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 01:32	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74304	02/29/24 11:10	SMC	EET MID
Soluble	Analysis	300.0		1			74485	03/03/24 16:12	CH	EET MID

Client Sample ID: BES24-122
Date Collected: 02/27/24 11:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74452	03/01/24 08:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 22:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/02/24 22:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/04/24 01:53	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 01:53	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74304	02/29/24 11:10	SMC	EET MID
Soluble	Analysis	300.0		1			74485	03/03/24 16:29	CH	EET MID

Client Sample ID: BES24-123
Date Collected: 02/27/24 11:00
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	74452	03/01/24 08:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 22:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/02/24 22:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/04/24 02:34	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 02:34	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74304	02/29/24 11:10	SMC	EET MID
Soluble	Analysis	300.0		1			74485	03/03/24 16:35	CH	EET MID

Client Sample ID: BES24-124
Date Collected: 02/27/24 11:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74452	03/01/24 08:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 23:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/02/24 23:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/04/24 02:55	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 02:55	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Client Sample ID: BES24-124
Date Collected: 02/27/24 11:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	74304	02/29/24 11:10	SMC	EET MID
Soluble	Analysis	300.0		1			74485	03/03/24 16:41	CH	EET MID

Client Sample ID: BES24-130
Date Collected: 02/27/24 11:10
Date Received: 02/27/24 16:41

Lab Sample ID: 890-6268-28
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74452	03/01/24 08:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 23:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74716	03/02/24 23:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			74682	03/04/24 03:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 03:16	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	74304	02/29/24 11:10	SMC	EET MID
Soluble	Analysis	300.0		1			74485	03/03/24 16:47	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6268-1
SDG: 23E-04616

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6268-1	BES24-98	Solid	02/27/24 09:00	02/27/24 16:41
890-6268-2	BES24-99	Solid	02/27/24 09:00	02/27/24 16:41
890-6268-3	BES24-100	Solid	02/27/24 09:10	02/27/24 16:41
890-6268-4	BES24-101	Solid	02/27/24 09:10	02/27/24 16:41
890-6268-5	BES24-102	Solid	02/27/24 09:20	02/27/24 16:41
890-6268-6	BES24-103	Solid	02/27/24 09:20	02/27/24 16:41
890-6268-7	BES24-104	Solid	02/27/24 09:30	02/27/24 16:41
890-6268-8	BES24-105	Solid	02/27/24 09:30	02/27/24 16:41
890-6268-9	BES24-106	Solid	02/27/24 09:40	02/27/24 16:41
890-6268-10	BES24-107	Solid	02/27/24 09:40	02/27/24 16:41
890-6268-11	BES24-108	Solid	02/27/24 09:50	02/27/24 16:41
890-6268-12	BES24-109	Solid	02/27/24 09:50	02/27/24 16:41
890-6268-13	BES24-110	Solid	02/27/24 10:00	02/27/24 16:41
890-6268-14	BES24-111	Solid	02/27/24 10:00	02/27/24 16:41
890-6268-15	BES24-112	Solid	02/27/24 10:10	02/27/24 16:41
890-6268-16	BES24-113	Solid	02/27/24 10:10	02/27/24 16:41
890-6268-17	BES24-114	Solid	02/27/24 10:20	02/27/24 16:41
890-6268-18	BES24-115	Solid	02/27/24 10:20	02/27/24 16:41
890-6268-19	BES24-116	Solid	02/27/24 10:30	02/27/24 16:41
890-6268-20	BES24-117	Solid	02/27/24 10:30	02/27/24 16:41
890-6268-21	BES24-118	Solid	02/27/24 10:40	02/27/24 16:41
890-6268-22	BES24-119	Solid	02/27/24 10:40	02/27/24 16:41
890-6268-23	BES24-120	Solid	02/27/24 10:50	02/27/24 16:41
890-6268-24	BES24-121	Solid	02/27/24 10:50	02/27/24 16:41
890-6268-25	BES24-122	Solid	02/27/24 11:00	02/27/24 16:41
890-6268-26	BES24-123	Solid	02/27/24 11:00	02/27/24 16:41
890-6268-27	BES24-124	Solid	02/27/24 11:10	02/27/24 16:41
890-6268-28	BES24-130	Solid	02/27/24 11:10	02/27/24 16:41

Released to Imaging: 5/15/2024 11:16:38 AM
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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

www.xenco.com Page 1 of 3

Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca and permian@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	Routine / Rush
Project Number:	23E-04616	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	D. Costafilho		
PO #:			

Work Order Comments

Program: UST/PST PRP Brownfields RR Superfund

State of Project:

Reporting: Level II Level III PST/UST TRRP Level IV

Deliverables: EDD ADaPT Other:

SAMPLE RECEIPT	Temp Blank: Yes No	Wet Ice: Yes No
Samples Received Intact:	Yes No	Thermometer ID: TNM07
Cooler Custody Seals:	Yes No N/A	Correction Factor: 0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading: 1.6
Total Containers:		Corrected Temperature: 1.4

ANALYSIS REQUEST

Preservative Codes

None: NO, DI Water: H_2O, Cool: Cool, MeOH: Me, HCL: HC, HNO_3: HN, H_2SO_4: H_2S, NaOH: Na, H_3PO_4: HP, $NaHSO_4$: NABIS, Na_2SO_3: NaSO3, Zinc Acetate+NaOH: Zn, Ascorbic Acid: SAPC

890-6268 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	Pres. Code	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride	Sample Comments
BES24-98 1.0'	Soil	02.27.24	09:00	1	Com			X	X	X	
BES24-99 1.0'	Soil	02.27.24	09:00	1	Com			X	X	X	
BES24-100 1.0'	Soil	02.27.24	09:10	1	Com			X	X	X	
BES24-101 1.0'	Soil	02.27.24	09:10	1	Com			X	X	X	
BES24-102 1.0'	Soil	02.27.24	09:20	1	Com			X	X	X	
BES24-103 1.0'	Soil	02.27.24	09:20	1	Com			X	X	X	
BES24-104 1.0'	Soil	02.27.24	09:30	1	Com			X	X	X	
BES24-105 1.0'	Soil	02.27.24	09:30	1	Com			X	X	X	
BES24-106 1.0'	Soil	02.27.24	09:40	1	Com			X	X	X	
BES24-107 1.0'	Soil	02.27.24	09:40	1	Com			X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			2-27-24 4:45	2		
3				4		
5				6		

Revised Date 08/25/2020 Rev. 2020.2

Released to Imaging: 5/15/2024 11:16:38 AM
Received by OCD: 4/27/2024 12:00:15 AM

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio TX (210) 509-3334
EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

CC: CDixon@vertex.ca for Final Report

Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

www.xenco.com Page 2 of 3

Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca and permian@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	Routine Rush
Project Number:	23E-04616	Due Date:	
Project Location:		TAT starts the day received by the lab if received by 4:30pm	
Sampler's Name:	D. Costafilho		
PO #:			

Work Order Comments

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

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

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: NaSO3
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	Parameters: BTEX (8021)	TPH:8015D(GRO/ DRO / MRO)	Chloride	Sample Comments
BES24-108 1.0'	Soil	02.27.24	09:50	1	Com		X	X	X	
BES24-109 1.0'	Soil	02.27.24	09:50	1	Com		X	X	X	
BES24-110 1.0'	Soil	02.27.24	10:00	1	Com		X	X	X	
BES24-111 1.0'	Soil	02.27.24	10:00	1	Com		X	X	X	
BES24-112 1.0'	Soil	02.27.24	10:10	1	Com		X	X	X	
BES24-113 1.0'	Soil	02.27.24	10:10	1	Com		X	X	X	
BES24-114 1.0'	Soil	02.27.24	10:20	1	Com		X	X	X	
BES24-115 1.0'	Soil	02.27.24	10:20	1	Com		X	X	X	
BES24-116 1.0'	Soil	02.27.24	10:30	1	Com		X	X	X	
BES24-117 1.0'	Soil	02.27.24	10:30	1	Com		X	X	X	

ANALYSIS REQUEST

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		2-27-24 4:45	2		
3			4		
5			6		

Released to Imaging: 5/15/2024 11:16:38 AM
Received by OCD: 4/27/2024 12:00:15 AM

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Chain of Custody

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EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

CC: CDixon@vertex.ca for Final Report

Work Order No: Cost Center #: 1082151001,
Incident #: nAPP2318831816

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Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca and permian@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	Routine Rush
Project Number:	23E-04616	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	D. Costafilho		
PO #:			

Work Order Comments

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

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

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: NaSO3; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride	Sample Comments
BES24-118 1.0'	Soil	02.27.24	10:40	1	Com		X	X	X	
BES24-119 1.0'	Soil	02.27.24	10:40	1	Com		X	X	X	
BES24-120 1.0'	Soil	02.27.24	10:50	1	Com		X	X	X	
BES24-121 1.0'	Soil	02.27.24	10:50	1	Com		X	X	X	
BES24-122 1.0'	Soil	02.27.24	11:00	1	Com		X	X	X	
BES24-123 1.0'	Soil	02.27.24	11:00	1	Com		X	X	X	
BES24-124 1.0'	Soil	02.27.24	11:10	1	Com		X	X	X	
BES24-130 1.0'	Soil	02.27.24	11:10	1	Com		X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		2-27-24 4:45	2		
3			4		
5			6		

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-6268-1
SDG Number: 23E-04616

Login Number: 6268
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
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: 890-6268-1
SDG Number: 23E-04616

Login Number: 6268
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 03/01/24 08:03 AM

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").	N/A	

CARDINAL Laboratories

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

March 05, 2024

CHANCE DIXON

VERTEX RESOURCE GROUP

420 SOUTH MAIN, SUITE 202

TULSA, OK 74103

RE: JRU DI 1A CTB

Enclosed are the results of analyses for samples received by the laboratory on 02/29/24 14:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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 accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 125 1' (H241015-01)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	QR-03
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	QR-03
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	QR-03
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *108 %* *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	**208**	16.0	03/01/2024	ND	416	104	400	3.77	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *113 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *118 %* *49.1-148*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 126 1' (H241015-02)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	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	**224**	16.0	03/01/2024	ND	416	104	400	3.77	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *125 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *130 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 127 1' (H241015-03)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.5 %* *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	**256**	16.0	03/01/2024	ND	416	104	400	3.77	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *113 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *117 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 128 1' (H241015-04)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	**192**	16.0	03/01/2024	ND	416	104	400	3.77	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *107 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *109 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 129 1' (H241015-05)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**176**	16.0	03/01/2024	ND	416	104	400	3.77	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *112 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *117 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 131 1' (H241015-06)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	**336**	16.0	03/01/2024	ND	416	104	400	3.77	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *106 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *109 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 132 1' (H241015-07)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	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	**320**	16.0	03/01/2024	ND	416	104	400	3.77	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *112 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *114 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 133 1' (H241015-08)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**272**	16.0	03/01/2024	ND	416	104	400	3.77	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *113 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *116 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 134 1' (H241015-09)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *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	**288**	16.0	03/01/2024	ND	416	104	400	3.77	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *112 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *113 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 135 1' (H241015-10)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	**288**	16.0	03/01/2024	ND	416	104	400	3.77	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *101 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *102 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 136 1' (H241015-11)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *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	**112**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *108 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *114 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 137 1' (H241015-12)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	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	**80.0**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *113 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *117 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 138 1' (H241015-13)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	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	**80.0**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *112 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *114 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 139 1' (H241015-14)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *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	**256**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *118 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *121 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 140 1' (H241015-15)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	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	**272**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *110 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *115 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 141 1' (H241015-16)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	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	**272**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *109 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *116 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 142 1' (H241015-17)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *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	**288**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *111 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *114 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 143 1' (H241015-18)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *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	**256**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *110 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *112 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 144 1' (H241015-19)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.6 %* *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	**240**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *103 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *105 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 145 1' (H241015-20)

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	03/01/2024	ND	2.13	106	2.00	2.63	
Toluene*	<0.050	0.050	03/01/2024	ND	2.18	109	2.00	2.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.28	114	2.00	3.36	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.76	113	6.00	3.36	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *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	**256**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	214	107	200	4.43	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	205	103	200	7.86	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *107 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *109 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 146 1' (H241015-21)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	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	**208**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *109 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *102 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 147 1' (H241015-22)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**240**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *113 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *106 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 148 1' (H241015-23)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	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	**384**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *120 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *112 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 149 1' (H241015-24)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**192**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *117 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *115 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 150 1' (H241015-25)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**224**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *114 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *109 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 151 1' (H241015-26)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	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	**176**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *119 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *117 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 152 1' (H241015-27)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	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	**160**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *114 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *112 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 153 1' (H241015-28)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**384**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *117 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *114 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 154 1' (H241015-29)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**336**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *117 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 155 1' (H241015-30)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	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	**64.0**	16.0	03/04/2024	ND	432	108	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *125 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *122 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 156 1' (H241015-31)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	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	**64.0**	16.0	03/04/2024	ND	464	116	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *107 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *104 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 157 1' (H241015-32)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	03/04/2024	ND	464	116	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *107 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *106 %* *49.1-148*

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 158 1' (H241015-33)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	**96.0**	16.0	03/04/2024	ND	464	116	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *104 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *102 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 40 2.5' (H241015-34)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	**48.0**	16.0	03/04/2024	ND	464	116	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *110 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *106 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 38 2.5' (H241015-35)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	**336**	16.0	03/04/2024	ND	464	116	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *115 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *112 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	02/29/2024	Sampling Date:	02/28/2024
Reported:	03/05/2024	Sampling Type:	Soil
Project Name:	JRU DI 1A CTB	Sampling Condition:	Cool & Intact
Project Number:	23E-04616	Sample Received By:	Dionica Hinojos
Project Location:	XTO		

Sample ID: BES 24 - 28 1.5' (H241015-36)

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	03/04/2024	ND	2.12	106	2.00	6.39	
Toluene*	<0.050	0.050	03/04/2024	ND	2.10	105	2.00	6.19	
Ethylbenzene*	<0.050	0.050	03/04/2024	ND	2.05	103	2.00	6.26	
Total Xylenes*	<0.150	0.150	03/04/2024	ND	6.21	103	6.00	5.30	
Total BTEX	<0.300	0.300	03/04/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	03/04/2024	ND	464	116	400	0.00	

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	03/01/2024	ND	186	92.9	200	0.679	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	175	87.5	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane *109 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *106 %* *49.1-148*

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Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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

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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource Services (Direct Bill to XTO Energy, Inc.)		BILL TO	
Project Manager: Chance Dixon		P.O. #:	
Address: 3101 Boyd Drive		Company: XTO Energy, Inc.	
City: Carlsbad	State: NM Zip:	Attn: Amy Ruth	
Phone #: 575.725.5001	Fax #:	Address: 3104 E. Greene St	
Project #: 23E-04616	Project Owner: Amy Ruth	City: Carlsbad	
Project Name: JRU DI 1A CTB		State: NM Zip: 88220	
Project Location:		Phone #: 432-661-0571	
Sampler Name: D. Costafilho		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE/COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
H241015																	
1	BES24-125 1'	C	1			X							02.28.24	9:00	X	X	X
2	BES24-126 1'	C	1			X							02.28.24	9:00	X	X	X
3	BES24-127 1'	C	1			X							02.28.24	9:10	X	X	X
4	BES24-128 1'	C	1			X							02.28.24	9:10	X	X	X
5	BES24-129 1'	C	1			X							02.28.24	9:20	X	X	X
6	BES24-131 1'	C	1			X							02.28.24	9:20	X	X	X
7	BES24-132 1'	C	1			X							02.28.24	9:30	X	X	X
8	BES24-133 1'	C	1			X							02.28.24	9:30	X	X	X
9	BES24-134 1'	C	1			X							02.28.24	9:40	X	X	X
10	BES24-135 1'	C	1			X							02.28.24	9:40	X	X	X

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Relinquished By:	Date: 2129/24 Time: 14:30	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: Chance Dixon (CDixon@vertex.ca), Amy Ruth (Amy.Ruth@exxonmobil.com)
Relinquished By:	Date: Time:	Received By:	REMARKS: Direct Bill to XTO Energy, Inc., Cost Center #: 1082151001, Incident #: nAPP2318831816 CC. Chance Dixon (CDixon@vertex.ca) for Final Report.

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.8 Corrected Temp. °C #1140	Sample Condition Cool Intact ☑ Yes ☑ Yes ☐ No ☐ No	CHECKED BY: (Initials) OH	Turnaround Time: Standard ☐ Bacteria (only) Sample Condition Rush ☐ Cool Intact Observed Temp. °C Thermometer ID #113 Correction Factor -0.5°C 0129/24 ☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource Services (Direct Bill to XTO Energy, Inc.)		BILL TO	
Project Manager: Chance Dixon		P.O. #:	
Address: 3101 Boyd Drive		Company: XTO Energy, Inc.	
City: Carlsbad	State: NM Zip:	Attn: Amy Ruth	
Phone #: 575.725.5001	Fax #:	Address: 3104 E. Greene St	
Project #: 23E-04616	Project Owner: Amy Ruth	City: Carlsbad	
Project Name: JRU DI 1A CTB		State: NM Zip: 88220	
Project Location:		Phone #: 432-661-0571	
Sampler Name: D. Costafilho		Fax #:	

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE	COOL	OTHER :	SAMPLING: DATE	TIME	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
H241015																		
11	BES24-136 1'	C	1			X								02.28.24	9:50	X	X	X
12	BES24-137 1'	C	1			X								02.28.24	9:50	X	X	X
13	BES24-138 1'	C	1			X								02.28.24	10:00	X	X	X
14	BES24-139 1'	C	1			X								02.28.24	10:00	X	X	X
15	BES24-140 1'	C	1			X								02.28.24	10:10	X	X	X
16	BES24-141 1'	C	1			X								02.28.24	10:10	X	X	X
17	BES24-142 1'	C	1			X								02.28.24	10:20	X	X	X
18	BES24-143 1'	C	1			X								02.28.24	10:20	X	X	X
19	BES24-144 1'	C	1			X								02.28.24	10:30	X	X	X
20	BES24-145 1'	C	1			X								02.28.24	10:30	X	X	X

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Relinquished By:	Date: 2/29/24 Time: 14:30	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: Chance Dixon (CDixon@vertex.ca), Amy Ruth (Amy.Ruth@exxonmobil.com)
Relinquished By:	Date: Time:	Received By:	REMARKS: Direct Bill to XTO Energy, Inc., Cost Center #: 1082151001, Incident #: nAPP2318831816 CC. Chance Dixon (CDixon@vertex.ca) for Final Report.

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.8 Corrected Temp. °C #1140	Sample Condition Cool Intact ☑ Yes ☑ Yes ☐ No ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Bacteria (only) Sample Condition Rush ☐ Cool Intact Observed Temp. °C Thermometer ID #113 Correction Factor -0.5°C 2/29/24 ☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource Services (Direct Bill to XTO Energy, Inc.)		BILL TO	
Project Manager: Chance Dixon		P.O. #:	
Address: 3101 Boyd Drive		Company: XTO Energy, Inc.	
City: Carlsbad	State: NM Zip:	Attn: Amy Ruth	
Phone #: 575.725.5001	Fax #:	Address: 3104 E. Greene St	
Project #: 23E-04616	Project Owner: Amy Ruth	City: Carlsbad	
Project Name: JRU DI 1A CTB		State: NM Zip: 88220	
Project Location:		Phone #: 432-661-0571	
Sampler Name: D. Costafilho		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE	COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride
H241015																		
21	BES24-146 1'	C	1			X								02.28.24	10:40	X	X	X
22	BES24-147 1'	C	1			X								02.28.24	10:40	X	X	X
23	BES24-148 1'	C	1			X								02.28.24	10:50	X	X	X
24	BES24-149 1'	C	1			X								02.28.24	10:50	X	X	X
25	BES24-150 1'	C	1			X								02.28.24	11:00	X	X	X
26	BES24-151 1'	C	1			X								02.28.24	11:00	X	X	X
27	BES24-152 1'	C	1			X								02.28.24	11:10	X	X	X
28	BES24-153 1'	C	1			X								02.28.24	11:10	X	X	X
29	BES24-154 1'	C	1			X								02.28.24	11:20	X	X	X
30	BES24-155 1'	C	1			X								02.28.24	11:20	X	X	X

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Relinquished By:	Date: 2/29/24 Time: 14:30	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: Chance Dixon (CDixon@vertex.ca), Amy Ruth (Amy.Ruth@exxonmobil.com)
Relinquished By:	Date: Time:	Received By:	REMARKS: Direct Bill to XTO Energy, Inc., Cost Center #: 1082151001, Incident #: nAPP2318831816 CC. Chance Dixon (CDixon@vertex.ca) for Final Report.

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.8 Corrected Temp. °C #140	Sample Condition Cool Intact ☑ Yes ☑ Yes ☐ No ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Bacteria (only) Sample Condition Rush ☐ Cool Intact Observed Temp. °C Thermometer ID #113 Correction Factor -0.5°C 2/28/24 ☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

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(575) 393-2326 FAX (575) 393-2476

Bill amy.ruth@exxonmobil.com

Company Name: Vertex Resource Services (Direct Bill to XTO Energy, Inc.)		BILL TO	
Project Manager: Chance Dixon		P.O. #:	
Address: 3101 Boyd Drive		Company: XTO Energy, Inc.	
City: Carlsbad	State: NM Zip:	Attn: Amy Ruth	
Phone #: 575.725.5001	Fax #:	Address: 3104 E. Greene St	
Project #: 23E-04616	Project Owner: Amy Ruth	City: Carlsbad	
Project Name: JRU DI 1A CTB		State: NM Zip: 88220	
Project Location:		Phone #: 432-661-0571	
Sampler Name: D. Costafilho		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE/COOL	OTHER :	SAMPLING: DATE	TIME	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride	ANALYSIS REQUEST
H241015																		
31	BES24-156 1'	C	1			X							02.28.24	11:30	X	X	X	
32	BES24-157 1'	C	1			X							02.28.24	11:30	X	X	X	
33	BES24-158 1'	C	1			X							02.28.24	11:40	X	X	X	
34	BES24-40 2.5'	C	1			X							02.28.24	11:40	X	X	X	
35	BES24-38 2.5'	C	1			X							02.28.24	11:50	X	X	X	
36	BES24-28 1.5'	C	1			X							02.28.24	11:50	X	X	X	

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Relinquished By:	Date: 2/29/24 Time: 14:30	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: Chance Dixon (CDixon@vertex.ca), Amy Ruth (Amy.Ruth@exxonmobil.com)
Relinquished By:	Date: Time:	Received By:	REMARKS: Direct Bill to XTO Energy, Inc., Cost Center #: 1082151001, Incident #: nAPP2318831816 CC. Chance Dixon (CDixon@vertex.ca) for Final Report.

