Incident Number: nAPP2331041267



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

Release Assessment and Closure April 2024

Release Assessment and Closure
James Ranch Unit DI 1A CTB
Section 21, Township 22 South, Range 30 East
County: Eddy

Prepared for:

XTO Energy

3104 E. Greene Street Carlsbad, New Mexico 88220

New Mexico Oil Conservation Division - District 2

811 S. 1st Street

Artesia, New Mexico 88210

Prepared by:

Vertex Resource Services Inc.

3101 Boyd Drive

Carlsbad, New Mexico 882

Chance Dixon

6/19/2024 Date

Chance Dixon, B.Sc.

PROJECT MANAGER, REPORT REVIEW

Release Assessment and Closure April 2024

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Release Assessment and Closure April 2024

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Release Assessment and Closure April 2024

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 October 26, 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 November 6, 2023. Incident ID number nAPP2331041267 was assigned to this incident.

This report describes 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 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 on October 26, 2023, due to corrosion of the 8" CS main produced water line resulting in a release of fluids to the pad. The incident was reported on November 6, 2023, and involved the release of approximately 9.45 barrels (bbl.) of produced water on the pad site. Approximately 7 bbl. of free fluid was removed during the initial spill cleanup. Additional details relevant to the release are presented in the C-141 Report.

3.0 Site Characteristics

The site is located approximately 64 miles southeast of Carlsbad, New Mexico (Google Inc., 2024). 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 Geological Map of New Mexico (New Mexico Bureau of Geology and Mineral Resources, 2024) indicates the site's surface geology primarily comprises Qp - Piedmont alluvial deposits (Holocene to lower Pleistocene) and is characterized as deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans. The soil at the site is characterized as fine-silty and calcareous (United States Department of Agriculture, Natural Resources Conservation Service, 2024). The predominant soil texture on the site is loamy fine sand. 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).

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 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

Release Assessment and Closure April 2024

half-shrubs dominate the historic plant community (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Limited to no vegetation is allowed to grow on the compacted production pad, right-of-way and access road.

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, 2024). Data from 2013 show 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 Linsey Lake located approximately 1.5 miles west of the site (United States Fish and Wildlife Service, 2024).

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.

Release Assessment and Closure April 2024

pill Cod	rdinates: 32.38001, -103.88664	X: 604730	Y: 3583103	
Site Spe	cific Conditions	Value	Unit	
1	Depth to Groundwater	110	feet	
2	Within 300 feet of any continuously flowing	012	foot	
2	watercourse or any other significant watercourse	912	feet	
2	Within 200 feet of any lakebed, sinkhole or playa lake	0.400	foot	
3	(measured from the ordinary high-water mark)	8,198	feet	
4	Within 300 feet from an occupied residence, school,	0.724	foot	
4	hospital, institution or church	9,724	feet	
	i) Within 500 feet of a spring or a private, domestic			
	fresh water well used by less than five households for	1,221	feet	
5	· ·	1,221		
	domestic or stock watering purposes, or			
	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-	No	(Y/N)	
	3 NMSA 1978 as amended, unless the municipality			
	specifically approves			
7	Within 300 feet of a wetland	7,337	feet	
8	Within the area overlying a subsurface mine	No	(Y/N)	
			Critical	
0	N/ithin an amatable area (Karat NAsa)	I Cala	High	
9	Within an unstable area (Karst Map)	High	Medium	
			Low	
10	Within a 100 year Floodule in	F00		
10	Within a 100-year Floodplain	500	year	
		Large Learn 1 to 5		
11	Soil Type	Largo Loam, 1 to 5		
		percent slopes		
		Loamy-		
12	Ecological Classification	R070BC007NM		
13	Geology	Qp		
		·		
			<50'	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	51-100'	
			>100'	

Release Assessment and Closure April 2024

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					
, G	Chloride	600 mg/kg					
450 feet	TPH (GRO+DRO+MRO)	100 mg/kg					
< 50 feet	BTEX	50 mg/kg					
	Benzene	10 mg/kg					

TDS - total dissolved solids

5.0 Remedial Actions Taken

An initial site inspection of the release area was completed on January 12, 2024, which identified the area of the release specified in the initial C-141 Report. The impacted area was determined to be approximately 90 feet long and 104 feet wide; the total affected area was 3,955 square feet.