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.8 Corrected Temp. °C #140	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Bacteria (only) Sample Condition Rush ☐ Cool Intact Observed Temp. °C Thermometer ID #113 Correction Factor -0.5°C 2/29/24 ☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 3/12/2024 7:09:00 AM

JOB DESCRIPTION

JRU DI 1A CTB
23 E - 04616

JOB NUMBER

890-6298-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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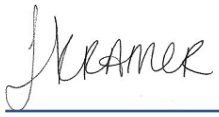
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Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Client: Vertex
Project/Site: JRU DI 1A CTB

Laboratory Job ID: 890-6298-1
SDG: 23 E - 04616

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Definitions/Glossary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project: JRU DI 1A CTB

Job ID: 890-6298-1

Job ID: 890-6298-1 Eurofins Carlsbad

Job Narrative
890-6298-1

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 3/1/2024 12:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -6.2°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: WES 24 - 20 1' (890-6298-1), WES 24 - 21 1' (890-6298-2), WES 24 - 22 1' (890-6298-3), WES 24 - 23 1' (890-6298-4), BES 24 -193 1' (890-6298-5), BES 24 -194 1' (890-6298-6), BES 24 -195 1' (890-6298-7), BES 24 -196 1' (890-6298-8), BES 24 -197 1' (890-6298-9), BES 24 -198 1' (890-6298-10), BES 24 -199 1' (890-6298-11), BES 24 - 200 1' (890-6298-12), BES 24 - 201 1' (890-6298-13), BES 24 - 202 1' (890-6298-14), BES 24 - 203 1' (890-6298-15), BES 24 - 204 1' (890-6298-16), BES 24 - 205 1' (890-6298-17), BES 24 - 206 1' (890-6298-18), BES 24 - 207 1' (890-6298-19), BES 24 - 208 1' (890-6298-20), BES 24 - 209 1' (890-6298-21), BES 24 -210 1' (890-6298-22), BES 24 -211 1' (890-6298-23), BES 24 -212 1' (890-6298-24), BES 24 -213 1' (890-6298-25), BES 24 -214 1' (890-6298-26), BES 24 -215 1' (890-6298-27), BES 24 -216 1' (890-6298-28), BES 24 -217 1' (890-6298-29), BES 24 -218 1' (890-6298-30), BES 24 -219 1' (890-6298-31), BES 24 - 220 1' (890-6298-32), BES 24 - 221 1' (890-6298-33), BES 24 - 222 1' (890-6298-34), BES 24 - 223 1' (890-6298-35), BES 24 - 224 1' (890-6298-36), BES 24 - 225 1' (890-6298-37), BES 24 - 226 1' (890-6298-38), BES 24 - 227 1' (890-6298-39), BES 24 - 228 1' (890-6298-40), BES 24 - 229 1' (890-6298-41), BES 24 - 230 1' (890-6298-42), BES 24 - 231 1' (890-6298-43), BES 24 - 232 1' (890-6298-44), BES 24 - 233 1' (890-6298-45), BES 24 - 234 1' (890-6298-46) and BES 24 - 235 1' (890-6298-47).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-74680 and 880-74687 and analytical batch 880-74853 was outside the control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: WES 24 - 21 1' (890-6298-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-74688 and analytical batch 880-74894 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BES 24 - 209 1' (890-6298-21). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-74853 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-74853/20).

Method 8021B: Surrogate recovery for the following sample was outside control limits: BES 24 - 231 1' (890-6298-43). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-74834 and analytical batch 880-74863 was outside the upper control limits.

Case Narrative

Client: Vertex
Project: JRU DI 1A CTB

Job ID: 890-6298-1

Job ID: 890-6298-1 (Continued) Eurofins Carlsbad

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: WES 24 - 21 1' (890-6298-2), WES 24 - 22 1' (890-6298-3), BES 24 -194 1' (890-6298-6), BES 24 -195 1' (890-6298-7), BES 24 -197 1' (890-6298-9), (890-6296-A-11-C), (890-6296-A-11-D MS) and (890-6296-A-11-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-74866/2-A) and (LCSD 880-74866/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BES 24 -198 1' (890-6298-10), BES 24 -199 1' (890-6298-11), BES 24 - 201 1' (890-6298-13), BES 24 - 203 1' (890-6298-15), BES 24 - 204 1' (890-6298-16), BES 24 - 205 1' (890-6298-17), BES 24 - 206 1' (890-6298-18), BES 24 - 207 1' (890-6298-19), BES 24 - 209 1' (890-6298-21), BES 24 -210 1' (890-6298-22), BES 24 -211 1' (890-6298-23), BES 24 -212 1' (890-6298-24), BES 24 -213 1' (890-6298-25), BES 24 -214 1' (890-6298-26), BES 24 -215 1' (890-6298-27), BES 24 -216 1' (890-6298-28), BES 24 -217 1' (890-6298-29), (890-6298-A-10-D MS) and (890-6298-A-10-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BES 24 -218 1' (890-6298-30), BES 24 -219 1' (890-6298-31), BES 24 - 220 1' (890-6298-32), BES 24 - 221 1' (890-6298-33) and (890-6298-A-30-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BES 24 - 223 1' (890-6298-35), BES 24 - 224 1' (890-6298-36), BES 24 - 225 1' (890-6298-37), BES 24 - 226 1' (890-6298-38) and BES 24 - 227 1' (890-6298-39). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BES 24 - 228 1' (890-6298-40), BES 24 - 230 1' (890-6298-42), BES 24 - 232 1' (890-6298-44), BES 24 - 233 1' (890-6298-45), BES 24 - 234 1' (890-6298-46) and BES 24 - 235 1' (890-6298-47). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-74928 and analytical batch 880-74956 was outside control limits. Sample non-homogeneity is suspected.

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

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-74628 and analytical batch 880-74929 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-74629 and analytical batch 880-74938 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: WES 24 - 20 1'

Lab Sample ID: 890-6298-1
Matrix: Solid
Date Collected: 02/29/24 09:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 12:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 12:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 12:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/24 15:15	03/06/24 12:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 12:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/24 15:15	03/06/24 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/04/24 15:15*	*03/06/24 12:18*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/04/24 15:15*	*03/06/24 12:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/06/24 12:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/06/24 15:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/05/24 16:53	03/06/24 15:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/05/24 16:53	03/06/24 15:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/05/24 16:53	03/06/24 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*03/05/24 16:53*	*03/06/24 15:48*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/05/24 16:53*	*03/06/24 15:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**166**		4.98		mg/Kg			03/08/24 03:21	1

Client Sample ID: WES 24 - 21 1'

Lab Sample ID: 890-6298-2
Matrix: Solid
Date Collected: 02/29/24 09:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 12:44	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 12:44	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 12:44	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/24 15:15	03/06/24 12:44	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 12:44	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/24 15:15	03/06/24 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*03/04/24 15:15*	*03/06/24 12:44*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: WES 24 - 21 1'

Lab Sample ID: 890-6298-2
Matrix: Solid
Date Collected: 02/29/24 09:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*64*	*S1-*	*70 - 130*	*03/04/24 15:15*	*03/06/24 12:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/06/24 12:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/06/24 16:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/05/24 16:53	03/06/24 16:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/05/24 16:53	03/06/24 16:10	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/05/24 16:53	03/06/24 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*03/05/24 16:53*	*03/06/24 16:10*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*03/05/24 16:53*	*03/06/24 16:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**217**		5.02	mg/Kg			03/08/24 03:28	1

Client Sample ID: WES 24 - 22 1'

Lab Sample ID: 890-6298-3
Matrix: Solid
Date Collected: 02/29/24 09:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:15	03/06/24 13:11	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:15	03/06/24 13:11	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:15	03/06/24 13:11	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/04/24 15:15	03/06/24 13:11	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:15	03/06/24 13:11	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/04/24 15:15	03/06/24 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*03/04/24 15:15*	*03/06/24 13:11*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/04/24 15:15*	*03/06/24 13:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			03/06/24 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			03/06/24 16:32	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: WES 24 - 22 1'

Lab Sample ID: 890-6298-3
Matrix: Solid
Date Collected: 02/29/24 09:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		03/05/24 16:53	03/06/24 16:32	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/05/24 16:53	03/06/24 16:32	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/05/24 16:53	03/06/24 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*145*	*S1+*	*70 - 130*	*03/05/24 16:53*	*03/06/24 16:32*	*1*
o-Terphenyl	*151*	*S1+*	*70 - 130*	*03/05/24 16:53*	*03/06/24 16:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**93.6**		5.04		mg/Kg			03/08/24 03:35	1

Client Sample ID: WES 24 - 23 1'

Lab Sample ID: 890-6298-4
Matrix: Solid
Date Collected: 02/29/24 09:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 13:37	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 13:37	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 13:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/24 15:15	03/06/24 13:37	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 13:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/24 15:15	03/06/24 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*03/04/24 15:15*	*03/06/24 13:37*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/04/24 15:15*	*03/06/24 13:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/06/24 13:37	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/06/24 17:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/05/24 16:53	03/06/24 17:03	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/05/24 16:53	03/06/24 17:03	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/05/24 16:53	03/06/24 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/05/24 16:53*	*03/06/24 17:03*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/05/24 16:53*	*03/06/24 17:03*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: WES 24 - 23 1'

Lab Sample ID: 890-6298-4
Matrix: Solid
Date Collected: 02/29/24 09:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.1	F1	4.99		mg/Kg			03/08/24 10:32	1

Client Sample ID: BES 24 -193 1'

Lab Sample ID: 890-6298-5
Matrix: Solid
Date Collected: 02/29/24 09:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 14:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 14:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 14:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/24 15:15	03/06/24 14:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 14:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/24 15:15	03/06/24 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/04/24 15:15*	*03/06/24 14:03*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*03/04/24 15:15*	*03/06/24 14:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/06/24 14:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/06/24 17:25	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/05/24 16:53	03/06/24 17:25	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/05/24 16:53	03/06/24 17:25	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/05/24 16:53	03/06/24 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*03/05/24 16:53*	*03/06/24 17:25*	*1*
o-Terphenyl	*90*		*70 - 130*	*03/05/24 16:53*	*03/06/24 17:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	171		5.02		mg/Kg			03/08/24 04:04	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -194 1'

Lab Sample ID: 890-6298-6
Matrix: Solid
Date Collected: 02/29/24 09:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 14:30	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 14:30	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 14:30	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/04/24 15:15	03/06/24 14:30	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 14:30	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/04/24 15:15	03/06/24 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*03/04/24 15:15*	*03/06/24 14:30*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/04/24 15:15*	*03/06/24 14:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/06/24 14:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			03/06/24 17:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		03/05/24 16:53	03/06/24 17:47	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		03/05/24 16:53	03/06/24 17:47	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		03/05/24 16:53	03/06/24 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*151*	*S1+*	*70 - 130*	*03/05/24 16:53*	*03/06/24 17:47*	*1*
o-Terphenyl	*161*	*S1+*	*70 - 130*	*03/05/24 16:53*	*03/06/24 17:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**142**		5.01		mg/Kg			03/08/24 04:11	1

Client Sample ID: BES 24 -195 1'

Lab Sample ID: 890-6298-7
Matrix: Solid
Date Collected: 02/29/24 09:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 14:56	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 14:56	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 14:56	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/24 15:15	03/06/24 14:56	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 14:56	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/24 15:15	03/06/24 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*03/04/24 15:15*	*03/06/24 14:56*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -195 1'

Lab Sample ID: 890-6298-7
Matrix: Solid
Date Collected: 02/29/24 09:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/04/24 15:15*	*03/06/24 14:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/06/24 14:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			03/06/24 18:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		03/05/24 16:53	03/06/24 18:09	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		03/05/24 16:53	03/06/24 18:09	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		03/05/24 16:53	03/06/24 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*144*	*S1+*	*70 - 130*	*03/05/24 16:53*	*03/06/24 18:09*	*1*
o-Terphenyl	*152*	*S1+*	*70 - 130*	*03/05/24 16:53*	*03/06/24 18:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**149**		4.97	mg/Kg			03/08/24 04:32	1

Client Sample ID: BES 24 -196 1'

Lab Sample ID: 890-6298-8
Matrix: Solid
Date Collected: 02/29/24 09:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:15	03/06/24 15:22	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:15	03/06/24 15:22	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:15	03/06/24 15:22	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/04/24 15:15	03/06/24 15:22	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:15	03/06/24 15:22	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/04/24 15:15	03/06/24 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/04/24 15:15*	*03/06/24 15:22*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*03/04/24 15:15*	*03/06/24 15:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/06/24 15:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			03/06/24 18:30	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -196 1'

Lab Sample ID: 890-6298-8
Matrix: Solid
Date Collected: 02/29/24 09:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/05/24 16:53	03/06/24 18:30	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/05/24 16:53	03/06/24 18:30	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/05/24 16:53	03/06/24 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/05/24 16:53*	*03/06/24 18:30*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/05/24 16:53*	*03/06/24 18:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**116**		4.96		mg/Kg			03/08/24 04:40	1

Client Sample ID: BES 24 -197 1'

Lab Sample ID: 890-6298-9
Matrix: Solid
Date Collected: 02/29/24 09:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 15:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 15:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 15:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/24 15:15	03/06/24 15:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 15:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/24 15:15	03/06/24 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*03/04/24 15:15*	*03/06/24 15:49*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*03/04/24 15:15*	*03/06/24 15:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/06/24 15:49	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/06/24 18:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/05/24 16:53	03/06/24 18:52	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/05/24 16:53	03/06/24 18:52	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/05/24 16:53	03/06/24 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*03/05/24 16:53*	*03/06/24 18:52*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*03/05/24 16:53*	*03/06/24 18:52*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -197 1'

Lab Sample ID: 890-6298-9
Matrix: Solid
Date Collected: 02/29/24 09:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	152		5.03		mg/Kg			03/08/24 04:47	1

Client Sample ID: BES 24 -198 1'

Lab Sample ID: 890-6298-10
Matrix: Solid
Date Collected: 02/29/24 09:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 16:39	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 16:39	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 16:39	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/04/24 15:15	03/06/24 16:39	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 16:39	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/04/24 15:15	03/06/24 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*03/04/24 15:15*	*03/06/24 16:39*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*03/04/24 15:15*	*03/06/24 16:39*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/06/24 16:39	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			03/06/24 20:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/06/24 09:24	03/06/24 20:41	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/06/24 09:24	03/06/24 20:41	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/06/24 09:24	03/06/24 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*275*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/06/24 20:41*	*1*
o-Terphenyl	*301*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/06/24 20:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	319		5.05		mg/Kg			03/08/24 04:54	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -199 1'

Lab Sample ID: 890-6298-11
Matrix: Solid
Date Collected: 02/29/24 09:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 18:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 18:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 18:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/24 15:15	03/06/24 18:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 18:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/24 15:15	03/06/24 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/04/24 15:15*	*03/06/24 18:24*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*03/04/24 15:15*	*03/06/24 18:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/06/24 18:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/06/24 21:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/06/24 09:24	03/06/24 21:47	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/06/24 09:24	03/06/24 21:47	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/06/24 09:24	03/06/24 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/06/24 21:47*	*1*
o-Terphenyl	*167*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/06/24 21:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**197**		4.98		mg/Kg			03/08/24 05:01	1

Client Sample ID: BES 24 - 200 1'

Lab Sample ID: 890-6298-12
Matrix: Solid
Date Collected: 02/29/24 09:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 18:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 18:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 18:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/24 15:15	03/06/24 18:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 18:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/24 15:15	03/06/24 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*03/04/24 15:15*	*03/06/24 18:51*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 200 1'

Lab Sample ID: 890-6298-12
Matrix: Solid
Date Collected: 02/29/24 09:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/04/24 15:15*	*03/06/24 18:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/06/24 18:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/06/24 22:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/06/24 09:24	03/06/24 22:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/06/24 09:24	03/06/24 22:09	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/06/24 09:24	03/06/24 22:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*116*		*70 - 130*	*03/06/24 09:24*	*03/06/24 22:09*	*1*
o-Terphenyl	*130*		*70 - 130*	*03/06/24 09:24*	*03/06/24 22:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**256**		4.99	mg/Kg			03/08/24 05:08	1

Client Sample ID: BES 24 - 201 1'

Lab Sample ID: 890-6298-13
Matrix: Solid
Date Collected: 02/29/24 10:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/04/24 15:15	03/06/24 19:17	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/04/24 15:15	03/06/24 19:17	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/04/24 15:15	03/06/24 19:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/04/24 15:15	03/06/24 19:17	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/04/24 15:15	03/06/24 19:17	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/04/24 15:15	03/06/24 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*03/04/24 15:15*	*03/06/24 19:17*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/04/24 15:15*	*03/06/24 19:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/06/24 19:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			03/06/24 22:30	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 201 1'

Lab Sample ID: 890-6298-13
Matrix: Solid
Date Collected: 02/29/24 10:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/06/24 09:24	03/06/24 22:30	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/06/24 09:24	03/06/24 22:30	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/06/24 09:24	03/06/24 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*138*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/06/24 22:30*	*1*
o-Terphenyl	*155*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/06/24 22:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**186**		5.04		mg/Kg			03/08/24 05:15	1

Client Sample ID: BES 24 - 202 1'

Lab Sample ID: 890-6298-14
Matrix: Solid
Date Collected: 02/29/24 10:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:15	03/06/24 19:45	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:15	03/06/24 19:45	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:15	03/06/24 19:45	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/04/24 15:15	03/06/24 19:45	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:15	03/06/24 19:45	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/04/24 15:15	03/06/24 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*03/04/24 15:15*	*03/06/24 19:45*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/04/24 15:15*	*03/06/24 19:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/06/24 19:45	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			03/06/24 22:51	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		03/06/24 09:24	03/06/24 22:51	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/06/24 09:24	03/06/24 22:51	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/06/24 09:24	03/06/24 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/06/24 09:24*	*03/06/24 22:51*	*1*
o-Terphenyl	*122*		*70 - 130*	*03/06/24 09:24*	*03/06/24 22:51*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 202 1'

Lab Sample ID: 890-6298-14
Matrix: Solid
Date Collected: 02/29/24 10:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	142	F1	5.02		mg/Kg			03/08/24 06:12	1

Client Sample ID: BES 24 - 203 1'

Lab Sample ID: 890-6298-15
Matrix: Solid
Date Collected: 02/29/24 10:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 20:13	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 20:13	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 20:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/24 15:15	03/06/24 20:13	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 20:13	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/24 15:15	03/06/24 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*03/04/24 15:15*	*03/06/24 20:13*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/04/24 15:15*	*03/06/24 20:13*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/06/24 20:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			03/06/24 23:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		03/06/24 09:24	03/06/24 23:13	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		03/06/24 09:24	03/06/24 23:13	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		03/06/24 09:24	03/06/24 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*03/06/24 09:24*	*03/06/24 23:13*	*1*
o-Terphenyl	*132*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/06/24 23:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	229		5.00		mg/Kg			03/08/24 06:34	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 204 1'

Lab Sample ID: 890-6298-16
Matrix: Solid
Date Collected: 02/29/24 10:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 20:40	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 20:40	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 20:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/24 15:15	03/06/24 20:40	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:15	03/06/24 20:40	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/24 15:15	03/06/24 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*03/04/24 15:15*	*03/06/24 20:40*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/04/24 15:15*	*03/06/24 20:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/06/24 20:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			03/06/24 23:34	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/06/24 09:24	03/06/24 23:34	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/06/24 09:24	03/06/24 23:34	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/06/24 09:24	03/06/24 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*03/06/24 09:24*	*03/06/24 23:34*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/06/24 23:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**156**		5.01		mg/Kg			03/08/24 06:41	1

Client Sample ID: BES 24 - 205 1'

Lab Sample ID: 890-6298-17
Matrix: Solid
Date Collected: 02/29/24 10:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 21:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 21:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 21:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/24 15:15	03/06/24 21:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:15	03/06/24 21:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/24 15:15	03/06/24 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*03/04/24 15:15*	*03/06/24 21:07*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 205 1'

Lab Sample ID: 890-6298-17
Matrix: Solid
Date Collected: 02/29/24 10:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/04/24 15:15*	*03/06/24 21:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/06/24 21:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			03/06/24 23:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		03/06/24 09:24	03/06/24 23:55	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg		03/06/24 09:24	03/06/24 23:55	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		03/06/24 09:24	03/06/24 23:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*155*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/06/24 23:55*	*1*
o-Terphenyl	*173*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/06/24 23:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**251**		5.03	mg/Kg			03/08/24 06:48	1

Client Sample ID: BES 24 - 206 1'

Lab Sample ID: 890-6298-18
Matrix: Solid
Date Collected: 02/29/24 10:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/04/24 15:15	03/06/24 21:34	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/04/24 15:15	03/06/24 21:34	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/04/24 15:15	03/06/24 21:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/04/24 15:15	03/06/24 21:34	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/04/24 15:15	03/06/24 21:34	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/04/24 15:15	03/06/24 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*03/04/24 15:15*	*03/06/24 21:34*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/04/24 15:15*	*03/06/24 21:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/06/24 21:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			03/07/24 00:16	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 206 1'

Lab Sample ID: 890-6298-18
Matrix: Solid
Date Collected: 02/29/24 10:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/06/24 09:24	03/07/24 00:16	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/06/24 09:24	03/07/24 00:16	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/06/24 09:24	03/07/24 00:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 00:16*	*1*
o-Terphenyl	*145*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 00:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**134**		5.04		mg/Kg			03/08/24 06:55	1

Client Sample ID: BES 24 - 207 1'

Lab Sample ID: 890-6298-19
Matrix: Solid
Date Collected: 02/29/24 10:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 22:00	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 22:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 22:00	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/04/24 15:15	03/06/24 22:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:15	03/06/24 22:00	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/04/24 15:15	03/06/24 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*03/04/24 15:15*	*03/06/24 22:00*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/24 15:15*	*03/06/24 22:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/06/24 22:00	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/07/24 00:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/06/24 09:24	03/07/24 00:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/06/24 09:24	03/07/24 00:38	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/06/24 09:24	03/07/24 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*126*		*70 - 130*	*03/06/24 09:24*	*03/07/24 00:38*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 00:38*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 207 1'

Lab Sample ID: 890-6298-19
Matrix: Solid
Date Collected: 02/29/24 10:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		4.97		mg/Kg			03/08/24 07:17	1

Client Sample ID: BES 24 - 208 1'

Lab Sample ID: 890-6298-20
Matrix: Solid
Date Collected: 02/29/24 10:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 22:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 22:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 22:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/24 15:15	03/06/24 22:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 22:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/24 15:15	03/06/24 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*03/04/24 15:15*	*03/06/24 22:26*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/04/24 15:15*	*03/06/24 22:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/06/24 22:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/07/24 01:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/06/24 09:24	03/07/24 01:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/06/24 09:24	03/07/24 01:20	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/06/24 09:24	03/07/24 01:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*03/06/24 09:24*	*03/07/24 01:20*	*1*
o-Terphenyl	*125*		*70 - 130*	*03/06/24 09:24*	*03/07/24 01:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		4.96		mg/Kg			03/08/24 07:24	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 209 1'

Lab Sample ID: 890-6298-21
Matrix: Solid
Date Collected: 02/29/24 10:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		03/04/24 15:17	03/06/24 17:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 17:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 17:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/24 15:17	03/06/24 17:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 17:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/24 15:17	03/06/24 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*03/04/24 15:17*	*03/06/24 17:17*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*03/04/24 15:17*	*03/06/24 17:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/06/24 17:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/07/24 01:41	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/06/24 09:24	03/07/24 01:41	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/06/24 09:24	03/07/24 01:41	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/06/24 09:24	03/07/24 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 01:41*	*1*
o-Terphenyl	*152*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 01:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73.9**		5.02		mg/Kg			03/08/24 07:31	1

Client Sample ID: BES 24 -210 1'

Lab Sample ID: 890-6298-22
Matrix: Solid
Date Collected: 02/29/24 10:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 17:38	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 17:38	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 17:38	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/24 15:17	03/06/24 17:38	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 17:38	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/24 15:17	03/06/24 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/04/24 15:17*	*03/06/24 17:38*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -210 1'

Lab Sample ID: 890-6298-22
Matrix: Solid
Date Collected: 02/29/24 10:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/04/24 15:17*	*03/06/24 17:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/06/24 17:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			03/07/24 02:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1	mg/Kg		03/06/24 09:24	03/07/24 02:02	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		03/06/24 09:24	03/07/24 02:02	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		03/06/24 09:24	03/07/24 02:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*160*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 02:02*	*1*
o-Terphenyl	*177*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 02:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.2**		5.03	mg/Kg			03/08/24 07:38	1

Client Sample ID: BES 24 -211 1'

Lab Sample ID: 890-6298-23
Matrix: Solid
Date Collected: 02/29/24 10:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:17	03/06/24 17:58	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:17	03/06/24 17:58	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:17	03/06/24 17:58	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/04/24 15:17	03/06/24 17:58	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:17	03/06/24 17:58	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/04/24 15:17	03/06/24 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/04/24 15:17*	*03/06/24 17:58*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/24 15:17*	*03/06/24 17:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			03/06/24 17:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			03/07/24 02:23	1

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -211 1'

Lab Sample ID: 890-6298-23
Matrix: Solid
Date Collected: 02/29/24 10:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/06/24 09:24	03/07/24 02:23	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/06/24 09:24	03/07/24 02:23	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/06/24 09:24	03/07/24 02:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 02:23*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 02:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**95.1**		5.01		mg/Kg			03/08/24 07:45	1

Client Sample ID: BES 24 -212 1'

Lab Sample ID: 890-6298-24
Matrix: Solid
Date Collected: 02/29/24 10:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 18:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 18:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 18:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/24 15:17	03/06/24 18:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 18:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/24 15:17	03/06/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/04/24 15:17*	*03/06/24 18:19*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/24 15:17*	*03/06/24 18:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/06/24 18:19	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/07/24 02:44	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/06/24 09:24	03/07/24 02:44	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/06/24 09:24	03/07/24 02:44	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/06/24 09:24	03/07/24 02:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*164*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 02:44*	*1*
o-Terphenyl	*172*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 02:44*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -212 1'

Lab Sample ID: 890-6298-24
Matrix: Solid
Date Collected: 02/29/24 10:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.6	F1	4.99		mg/Kg			03/08/24 07:52	1

Client Sample ID: BES 24 -213 1'

Lab Sample ID: 890-6298-25
Matrix: Solid
Date Collected: 02/29/24 11:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 18:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 18:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 18:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/24 15:17	03/06/24 18:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 18:40	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/24 15:17	03/06/24 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/04/24 15:17*	*03/06/24 18:40*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/04/24 15:17*	*03/06/24 18:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/06/24 18:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/07/24 03:05	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/06/24 09:24	03/07/24 03:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/06/24 09:24	03/07/24 03:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/06/24 09:24	03/07/24 03:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*162*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 03:05*	*1*
o-Terphenyl	*170*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 03:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1020		50.4		mg/Kg			03/08/24 08:14	10

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -214 1'

Lab Sample ID: 890-6298-26
Matrix: Solid
Date Collected: 02/29/24 11:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/06/24 19:00	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/06/24 19:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/06/24 19:00	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/04/24 15:17	03/06/24 19:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/06/24 19:00	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/04/24 15:17	03/06/24 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*03/04/24 15:17*	*03/06/24 19:00*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/24 15:17*	*03/06/24 19:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/06/24 19:00	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/07/24 03:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/06/24 09:24	03/07/24 03:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/06/24 09:24	03/07/24 03:26	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/06/24 09:24	03/07/24 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*141*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 03:26*	*1*
o-Terphenyl	*151*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 03:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**383**		24.9		mg/Kg			03/08/24 08:21	5

Client Sample ID: BES 24 -215 1'

Lab Sample ID: 890-6298-27
Matrix: Solid
Date Collected: 02/29/24 11:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 19:21	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 19:21	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 19:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/24 15:17	03/06/24 19:21	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 19:21	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/24 15:17	03/06/24 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/04/24 15:17*	*03/06/24 19:21*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -215 1'

Lab Sample ID: 890-6298-27
Matrix: Solid
Date Collected: 02/29/24 11:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/04/24 15:17*	*03/06/24 19:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/06/24 19:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			03/07/24 03:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		03/06/24 09:24	03/07/24 03:47	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/06/24 09:24	03/07/24 03:47	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/06/24 09:24	03/07/24 03:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*149*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 03:47*	*1*
o-Terphenyl	*161*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 03:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**448**		24.8	mg/Kg			03/08/24 08:42	5

Client Sample ID: BES 24 -216 1'

Lab Sample ID: 890-6298-28
Matrix: Solid
Date Collected: 02/29/24 11:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:17	03/06/24 19:41	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:17	03/06/24 19:41	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:17	03/06/24 19:41	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/04/24 15:17	03/06/24 19:41	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/04/24 15:17	03/06/24 19:41	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/04/24 15:17	03/06/24 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/04/24 15:17*	*03/06/24 19:41*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/04/24 15:17*	*03/06/24 19:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/06/24 19:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			03/07/24 04:08	1

Eurofins Carlsbad

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -216 1'

Lab Sample ID: 890-6298-28
Matrix: Solid
Date Collected: 02/29/24 11:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/06/24 09:24	03/07/24 04:08	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/06/24 09:24	03/07/24 04:08	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/06/24 09:24	03/07/24 04:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*172*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 04:08*	*1*
o-Terphenyl	*187*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 04:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**573**		25.3		mg/Kg			03/08/24 08:49	5

Client Sample ID: BES 24 -217 1'

Lab Sample ID: 890-6298-29
Matrix: Solid
Date Collected: 02/29/24 11:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 20:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 20:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 20:02	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/24 15:17	03/06/24 20:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 20:02	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/24 15:17	03/06/24 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/04/24 15:17*	*03/06/24 20:02*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/04/24 15:17*	*03/06/24 20:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/06/24 20:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/07/24 04:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/06/24 09:24	03/07/24 04:29	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/06/24 09:24	03/07/24 04:29	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/06/24 09:24	03/07/24 04:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*152*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 04:29*	*1*
o-Terphenyl	*162*	*S1+*	*70 - 130*	*03/06/24 09:24*	*03/07/24 04:29*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -217 1'

Lab Sample ID: 890-6298-29
Matrix: Solid
Date Collected: 02/29/24 11:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99.9		5.03		mg/Kg			03/08/24 08:57	1

Client Sample ID: BES 24 -218 1'

Lab Sample ID: 890-6298-30
Matrix: Solid
Date Collected: 02/29/24 11:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/06/24 20:23	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/06/24 20:23	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/06/24 20:23	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/04/24 15:17	03/06/24 20:23	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/06/24 20:23	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/04/24 15:17	03/06/24 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/04/24 15:17*	*03/06/24 20:23*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/04/24 15:17*	*03/06/24 20:23*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/06/24 20:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/07/24 11:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U F2	49.7		mg/Kg		03/06/24 16:39	03/07/24 11:11	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/06/24 16:39	03/07/24 11:11	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/06/24 16:39	03/07/24 11:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*158*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 11:11*	*1*
o-Terphenyl	*184*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 11:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.6		5.00		mg/Kg			03/08/24 09:04	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -219 1'

Lab Sample ID: 890-6298-31
Matrix: Solid
Date Collected: 02/29/24 11:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 21:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 21:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 21:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/24 15:17	03/06/24 21:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 21:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/24 15:17	03/06/24 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/04/24 15:17*	*03/06/24 21:47*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/04/24 15:17*	*03/06/24 21:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/06/24 21:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/07/24 12:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/06/24 16:39	03/07/24 12:16	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/06/24 16:39	03/07/24 12:16	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/06/24 16:39	03/07/24 12:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*127*		*70 - 130*	*03/06/24 16:39*	*03/07/24 12:16*	*1*
o-Terphenyl	*145*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 12:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**105**		5.00		mg/Kg			03/08/24 09:11	1

Client Sample ID: BES 24 - 220 1'

Lab Sample ID: 890-6298-32
Matrix: Solid
Date Collected: 02/29/24 11:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 22:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 22:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 22:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/24 15:17	03/06/24 22:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 22:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/24 15:17	03/06/24 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/04/24 15:17*	*03/06/24 22:08*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 220 1'

Lab Sample ID: 890-6298-32
Matrix: Solid
Date Collected: 02/29/24 11:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/24 15:17*	*03/06/24 22:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/06/24 22:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			03/07/24 12:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		03/06/24 16:39	03/07/24 12:37	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		03/06/24 16:39	03/07/24 12:37	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		03/06/24 16:39	03/07/24 12:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*120*		*70 - 130*	*03/06/24 16:39*	*03/07/24 12:37*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 12:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63.9**		5.02	mg/Kg			03/08/24 09:18	1

Client Sample ID: BES 24 - 221 1'

Lab Sample ID: 890-6298-33
Matrix: Solid
Date Collected: 02/29/24 11:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/04/24 15:17	03/06/24 22:29	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/04/24 15:17	03/06/24 22:29	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/04/24 15:17	03/06/24 22:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/04/24 15:17	03/06/24 22:29	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/04/24 15:17	03/06/24 22:29	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/04/24 15:17	03/06/24 22:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/04/24 15:17*	*03/06/24 22:29*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/04/24 15:17*	*03/06/24 22:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/06/24 22:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/07/24 12:59	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 221 1'

Lab Sample ID: 890-6298-33
Matrix: Solid
Date Collected: 02/29/24 11:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 12:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 12:59	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*03/06/24 16:39*	*03/07/24 12:59*	*1*
o-Terphenyl	*134*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 12:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**104**		5.04		mg/Kg			03/08/24 09:25	1

Client Sample ID: BES 24 - 222 1'

Lab Sample ID: 890-6298-34
Matrix: Solid
Date Collected: 02/29/24 11:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:17	03/06/24 22:49	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:17	03/06/24 22:49	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:17	03/06/24 22:49	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/04/24 15:17	03/06/24 22:49	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:17	03/06/24 22:49	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/04/24 15:17	03/06/24 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/04/24 15:17*	*03/06/24 22:49*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/04/24 15:17*	*03/06/24 22:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/06/24 22:49	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/07/24 13:21	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/06/24 16:39	03/07/24 13:21	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/06/24 16:39	03/07/24 13:21	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/06/24 16:39	03/07/24 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*03/06/24 16:39*	*03/07/24 13:21*	*1*
o-Terphenyl	*127*		*70 - 130*	*03/06/24 16:39*	*03/07/24 13:21*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 222 1'

Lab Sample ID: 890-6298-34
Matrix: Solid
Date Collected: 02/29/24 11:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.6		5.03		mg/Kg			03/10/24 11:53	1

Client Sample ID: BES 24 - 223 1'

Lab Sample ID: 890-6298-35
Matrix: Solid
Date Collected: 02/29/24 11:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 23:10	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 23:10	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 23:10	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/24 15:17	03/06/24 23:10	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 23:10	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/24 15:17	03/06/24 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*03/04/24 15:17*	*03/06/24 23:10*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/04/24 15:17*	*03/06/24 23:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/06/24 23:10	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			03/07/24 13:42	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		03/06/24 16:39	03/07/24 13:42	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/06/24 16:39	03/07/24 13:42	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/06/24 16:39	03/07/24 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 13:42*	*1*
o-Terphenyl	*165*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 13:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	141		4.97		mg/Kg			03/10/24 12:10	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 224 1'

Lab Sample ID: 890-6298-36
Matrix: Solid
Date Collected: 02/29/24 11:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 23:30	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 23:30	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 23:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/24 15:17	03/06/24 23:30	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:17	03/06/24 23:30	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/24 15:17	03/06/24 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*03/04/24 15:17*	*03/06/24 23:30*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/04/24 15:17*	*03/06/24 23:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/06/24 23:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			03/07/24 14:04	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/06/24 16:39	03/07/24 14:04	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/06/24 16:39	03/07/24 14:04	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/06/24 16:39	03/07/24 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*152*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 14:04*	*1*
o-Terphenyl	*170*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 14:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**123**		5.01		mg/Kg			03/10/24 12:16	1

Client Sample ID: BES 24 - 225 1'

Lab Sample ID: 890-6298-37
Matrix: Solid
Date Collected: 02/29/24 12:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 23:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 23:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 23:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/24 15:17	03/06/24 23:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:17	03/06/24 23:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/24 15:17	03/06/24 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*03/04/24 15:17*	*03/06/24 23:51*	*1*

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 225 1'

Lab Sample ID: 890-6298-37
Matrix: Solid
Date Collected: 02/29/24 12:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/24 15:17*	*03/06/24 23:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/06/24 23:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			03/07/24 14:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		03/06/24 16:39	03/07/24 14:26	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		03/06/24 16:39	03/07/24 14:26	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		03/06/24 16:39	03/07/24 14:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*145*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 14:26*	*1*
o-Terphenyl	*156*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 14:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**541**		4.96	mg/Kg			03/10/24 12:22	1

Client Sample ID: BES 24 - 226 1'

Lab Sample ID: 890-6298-38
Matrix: Solid
Date Collected: 02/29/24 12:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/04/24 15:17	03/07/24 00:11	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/04/24 15:17	03/07/24 00:11	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/04/24 15:17	03/07/24 00:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/04/24 15:17	03/07/24 00:11	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/04/24 15:17	03/07/24 00:11	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/04/24 15:17	03/07/24 00:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*03/04/24 15:17*	*03/07/24 00:11*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/04/24 15:17*	*03/07/24 00:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/07/24 00:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			03/07/24 14:47	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 226 1'

Lab Sample ID: 890-6298-38
Matrix: Solid
Date Collected: 02/29/24 12:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/06/24 16:39	03/07/24 14:47	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/06/24 16:39	03/07/24 14:47	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/06/24 16:39	03/07/24 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*03/06/24 16:39*	*03/07/24 14:47*	*1*
o-Terphenyl	*138*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 14:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**801**		4.98		mg/Kg			03/10/24 12:27	1

Client Sample ID: BES 24 - 227 1'

Lab Sample ID: 890-6298-39
Matrix: Solid
Date Collected: 02/29/24 12:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/07/24 00:32	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/07/24 00:32	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/07/24 00:32	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/04/24 15:17	03/07/24 00:32	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/04/24 15:17	03/07/24 00:32	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/04/24 15:17	03/07/24 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*03/04/24 15:17*	*03/07/24 00:32*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/04/24 15:17*	*03/07/24 00:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/07/24 00:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/07/24 15:09	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/06/24 16:39	03/07/24 15:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/06/24 16:39	03/07/24 15:09	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/06/24 16:39	03/07/24 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 15:09*	*1*
o-Terphenyl	*142*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 15:09*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 227 1'

Lab Sample ID: 890-6298-39
Matrix: Solid
Date Collected: 02/29/24 12:00
Date Received: 03/01/24 12:37
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	855		5.03		mg/Kg			03/10/24 12:45	1

Client Sample ID: BES 24 - 228 1'

Lab Sample ID: 890-6298-40
Matrix: Solid
Date Collected: 02/29/24 12:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/07/24 00:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/07/24 00:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/07/24 00:52	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/24 15:17	03/07/24 00:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/07/24 00:52	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/24 15:17	03/07/24 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/04/24 15:17*	*03/07/24 00:52*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/04/24 15:17*	*03/07/24 00:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/07/24 00:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/07/24 15:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/06/24 16:39	03/07/24 15:52	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/06/24 16:39	03/07/24 15:52	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/06/24 16:39	03/07/24 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 15:52*	*1*
o-Terphenyl	*153*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 15:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	366		5.04		mg/Kg			03/10/24 12:50	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 229 1'

Lab Sample ID: 890-6298-41
Matrix: Solid
Date Collected: 02/29/24 12:10
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:01	03/07/24 05:13	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:01	03/07/24 05:13	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:01	03/07/24 05:13	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/04/24 15:01	03/07/24 05:13	1
o-Xylene	**0.00732**		0.00202		mg/Kg		03/04/24 15:01	03/07/24 05:13	1
Xylenes, Total	**0.00732**		0.00404		mg/Kg		03/04/24 15:01	03/07/24 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*03/04/24 15:01*	*03/07/24 05:13*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/04/24 15:01*	*03/07/24 05:13*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00732**		0.00404		mg/Kg			03/07/24 05:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/07/24 16:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 16:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 16:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*03/06/24 16:39*	*03/07/24 16:14*	*1*
o-Terphenyl	*121*		*70 - 130*	*03/06/24 16:39*	*03/07/24 16:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**342**		4.97		mg/Kg			03/10/24 12:56	1

Client Sample ID: BES 24 - 230 1'

Lab Sample ID: 890-6298-42
Matrix: Solid
Date Collected: 02/29/24 12:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 05:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 05:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 05:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/24 15:01	03/07/24 05:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 05:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/24 15:01	03/07/24 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*03/04/24 15:01*	*03/07/24 05:38*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 230 1'

Lab Sample ID: 890-6298-42
Matrix: Solid
Date Collected: 02/29/24 12:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/04/24 15:01*	*03/07/24 05:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			03/07/24 05:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5	mg/Kg			03/07/24 16:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5	mg/Kg		03/06/24 16:39	03/07/24 16:36	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5	mg/Kg		03/06/24 16:39	03/07/24 16:36	1
OII Range Organics (Over C28-C36)	<49.5	U	49.5	mg/Kg		03/06/24 16:39	03/07/24 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 16:36*	*1*
o-Terphenyl	*143*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 16:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**375**		5.03	mg/Kg			03/10/24 13:02	1

Client Sample ID: BES 24 - 231 1'

Lab Sample ID: 890-6298-43
Matrix: Solid
Date Collected: 02/29/24 12:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/04/24 15:01	03/07/24 06:03	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/04/24 15:01	03/07/24 06:03	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/04/24 15:01	03/07/24 06:03	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/04/24 15:01	03/07/24 06:03	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/04/24 15:01	03/07/24 06:03	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/04/24 15:01	03/07/24 06:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*03/04/24 15:01*	*03/07/24 06:03*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/24 15:01*	*03/07/24 06:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			03/07/24 06:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			03/07/24 16:57	1

Eurofins Carlsbad

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 231 1'

Lab Sample ID: 890-6298-43
Matrix: Solid
Date Collected: 02/29/24 12:20
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/06/24 16:39	03/07/24 16:57	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/06/24 16:39	03/07/24 16:57	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/06/24 16:39	03/07/24 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*03/06/24 16:39*	*03/07/24 16:57*	*1*
o-Terphenyl	*125*		*70 - 130*	*03/06/24 16:39*	*03/07/24 16:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**367**		5.01		mg/Kg			03/10/24 13:08	1

Client Sample ID: BES 24 - 232 1'

Lab Sample ID: 890-6298-44
Matrix: Solid
Date Collected: 02/29/24 12:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 07:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 07:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 07:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/24 15:01	03/07/24 07:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 07:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/24 15:01	03/07/24 07:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/04/24 15:01*	*03/07/24 07:47*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*03/04/24 15:01*	*03/07/24 07:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/07/24 07:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			03/07/24 17:19	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/06/24 16:39	03/07/24 17:19	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/06/24 16:39	03/07/24 17:19	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/06/24 16:39	03/07/24 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 17:19*	*1*
o-Terphenyl	*151*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 17:19*	*1*

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 232 1'

Lab Sample ID: 890-6298-44
Matrix: Solid
Date Collected: 02/29/24 12:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	262		5.05		mg/Kg			03/10/24 13:14	1

Client Sample ID: BES 24 - 233 1'

Lab Sample ID: 890-6298-45
Matrix: Solid
Date Collected: 02/29/24 12:30
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:01	03/07/24 08:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:01	03/07/24 08:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:01	03/07/24 08:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/24 15:01	03/07/24 08:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/24 15:01	03/07/24 08:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/24 15:01	03/07/24 08:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*03/04/24 15:01*	*03/07/24 08:12*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/04/24 15:01*	*03/07/24 08:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/07/24 08:12	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			03/07/24 17:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/06/24 16:39	03/07/24 17:40	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/06/24 16:39	03/07/24 17:40	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/06/24 16:39	03/07/24 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*153*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 17:40*	*1*
o-Terphenyl	*166*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 17:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	193		4.95		mg/Kg			03/10/24 13:31	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 234 1'

Lab Sample ID: 890-6298-46
Matrix: Solid
Date Collected: 02/29/24 12:40
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:01	03/07/24 08:38	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:01	03/07/24 08:38	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:01	03/07/24 08:38	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/24 15:01	03/07/24 08:38	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/24 15:01	03/07/24 08:38	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/24 15:01	03/07/24 08:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*03/04/24 15:01*	*03/07/24 08:38*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/04/24 15:01*	*03/07/24 08:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/07/24 08:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/07/24 18:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/06/24 16:39	03/07/24 18:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/06/24 16:39	03/07/24 18:02	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/06/24 16:39	03/07/24 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*03/06/24 16:39*	*03/07/24 18:02*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 18:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**223**		5.03		mg/Kg			03/10/24 13:37	1

Client Sample ID: BES 24 - 235 1'

Lab Sample ID: 890-6298-47
Matrix: Solid
Date Collected: 02/29/24 12:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:01	03/07/24 09:06	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:01	03/07/24 09:06	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:01	03/07/24 09:06	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/04/24 15:01	03/07/24 09:06	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/24 15:01	03/07/24 09:06	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/04/24 15:01	03/07/24 09:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/04/24 15:01*	*03/07/24 09:06*	*1*

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Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 235 1'
Date Collected: 02/29/24 12:50
Date Received: 03/01/24 12:37
Sample Depth: 1'

Lab Sample ID: 890-6298-47
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*03/04/24 15:01*	*03/07/24 09:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/07/24 09:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/07/24 18:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 18:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 18:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*152*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 18:23*	*1*
o-Terphenyl	*164*	*S1+*	*70 - 130*	*03/06/24 16:39*	*03/07/24 18:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**196**		5.01		mg/Kg			03/10/24 13:54	1