Remediation efforts began on March 8, 2024, and were finalized on May 28, 2024. Vertex personnel supervised the excavation of impacted soils. Field screening 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 3 feet bgs. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility. Photographs documenting final excavation before the backfill are included in Appendix C. Initial characterization results are presented in Table 3.

Notification that confirmatory samples were being collected was provided to the NMOCD on March 1, 2024, and can be located on NMOCD Permitting. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. Samples were collected for laboratory analysis following NMOCD soil sampling procedures. They were submitted to Eurofins 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 4, and the laboratory data reports are included in Appendix E. All confirmatory samples collected and analyzed were below closure criteria for the site.

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

BTEX – benzene, toluene, ethylbenzene and xylenes

Release Assessment and Closure April 2024

6.0 Closure Request

The release area was fully delineated, remediated, and backfilled with local soils by June 10, 2024. Confirmatory samples were analyzed by the laboratory and found to be below allowable concentrations as per the NMAC Closure Criteria for Soils Impacted by a Release locations "under 50 feet to groundwater". Based on these findings, XTO Energy requests that this release be closed.

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

Release Assessment and Closure April 2024

7.0 References

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Release Assessment and Closure April 2024

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.

FIGURE

- Base Sample (Excavated) (Prefixed by "BES24-")
- ▲ Wall Sample (Excavated) (Prefixed by "WES24-")
- — Pipeline (Aboveground)
- Pipeline (Underground)
- Excavation to 2.5' bgs (~ 476 sq.ft.)
- Excavation to 3' bgs (~ 247 sq.ft.)
- Excavation to 2' bgs (~ 584 sq.ft.)
- Excavation to 2' bgs (~ 161 sq.ft.)
- South Excavation to 0.5' bgs (~1,985 sq.ft.)



PROJECTSIXTO Energy/23E-04616 - JRU DI 1A CTB\PH2_ Figure 2 Confirmatory Sampling Site Schematic South (23E-04616)ID18676.mxd

0 5 10 20 NAD 1983 UTM Zone 13N Date: Jun 18/24 Map Center: Lat: 32.379853, Long:-103.886528



Confirmatory Sampling Site Schematic JRU DI 1A CTB

FIGURE:



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

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

Table

Client Name: XTO Energy Site Name: JRU DI 1A CTB

NMOCD Tracking #: nAPP2331041267

Project #: 23E-04616

Lab Reports: 885-990-1, 885-1287-1, 885-1289-1, 885-1341-1, 885-2783-1, 885-3429-1, 885-3547-1, 885-5373-1, 885-4276-1,