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-6298-1	WES 24 - 20 1'	109	88
890-6298-1 MS	WES 24 - 20 1'	105	89
890-6298-1 MSD	WES 24 - 20 1'	102	96
890-6298-2	WES 24 - 21 1'	122	64 S1-
890-6298-3	WES 24 - 22 1'	130	96
890-6298-4	WES 24 - 23 1'	122	97
890-6298-5	BES 24 -193 1'	110	89
890-6298-6	BES 24 -194 1'	118	94
890-6298-7	BES 24 -195 1'	122	95
890-6298-8	BES 24 -196 1'	106	86
890-6298-9	BES 24 -197 1'	120	87
890-6298-10	BES 24 -198 1'	120	87
890-6298-11	BES 24 -199 1'	109	79
890-6298-12	BES 24 - 200 1'	124	88
890-6298-13	BES 24 - 201 1'	124	90
890-6298-14	BES 24 - 202 1'	119	96
890-6298-15	BES 24 - 203 1'	114	93
890-6298-16	BES 24 - 204 1'	121	95
890-6298-17	BES 24 - 205 1'	123	94
890-6298-18	BES 24 - 206 1'	118	93
890-6298-19	BES 24 - 207 1'	126	98
890-6298-20	BES 24 - 208 1'	128	100
890-6298-21	BES 24 - 209 1'	68 S1-	89
890-6298-21 MS	BES 24 - 209 1'	108	90
890-6298-21 MSD	BES 24 - 209 1'	99	94
890-6298-22	BES 24 -210 1'	106	101
890-6298-23	BES 24 -211 1'	106	98
890-6298-24	BES 24 -212 1'	106	98
890-6298-25	BES 24 -213 1'	110	99
890-6298-26	BES 24 -214 1'	113	98
890-6298-27	BES 24 -215 1'	107	97
890-6298-28	BES 24 -216 1'	103	100
890-6298-29	BES 24 -217 1'	109	101
890-6298-30	BES 24 -218 1'	108	102
890-6298-31	BES 24 -219 1'	105	95
890-6298-32	BES 24 - 220 1'	110	98
890-6298-33	BES 24 - 221 1'	108	92
890-6298-34	BES 24 - 222 1'	112	96
890-6298-35	BES 24 - 223 1'	116	96
890-6298-36	BES 24 - 224 1'	117	96
890-6298-37	BES 24 - 225 1'	114	98
890-6298-38	BES 24 - 226 1'	130	94
890-6298-39	BES 24 - 227 1'	116	94
890-6298-40	BES 24 - 228 1'	112	95
890-6298-41	BES 24 - 229 1'	128	96
890-6298-42	BES 24 - 230 1'	119	94
890-6298-43	BES 24 - 231 1'	133 S1+	98
890-6298-44	BES 24 - 232 1'	107	85
890-6298-45	BES 24 - 233 1'	119	92

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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

Matrix: Solid **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (70-130)	DFBZ1 (70-130)
890-6298-46	BES 24 - 234 1'	117	93
890-6298-47	BES 24 - 235 1'	110	83
LCS 880-74680/1-A	Lab Control Sample	118	111
LCS 880-74687/1-A	Lab Control Sample	110	102
LCS 880-74688/1-A	Lab Control Sample	94	96
LCSD 880-74680/2-A	Lab Control Sample Dup	126	113
LCSD 880-74687/2-A	Lab Control Sample Dup	99	96
LCSD 880-74688/2-A	Lab Control Sample Dup	101	95
MB 880-74680/5-A	Method Blank	65 S1-	87
MB 880-74687/5-A	Method Blank	65 S1-	87
MB 880-74688/5-A	Method Blank	77	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 1CO1 (70-130)	OTPH1 (70-130)
890-6296-A-11-D MS	Matrix Spike	129	135 S1+
890-6296-A-11-E MSD	Matrix Spike Duplicate	128	132 S1+
890-6298-1	WES 24 - 20 1'	107	112
890-6298-2	WES 24 - 21 1'	130	139 S1+
890-6298-3	WES 24 - 22 1'	145 S1+	151 S1+
890-6298-4	WES 24 - 23 1'	91	97
890-6298-5	BES 24 -193 1'	85	90
890-6298-6	BES 24 -194 1'	151 S1+	161 S1+
890-6298-7	BES 24 -195 1'	144 S1+	152 S1+
890-6298-8	BES 24 -196 1'	91	98
890-6298-9	BES 24 -197 1'	124	133 S1+
890-6298-10	BES 24 -198 1'	275 S1+	301 S1+
890-6298-10 MS	BES 24 -198 1'	150 S1+	152 S1+
890-6298-10 MSD	BES 24 -198 1'	153 S1+	157 S1+
890-6298-11	BES 24 -199 1'	148 S1+	167 S1+
890-6298-12	BES 24 - 200 1'	116	130
890-6298-13	BES 24 - 201 1'	138 S1+	155 S1+
890-6298-14	BES 24 - 202 1'	109	122
890-6298-15	BES 24 - 203 1'	118	132 S1+
890-6298-16	BES 24 - 204 1'	125	140 S1+
890-6298-17	BES 24 - 205 1'	155 S1+	173 S1+
890-6298-18	BES 24 - 206 1'	132 S1+	145 S1+
890-6298-19	BES 24 - 207 1'	126	139 S1+
890-6298-20	BES 24 - 208 1'	114	125
890-6298-21	BES 24 - 209 1'	140 S1+	152 S1+
890-6298-22	BES 24 -210 1'	160 S1+	177 S1+
890-6298-23	BES 24 -211 1'	132 S1+	139 S1+
890-6298-24	BES 24 -212 1'	164 S1+	172 S1+
890-6298-25	BES 24 -213 1'	162 S1+	170 S1+

Surrogate Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-6298-26	BES 24 -214 1'	141 S1+	151 S1+										
890-6298-27	BES 24 -215 1'	149 S1+	161 S1+										
890-6298-28	BES 24 -216 1'	172 S1+	187 S1+										
890-6298-29	BES 24 -217 1'	152 S1+	162 S1+										
890-6298-30	BES 24 -218 1'	158 S1+	184 S1+										
890-6298-30 MS	BES 24 -218 1'	122	127										
890-6298-30 MSD	BES 24 -218 1'	147 S1+	151 S1+										
890-6298-31	BES 24 -219 1'	127	145 S1+										
890-6298-32	BES 24 - 220 1'	120	136 S1+										
890-6298-33	BES 24 - 221 1'	119	134 S1+										
890-6298-34	BES 24 - 222 1'	114	127										
890-6298-35	BES 24 - 223 1'	148 S1+	165 S1+										
890-6298-36	BES 24 - 224 1'	152 S1+	170 S1+										
890-6298-37	BES 24 - 225 1'	145 S1+	156 S1+										
890-6298-38	BES 24 - 226 1'	128	138 S1+										
890-6298-39	BES 24 - 227 1'	131 S1+	142 S1+										
890-6298-40	BES 24 - 228 1'	143 S1+	153 S1+										
890-6298-41	BES 24 - 229 1'	114	121										
890-6298-42	BES 24 - 230 1'	137 S1+	143 S1+										
890-6298-43	BES 24 - 231 1'	118	125										
890-6298-44	BES 24 - 232 1'	140 S1+	151 S1+										
890-6298-45	BES 24 - 233 1'	153 S1+	166 S1+										
890-6298-46	BES 24 - 234 1'	130	140 S1+										
890-6298-47	BES 24 - 235 1'	152 S1+	164 S1+										
LCS 880-74834/2-A	Lab Control Sample	97	102										
LCS 880-74866/2-A	Lab Control Sample	114	147 S1+										
LCS 880-74928/2-A	Lab Control Sample	92	94										
LCSD 880-74834/3-A	Lab Control Sample Dup	90	95										
LCSD 880-74866/3-A	Lab Control Sample Dup	107	132 S1+										
LCSD 880-74928/3-A	Lab Control Sample Dup	91	94										
MB 880-74834/1-A	Method Blank	121	139 S1+										
MB 880-74866/1-A	Method Blank	114	130										
MB 880-74928/1-A	Method Blank	98	111										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-74680/5-A
Matrix: Solid
Analysis Batch: 74853

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74680

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 01:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 01:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 01:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/24 15:01	03/07/24 01:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:01	03/07/24 01:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/24 15:01	03/07/24 01:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*65*	*S1-*	*70 - 130*	*03/04/24 15:01*	*03/07/24 01:50*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*03/04/24 15:01*	*03/07/24 01:50*	*1*

Lab Sample ID: LCS 880-74680/1-A
Matrix: Solid
Analysis Batch: 74853

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74680

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1062		mg/Kg		106	70 - 130		
Toluene			0.100	0.1001		mg/Kg		100	70 - 130		
Ethylbenzene			0.100	0.1057		mg/Kg		106	70 - 130		
m-Xylene & p-Xylene			0.200	0.2127		mg/Kg		106	70 - 130		
o-Xylene			0.100	0.1088		mg/Kg		109	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-74680/2-A
Matrix: Solid
Analysis Batch: 74853

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74680

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09101		mg/Kg		91	70 - 130	15	35
Toluene			0.100	0.08726		mg/Kg		87	70 - 130	14	35
Ethylbenzene			0.100	0.09103		mg/Kg		91	70 - 130	15	35
m-Xylene & p-Xylene			0.200	0.1832		mg/Kg		92	70 - 130	15	35
o-Xylene			0.100	0.09642		mg/Kg		96	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: MB 880-74687/5-A
Matrix: Solid
Analysis Batch: 74853

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74687

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 11:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 11:51	1

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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

Lab Sample ID: MB 880-74687/5-A
Matrix: Solid
Analysis Batch: 74853

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74687

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 11:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/24 15:15	03/06/24 11:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:15	03/06/24 11:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/24 15:15	03/06/24 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*65*	*S1-*	*70 - 130*	*03/04/24 15:15*	*03/06/24 11:51*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*03/04/24 15:15*	*03/06/24 11:51*	*1*

Lab Sample ID: LCS 880-74687/1-A
Matrix: Solid
Analysis Batch: 74853

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74687

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1219		mg/Kg		122	70 - 130		
Toluene			0.100	0.1189		mg/Kg		119	70 - 130		
Ethylbenzene			0.100	0.1242		mg/Kg		124	70 - 130		
m-Xylene & p-Xylene			0.200	0.2478		mg/Kg		124	70 - 130		
o-Xylene			0.100	0.1227		mg/Kg		123	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-74687/2-A
Matrix: Solid
Analysis Batch: 74853

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74687

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1126		mg/Kg		113	70 - 130	8	35
Toluene			0.100	0.1143		mg/Kg		114	70 - 130	4	35
Ethylbenzene			0.100	0.1195		mg/Kg		119	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2405		mg/Kg		120	70 - 130	3	35
o-Xylene			0.100	0.1198		mg/Kg		120	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 890-6298-1 MS
Matrix: Solid
Analysis Batch: 74853

Client Sample ID: WES 24 - 20 1'
Prep Type: Total/NA
Prep Batch: 74687

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.101	0.07076		mg/Kg		70	70 - 130		
Toluene	<0.00199	U	0.101	0.07510		mg/Kg		75	70 - 130		
Ethylbenzene	<0.00199	U	0.101	0.08279		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1636		mg/Kg		81	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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

Lab Sample ID: 890-6298-1 MS
Matrix: Solid
Analysis Batch: 74853

Client Sample ID: WES 24 - 20 1'
Prep Type: Total/NA
Prep Batch: 74687

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	<0.00199	U	0.101	0.08522		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

Lab Sample ID: 890-6298-1 MSD
Matrix: Solid
Analysis Batch: 74853

Client Sample ID: WES 24 - 20 1'
Prep Type: Total/NA
Prep Batch: 74687

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08457		mg/Kg		85	70 - 130	18	35
Toluene	<0.00199	U	0.100	0.08971		mg/Kg		90	70 - 130	18	35
Ethylbenzene	<0.00199	U	0.100	0.1001		mg/Kg		100	70 - 130	19	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1993		mg/Kg		100	70 - 130	20	35
o-Xylene	<0.00199	U	0.100	0.1033		mg/Kg		103	70 - 130	19	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 880-74688/5-A
Matrix: Solid
Analysis Batch: 74894

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74688

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 16:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 16:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 16:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/24 15:17	03/06/24 16:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/24 15:17	03/06/24 16:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/24 15:17	03/06/24 16:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*03/04/24 15:17*	*03/06/24 16:17*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/04/24 15:17*	*03/06/24 16:17*	*1*

Lab Sample ID: LCS 880-74688/1-A
Matrix: Solid
Analysis Batch: 74894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74688

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1106		mg/Kg		111	70 - 130
Toluene	0.100	0.1039		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.1065		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.2174		mg/Kg		109	70 - 130
o-Xylene	0.100	0.1073		mg/Kg		107	70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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

Lab Sample ID: LCS 880-74688/1-A
Matrix: Solid
Analysis Batch: 74894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74688

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-74688/2-A
Matrix: Solid
Analysis Batch: 74894

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74688

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1230		mg/Kg		123	70 - 130	11	35
Toluene			0.100	0.1154		mg/Kg		115	70 - 130	10	35
Ethylbenzene			0.100	0.1172		mg/Kg		117	70 - 130	10	35
m-Xylene & p-Xylene			0.200	0.2371		mg/Kg		119	70 - 130	9	35
o-Xylene			0.100	0.1169		mg/Kg		117	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-6298-21 MS
Matrix: Solid
Analysis Batch: 74894

Client Sample ID: BES 24 - 209 1'
Prep Type: Total/NA
Prep Batch: 74688

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F1	0.101	0.06518	F1	mg/Kg		65	70 - 130		
Toluene	<0.00199	U	0.101	0.07721		mg/Kg		77	70 - 130		
Ethylbenzene	<0.00199	U	0.101	0.08724		mg/Kg		87	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1805		mg/Kg		90	70 - 130		
o-Xylene	<0.00199	U	0.101	0.09404		mg/Kg		93	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: 890-6298-21 MSD
Matrix: Solid
Analysis Batch: 74894

Client Sample ID: BES 24 - 209 1'
Prep Type: Total/NA
Prep Batch: 74688

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.08184		mg/Kg		82	70 - 130	23	35
Toluene	<0.00199	U	0.100	0.08140		mg/Kg		81	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.100	0.08697		mg/Kg		87	70 - 130	0	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1743		mg/Kg		87	70 - 130	3	35
o-Xylene	<0.00199	U	0.100	0.09061		mg/Kg		91	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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

Lab Sample ID: MB 880-74834/1-A
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74834

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/05/24 16:53	03/06/24 08:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/05/24 16:53	03/06/24 08:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/05/24 16:53	03/06/24 08:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*03/05/24 16:53*	*03/06/24 08:13*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*03/05/24 16:53*	*03/06/24 08:13*	*1*

Lab Sample ID: LCS 880-74834/2-A
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74834

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1066		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1137		mg/Kg		114	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-74834/3-A
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74834

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1123		mg/Kg		112	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	1061		mg/Kg		106	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: 890-6296-A-11-D MS
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 74834

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	1010	1103		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.7	U	1010	1036		mg/Kg		100	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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

Lab Sample ID: 890-6296-A-11-D MS
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 74834

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	129		70 - 130
o-Terphenyl	135	S1+	70 - 130

Lab Sample ID: 890-6296-A-11-E MSD
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 74834

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	1010	1170		mg/Kg		112	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.7	U	1010	1032		mg/Kg		99	70 - 130	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	128		70 - 130
o-Terphenyl	132	S1+	70 - 130

Lab Sample ID: MB 880-74866/1-A
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74866

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/06/24 09:24	03/06/24 19:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/06/24 09:24	03/06/24 19:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/06/24 09:24	03/06/24 19:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	03/06/24 09:24	03/06/24 19:35	1
o-Terphenyl	130		70 - 130	03/06/24 09:24	03/06/24 19:35	1

Lab Sample ID: LCS 880-74866/2-A
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74866

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1168		mg/Kg		117	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	947.9		mg/Kg		95	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	147	S1+	70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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

Lab Sample ID: LCSD 880-74866/3-A
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74866

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1064		mg/Kg		106	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	885.6		mg/Kg		89	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*107*		*70 - 130*
o-Terphenyl	*132*	*S1+*	*70 - 130*

Lab Sample ID: 890-6298-10 MS
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: BES 24 -198 1'
Prep Type: Total/NA
Prep Batch: 74866

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	1010	1127		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.4	U	1010	1060		mg/Kg		102	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*150*	*S1+*	*70 - 130*
o-Terphenyl	*152*	*S1+*	*70 - 130*

Lab Sample ID: 890-6298-10 MSD
Matrix: Solid
Analysis Batch: 74863

Client Sample ID: BES 24 -198 1'
Prep Type: Total/NA
Prep Batch: 74866

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	<50.4	U	1010	1127		mg/Kg		108	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.4	U	1010	1134		mg/Kg		110	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*153*	*S1+*	*70 - 130*
o-Terphenyl	*157*	*S1+*	*70 - 130*

Lab Sample ID: MB 880-74928/1-A
Matrix: Solid
Analysis Batch: 74956

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74928

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 08:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 08:02	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/06/24 16:39	03/07/24 08:02	1

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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

Lab Sample ID: MB 880-74928/1-A
Matrix: Solid
Analysis Batch: 74956

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74928

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/06/24 16:39	03/07/24 08:02	1
o-Terphenyl	111		70 - 130	03/06/24 16:39	03/07/24 08:02	1

Lab Sample ID: LCS 880-74928/2-A
Matrix: Solid
Analysis Batch: 74956

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74928

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1102		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1074		mg/Kg		107	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: LCSD 880-74928/3-A
Matrix: Solid
Analysis Batch: 74956

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74928

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1066		mg/Kg		107	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	1058		mg/Kg		106	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 890-6298-30 MS
Matrix: Solid
Analysis Batch: 74956

Client Sample ID: BES 24 -218 1'
Prep Type: Total/NA
Prep Batch: 74928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.7	U F2	1010	903.7		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.7	U	1010	889.4		mg/Kg		84	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	127		70 - 130

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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

Lab Sample ID: 890-6298-30 MSD — **Client Sample ID: BES 24 -218 1'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 74956 — **Prep Batch: 74928**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.7	U F2	1010	1185	F2	mg/Kg		113	70 - 130	27	20
Diesel Range Organics (Over C10-C28)	<49.7	U	1010	1074		mg/Kg		102	70 - 130	19	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*147*	*S1+*	*70 - 130*
o-Terphenyl	*151*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-74628/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 74929

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/08/24 01:41	1

Lab Sample ID: LCS 880-74628/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 74929

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.3		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-74628/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 74929

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	263.0		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-6298-4 MS — **Client Sample ID: WES 24 - 23 1'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 74929

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	86.1	F1	250	261.0	F1	mg/Kg		70	90 - 110		

Lab Sample ID: 890-6298-4 MSD — **Client Sample ID: WES 24 - 23 1'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 74929

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	86.1	F1	250	260.6	F1	mg/Kg		70	90 - 110	0	20

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-74629/1-A
Matrix: Solid
Analysis Batch: 74938

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/08/24 05:51	1

Lab Sample ID: LCS 880-74629/2-A
Matrix: Solid
Analysis Batch: 74938

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	262.3		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-74629/3-A
Matrix: Solid
Analysis Batch: 74938

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	257.1		mg/Kg		103	90 - 110	2	20

Lab Sample ID: 890-6298-14 MS
Matrix: Solid
Analysis Batch: 74938

Client Sample ID: BES 24 - 202 1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	142	F1	251	319.9	F1	mg/Kg		71	90 - 110		

Lab Sample ID: 890-6298-14 MSD
Matrix: Solid
Analysis Batch: 74938

Client Sample ID: BES 24 - 202 1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	142	F1	251	324.5	F1	mg/Kg		73	90 - 110	1	20

Lab Sample ID: 890-6298-24 MS
Matrix: Solid
Analysis Batch: 74938

Client Sample ID: BES 24 -212 1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	92.6	F1	250	400.9	F1	mg/Kg		124	90 - 110		

Lab Sample ID: 890-6298-24 MSD
Matrix: Solid
Analysis Batch: 74938

Client Sample ID: BES 24 -212 1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	92.6	F1	250	401.4	F1	mg/Kg		124	90 - 110	0	20

Lab Sample ID: MB 880-74631/1-A
Matrix: Solid
Analysis Batch: 75008

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/10/24 11:35	1

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-74631/2-A
Matrix: Solid
Analysis Batch: 75008

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	262.2		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-74631/3-A
Matrix: Solid
Analysis Batch: 75008

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	262.4		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-6298-34 MS
Matrix: Solid
Analysis Batch: 75008

Client Sample ID: BES 24 - 222 1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	60.6		252	329.8		mg/Kg		107	90 - 110		

Lab Sample ID: 890-6298-34 MSD
Matrix: Solid
Analysis Batch: 75008

Client Sample ID: BES 24 - 222 1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	60.6		252	323.9		mg/Kg		105	90 - 110	2	20

Lab Sample ID: 890-6298-44 MS
Matrix: Solid
Analysis Batch: 75008

Client Sample ID: BES 24 - 232 1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	262		253	512.6		mg/Kg		99	90 - 110		

Lab Sample ID: 890-6298-44 MSD
Matrix: Solid
Analysis Batch: 75008

Client Sample ID: BES 24 - 232 1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	262		253	512.7		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

GC VOA

Prep Batch: 74680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-41	BES 24 - 229 1'	Total/NA	Solid	5035	
890-6298-42	BES 24 - 230 1'	Total/NA	Solid	5035	
890-6298-43	BES 24 - 231 1'	Total/NA	Solid	5035	
890-6298-44	BES 24 - 232 1'	Total/NA	Solid	5035	
890-6298-45	BES 24 - 233 1'	Total/NA	Solid	5035	
890-6298-46	BES 24 - 234 1'	Total/NA	Solid	5035	
890-6298-47	BES 24 - 235 1'	Total/NA	Solid	5035	
MB 880-74680/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74680/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74680/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 74687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-1	WES 24 - 20 1'	Total/NA	Solid	5035	
890-6298-2	WES 24 - 21 1'	Total/NA	Solid	5035	
890-6298-3	WES 24 - 22 1'	Total/NA	Solid	5035	
890-6298-4	WES 24 - 23 1'	Total/NA	Solid	5035	
890-6298-5	BES 24 -193 1'	Total/NA	Solid	5035	
890-6298-6	BES 24 -194 1'	Total/NA	Solid	5035	
890-6298-7	BES 24 -195 1'	Total/NA	Solid	5035	
890-6298-8	BES 24 -196 1'	Total/NA	Solid	5035	
890-6298-9	BES 24 -197 1'	Total/NA	Solid	5035	
890-6298-10	BES 24 -198 1'	Total/NA	Solid	5035	
890-6298-11	BES 24 -199 1'	Total/NA	Solid	5035	
890-6298-12	BES 24 - 200 1'	Total/NA	Solid	5035	
890-6298-13	BES 24 - 201 1'	Total/NA	Solid	5035	
890-6298-14	BES 24 - 202 1'	Total/NA	Solid	5035	
890-6298-15	BES 24 - 203 1'	Total/NA	Solid	5035	
890-6298-16	BES 24 - 204 1'	Total/NA	Solid	5035	
890-6298-17	BES 24 - 205 1'	Total/NA	Solid	5035	
890-6298-18	BES 24 - 206 1'	Total/NA	Solid	5035	
890-6298-19	BES 24 - 207 1'	Total/NA	Solid	5035	
890-6298-20	BES 24 - 208 1'	Total/NA	Solid	5035	
MB 880-74687/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74687/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74687/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6298-1 MS	WES 24 - 20 1'	Total/NA	Solid	5035	
890-6298-1 MSD	WES 24 - 20 1'	Total/NA	Solid	5035	

Prep Batch: 74688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-21	BES 24 - 209 1'	Total/NA	Solid	5035	
890-6298-22	BES 24 -210 1'	Total/NA	Solid	5035	
890-6298-23	BES 24 -211 1'	Total/NA	Solid	5035	
890-6298-24	BES 24 -212 1'	Total/NA	Solid	5035	
890-6298-25	BES 24 -213 1'	Total/NA	Solid	5035	
890-6298-26	BES 24 -214 1'	Total/NA	Solid	5035	
890-6298-27	BES 24 -215 1'	Total/NA	Solid	5035	
890-6298-28	BES 24 -216 1'	Total/NA	Solid	5035	
890-6298-29	BES 24 -217 1'	Total/NA	Solid	5035	
890-6298-30	BES 24 -218 1'	Total/NA	Solid	5035	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

GC VOA (Continued)

Prep Batch: 74688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-31	BES 24 -219 1'	Total/NA	Solid	5035	
890-6298-32	BES 24 - 220 1'	Total/NA	Solid	5035	
890-6298-33	BES 24 - 221 1'	Total/NA	Solid	5035	
890-6298-34	BES 24 - 222 1'	Total/NA	Solid	5035	
890-6298-35	BES 24 - 223 1'	Total/NA	Solid	5035	
890-6298-36	BES 24 - 224 1'	Total/NA	Solid	5035	
890-6298-37	BES 24 - 225 1'	Total/NA	Solid	5035	
890-6298-38	BES 24 - 226 1'	Total/NA	Solid	5035	
890-6298-39	BES 24 - 227 1'	Total/NA	Solid	5035	
890-6298-40	BES 24 - 228 1'	Total/NA	Solid	5035	
MB 880-74688/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74688/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74688/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6298-21 MS	BES 24 - 209 1'	Total/NA	Solid	5035	
890-6298-21 MSD	BES 24 - 209 1'	Total/NA	Solid	5035	

Analysis Batch: 74853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-1	WES 24 - 20 1'	Total/NA	Solid	8021B	74687
890-6298-2	WES 24 - 21 1'	Total/NA	Solid	8021B	74687
890-6298-3	WES 24 - 22 1'	Total/NA	Solid	8021B	74687
890-6298-4	WES 24 - 23 1'	Total/NA	Solid	8021B	74687
890-6298-5	BES 24 -193 1'	Total/NA	Solid	8021B	74687
890-6298-6	BES 24 -194 1'	Total/NA	Solid	8021B	74687
890-6298-7	BES 24 -195 1'	Total/NA	Solid	8021B	74687
890-6298-8	BES 24 -196 1'	Total/NA	Solid	8021B	74687
890-6298-9	BES 24 -197 1'	Total/NA	Solid	8021B	74687
890-6298-10	BES 24 -198 1'	Total/NA	Solid	8021B	74687
890-6298-11	BES 24 -199 1'	Total/NA	Solid	8021B	74687
890-6298-12	BES 24 - 200 1'	Total/NA	Solid	8021B	74687
890-6298-13	BES 24 - 201 1'	Total/NA	Solid	8021B	74687
890-6298-14	BES 24 - 202 1'	Total/NA	Solid	8021B	74687
890-6298-15	BES 24 - 203 1'	Total/NA	Solid	8021B	74687
890-6298-16	BES 24 - 204 1'	Total/NA	Solid	8021B	74687
890-6298-17	BES 24 - 205 1'	Total/NA	Solid	8021B	74687
890-6298-18	BES 24 - 206 1'	Total/NA	Solid	8021B	74687
890-6298-19	BES 24 - 207 1'	Total/NA	Solid	8021B	74687
890-6298-20	BES 24 - 208 1'	Total/NA	Solid	8021B	74687
890-6298-41	BES 24 - 229 1'	Total/NA	Solid	8021B	74680
890-6298-42	BES 24 - 230 1'	Total/NA	Solid	8021B	74680
890-6298-43	BES 24 - 231 1'	Total/NA	Solid	8021B	74680
890-6298-44	BES 24 - 232 1'	Total/NA	Solid	8021B	74680
890-6298-45	BES 24 - 233 1'	Total/NA	Solid	8021B	74680
890-6298-46	BES 24 - 234 1'	Total/NA	Solid	8021B	74680
890-6298-47	BES 24 - 235 1'	Total/NA	Solid	8021B	74680
MB 880-74680/5-A	Method Blank	Total/NA	Solid	8021B	74680
MB 880-74687/5-A	Method Blank	Total/NA	Solid	8021B	74687
LCS 880-74680/1-A	Lab Control Sample	Total/NA	Solid	8021B	74680
LCS 880-74687/1-A	Lab Control Sample	Total/NA	Solid	8021B	74687
LCSD 880-74680/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74680
LCSD 880-74687/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74687

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

GC VOA (Continued)

Analysis Batch: 74853 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-1 MS	WES 24 - 20 1'	Total/NA	Solid	8021B	74687
890-6298-1 MSD	WES 24 - 20 1'	Total/NA	Solid	8021B	74687

Analysis Batch: 74894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-21	BES 24 - 209 1'	Total/NA	Solid	8021B	74688
890-6298-22	BES 24 -210 1'	Total/NA	Solid	8021B	74688
890-6298-23	BES 24 -211 1'	Total/NA	Solid	8021B	74688
890-6298-24	BES 24 -212 1'	Total/NA	Solid	8021B	74688
890-6298-25	BES 24 -213 1'	Total/NA	Solid	8021B	74688
890-6298-26	BES 24 -214 1'	Total/NA	Solid	8021B	74688
890-6298-27	BES 24 -215 1'	Total/NA	Solid	8021B	74688
890-6298-28	BES 24 -216 1'	Total/NA	Solid	8021B	74688
890-6298-29	BES 24 -217 1'	Total/NA	Solid	8021B	74688
890-6298-30	BES 24 -218 1'	Total/NA	Solid	8021B	74688
890-6298-31	BES 24 -219 1'	Total/NA	Solid	8021B	74688
890-6298-32	BES 24 - 220 1'	Total/NA	Solid	8021B	74688
890-6298-33	BES 24 - 221 1'	Total/NA	Solid	8021B	74688
890-6298-34	BES 24 - 222 1'	Total/NA	Solid	8021B	74688
890-6298-35	BES 24 - 223 1'	Total/NA	Solid	8021B	74688
890-6298-36	BES 24 - 224 1'	Total/NA	Solid	8021B	74688
890-6298-37	BES 24 - 225 1'	Total/NA	Solid	8021B	74688
890-6298-38	BES 24 - 226 1'	Total/NA	Solid	8021B	74688
890-6298-39	BES 24 - 227 1'	Total/NA	Solid	8021B	74688
890-6298-40	BES 24 - 228 1'	Total/NA	Solid	8021B	74688
MB 880-74688/5-A	Method Blank	Total/NA	Solid	8021B	74688
LCS 880-74688/1-A	Lab Control Sample	Total/NA	Solid	8021B	74688
LCSD 880-74688/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74688
890-6298-21 MS	BES 24 - 209 1'	Total/NA	Solid	8021B	74688
890-6298-21 MSD	BES 24 - 209 1'	Total/NA	Solid	8021B	74688

Analysis Batch: 74939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-1	WES 24 - 20 1'	Total/NA	Solid	Total BTEX	
890-6298-2	WES 24 - 21 1'	Total/NA	Solid	Total BTEX	
890-6298-3	WES 24 - 22 1'	Total/NA	Solid	Total BTEX	
890-6298-4	WES 24 - 23 1'	Total/NA	Solid	Total BTEX	
890-6298-5	BES 24 -193 1'	Total/NA	Solid	Total BTEX	
890-6298-6	BES 24 -194 1'	Total/NA	Solid	Total BTEX	
890-6298-7	BES 24 -195 1'	Total/NA	Solid	Total BTEX	
890-6298-8	BES 24 -196 1'	Total/NA	Solid	Total BTEX	
890-6298-9	BES 24 -197 1'	Total/NA	Solid	Total BTEX	
890-6298-10	BES 24 -198 1'	Total/NA	Solid	Total BTEX	
890-6298-11	BES 24 -199 1'	Total/NA	Solid	Total BTEX	
890-6298-12	BES 24 - 200 1'	Total/NA	Solid	Total BTEX	
890-6298-13	BES 24 - 201 1'	Total/NA	Solid	Total BTEX	
890-6298-14	BES 24 - 202 1'	Total/NA	Solid	Total BTEX	
890-6298-15	BES 24 - 203 1'	Total/NA	Solid	Total BTEX	
890-6298-16	BES 24 - 204 1'	Total/NA	Solid	Total BTEX	
890-6298-17	BES 24 - 205 1'	Total/NA	Solid	Total BTEX	
890-6298-18	BES 24 - 206 1'	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

GC VOA (Continued)

Analysis Batch: 74939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-19	BES 24 - 207 1'	Total/NA	Solid	Total BTEX	
890-6298-20	BES 24 - 208 1'	Total/NA	Solid	Total BTEX	
890-6298-21	BES 24 - 209 1'	Total/NA	Solid	Total BTEX	
890-6298-22	BES 24 -210 1'	Total/NA	Solid	Total BTEX	
890-6298-23	BES 24 -211 1'	Total/NA	Solid	Total BTEX	
890-6298-24	BES 24 -212 1'	Total/NA	Solid	Total BTEX	
890-6298-25	BES 24 -213 1'	Total/NA	Solid	Total BTEX	
890-6298-26	BES 24 -214 1'	Total/NA	Solid	Total BTEX	
890-6298-27	BES 24 -215 1'	Total/NA	Solid	Total BTEX	
890-6298-28	BES 24 -216 1'	Total/NA	Solid	Total BTEX	
890-6298-29	BES 24 -217 1'	Total/NA	Solid	Total BTEX	
890-6298-30	BES 24 -218 1'	Total/NA	Solid	Total BTEX	
890-6298-31	BES 24 -219 1'	Total/NA	Solid	Total BTEX	
890-6298-32	BES 24 - 220 1'	Total/NA	Solid	Total BTEX	
890-6298-33	BES 24 - 221 1'	Total/NA	Solid	Total BTEX	
890-6298-34	BES 24 - 222 1'	Total/NA	Solid	Total BTEX	
890-6298-35	BES 24 - 223 1'	Total/NA	Solid	Total BTEX	
890-6298-36	BES 24 - 224 1'	Total/NA	Solid	Total BTEX	
890-6298-37	BES 24 - 225 1'	Total/NA	Solid	Total BTEX	
890-6298-38	BES 24 - 226 1'	Total/NA	Solid	Total BTEX	
890-6298-39	BES 24 - 227 1'	Total/NA	Solid	Total BTEX	
890-6298-40	BES 24 - 228 1'	Total/NA	Solid	Total BTEX	
890-6298-41	BES 24 - 229 1'	Total/NA	Solid	Total BTEX	
890-6298-42	BES 24 - 230 1'	Total/NA	Solid	Total BTEX	
890-6298-43	BES 24 - 231 1'	Total/NA	Solid	Total BTEX	
890-6298-44	BES 24 - 232 1'	Total/NA	Solid	Total BTEX	
890-6298-45	BES 24 - 233 1'	Total/NA	Solid	Total BTEX	
890-6298-46	BES 24 - 234 1'	Total/NA	Solid	Total BTEX	
890-6298-47	BES 24 - 235 1'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 74834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-1	WES 24 - 20 1'	Total/NA	Solid	8015NM Prep	
890-6298-2	WES 24 - 21 1'	Total/NA	Solid	8015NM Prep	
890-6298-3	WES 24 - 22 1'	Total/NA	Solid	8015NM Prep	
890-6298-4	WES 24 - 23 1'	Total/NA	Solid	8015NM Prep	
890-6298-5	BES 24 -193 1'	Total/NA	Solid	8015NM Prep	
890-6298-6	BES 24 -194 1'	Total/NA	Solid	8015NM Prep	
890-6298-7	BES 24 -195 1'	Total/NA	Solid	8015NM Prep	
890-6298-8	BES 24 -196 1'	Total/NA	Solid	8015NM Prep	
890-6298-9	BES 24 -197 1'	Total/NA	Solid	8015NM Prep	
MB 880-74834/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74834/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6296-A-11-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6296-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

GC Semi VOA

Analysis Batch: 74863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-1	WES 24 - 20 1'	Total/NA	Solid	8015B NM	74834
890-6298-2	WES 24 - 21 1'	Total/NA	Solid	8015B NM	74834
890-6298-3	WES 24 - 22 1'	Total/NA	Solid	8015B NM	74834
890-6298-4	WES 24 - 23 1'	Total/NA	Solid	8015B NM	74834
890-6298-5	BES 24 -193 1'	Total/NA	Solid	8015B NM	74834
890-6298-6	BES 24 -194 1'	Total/NA	Solid	8015B NM	74834
890-6298-7	BES 24 -195 1'	Total/NA	Solid	8015B NM	74834
890-6298-8	BES 24 -196 1'	Total/NA	Solid	8015B NM	74834
890-6298-9	BES 24 -197 1'	Total/NA	Solid	8015B NM	74834
890-6298-10	BES 24 -198 1'	Total/NA	Solid	8015B NM	74866
890-6298-11	BES 24 -199 1'	Total/NA	Solid	8015B NM	74866
890-6298-12	BES 24 - 200 1'	Total/NA	Solid	8015B NM	74866
890-6298-13	BES 24 - 201 1'	Total/NA	Solid	8015B NM	74866
890-6298-14	BES 24 - 202 1'	Total/NA	Solid	8015B NM	74866
890-6298-15	BES 24 - 203 1'	Total/NA	Solid	8015B NM	74866
890-6298-16	BES 24 - 204 1'	Total/NA	Solid	8015B NM	74866
890-6298-17	BES 24 - 205 1'	Total/NA	Solid	8015B NM	74866
890-6298-18	BES 24 - 206 1'	Total/NA	Solid	8015B NM	74866
890-6298-19	BES 24 - 207 1'	Total/NA	Solid	8015B NM	74866
890-6298-20	BES 24 - 208 1'	Total/NA	Solid	8015B NM	74866
890-6298-21	BES 24 - 209 1'	Total/NA	Solid	8015B NM	74866
890-6298-22	BES 24 -210 1'	Total/NA	Solid	8015B NM	74866
890-6298-23	BES 24 -211 1'	Total/NA	Solid	8015B NM	74866
890-6298-24	BES 24 -212 1'	Total/NA	Solid	8015B NM	74866
890-6298-25	BES 24 -213 1'	Total/NA	Solid	8015B NM	74866
890-6298-26	BES 24 -214 1'	Total/NA	Solid	8015B NM	74866
890-6298-27	BES 24 -215 1'	Total/NA	Solid	8015B NM	74866
890-6298-28	BES 24 -216 1'	Total/NA	Solid	8015B NM	74866
890-6298-29	BES 24 -217 1'	Total/NA	Solid	8015B NM	74866
MB 880-74834/1-A	Method Blank	Total/NA	Solid	8015B NM	74834
MB 880-74866/1-A	Method Blank	Total/NA	Solid	8015B NM	74866
LCS 880-74834/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74834
LCS 880-74866/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74866
LCSD 880-74834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74834
LCSD 880-74866/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74866
890-6296-A-11-D MS	Matrix Spike	Total/NA	Solid	8015B NM	74834
890-6296-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	74834
890-6298-10 MS	BES 24 -198 1'	Total/NA	Solid	8015B NM	74866
890-6298-10 MSD	BES 24 -198 1'	Total/NA	Solid	8015B NM	74866

Prep Batch: 74866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-10	BES 24 -198 1'	Total/NA	Solid	8015NM Prep	
890-6298-11	BES 24 -199 1'	Total/NA	Solid	8015NM Prep	
890-6298-12	BES 24 - 200 1'	Total/NA	Solid	8015NM Prep	
890-6298-13	BES 24 - 201 1'	Total/NA	Solid	8015NM Prep	
890-6298-14	BES 24 - 202 1'	Total/NA	Solid	8015NM Prep	
890-6298-15	BES 24 - 203 1'	Total/NA	Solid	8015NM Prep	
890-6298-16	BES 24 - 204 1'	Total/NA	Solid	8015NM Prep	
890-6298-17	BES 24 - 205 1'	Total/NA	Solid	8015NM Prep	
890-6298-18	BES 24 - 206 1'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

GC Semi VOA (Continued)

Prep Batch: 74866 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-19	BES 24 - 207 1'	Total/NA	Solid	8015NM Prep	
890-6298-20	BES 24 - 208 1'	Total/NA	Solid	8015NM Prep	
890-6298-21	BES 24 - 209 1'	Total/NA	Solid	8015NM Prep	
890-6298-22	BES 24 -210 1'	Total/NA	Solid	8015NM Prep	
890-6298-23	BES 24 -211 1'	Total/NA	Solid	8015NM Prep	
890-6298-24	BES 24 -212 1'	Total/NA	Solid	8015NM Prep	
890-6298-25	BES 24 -213 1'	Total/NA	Solid	8015NM Prep	
890-6298-26	BES 24 -214 1'	Total/NA	Solid	8015NM Prep	
890-6298-27	BES 24 -215 1'	Total/NA	Solid	8015NM Prep	
890-6298-28	BES 24 -216 1'	Total/NA	Solid	8015NM Prep	
890-6298-29	BES 24 -217 1'	Total/NA	Solid	8015NM Prep	
MB 880-74866/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74866/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74866/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6298-10 MS	BES 24 -198 1'	Total/NA	Solid	8015NM Prep	
890-6298-10 MSD	BES 24 -198 1'	Total/NA	Solid	8015NM Prep	

Prep Batch: 74928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-30	BES 24 -218 1'	Total/NA	Solid	8015NM Prep	
890-6298-31	BES 24 -219 1'	Total/NA	Solid	8015NM Prep	
890-6298-32	BES 24 - 220 1'	Total/NA	Solid	8015NM Prep	
890-6298-33	BES 24 - 221 1'	Total/NA	Solid	8015NM Prep	
890-6298-34	BES 24 - 222 1'	Total/NA	Solid	8015NM Prep	
890-6298-35	BES 24 - 223 1'	Total/NA	Solid	8015NM Prep	
890-6298-36	BES 24 - 224 1'	Total/NA	Solid	8015NM Prep	
890-6298-37	BES 24 - 225 1'	Total/NA	Solid	8015NM Prep	
890-6298-38	BES 24 - 226 1'	Total/NA	Solid	8015NM Prep	
890-6298-39	BES 24 - 227 1'	Total/NA	Solid	8015NM Prep	
890-6298-40	BES 24 - 228 1'	Total/NA	Solid	8015NM Prep	
890-6298-41	BES 24 - 229 1'	Total/NA	Solid	8015NM Prep	
890-6298-42	BES 24 - 230 1'	Total/NA	Solid	8015NM Prep	
890-6298-43	BES 24 - 231 1'	Total/NA	Solid	8015NM Prep	
890-6298-44	BES 24 - 232 1'	Total/NA	Solid	8015NM Prep	
890-6298-45	BES 24 - 233 1'	Total/NA	Solid	8015NM Prep	
890-6298-46	BES 24 - 234 1'	Total/NA	Solid	8015NM Prep	
890-6298-47	BES 24 - 235 1'	Total/NA	Solid	8015NM Prep	
MB 880-74928/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74928/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74928/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6298-30 MS	BES 24 -218 1'	Total/NA	Solid	8015NM Prep	
890-6298-30 MSD	BES 24 -218 1'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 74956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-30	BES 24 -218 1'	Total/NA	Solid	8015B NM	74928
890-6298-31	BES 24 -219 1'	Total/NA	Solid	8015B NM	74928
890-6298-32	BES 24 - 220 1'	Total/NA	Solid	8015B NM	74928
890-6298-33	BES 24 - 221 1'	Total/NA	Solid	8015B NM	74928
890-6298-34	BES 24 - 222 1'	Total/NA	Solid	8015B NM	74928
890-6298-35	BES 24 - 223 1'	Total/NA	Solid	8015B NM	74928

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

GC Semi VOA (Continued)

Analysis Batch: 74956 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-36	BES 24 - 224 1'	Total/NA	Solid	8015B NM	74928
890-6298-37	BES 24 - 225 1'	Total/NA	Solid	8015B NM	74928
890-6298-38	BES 24 - 226 1'	Total/NA	Solid	8015B NM	74928
890-6298-39	BES 24 - 227 1'	Total/NA	Solid	8015B NM	74928
890-6298-40	BES 24 - 228 1'	Total/NA	Solid	8015B NM	74928
890-6298-41	BES 24 - 229 1'	Total/NA	Solid	8015B NM	74928
890-6298-42	BES 24 - 230 1'	Total/NA	Solid	8015B NM	74928
890-6298-43	BES 24 - 231 1'	Total/NA	Solid	8015B NM	74928
890-6298-44	BES 24 - 232 1'	Total/NA	Solid	8015B NM	74928
890-6298-45	BES 24 - 233 1'	Total/NA	Solid	8015B NM	74928
890-6298-46	BES 24 - 234 1'	Total/NA	Solid	8015B NM	74928
890-6298-47	BES 24 - 235 1'	Total/NA	Solid	8015B NM	74928
MB 880-74928/1-A	Method Blank	Total/NA	Solid	8015B NM	74928
LCS 880-74928/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74928
LCSD 880-74928/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74928
890-6298-30 MS	BES 24 -218 1'	Total/NA	Solid	8015B NM	74928
890-6298-30 MSD	BES 24 -218 1'	Total/NA	Solid	8015B NM	74928

Analysis Batch: 75016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-1	WES 24 - 20 1'	Total/NA	Solid	8015 NM	
890-6298-2	WES 24 - 21 1'	Total/NA	Solid	8015 NM	
890-6298-3	WES 24 - 22 1'	Total/NA	Solid	8015 NM	
890-6298-4	WES 24 - 23 1'	Total/NA	Solid	8015 NM	
890-6298-5	BES 24 -193 1'	Total/NA	Solid	8015 NM	
890-6298-6	BES 24 -194 1'	Total/NA	Solid	8015 NM	
890-6298-7	BES 24 -195 1'	Total/NA	Solid	8015 NM	
890-6298-8	BES 24 -196 1'	Total/NA	Solid	8015 NM	
890-6298-9	BES 24 -197 1'	Total/NA	Solid	8015 NM	
890-6298-10	BES 24 -198 1'	Total/NA	Solid	8015 NM	
890-6298-11	BES 24 -199 1'	Total/NA	Solid	8015 NM	
890-6298-12	BES 24 - 200 1'	Total/NA	Solid	8015 NM	
890-6298-13	BES 24 - 201 1'	Total/NA	Solid	8015 NM	
890-6298-14	BES 24 - 202 1'	Total/NA	Solid	8015 NM	
890-6298-15	BES 24 - 203 1'	Total/NA	Solid	8015 NM	
890-6298-16	BES 24 - 204 1'	Total/NA	Solid	8015 NM	
890-6298-17	BES 24 - 205 1'	Total/NA	Solid	8015 NM	
890-6298-18	BES 24 - 206 1'	Total/NA	Solid	8015 NM	
890-6298-19	BES 24 - 207 1'	Total/NA	Solid	8015 NM	
890-6298-20	BES 24 - 208 1'	Total/NA	Solid	8015 NM	
890-6298-21	BES 24 - 209 1'	Total/NA	Solid	8015 NM	
890-6298-22	BES 24 -210 1'	Total/NA	Solid	8015 NM	
890-6298-23	BES 24 -211 1'	Total/NA	Solid	8015 NM	
890-6298-24	BES 24 -212 1'	Total/NA	Solid	8015 NM	
890-6298-25	BES 24 -213 1'	Total/NA	Solid	8015 NM	
890-6298-26	BES 24 -214 1'	Total/NA	Solid	8015 NM	
890-6298-27	BES 24 -215 1'	Total/NA	Solid	8015 NM	
890-6298-28	BES 24 -216 1'	Total/NA	Solid	8015 NM	
890-6298-29	BES 24 -217 1'	Total/NA	Solid	8015 NM	
890-6298-30	BES 24 -218 1'	Total/NA	Solid	8015 NM	
890-6298-31	BES 24 -219 1'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

GC Semi VOA (Continued)

Analysis Batch: 75016 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-32	BES 24 - 220 1'	Total/NA	Solid	8015 NM	
890-6298-33	BES 24 - 221 1'	Total/NA	Solid	8015 NM	
890-6298-34	BES 24 - 222 1'	Total/NA	Solid	8015 NM	
890-6298-35	BES 24 - 223 1'	Total/NA	Solid	8015 NM	
890-6298-36	BES 24 - 224 1'	Total/NA	Solid	8015 NM	
890-6298-37	BES 24 - 225 1'	Total/NA	Solid	8015 NM	
890-6298-38	BES 24 - 226 1'	Total/NA	Solid	8015 NM	
890-6298-39	BES 24 - 227 1'	Total/NA	Solid	8015 NM	
890-6298-40	BES 24 - 228 1'	Total/NA	Solid	8015 NM	
890-6298-41	BES 24 - 229 1'	Total/NA	Solid	8015 NM	
890-6298-42	BES 24 - 230 1'	Total/NA	Solid	8015 NM	
890-6298-43	BES 24 - 231 1'	Total/NA	Solid	8015 NM	
890-6298-44	BES 24 - 232 1'	Total/NA	Solid	8015 NM	
890-6298-45	BES 24 - 233 1'	Total/NA	Solid	8015 NM	
890-6298-46	BES 24 - 234 1'	Total/NA	Solid	8015 NM	
890-6298-47	BES 24 - 235 1'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 74628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-1	WES 24 - 20 1'	Soluble	Solid	DI Leach	
890-6298-2	WES 24 - 21 1'	Soluble	Solid	DI Leach	
890-6298-3	WES 24 - 22 1'	Soluble	Solid	DI Leach	
890-6298-4	WES 24 - 23 1'	Soluble	Solid	DI Leach	
890-6298-5	BES 24 -193 1'	Soluble	Solid	DI Leach	
890-6298-6	BES 24 -194 1'	Soluble	Solid	DI Leach	
890-6298-7	BES 24 -195 1'	Soluble	Solid	DI Leach	
890-6298-8	BES 24 -196 1'	Soluble	Solid	DI Leach	
890-6298-9	BES 24 -197 1'	Soluble	Solid	DI Leach	
890-6298-10	BES 24 -198 1'	Soluble	Solid	DI Leach	
890-6298-11	BES 24 -199 1'	Soluble	Solid	DI Leach	
890-6298-12	BES 24 - 200 1'	Soluble	Solid	DI Leach	
890-6298-13	BES 24 - 201 1'	Soluble	Solid	DI Leach	
MB 880-74628/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-74628/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-74628/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6298-4 MS	WES 24 - 23 1'	Soluble	Solid	DI Leach	
890-6298-4 MSD	WES 24 - 23 1'	Soluble	Solid	DI Leach	

Leach Batch: 74629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-14	BES 24 - 202 1'	Soluble	Solid	DI Leach	
890-6298-15	BES 24 - 203 1'	Soluble	Solid	DI Leach	
890-6298-16	BES 24 - 204 1'	Soluble	Solid	DI Leach	
890-6298-17	BES 24 - 205 1'	Soluble	Solid	DI Leach	
890-6298-18	BES 24 - 206 1'	Soluble	Solid	DI Leach	
890-6298-19	BES 24 - 207 1'	Soluble	Solid	DI Leach	
890-6298-20	BES 24 - 208 1'	Soluble	Solid	DI Leach	
890-6298-21	BES 24 - 209 1'	Soluble	Solid	DI Leach	
890-6298-22	BES 24 -210 1'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

HPLC/IC (Continued)

Leach Batch: 74629 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-23	BES 24 -211 1'	Soluble	Solid	DI Leach	
890-6298-24	BES 24 -212 1'	Soluble	Solid	DI Leach	
890-6298-25	BES 24 -213 1'	Soluble	Solid	DI Leach	
890-6298-26	BES 24 -214 1'	Soluble	Solid	DI Leach	
890-6298-27	BES 24 -215 1'	Soluble	Solid	DI Leach	
890-6298-28	BES 24 -216 1'	Soluble	Solid	DI Leach	
890-6298-29	BES 24 -217 1'	Soluble	Solid	DI Leach	
890-6298-30	BES 24 -218 1'	Soluble	Solid	DI Leach	
890-6298-31	BES 24 -219 1'	Soluble	Solid	DI Leach	
890-6298-32	BES 24 - 220 1'	Soluble	Solid	DI Leach	
890-6298-33	BES 24 - 221 1'	Soluble	Solid	DI Leach	
MB 880-74629/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-74629/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-74629/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6298-14 MS	BES 24 - 202 1'	Soluble	Solid	DI Leach	
890-6298-14 MSD	BES 24 - 202 1'	Soluble	Solid	DI Leach	
890-6298-24 MS	BES 24 -212 1'	Soluble	Solid	DI Leach	
890-6298-24 MSD	BES 24 -212 1'	Soluble	Solid	DI Leach	

Leach Batch: 74631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-34	BES 24 - 222 1'	Soluble	Solid	DI Leach	
890-6298-35	BES 24 - 223 1'	Soluble	Solid	DI Leach	
890-6298-36	BES 24 - 224 1'	Soluble	Solid	DI Leach	
890-6298-37	BES 24 - 225 1'	Soluble	Solid	DI Leach	
890-6298-38	BES 24 - 226 1'	Soluble	Solid	DI Leach	
890-6298-39	BES 24 - 227 1'	Soluble	Solid	DI Leach	
890-6298-40	BES 24 - 228 1'	Soluble	Solid	DI Leach	
890-6298-41	BES 24 - 229 1'	Soluble	Solid	DI Leach	
890-6298-42	BES 24 - 230 1'	Soluble	Solid	DI Leach	
890-6298-43	BES 24 - 231 1'	Soluble	Solid	DI Leach	
890-6298-44	BES 24 - 232 1'	Soluble	Solid	DI Leach	
890-6298-45	BES 24 - 233 1'	Soluble	Solid	DI Leach	
890-6298-46	BES 24 - 234 1'	Soluble	Solid	DI Leach	
890-6298-47	BES 24 - 235 1'	Soluble	Solid	DI Leach	
MB 880-74631/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-74631/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-74631/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6298-34 MS	BES 24 - 222 1'	Soluble	Solid	DI Leach	
890-6298-34 MSD	BES 24 - 222 1'	Soluble	Solid	DI Leach	
890-6298-44 MS	BES 24 - 232 1'	Soluble	Solid	DI Leach	
890-6298-44 MSD	BES 24 - 232 1'	Soluble	Solid	DI Leach	

Analysis Batch: 74929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-1	WES 24 - 20 1'	Soluble	Solid	300.0	74628
890-6298-2	WES 24 - 21 1'	Soluble	Solid	300.0	74628
890-6298-3	WES 24 - 22 1'	Soluble	Solid	300.0	74628
890-6298-4	WES 24 - 23 1'	Soluble	Solid	300.0	74628
890-6298-5	BES 24 -193 1'	Soluble	Solid	300.0	74628
890-6298-6	BES 24 -194 1'	Soluble	Solid	300.0	74628

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

HPLC/IC (Continued)

Analysis Batch: 74929 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-7	BES 24 -195 1'	Soluble	Solid	300.0	74628
890-6298-8	BES 24 -196 1'	Soluble	Solid	300.0	74628
890-6298-9	BES 24 -197 1'	Soluble	Solid	300.0	74628
890-6298-10	BES 24 -198 1'	Soluble	Solid	300.0	74628
890-6298-11	BES 24 -199 1'	Soluble	Solid	300.0	74628
890-6298-12	BES 24 - 200 1'	Soluble	Solid	300.0	74628
890-6298-13	BES 24 - 201 1'	Soluble	Solid	300.0	74628
MB 880-74628/1-A	Method Blank	Soluble	Solid	300.0	74628
LCS 880-74628/2-A	Lab Control Sample	Soluble	Solid	300.0	74628
LCSD 880-74628/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74628
890-6298-4 MS	WES 24 - 23 1'	Soluble	Solid	300.0	74628
890-6298-4 MSD	WES 24 - 23 1'	Soluble	Solid	300.0	74628

Analysis Batch: 74938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-14	BES 24 - 202 1'	Soluble	Solid	300.0	74629
890-6298-15	BES 24 - 203 1'	Soluble	Solid	300.0	74629
890-6298-16	BES 24 - 204 1'	Soluble	Solid	300.0	74629
890-6298-17	BES 24 - 205 1'	Soluble	Solid	300.0	74629
890-6298-18	BES 24 - 206 1'	Soluble	Solid	300.0	74629
890-6298-19	BES 24 - 207 1'	Soluble	Solid	300.0	74629
890-6298-20	BES 24 - 208 1'	Soluble	Solid	300.0	74629
890-6298-21	BES 24 - 209 1'	Soluble	Solid	300.0	74629
890-6298-22	BES 24 -210 1'	Soluble	Solid	300.0	74629
890-6298-23	BES 24 -211 1'	Soluble	Solid	300.0	74629
890-6298-24	BES 24 -212 1'	Soluble	Solid	300.0	74629
890-6298-25	BES 24 -213 1'	Soluble	Solid	300.0	74629
890-6298-26	BES 24 -214 1'	Soluble	Solid	300.0	74629
890-6298-27	BES 24 -215 1'	Soluble	Solid	300.0	74629
890-6298-28	BES 24 -216 1'	Soluble	Solid	300.0	74629
890-6298-29	BES 24 -217 1'	Soluble	Solid	300.0	74629
890-6298-30	BES 24 -218 1'	Soluble	Solid	300.0	74629
890-6298-31	BES 24 -219 1'	Soluble	Solid	300.0	74629
890-6298-32	BES 24 - 220 1'	Soluble	Solid	300.0	74629
890-6298-33	BES 24 - 221 1'	Soluble	Solid	300.0	74629
MB 880-74629/1-A	Method Blank	Soluble	Solid	300.0	74629
LCS 880-74629/2-A	Lab Control Sample	Soluble	Solid	300.0	74629
LCSD 880-74629/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74629
890-6298-14 MS	BES 24 - 202 1'	Soluble	Solid	300.0	74629
890-6298-14 MSD	BES 24 - 202 1'	Soluble	Solid	300.0	74629
890-6298-24 MS	BES 24 -212 1'	Soluble	Solid	300.0	74629
890-6298-24 MSD	BES 24 -212 1'	Soluble	Solid	300.0	74629

Analysis Batch: 75008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-34	BES 24 - 222 1'	Soluble	Solid	300.0	74631
890-6298-35	BES 24 - 223 1'	Soluble	Solid	300.0	74631
890-6298-36	BES 24 - 224 1'	Soluble	Solid	300.0	74631
890-6298-37	BES 24 - 225 1'	Soluble	Solid	300.0	74631
890-6298-38	BES 24 - 226 1'	Soluble	Solid	300.0	74631
890-6298-39	BES 24 - 227 1'	Soluble	Solid	300.0	74631

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

HPLC/IC (Continued)

Analysis Batch: 75008 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6298-40	BES 24 - 228 1'	Soluble	Solid	300.0	74631
890-6298-41	BES 24 - 229 1'	Soluble	Solid	300.0	74631
890-6298-42	BES 24 - 230 1'	Soluble	Solid	300.0	74631
890-6298-43	BES 24 - 231 1'	Soluble	Solid	300.0	74631
890-6298-44	BES 24 - 232 1'	Soluble	Solid	300.0	74631
890-6298-45	BES 24 - 233 1'	Soluble	Solid	300.0	74631
890-6298-46	BES 24 - 234 1'	Soluble	Solid	300.0	74631
890-6298-47	BES 24 - 235 1'	Soluble	Solid	300.0	74631
MB 880-74631/1-A	Method Blank	Soluble	Solid	300.0	74631
LCS 880-74631/2-A	Lab Control Sample	Soluble	Solid	300.0	74631
LCSD 880-74631/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74631
890-6298-34 MS	BES 24 - 222 1'	Soluble	Solid	300.0	74631
890-6298-34 MSD	BES 24 - 222 1'	Soluble	Solid	300.0	74631
890-6298-44 MS	BES 24 - 232 1'	Soluble	Solid	300.0	74631
890-6298-44 MSD	BES 24 - 232 1'	Soluble	Solid	300.0	74631

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: WES 24 - 20 1'
Lab Sample ID: 890-6298-1
Date Collected: 02/29/24 09:00
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 12:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 12:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 15:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	74834	03/05/24 16:53	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 15:48	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 03:21	CH	EET MID

Client Sample ID: WES 24 - 21 1'
Lab Sample ID: 890-6298-2
Date Collected: 02/29/24 09:00
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 12:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 16:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	74834	03/05/24 16:53	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 16:10	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 03:28	CH	EET MID

Client Sample ID: WES 24 - 22 1'
Lab Sample ID: 890-6298-3
Date Collected: 02/29/24 09:10
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 13:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 13:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 16:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	74834	03/05/24 16:53	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 16:32	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 03:35	CH	EET MID

Client Sample ID: WES 24 - 23 1'
Lab Sample ID: 890-6298-4
Date Collected: 02/29/24 09:10
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 13:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 13:37	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: WES 24 - 23 1'

Lab Sample ID: 890-6298-4
Matrix: Solid
Date Collected: 02/29/24 09:10
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			75016	03/06/24 17:03	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	74834	03/05/24 16:53	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 17:03	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 10:32	CH	EET MID

Client Sample ID: BES 24 -193 1'

Lab Sample ID: 890-6298-5
Matrix: Solid
Date Collected: 02/29/24 09:20
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 14:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 14:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 17:25	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74834	03/05/24 16:53	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 17:25	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 04:04	CH	EET MID

Client Sample ID: BES 24 -194 1'

Lab Sample ID: 890-6298-6
Matrix: Solid
Date Collected: 02/29/24 09:20
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 14:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 14:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 17:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	74834	03/05/24 16:53	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 17:47	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 04:11	CH	EET MID

Client Sample ID: BES 24 -195 1'

Lab Sample ID: 890-6298-7
Matrix: Solid
Date Collected: 02/29/24 09:30
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 14:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 14:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 18:09	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74834	03/05/24 16:53	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 18:09	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -195 1'
Lab Sample ID: 890-6298-7
Date Collected: 02/29/24 09:30
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 04:32	CH	EET MID

Client Sample ID: BES 24 -196 1'
Lab Sample ID: 890-6298-8
Date Collected: 02/29/24 09:30
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 15:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 15:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 18:30	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74834	03/05/24 16:53	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 18:30	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 04:40	CH	EET MID

Client Sample ID: BES 24 -197 1'
Lab Sample ID: 890-6298-9
Date Collected: 02/29/24 09:40
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 15:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 15:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 18:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74834	03/05/24 16:53	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 18:52	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 04:47	CH	EET MID

Client Sample ID: BES 24 -198 1'
Lab Sample ID: 890-6298-10
Date Collected: 02/29/24 09:40
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 16:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 16:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 20:41	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 20:41	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 04:54	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -199 1'
Lab Sample ID: 890-6298-11
Date Collected: 02/29/24 09:50
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 18:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 18:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 21:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 21:47	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 05:01	CH	EET MID

Client Sample ID: BES 24 - 200 1'
Lab Sample ID: 890-6298-12
Date Collected: 02/29/24 09:50
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 18:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 18:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 22:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 22:09	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 05:08	CH	EET MID

Client Sample ID: BES 24 - 201 1'
Lab Sample ID: 890-6298-13
Date Collected: 02/29/24 10:00
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 19:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 19:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 22:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.055 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 22:30	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74628	03/04/24 12:11	SMC	EET MID
Soluble	Analysis	300.0		1			74929	03/08/24 05:15	CH	EET MID

Client Sample ID: BES 24 - 202 1'
Lab Sample ID: 890-6298-14
Date Collected: 02/29/24 10:00
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 19:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 19:45	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 202 1'
Lab Sample ID: 890-6298-14
Date Collected: 02/29/24 10:00
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			75016	03/06/24 22:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 22:51	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 06:12	CH	EET MID

Client Sample ID: BES 24 - 203 1'
Lab Sample ID: 890-6298-15
Date Collected: 02/29/24 10:10
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 20:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 20:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 23:13	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 23:13	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 06:34	CH	EET MID

Client Sample ID: BES 24 - 204 1'
Lab Sample ID: 890-6298-16
Date Collected: 02/29/24 10:10
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 20:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 20:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 23:34	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 23:34	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 06:41	CH	EET MID

Client Sample ID: BES 24 - 205 1'
Lab Sample ID: 890-6298-17
Date Collected: 02/29/24 10:20
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 21:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 21:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/06/24 23:55	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/06/24 23:55	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 205 1'
Date Collected: 02/29/24 10:20
Date Received: 03/01/24 12:37

Lab Sample ID: 890-6298-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 06:48	CH	EET MID

Client Sample ID: BES 24 - 206 1'
Date Collected: 02/29/24 10:20
Date Received: 03/01/24 12:37

Lab Sample ID: 890-6298-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 21:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 21:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 00:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 00:16	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 06:55	CH	EET MID

Client Sample ID: BES 24 - 207 1'
Date Collected: 02/29/24 10:30
Date Received: 03/01/24 12:37

Lab Sample ID: 890-6298-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 22:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 22:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 00:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 00:38	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 07:17	CH	EET MID

Client Sample ID: BES 24 - 208 1'
Date Collected: 02/29/24 10:30
Date Received: 03/01/24 12:37

Lab Sample ID: 890-6298-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74687	03/04/24 15:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/06/24 22:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 22:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 01:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 01:20	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 07:24	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 209 1'
Lab Sample ID: 890-6298-21
Date Collected: 02/29/24 10:40
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 17:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 17:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 01:41	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 01:41	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 07:31	CH	EET MID

Client Sample ID: BES 24 -210 1'
Lab Sample ID: 890-6298-22
Date Collected: 02/29/24 10:40
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 17:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 17:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 02:02	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 02:02	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 07:38	CH	EET MID

Client Sample ID: BES 24 -211 1'
Lab Sample ID: 890-6298-23
Date Collected: 02/29/24 10:50
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 17:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 17:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 02:23	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 02:23	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 07:45	CH	EET MID

Client Sample ID: BES 24 -212 1'
Lab Sample ID: 890-6298-24
Date Collected: 02/29/24 10:50
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 18:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 18:19	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -212 1'
Lab Sample ID: 890-6298-24
Date Collected: 02/29/24 10:50
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			75016	03/07/24 02:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 02:44	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 07:52	CH	EET MID

Client Sample ID: BES 24 -213 1'
Lab Sample ID: 890-6298-25
Date Collected: 02/29/24 11:00
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 18:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 18:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 03:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 03:05	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		10			74938	03/08/24 08:14	CH	EET MID

Client Sample ID: BES 24 -214 1'
Lab Sample ID: 890-6298-26
Date Collected: 02/29/24 11:00
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 19:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 19:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 03:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 03:26	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		5			74938	03/08/24 08:21	CH	EET MID

Client Sample ID: BES 24 -215 1'
Lab Sample ID: 890-6298-27
Date Collected: 02/29/24 11:10
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 19:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 19:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 03:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 03:47	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -215 1'
Lab Sample ID: 890-6298-27
Date Collected: 02/29/24 11:10
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		5			74938	03/08/24 08:42	CH	EET MID

Client Sample ID: BES 24 -216 1'
Lab Sample ID: 890-6298-28
Date Collected: 02/29/24 11:10
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 19:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 19:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 04:08	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 04:08	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		5			74938	03/08/24 08:49	CH	EET MID

Client Sample ID: BES 24 -217 1'
Lab Sample ID: 890-6298-29
Date Collected: 02/29/24 11:20
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 20:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 20:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 04:29	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74866	03/06/24 09:24	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74863	03/07/24 04:29	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 08:57	CH	EET MID

Client Sample ID: BES 24 -218 1'
Lab Sample ID: 890-6298-30
Date Collected: 02/29/24 11:20
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 20:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 20:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 11:11	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 09:04	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 -219 1'
Lab Sample ID: 890-6298-31
Date Collected: 02/29/24 11:30
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 21:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 21:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 12:16	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 12:16	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 09:11	CH	EET MID

Client Sample ID: BES 24 - 220 1'
Lab Sample ID: 890-6298-32
Date Collected: 02/29/24 11:30
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 22:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 22:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 12:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 12:37	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 09:18	CH	EET MID

Client Sample ID: BES 24 - 221 1'
Lab Sample ID: 890-6298-33
Date Collected: 02/29/24 11:40
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 22:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 22:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 12:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 12:59	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74629	03/04/24 12:14	SMC	EET MID
Soluble	Analysis	300.0		1			74938	03/08/24 09:25	CH	EET MID

Client Sample ID: BES 24 - 222 1'
Lab Sample ID: 890-6298-34
Date Collected: 02/29/24 11:40
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 22:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 22:49	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 222 1'
Date Collected: 02/29/24 11:40
Date Received: 03/01/24 12:37

Lab Sample ID: 890-6298-34
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			75016	03/07/24 13:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 13:21	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 11:53	CH	EET MID

Client Sample ID: BES 24 - 223 1'
Date Collected: 02/29/24 11:50
Date Received: 03/01/24 12:37

Lab Sample ID: 890-6298-35
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 23:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 23:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 13:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 13:42	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 12:10	CH	EET MID

Client Sample ID: BES 24 - 224 1'
Date Collected: 02/29/24 11:50
Date Received: 03/01/24 12:37

Lab Sample ID: 890-6298-36
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 23:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 23:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 14:04	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 14:04	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 12:16	CH	EET MID

Client Sample ID: BES 24 - 225 1'
Date Collected: 02/29/24 12:00
Date Received: 03/01/24 12:37

Lab Sample ID: 890-6298-37
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/06/24 23:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/06/24 23:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 14:26	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 225 1'
Lab Sample ID: 890-6298-37
Date Collected: 02/29/24 12:00
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 12:22	CH	EET MID

Client Sample ID: BES 24 - 226 1'
Lab Sample ID: 890-6298-38
Date Collected: 02/29/24 12:00
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/07/24 00:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/07/24 00:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 14:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 14:47	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 12:27	CH	EET MID

Client Sample ID: BES 24 - 227 1'
Lab Sample ID: 890-6298-39
Date Collected: 02/29/24 12:00
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/07/24 00:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/07/24 00:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 15:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 15:09	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 12:45	CH	EET MID

Client Sample ID: BES 24 - 228 1'
Lab Sample ID: 890-6298-40
Date Collected: 02/29/24 12:10
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74688	03/04/24 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74894	03/07/24 00:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/07/24 00:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 15:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 15:52	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 12:50	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 229 1'
Lab Sample ID: 890-6298-41
Date Collected: 02/29/24 12:10
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	74680	03/04/24 15:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/07/24 05:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/07/24 05:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 16:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 16:14	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 12:56	CH	EET MID

Client Sample ID: BES 24 - 230 1'
Lab Sample ID: 890-6298-42
Date Collected: 02/29/24 12:20
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74680	03/04/24 15:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/07/24 05:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/07/24 05:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 16:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 16:36	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 13:02	CH	EET MID

Client Sample ID: BES 24 - 231 1'
Lab Sample ID: 890-6298-43
Date Collected: 02/29/24 12:20
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74680	03/04/24 15:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/07/24 06:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/07/24 06:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 16:57	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 16:57	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 13:08	CH	EET MID

Client Sample ID: BES 24 - 232 1'
Lab Sample ID: 890-6298-44
Date Collected: 02/29/24 12:30
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	74680	03/04/24 15:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/07/24 07:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/07/24 07:47	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 232 1'
Lab Sample ID: 890-6298-44
Date Collected: 02/29/24 12:30
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			75016	03/07/24 17:19	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 17:19	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 13:14	CH	EET MID

Client Sample ID: BES 24 - 233 1'
Lab Sample ID: 890-6298-45
Date Collected: 02/29/24 12:30
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74680	03/04/24 15:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/07/24 08:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/07/24 08:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 17:40	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 17:40	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 13:31	CH	EET MID

Client Sample ID: BES 24 - 234 1'
Lab Sample ID: 890-6298-46
Date Collected: 02/29/24 12:40
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	74680	03/04/24 15:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/07/24 08:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/07/24 08:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 18:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 18:02	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 13:37	CH	EET MID

Client Sample ID: BES 24 - 235 1'
Lab Sample ID: 890-6298-47
Date Collected: 02/29/24 12:50
Matrix: Solid
Date Received: 03/01/24 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74680	03/04/24 15:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74853	03/07/24 09:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74939	03/07/24 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			75016	03/07/24 18:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	74928	03/06/24 16:39	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74956	03/07/24 18:23	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Client Sample ID: BES 24 - 235 1'

Date Collected: 02/29/24 12:50
Date Received: 03/01/24 12:37

Lab Sample ID: 890-6298-47

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	74631	03/04/24 12:23	SMC	EET MID
Soluble	Analysis	300.0		1			75008	03/10/24 13:54	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 890-6298-1
SDG: 23 E - 04616

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6298-1	WES 24 - 20 1'	Solid	02/29/24 09:00	03/01/24 12:37	1'
890-6298-2	WES 24 - 21 1'	Solid	02/29/24 09:00	03/01/24 12:37	1'
890-6298-3	WES 24 - 22 1'	Solid	02/29/24 09:10	03/01/24 12:37	1'
890-6298-4	WES 24 - 23 1'	Solid	02/29/24 09:10	03/01/24 12:37	1'
890-6298-5	BES 24 -193 1'	Solid	02/29/24 09:20	03/01/24 12:37	1'
890-6298-6	BES 24 -194 1'	Solid	02/29/24 09:20	03/01/24 12:37	1'
890-6298-7	BES 24 -195 1'	Solid	02/29/24 09:30	03/01/24 12:37	1'
890-6298-8	BES 24 -196 1'	Solid	02/29/24 09:30	03/01/24 12:37	1'
890-6298-9	BES 24 -197 1'	Solid	02/29/24 09:40	03/01/24 12:37	1'
890-6298-10	BES 24 -198 1'	Solid	02/29/24 09:40	03/01/24 12:37	1'
890-6298-11	BES 24 -199 1'	Solid	02/29/24 09:50	03/01/24 12:37	1'
890-6298-12	BES 24 - 200 1'	Solid	02/29/24 09:50	03/01/24 12:37	1'
890-6298-13	BES 24 - 201 1'	Solid	02/29/24 10:00	03/01/24 12:37	1'
890-6298-14	BES 24 - 202 1'	Solid	02/29/24 10:00	03/01/24 12:37	1'
890-6298-15	BES 24 - 203 1'	Solid	02/29/24 10:10	03/01/24 12:37	1'
890-6298-16	BES 24 - 204 1'	Solid	02/29/24 10:10	03/01/24 12:37	1'
890-6298-17	BES 24 - 205 1'	Solid	02/29/24 10:20	03/01/24 12:37	1'
890-6298-18	BES 24 - 206 1'	Solid	02/29/24 10:20	03/01/24 12:37	1'
890-6298-19	BES 24 - 207 1'	Solid	02/29/24 10:30	03/01/24 12:37	1'
890-6298-20	BES 24 - 208 1'	Solid	02/29/24 10:30	03/01/24 12:37	1'
890-6298-21	BES 24 - 209 1'	Solid	02/29/24 10:40	03/01/24 12:37	1'
890-6298-22	BES 24 -210 1'	Solid	02/29/24 10:40	03/01/24 12:37	1'
890-6298-23	BES 24 -211 1'	Solid	02/29/24 10:50	03/01/24 12:37	1'
890-6298-24	BES 24 -212 1'	Solid	02/29/24 10:50	03/01/24 12:37	1'
890-6298-25	BES 24 -213 1'	Solid	02/29/24 11:00	03/01/24 12:37	1'
890-6298-26	BES 24 -214 1'	Solid	02/29/24 11:00	03/01/24 12:37	1'
890-6298-27	BES 24 -215 1'	Solid	02/29/24 11:10	03/01/24 12:37	1'
890-6298-28	BES 24 -216 1'	Solid	02/29/24 11:10	03/01/24 12:37	1'
890-6298-29	BES 24 -217 1'	Solid	02/29/24 11:20	03/01/24 12:37	1'
890-6298-30	BES 24 -218 1'	Solid	02/29/24 11:20	03/01/24 12:37	1'
890-6298-31	BES 24 -219 1'	Solid	02/29/24 11:30	03/01/24 12:37	1'
890-6298-32	BES 24 - 220 1'	Solid	02/29/24 11:30	03/01/24 12:37	1'
890-6298-33	BES 24 - 221 1'	Solid	02/29/24 11:40	03/01/24 12:37	1'
890-6298-34	BES 24 - 222 1'	Solid	02/29/24 11:40	03/01/24 12:37	1'
890-6298-35	BES 24 - 223 1'	Solid	02/29/24 11:50	03/01/24 12:37	1'
890-6298-36	BES 24 - 224 1'	Solid	02/29/24 11:50	03/01/24 12:37	1'
890-6298-37	BES 24 - 225 1'	Solid	02/29/24 12:00	03/01/24 12:37	1'
890-6298-38	BES 24 - 226 1'	Solid	02/29/24 12:00	03/01/24 12:37	1'
890-6298-39	BES 24 - 227 1'	Solid	02/29/24 12:00	03/01/24 12:37	1'
890-6298-40	BES 24 - 228 1'	Solid	02/29/24 12:10	03/01/24 12:37	1'
890-6298-41	BES 24 - 229 1'	Solid	02/29/24 12:10	03/01/24 12:37	1'
890-6298-42	BES 24 - 230 1'	Solid	02/29/24 12:20	03/01/24 12:37	1'
890-6298-43	BES 24 - 231 1'	Solid	02/29/24 12:20	03/01/24 12:37	1'
890-6298-44	BES 24 - 232 1'	Solid	02/29/24 12:30	03/01/24 12:37	1'
890-6298-45	BES 24 - 233 1'	Solid	02/29/24 12:30	03/01/24 12:37	1'
890-6298-46	BES 24 - 234 1'	Solid	02/29/24 12:40	03/01/24 12:37	1'
890-6298-47	BES 24 - 235 1'	Solid	02/29/24 12:50	03/01/24 12:37	1'

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Chain of Custody

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Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

CC: CDixon@vertex.ca for Final Report

Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

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Project Manager	Chance Dixon (CDixon@vertex.ca)	Bill to (if different)	XTO Energy, Inc.
Company Name	Vertex Resource Services	Company Name	XTO Energy, Inc
Address	3101 Boyd Drive	Address	3104 E. Greene St
City, State ZIP	Carlsbad NM, 88220	City, State ZIP	Carlsbad NM, 88220
Phone	575 725 5001	Email	CC: CDixon@vertex.ca for Final Report
Project Name	JRU DI 1A CTB	Turn Around	
Project Number	23E-04616	✓Routine Rush	
Project Location		Due Date:	
Sampler's Name	Deusavan Costa	TAT starts the day received by the lab, if received by 4:30pm	
PO #			

Work Order Comments

Program: UST/PST RRP Brownfields RR Superfund

State of Project:

Reporting: Level II Level III PST/UST TRR Level IV

Deliverables: EDD ADaPT Other

SAMPLE RECEIPT

Temp Blank	Yes No	Wet Ice	Yes No
Samples Received Intact	Yes No	Thermometer ID	TNM002
Cooler Custody Seals	Yes No N/A	Correction Factor	-0.2
Sample Custody Seals	Yes No N/A	Temperature Reading	-6.4
Total Containers		Corrected Temperature	-6.2

ANALYSIS REQUEST

Preservative Codes

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

890-6298 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	Parameters: BTEX (8021)	TPH 8015D(GRO / DRO / MRO)	Chloride	Sample Comments
WES24-20 1'	Soil	02.29.24	9:00	1	Com		X	X	X	
WES24-21 1'	Soil	02.29.24	9:00	1	Com		X	X	X	
WES24-22 1'	Soil	02.29.24	9:10	1	Com		X	X	X	
WES24-23 1'	Soil	02.29.24	9:10	1	Com		X	X	X	
BES24-193 1'	Soil	02.29.24	9:20	1	Com		X	X	X	
BES24-194 1'	Soil	02.29.24	9:20	1	Com		X	X	X	
BES24-195 1'	Soil	02.29.24	9:30	1	Com		X	X	X	
BES24-196 1'	Soil	02.29.24	9:30	1	Com		X	X	X	
BES24-197 1'	Soil	02.29.24	9:40	1	Com		X	X	X	
BES24-198 1'	Soil	02.29.24	9:40	1	Com		X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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3			4		
5			6		

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CC: CDixon@vertex.ca for Final Report

Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

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Project Manager	Chance Dixon (CDixon@vertex.ca)	Bill to (if different)	XTO Energy, Inc
Company Name	Vertex Resource Services	Company Name	XTO Energy, Inc
Address	3101 Boyd Drive	Address	3104 E. Greene St
City, State ZIP	Carlsbad NM, 88220	City, State ZIP	Carlsbad NM, 88220
Phone	575.725.5001	Email	CC: CDixon@vertex.ca for Final Report
Project Name	JRU DI 1A CTB	Turn Around	
Project Number	23E-04616	✓Routine Rush	
Project Location		Due Date:	
Sampler's Name	Deusavan Costa	TAT starts the day received by the lab, if received by 4:30pm	
PO #			

Work Order Comments

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

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

Preservative Codes

None: NO, DI Water: H_2O, Cool: Cool, MeOH: Me, HCL: HC, HNO_3: HN, H_2SO_4: H_2, NaOH: Na, H_3PO_4: HP, $NaHSO_4$: NABIS, $Na_2S_2O_3$: NaSO3, Zn Acetate+NaOH: Zn, NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	BTEX (8021)	TPH 8015D(GRO / DRO / MRO)	Chloride	Sample Comments
BES24-199 1'	Soil	02.29.24	9:50	1	Com		X	X	X	
BES24-200 1'	Soil	02.29.24	9:50	1	Com		X	X	X	
BES24-201 1'	Soil	02.29.24	10:00	1	Com		X	X	X	
BES24-202 1'	Soil	02.29.24	10:00	1	Com		X	X	X	
BES24-203 1'	Soil	02.29.24	10:10	1	Com		X	X	X	
BES24-204 1'	Soil	02.29.24	10:10	1	Com		X	X	X	
BES24-205 1'	Soil	02.29.24	10:20	1	Com		X	X	X	
BES24-206 1'	Soil	02.29.24	10:20	1	Com		X	X	X	
BES24-207 1'	Soil	02.29.24	10:30	1	Com		X	X	X	
BES24-208 1'	Soil	02.29.24	10:30	1	Com		X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

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Project Manager	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc
Company Name	Vertex Resource Services	Company Name	XTO Energy, Inc
Address	3101 Boyd Drive	Address	3104 E. Greene St
City, State ZIP	Carlsbad NM, 88220	City, State ZIP	Carlsbad NM, 88220
Phone	575.725.5001	Email	CC: CDixon@vertex.ca for Final Report
Project Name	JRU DI 1A CTB	Turn Around	
Project Number	23E-04616	✓ Routine Rush	Pres. Code
Project Location		Due Date:	
Sampler's Name	Deusavan Costa	TAT starts the day received by the lab, if received by 4:30pm	
PO #			

Work Order Comments

Program: UST/PST PRP Brownfields RR Superfund
State of Project:
Reporting: Level II Level III PST/UST TRR Level
Deliverables EDD ADaPT Other

SAMPLE RECEIPT

Temp Blank	Yes (No)	Wet Ice	Yes No
Samples Received Intact	Yes No	Thermometer ID	TWN002
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-0.2
Sample Custody Seals	Yes No (N/A)	Temperature Reading	-6.4
Total Containers		Corrected Temperature	-6.2

Preservative Codes

None: NO, DI Water: H_2O, MeOH: Me, HNO_3: HN, H_2SO_4: H_2, NaOH: Na, Zn Acetate+NaOH: Zn

ANALYSIS REQUEST

Parameters: BTEX (8021), TPH 8015D(GRO / DRO / MRO), Chloride

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	BTEX (8021)	TPH 8015D(GRO / DRO / MRO)	Chloride	Sample Comments
BES24-209 1'	Soil	02.29.24	10:40	1	Com		X	X	X	
BES24-210 1'	Soil	02.29.24	10:40	1	Com		X	X	X	
BES24-211 1'	Soil	02.29.24	10:50	1	Com		X	X	X	
BES24-212 1'	Soil	02.29.24	10:50	1	Com		X	X	X	
BES24-213 1'	Soil	02.29.24	11:00	1	Com		X	X	X	
BES24-214 1'	Soil	02.29.24	11:00	1	Com		X	X	X	
BES24-215 1'	Soil	02.29.24	11:10	1	Com		X	X	X	
BES24-216 1'	Soil	02.29.24	11:10	1	Com		X	X	X	
BES24-217 1'	Soil	02.29.24	11:20	1	Com		X	X	X	
BES24-218 1'	Soil	02.29.24	11:20	1	Com		X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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Hobbs NM (575) 392-7550, Carlsbad NM (575) 988-3199

CC: CDixon@vertex.ca for Final Report

Work Order No: Cost Center #: 1082151001, Incident #: nAPP2318831816

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Project Manager	Chance Dixon (CDixon@vertex.ca)	Bill to (if different)	XTO Energy, Inc
Company Name	Vertex Resource Services	Company Name	XTO Energy, Inc
Address	3101 Boyd Drive	Address	3104 E. Greene St
City, State ZIP	Carlsbad NM, 88220	City, State ZIP	Carlsbad NM, 88220
Phone	575.725.5001	Email	CC: CDixon@vertex.ca for Final Report
Project Name	JRU DI 1A CTB	Turn Around	
Project Number	23E-04616	✓ Routine Rush	
Project Location		Due Date	
Sampler's Name	Deusavan Costa	TAT starts the day received by the lab, if received by 4:30pm	
PO #			

Work Order Comments

Program: UST/PST PRP Brownfields RR Superfund

State of Project:

Reporting: Level II Level III PST/UST TRRP Level IV

Deliverables: EDD ADaPT Other

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

Preservative Codes

None: NO DI Water: H_2O

MeOH: Me

HNO_3: HN

H_2SO_4: H_2 NaOH: Na

H_3PO_4: HP

$NaHSO_4$: NABIS

$Na_2S_2O_3$: NaSO3

Zn Acetate+NaOH: Zn

NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	Parameters: BTEX (8021)	TPH 8015D(GRO / DRO / MRO)	Chloride
BES24-219 1'	Soil	02.29.24	11:30	1	Com		X	X	X
BES24-220 1'	Soil	02.29.24	11:30	1	Com		X	X	X
BES24-221 1'	Soil	02.29.24	11:40	1	Com		X	X	X
BES24-222 1'	Soil	02.29.24	11:40	1	Com		X	X	X
BES24-223 1'	Soil	02.29.24	11:50	1	Com		X	X	X
BES24-224 1'	Soil	02.29.24	11:50	1	Com		X	X	X
BES24-225 1'	Soil	02.29.24	12:00	1	Com		X	X	X
BES24-226 1'	Soil	02.29.24	12:00	1	Com		X	X	X
BES24-227 1'	Soil	02.29.24	12:00	1	Com		X	X	X
BES24-228 1'	Soil	02.29.24	12:10	1	Com		X	X	X

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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Phone	575.725.5001	Email	CC: CDixon@vertex.ca for Final Report
Project Name	JRU DI 1A CTB	Turn Around	
Project Number	23E-04616	✓ Routine / Rush	Pres. Code
Project Location		Due Date	
Sampler's Name	Deusavan Costa	TAT starts the day received by the lab, if received by 4:30pm	
PO #			

Work Order Comments

Program: UST/PST RRP Brownfields RR Superfund
State of Project:
Reporting Level II Level III PST/UST TRR Level
Deliverables EDD ADaPT Other

SAMPLE RECEIPT

Temp Blank	Yes (No)	Wet Ice	Yes No		
Samples Received Intact	Yes No	Thermometer ID	TM002		
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-0.2		
Sample Custody Seals	Yes No (N/A)	Temperature Reading	-6.4		
Total Containers		Corrected Temperature	-6.2		

Preservative Codes

None: NO, DI Water: H_2O, MeOH: Me, HNO_3: HN, H_2SO_4: H_2, NaOH: Na, Zn Acetate+NaOH: Zn

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	BTEX (8021)	TPH 8015D(GRO / DRO / MRO)	Chloride
BES24-229 1'	Soil	02.29.24	12:10	1	Com		X	X	X
BES24-230 1'	Soil	02.29.24	12:20	1	Com		X	X	X
BES24-231 1'	Soil	02.29.24	12:20	1	Com		X	X	X
BES24-232 1'	Soil	02.29.24	12:30	1	Com		X	X	X
BES24-233 1'	Soil	02.29.24	12:30	1	Com		X	X	X
BES24-234 1'	Soil	02.29.24	12:40	1	Com		X	X	X
BES24-235 1'	Soil	02.29.24	12:50	1	Com		X	X	X

Parameters

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-6298-1
SDG Number: 23 E - 04616

Login Number: 6298
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
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: 890-6298-1
SDG Number: 23 E - 04616

Login Number: 6298
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 03/04/24 12:22 PM

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").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

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JOB DESCRIPTION

JRU DI 1A CTB

JOB NUMBER

885-1341-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

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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



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

Client: Vertex
Project/Site: JRU DI 1A CTB

Laboratory Job ID: 885-1341-1

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Receipt Checklists 21

Definitions/Glossary

Client: Vertex Job ID: 885-1341-1
Project/Site: JRU DI 1A CTB

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.
¤	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: JRU DI 1A CTB

Job ID: 885-1341-1

Job ID: 885-1341-1 Eurofins Albuquerque

Job Narrative
885-1341-1

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 3/16/2024 8:05 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 0.9°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
Method 8015D_DRO: The continuing calibration verification (CCV) associated with batch 885-2016 recovered outside acceptance criteria, low biased, for Di-n-octyl phthalate (Surr). Reporting all associated samples with passing surrogate; re-running any with low surrogate. The following samples are associated WES24-06 0-0.5' (885-1341-1), WES24-07 0-0.5' (885-1341-2), WES24-08 0-0.5' (885-1341-3), BES24-213 1.25' (885-1341-4), BES24-225 1.25' (885-1341-5), BES24-226 1.25' (885-1341-6), (CCV 885-2016/28), (CCV 885-2016/42), (LCS 885-1985/2-A), (MB 885-1985/1-A), (885-1341-A-6-D MS) and (885-1341-A-6-E MSD).

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

HPLC/IC
Method 300_OF_28D_PREC: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-1949 and analytical batch 885-2271 were outside control limits for one or more analytes. Matrix spike is diluted 20x, resulting in poor recovery. See QC Sample Results for details.

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

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

Client Sample ID: WES24-06 0-0.5'
Date Collected: 03/14/24 10:30
Date Received: 03/16/24 08:05

Lab Sample ID: 885-1341-1
Matrix: Solid

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		03/19/24 11:34	03/23/24 05:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*15 - 244*	*03/19/24 11:34*	*03/23/24 05:55*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/19/24 11:34	03/23/24 05:55	1
Ethylbenzene	ND		0.048		mg/Kg		03/19/24 11:34	03/23/24 05:55	1
Toluene	ND		0.048		mg/Kg		03/19/24 11:34	03/23/24 05:55	1
Xylenes, Total	ND		0.095		mg/Kg		03/19/24 11:34	03/23/24 05:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*39 - 146*	*03/19/24 11:34*	*03/23/24 05:55*	*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		9.5		mg/Kg		03/20/24 08:58	03/25/24 20:52	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/20/24 08:58	03/25/24 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*115*		*62 - 134*	*03/20/24 08:58*	*03/25/24 20:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**160**		60		mg/Kg		03/19/24 13:43	03/19/24 22:58	20

Client Sample ID: WES24-07 0-0.5'
Date Collected: 03/14/24 10:35
Date Received: 03/16/24 08:05

Lab Sample ID: 885-1341-2
Matrix: Solid

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		03/19/24 11:34	03/23/24 06:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*15 - 244*	*03/19/24 11:34*	*03/23/24 06:17*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/19/24 11:34	03/23/24 06:17	1
Ethylbenzene	ND		0.047		mg/Kg		03/19/24 11:34	03/23/24 06:17	1
Toluene	ND		0.047		mg/Kg		03/19/24 11:34	03/23/24 06:17	1
Xylenes, Total	ND		0.094		mg/Kg		03/19/24 11:34	03/23/24 06:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*39 - 146*	*03/19/24 11:34*	*03/23/24 06:17*	*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		9.5		mg/Kg		03/20/24 08:58	03/20/24 16:37	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/20/24 08:58	03/20/24 16:37	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

Client Sample ID: WES24-07 0-0.5'
Date Collected: 03/14/24 10:35
Date Received: 03/16/24 08:05

Lab Sample ID: 885-1341-2
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	*62*		*62 - 134*	*03/20/24 08:58*	*03/20/24 16:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**320**		60		mg/Kg		03/19/24 13:43	03/19/24 23:10	20

Client Sample ID: WES24-08 0-0.5'
Date Collected: 03/14/24 10:40
Date Received: 03/16/24 08:05

Lab Sample ID: 885-1341-3
Matrix: Solid

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		03/19/24 11:34	03/23/24 06:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*103*		*15 - 244*	*03/19/24 11:34*	*03/23/24 06:39*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/19/24 11:34	03/23/24 06:39	1
Ethylbenzene	ND		0.048		mg/Kg		03/19/24 11:34	03/23/24 06:39	1
Toluene	ND		0.048		mg/Kg		03/19/24 11:34	03/23/24 06:39	1
Xylenes, Total	ND		0.096		mg/Kg		03/19/24 11:34	03/23/24 06:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*92*		*39 - 146*	*03/19/24 11:34*	*03/23/24 06:39*	*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		9.5		mg/Kg		03/20/24 08:58	03/20/24 16:49	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/20/24 08:58	03/20/24 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	*62*		*62 - 134*	*03/20/24 08:58*	*03/20/24 16:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3900**		150		mg/Kg		03/19/24 13:43	03/28/24 15:22	50

Client Sample ID: BES24-213 1.25'
Date Collected: 03/14/24 11:30
Date Received: 03/16/24 08:05

Lab Sample ID: 885-1341-4
Matrix: Solid

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		03/19/24 11:34	03/23/24 07:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*103*		*15 - 244*	*03/19/24 11:34*	*03/23/24 07:01*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/19/24 11:34	03/23/24 07:01	1

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

Client Sample ID: BES24-213 1.25'
Date Collected: 03/14/24 11:30
Date Received: 03/16/24 08:05

Lab Sample ID: 885-1341-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.049		mg/Kg		03/19/24 11:34	03/23/24 07:01	1
Toluene	ND		0.049		mg/Kg		03/19/24 11:34	03/23/24 07:01	1
Xylenes, Total	ND		0.099		mg/Kg		03/19/24 11:34	03/23/24 07:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*39 - 146*	*03/19/24 11:34*	*03/23/24 07:01*	*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		10		mg/Kg		03/20/24 08:58	03/20/24 17:14	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		03/20/24 08:58	03/20/24 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*65*		*62 - 134*	*03/20/24 08:58*	*03/20/24 17:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/19/24 14:21	03/20/24 12:45	20

Client Sample ID: BES24-225 1.25'
Date Collected: 03/14/24 11:35
Date Received: 03/16/24 08:05

Lab Sample ID: 885-1341-5
Matrix: Solid

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		03/19/24 11:34	03/23/24 07:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*15 - 244*	*03/19/24 11:34*	*03/23/24 07:23*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		03/19/24 11:34	03/23/24 07:23	1
Ethylbenzene	ND		0.047		mg/Kg		03/19/24 11:34	03/23/24 07:23	1
Toluene	ND		0.047		mg/Kg		03/19/24 11:34	03/23/24 07:23	1
Xylenes, Total	ND		0.094		mg/Kg		03/19/24 11:34	03/23/24 07:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*39 - 146*	*03/19/24 11:34*	*03/23/24 07:23*	*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		9.6		mg/Kg		03/20/24 08:58	03/20/24 19:04	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/20/24 08:58	03/20/24 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*68*		*62 - 134*	*03/20/24 08:58*	*03/20/24 19:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		60		mg/Kg		03/19/24 14:21	03/19/24 18:59	20

Client Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

Client Sample ID: BES24-226 1.25'
Date Collected: 03/14/24 11:40
Date Received: 03/16/24 08:05

Lab Sample ID: 885-1341-6
Matrix: Solid

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		03/19/24 11:34	03/23/24 07:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*15 - 244*	*03/19/24 11:34*	*03/23/24 07:45*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		03/19/24 11:34	03/23/24 07:45	1
Ethylbenzene	ND		0.046		mg/Kg		03/19/24 11:34	03/23/24 07:45	1
Toluene	ND		0.046		mg/Kg		03/19/24 11:34	03/23/24 07:45	1
Xylenes, Total	ND		0.092		mg/Kg		03/19/24 11:34	03/23/24 07:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*39 - 146*	*03/19/24 11:34*	*03/23/24 07:45*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		03/20/24 08:58	03/20/24 19:17	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/20/24 08:58	03/20/24 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*68*		*62 - 134*	*03/20/24 08:58*	*03/20/24 19:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		60		mg/Kg		03/19/24 14:21	03/19/24 19:36	20

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

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

Lab Sample ID: MB 885-1929/1-A
Matrix: Solid
Analysis Batch: 2216

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1929

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		03/19/24 10:24	03/22/24 12:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*15 - 244*	*03/19/24 10:24*	*03/22/24 12:30*	*1*

Lab Sample ID: MB 885-1938/1-A
Matrix: Solid
Analysis Batch: 2216

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1938

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		03/19/24 11:34	03/22/24 23:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*15 - 244*	*03/19/24 11:34*	*03/22/24 23:22*	*1*

Lab Sample ID: LCS 885-1938/2-A
Matrix: Solid
Analysis Batch: 2216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1938

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	23.0		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*206*		*15 - 244*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-1929/1-A
Matrix: Solid
Analysis Batch: 2224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1929

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/19/24 10:24	03/22/24 12:30	1
Ethylbenzene	ND		0.050		mg/Kg		03/19/24 10:24	03/22/24 12:30	1
Toluene	ND		0.050		mg/Kg		03/19/24 10:24	03/22/24 12:30	1
Xylenes, Total	ND		0.10		mg/Kg		03/19/24 10:24	03/22/24 12:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*39 - 146*	*03/19/24 10:24*	*03/22/24 12:30*	*1*

Lab Sample ID: MB 885-1938/1-A
Matrix: Solid
Analysis Batch: 2224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1938

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/19/24 11:34	03/22/24 23:22	1
Ethylbenzene	ND		0.050		mg/Kg		03/19/24 11:34	03/22/24 23:22	1

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

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

Lab Sample ID: MB 885-1938/1-A
Matrix: Solid
Analysis Batch: 2224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1938

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.050		mg/Kg		03/19/24 11:34	03/22/24 23:22	1
Xylenes, Total	ND		0.10		mg/Kg		03/19/24 11:34	03/22/24 23:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*39 - 146*	*03/19/24 11:34*	*03/22/24 23:22*	*1*

Lab Sample ID: LCS 885-1938/3-A
Matrix: Solid
Analysis Batch: 2224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1938

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.874		mg/Kg		87	70 - 130		
Ethylbenzene			1.00	0.890		mg/Kg		89	70 - 130		
m,p-Xylene			2.00	1.78		mg/Kg		89	70 - 130		
o-Xylene			1.00	0.892		mg/Kg		89	70 - 130		
Toluene			1.00	0.883		mg/Kg		88	70 - 130		
Xylenes, Total			3.00	2.67		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*39 - 146*

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

Lab Sample ID: MB 885-1985/1-A
Matrix: Solid
Analysis Batch: 2016

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1985

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		03/20/24 08:58	03/20/24 14:47	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		03/20/24 08:58	03/20/24 14:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*89*		*62 - 134*	*03/20/24 08:58*	*03/20/24 14:47*	*1*

Lab Sample ID: LCS 885-1985/2-A
Matrix: Solid
Analysis Batch: 2016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1985

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	44.5		mg/Kg		89	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*89*		*62 - 134*

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

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

Lab Sample ID: 885-1341-6 MS
Matrix: Solid
Analysis Batch: 2016

Client Sample ID: BES24-226 1.25'
Prep Type: Total/NA
Prep Batch: 1985

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]	ND		48.5	40.5		mg/Kg		83	44 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*65*		*62 - 134*

Lab Sample ID: 885-1341-6 MSD
Matrix: Solid
Analysis Batch: 2016

Client Sample ID: BES24-226 1.25'
Prep Type: Total/NA
Prep Batch: 1985

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		49.7	41.1		mg/Kg		83	44 - 136	2	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*66*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-1946/1-A
Matrix: Solid
Analysis Batch: 2019

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1946

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		03/19/24 13:43	03/19/24 16:35	1

Lab Sample ID: LCS 885-1946/2-A
Matrix: Solid
Analysis Batch: 2019

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1946

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	28.8		mg/Kg		96	90 - 110		

Lab Sample ID: MB 885-1949/1-A
Matrix: Solid
Analysis Batch: 2271

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1949

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		03/19/24 14:21	03/19/24 17:33	1

Lab Sample ID: MB 885-1949/1-A
Matrix: Solid
Analysis Batch: 2062

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1949

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		03/19/24 14:21	03/20/24 12:20	1

QC Sample Results

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-1949/2-A
Matrix: Solid
Analysis Batch: 2271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1949

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	29.1		mg/Kg		97	90 - 110		

Lab Sample ID: LCS 885-1949/2-A
Matrix: Solid
Analysis Batch: 2062

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1949

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	29.0		mg/Kg		97	90 - 110		

Lab Sample ID: 885-1341-4 MS
Matrix: Solid
Analysis Batch: 2271

Client Sample ID: BES24-213 1.25'
Prep Type: Total/NA
Prep Batch: 1949

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		30.2	79.2		mg/Kg		NC	50 - 150		

Lab Sample ID: 885-1341-4 MSD
Matrix: Solid
Analysis Batch: 2271

Client Sample ID: BES24-213 1.25'
Prep Type: Total/NA
Prep Batch: 1949

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		29.9	79.2		mg/Kg		NC	50 - 150	0	20

Lab Sample ID: 885-1341-5 MS
Matrix: Solid
Analysis Batch: 2271

Client Sample ID: BES24-225 1.25'
Prep Type: Total/NA
Prep Batch: 1949

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	130		29.9	152	4	mg/Kg		82	50 - 150		

Lab Sample ID: 885-1341-5 MSD
Matrix: Solid
Analysis Batch: 2271

Client Sample ID: BES24-225 1.25'
Prep Type: Total/NA
Prep Batch: 1949

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	130		29.7	150	4	mg/Kg		77	50 - 150	1	20

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

GC VOA

Prep Batch: 1929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-1929/1-A	Method Blank	Total/NA	Solid	5030C	

Prep Batch: 1938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-1	WES24-06 0-0.5'	Total/NA	Solid	5030C	
885-1341-2	WES24-07 0-0.5'	Total/NA	Solid	5030C	
885-1341-3	WES24-08 0-0.5'	Total/NA	Solid	5030C	
885-1341-4	BES24-213 1.25'	Total/NA	Solid	5030C	
885-1341-5	BES24-225 1.25'	Total/NA	Solid	5030C	
885-1341-6	BES24-226 1.25'	Total/NA	Solid	5030C	
MB 885-1938/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-1938/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-1938/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 2216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-1	WES24-06 0-0.5'	Total/NA	Solid	8015D	1938
885-1341-2	WES24-07 0-0.5'	Total/NA	Solid	8015D	1938
885-1341-3	WES24-08 0-0.5'	Total/NA	Solid	8015D	1938
885-1341-4	BES24-213 1.25'	Total/NA	Solid	8015D	1938
885-1341-5	BES24-225 1.25'	Total/NA	Solid	8015D	1938
885-1341-6	BES24-226 1.25'	Total/NA	Solid	8015D	1938
MB 885-1929/1-A	Method Blank	Total/NA	Solid	8015D	1929
MB 885-1938/1-A	Method Blank	Total/NA	Solid	8015D	1938
LCS 885-1938/2-A	Lab Control Sample	Total/NA	Solid	8015D	1938

Analysis Batch: 2224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-1	WES24-06 0-0.5'	Total/NA	Solid	8021B	1938
885-1341-2	WES24-07 0-0.5'	Total/NA	Solid	8021B	1938
885-1341-3	WES24-08 0-0.5'	Total/NA	Solid	8021B	1938
885-1341-4	BES24-213 1.25'	Total/NA	Solid	8021B	1938
885-1341-5	BES24-225 1.25'	Total/NA	Solid	8021B	1938
885-1341-6	BES24-226 1.25'	Total/NA	Solid	8021B	1938
MB 885-1929/1-A	Method Blank	Total/NA	Solid	8021B	1929
MB 885-1938/1-A	Method Blank	Total/NA	Solid	8021B	1938
LCS 885-1938/3-A	Lab Control Sample	Total/NA	Solid	8021B	1938

GC Semi VOA

Prep Batch: 1985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-1	WES24-06 0-0.5'	Total/NA	Solid	SHAKE	
885-1341-2	WES24-07 0-0.5'	Total/NA	Solid	SHAKE	
885-1341-3	WES24-08 0-0.5'	Total/NA	Solid	SHAKE	
885-1341-4	BES24-213 1.25'	Total/NA	Solid	SHAKE	
885-1341-5	BES24-225 1.25'	Total/NA	Solid	SHAKE	
885-1341-6	BES24-226 1.25'	Total/NA	Solid	SHAKE	
MB 885-1985/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-1985/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-1341-6 MS	BES24-226 1.25'	Total/NA	Solid	SHAKE	

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

GC Semi VOA (Continued)

Prep Batch: 1985 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-6 MSD	BES24-226 1.25'	Total/NA	Solid	SHAKE	

Analysis Batch: 2016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-2	WES24-07 0-0.5'	Total/NA	Solid	8015D	1985
885-1341-3	WES24-08 0-0.5'	Total/NA	Solid	8015D	1985
885-1341-4	BES24-213 1.25'	Total/NA	Solid	8015D	1985
885-1341-5	BES24-225 1.25'	Total/NA	Solid	8015D	1985
885-1341-6	BES24-226 1.25'	Total/NA	Solid	8015D	1985
MB 885-1985/1-A	Method Blank	Total/NA	Solid	8015D	1985
LCS 885-1985/2-A	Lab Control Sample	Total/NA	Solid	8015D	1985
885-1341-6 MS	BES24-226 1.25'	Total/NA	Solid	8015D	1985
885-1341-6 MSD	BES24-226 1.25'	Total/NA	Solid	8015D	1985

Analysis Batch: 2289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-1	WES24-06 0-0.5'	Total/NA	Solid	8015D	1985

HPLC/IC

Prep Batch: 1946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-1	WES24-06 0-0.5'	Total/NA	Solid	300_Prep	
885-1341-2	WES24-07 0-0.5'	Total/NA	Solid	300_Prep	
885-1341-3	WES24-08 0-0.5'	Total/NA	Solid	300_Prep	
MB 885-1946/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-1946/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Prep Batch: 1949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-4	BES24-213 1.25'	Total/NA	Solid	300_Prep	
885-1341-5	BES24-225 1.25'	Total/NA	Solid	300_Prep	
885-1341-6	BES24-226 1.25'	Total/NA	Solid	300_Prep	
MB 885-1949/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-1949/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-1341-4 MS	BES24-213 1.25'	Total/NA	Solid	300_Prep	
885-1341-4 MSD	BES24-213 1.25'	Total/NA	Solid	300_Prep	
885-1341-5 MS	BES24-225 1.25'	Total/NA	Solid	300_Prep	
885-1341-5 MSD	BES24-225 1.25'	Total/NA	Solid	300_Prep	

Analysis Batch: 2019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-1	WES24-06 0-0.5'	Total/NA	Solid	300.0	1946
885-1341-2	WES24-07 0-0.5'	Total/NA	Solid	300.0	1946
MB 885-1946/1-A	Method Blank	Total/NA	Solid	300.0	1946
LCS 885-1946/2-A	Lab Control Sample	Total/NA	Solid	300.0	1946

Analysis Batch: 2062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-4	BES24-213 1.25'	Total/NA	Solid	300.0	1949
MB 885-1949/1-A	Method Blank	Total/NA	Solid	300.0	1949

QC Association Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

HPLC/IC (Continued)

Analysis Batch: 2062 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-1949/2-A	Lab Control Sample	Total/NA	Solid	300.0	1949

Analysis Batch: 2271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-5	BES24-225 1.25'	Total/NA	Solid	300.0	1949
885-1341-6	BES24-226 1.25'	Total/NA	Solid	300.0	1949
MB 885-1949/1-A	Method Blank	Total/NA	Solid	300.0	1949
LCS 885-1949/2-A	Lab Control Sample	Total/NA	Solid	300.0	1949
885-1341-4 MS	BES24-213 1.25'	Total/NA	Solid	300.0	1949
885-1341-4 MSD	BES24-213 1.25'	Total/NA	Solid	300.0	1949
885-1341-5 MS	BES24-225 1.25'	Total/NA	Solid	300.0	1949
885-1341-5 MSD	BES24-225 1.25'	Total/NA	Solid	300.0	1949

Analysis Batch: 2473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1341-3	WES24-08 0-0.5'	Total/NA	Solid	300.0	1946

Lab Chronicle

Client: Vertex
Job ID: 885-1341-1
Project/Site: JRU DI 1A CTB

Client Sample ID: WES24-06 0-0.5'
Lab Sample ID: 885-1341-1
Date Collected: 03/14/24 10:30
Matrix: Solid
Date Received: 03/16/24 08:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8015D		1	2216	RA	EET ALB	03/23/24 05:55
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8021B		1	2224	RA	EET ALB	03/23/24 05:55
Total/NA	Prep	SHAKE			1985	SB	EET ALB	03/20/24 08:58
Total/NA	Analysis	8015D		1	2289	JU	EET ALB	03/25/24 20:52
Total/NA	Prep	300_Prep			1946	JT	EET ALB	03/19/24 13:43
Total/NA	Analysis	300.0		20	2019	KB	EET ALB	03/19/24 22:58

Client Sample ID: WES24-07 0-0.5'
Lab Sample ID: 885-1341-2
Date Collected: 03/14/24 10:35
Matrix: Solid
Date Received: 03/16/24 08:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8015D		1	2216	RA	EET ALB	03/23/24 06:17
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8021B		1	2224	RA	EET ALB	03/23/24 06:17
Total/NA	Prep	SHAKE			1985	SB	EET ALB	03/20/24 08:58
Total/NA	Analysis	8015D		1	2016	JU	EET ALB	03/20/24 16:37
Total/NA	Prep	300_Prep			1946	JT	EET ALB	03/19/24 13:43
Total/NA	Analysis	300.0		20	2019	KB	EET ALB	03/19/24 23:10

Client Sample ID: WES24-08 0-0.5'
Lab Sample ID: 885-1341-3
Date Collected: 03/14/24 10:40
Matrix: Solid
Date Received: 03/16/24 08:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8015D		1	2216	RA	EET ALB	03/23/24 06:39
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8021B		1	2224	RA	EET ALB	03/23/24 06:39
Total/NA	Prep	SHAKE			1985	SB	EET ALB	03/20/24 08:58
Total/NA	Analysis	8015D		1	2016	JU	EET ALB	03/20/24 16:49
Total/NA	Prep	300_Prep			1946	JT	EET ALB	03/19/24 13:43
Total/NA	Analysis	300.0		50	2473	KB	EET ALB	03/28/24 15:22

Client Sample ID: BES24-213 1.25'
Lab Sample ID: 885-1341-4
Date Collected: 03/14/24 11:30
Matrix: Solid
Date Received: 03/16/24 08:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8015D		1	2216	RA	EET ALB	03/23/24 07:01

Lab Chronicle

Client: Vertex
Job ID: 885-1341-1
Project/Site: JRU DI 1A CTB

Client Sample ID: BES24-213 1.25'
Lab Sample ID: 885-1341-4
Date Collected: 03/14/24 11:30
Matrix: Solid
Date Received: 03/16/24 08:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8021B		1	2224	RA	EET ALB	03/23/24 07:01
Total/NA	Prep	SHAKE			1985	SB	EET ALB	03/20/24 08:58
Total/NA	Analysis	8015D		1	2016	JU	EET ALB	03/20/24 17:14
Total/NA	Prep	300_Prep			1949	JT	EET ALB	03/19/24 14:21
Total/NA	Analysis	300.0		20	2062	KB	EET ALB	03/20/24 12:45

Client Sample ID: BES24-225 1.25'
Lab Sample ID: 885-1341-5
Date Collected: 03/14/24 11:35
Matrix: Solid
Date Received: 03/16/24 08:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8015D		1	2216	RA	EET ALB	03/23/24 07:23
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8021B		1	2224	RA	EET ALB	03/23/24 07:23
Total/NA	Prep	SHAKE			1985	SB	EET ALB	03/20/24 08:58
Total/NA	Analysis	8015D		1	2016	JU	EET ALB	03/20/24 19:04
Total/NA	Prep	300_Prep			1949	JT	EET ALB	03/19/24 14:21
Total/NA	Analysis	300.0		20	2271	RC	EET ALB	03/19/24 18:59

Client Sample ID: BES24-226 1.25'
Lab Sample ID: 885-1341-6
Date Collected: 03/14/24 11:40
Matrix: Solid
Date Received: 03/16/24 08:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8015D		1	2216	RA	EET ALB	03/23/24 07:45
Total/NA	Prep	5030C			1938	IMR	EET ALB	03/19/24 11:34
Total/NA	Analysis	8021B		1	2224	RA	EET ALB	03/23/24 07:45
Total/NA	Prep	SHAKE			1985	SB	EET ALB	03/20/24 08:58
Total/NA	Analysis	8015D		1	2016	JU	EET ALB	03/20/24 19:17
Total/NA	Prep	300_Prep			1949	JT	EET ALB	03/19/24 14:21
Total/NA	Analysis	300.0		20	2271	RC	EET ALB	03/19/24 19:36

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: JRU DI 1A CTB

Job ID: 885-1341-1

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

Released to Imaging: 5/15/2024 11:16:38 AM
Received by OCD: 4/27/2024 12:00:15 AM

eurofins | Environment Testing
Xenco HALL

CC: CDixon@vertex.ca for Final Report

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

885-1341 COC

REMARKS: Direct Bill to XTO Energy, Inc., Cost Center #: 1082151001, Incident #: nAPP2331041267 CC. Chance Dixon (CDixon@vertex.ca) for Final Report.

www.xenco.com Page 1 of 1

Project Manager:	Chance Dixon (CDixon@vertex.ca)	Bill to: (if different)	XTO Energy, Inc.
Company Name:	Vertex Resource Services	Company Name:	XTO Energy, Inc.
Address:	3101 Boyd Drive	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM, 88220
Phone:	575.725.5001	Email:	CC: CDixon@vertex.ca for Final Report
Project Name:	JRU DI 1A CTB	Turn Around	
Project Number:	23E-04616	Routine X Rush X	
Project Location:		Due Date: 5 DAY	
Sampler's Name:	Deusavan Costa	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

Work Order Comments

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

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

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (ft)	Grab/ Comp	# of Cont	Parameters: BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride	Sample Comments
WES24-06 0-0.5'	Soil	03.14.24	10:30	1	Com		X	X	X	1341 1
WES24-07 0-0.5'	Soil	03.14.24	10:35	1	Com		X	X	X	2
WES24-08 0-0.5'	Soil	03.14.24	10:40	1	Com		X	X	X	3
BES24-213 1.25'	Soil	03.14.24	11:30	1	Com		X	X	X	4
BES24-225 1.25'	Soil	03.14.24	11:35	1	Com		X	X	X	5
BES24-226 1.25'	Soil	03.14.24	11:40	1	Com		X	X	X	6

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

0.9 - 0 = 0.9 Yog

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		3/15/24 1000	2		3/16/24 0805
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-1341-1

Login Number: 1341 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Cason, Cheyenne

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	

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QUESTIONS

Action 338088

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 338088
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2318831816**
Incident Name	**NAPP2318831816 JAMES RANCH UNIT DI 1A CTB @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	JAMES RANCH UNIT DI 1A CTB
Date Release Discovered	06/28/2023
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: Corrosion | Other (Specify) | Produced Water | Released: 37 BBL | Recovered: 30 BBL | Lost: 7 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)	Internal corrosion caused a release of fluids from the 6" outlet line on the production bulk vessel.

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
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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: Amy Ruth Title: Coordinator SSHE Environmental Email: amy.ruth@exxonmobil.com Date: 04/26/2024

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 338088
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 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	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between ½ and 1 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	20100
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	245
GRO+DRO (EPA SW-846 Method 8015M)	245
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	02/13/2024
On what date will (or did) the final sampling or liner inspection occur	03/14/2024
On what date will (or was) the remediation complete(d)	03/14/2024
What is the estimated surface area (in square feet) that will be reclaimed	36679
What is the estimated volume (in cubic yards) that will be reclaimed	2000
What is the estimated surface area (in square feet) that will be remediated	36679
What is the estimated volume (in cubic yards) that will be remediated	10
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 338088
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	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.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Amy Ruth Title: Coordinator SSHE Environmental Email: amy.ruth@exxonmobil.com Date: 04/26/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 338088
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 338088
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**322685**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**03/14/2024**
What was the (estimated) number of samples that were to be gathered	**5**
What was the sampling surface area in square feet	**1000**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	45627
What was the total volume (cubic yards) remediated	1650
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	45627
What was the total volume (in cubic yards) reclaimed	1650
Summarize any additional remediation activities not included by answers (above)	Site was cleaned to NMOCD's strictest criteria.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Amy Ruth Title: Coordinator SSHE Environmental Email: amy.ruth@exxonmobil.com Date: 04/26/2024

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 338088
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 338088

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	5380
	Action Number: 338088
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2318831816 JAMES RANCH UNIT DI 1A CTB, thank you. This Remediation Closure Report is approved.	5/15/2024