		Table 3. Confirmator	ry Sample I	Field Scree	en and Lal	oratory R	esults - De	epth to Gr	oundwate	r <50 feet	bgs		
	Sample Des	cription	Fi	eld Screeni	ng			Petrole	um Hydro	carbons			
			ds			Volatile Extractable				Inorganic			
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene (mg/kg)	BY BTEX (Total)	Basoline Range Organics (GRO)	DRO)	Motor Oil Range Organics (MRO)	(mg/kg)	Total Petroleum	33/2/Chloride Concentration
DEC24.04		14 1 0 2024	ND	22	205	ND	ND	ND	ND	ND	ND	ND	290
BES24-01	2	March 8, 2024	ND	15	317	ND	ND	ND	ND	ND	ND	ND	190
BES24-02 BES24-03	0.5 0.5	March 8, 2024	ND ND	15	317	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	390
		March 8, 2024	ND ND	13	370	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	150
BES24-04 BES24-05	0.5 2	March 8, 2024 March 8, 2024	ND	32	298	ND	ND	ND	ND	ND	ND	ND	94
BES24-06	2	March 12, 2024	ND	12	420	ND	ND	ND	ND	ND	ND	ND	110
BES24-07	3	May 8, 2024	ND	97	475	ND	ND	ND	ND	ND	ND	ND	160
BES24-08	2	March 12, 2024	ND	8	520	ND	ND	ND	ND	ND	ND	ND	120
BES24-09	0.5	March 12, 2024	ND	15	320	ND	ND	ND	ND	ND	ND	ND	93
BES24-10	0.5	March 12, 2024	ND	30	360	ND	ND	ND	ND	ND	ND	ND	98
BES24-11	0.5	March 12, 2024	ND	32	408	ND	ND	ND	ND	ND	ND	ND	110
BES24-12	0.5	March 12, 2024	ND	27	372	ND	ND	ND	ND	ND	ND	ND	90
BES24-13	0.5	March 12, 2024	ND	15	570	ND	ND	ND	ND	ND	ND	ND	89
BES24-14	0.5	March 12, 2024	ND	20	420	ND	ND	ND	ND	ND	ND	ND	100
BES24-15	0.5	March 13, 2024	ND	68	650	ND	ND	ND	ND	ND	ND	ND	410
BES24-16	2.5	May 8, 2024	ND	40	198	ND	ND	ND	ND	ND	ND	ND	ND
BES24-17	2	April 23, 2024	ND	37	354	ND	ND	ND	ND	ND	ND	ND	240
BES24-18	0.5	March 12, 2024	ND	23	475	ND	ND	ND	ND	ND	ND	ND	110
BES24-19	0.5	March 12, 2024	ND	12	382	ND	ND	ND	ND	ND	ND	ND	130
BES24-19	2	May 28, 2024	ND	105	486	ND	ND	ND	ND	ND	ND	ND	ND
BES24-20	0.5	March 12, 2024	ND	7	280	ND	ND	ND	ND	ND	ND	ND	120
BES24-20	2	May 28, 2024	ND	121	400	ND	ND	ND	ND	ND	ND	ND	ND
BES24-21	2.5	May 8, 2024	ND	47	200	ND	ND	ND	ND	ND	ND	ND	ND
WES24-01	2	March 8, 2024	ND	32	298	ND	ND	ND	ND	ND	ND	ND	290
WES24-02	2	March 12, 2024	ND	42	520	ND	ND	ND	ND	ND	ND	ND	140
WES24-04	2	March 13, 2024	ND	87	405	ND	ND	ND	ND	ND	ND	ND	200
WES24-05	0-0.5	March 13, 2024	ND	27	372	ND	ND	ND	ND	ND	ND	ND	150
WES24-06	0-2	March 14, 2024	ND	27	450	ND	ND	ND	ND	ND	ND	ND	160
WES24-07	0.5	March 14, 2024	ND ND	37 38	610 295	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	320 100
WES24-10	0-2	April 9, 2024	ND ND	51	295	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
WES24-15	0-2	March 8, 2024	ND ND	51	193	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
WES24-16	0-2 0-3	March 8, 2024	ND ND	67	145	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND
WES24-17	0-3 0-2.5	March 8, 2024	ND ND	71	158	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND
WES24-18		March 8, 2024	ND ND	147	475	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
WES24-25	0-0.5	May 28, 2024	ND	14/	4/5	ND	ND	ND	ND	ND	ND	ND	ND

[&]quot;ND" Not Detected at the Reporting Limit

Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria



[&]quot;-" indicates not analyzed/assessed

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	nAPP2331041267
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible	Party XTO) Energy		OGRID 5	OGRID 5380			
Contact Nam	ne Garrett Gr	reen		Contact Te	Contact Telephone 575-200-0729			
Contact ema	il garrett.gre	en@exxonmobil.c	om	Incident #	Incident # (assigned by OCD)			
Contact mail	ing address	3104 E. Greene St	reet, Carlsbad, Nev	w Mexico, 88220				
			Location	of Release So	nurce			
22	27096		Location	of Release Se				
Latitude 32			OIAD 92 in doc	Longitude _	-103.88668			
			(NAD 83 in aec					
Site Name	James Ranci	h Unit DI 1A Tank	Battery	Site Type	Tank Battery			
Date Release	Discovered	10/26/2023		API# (if app	licable)			
II	G + :	T1:	D	Carre	4	7		
Unit Letter	Section	Township	Range	Coun	<u> </u>	-		
F	21	22S	30E	Eddy	Eddy			
Surface Owne	r: State	➤ Federal □ Tr	ribal	Name:)		
			Nature and	l Volume of H	Release			
	Materia	ıl(s) Released (Select al	l that apply and attach	calculations or specific	justification for the	e volumes provided below)		
Crude Oi	1	Volume Release	d (bbls)		Volume Reco	overed (bbls)		
× Produced	Water	Volume Release	d (bbls) 9.45		Volume Recovered (bbls) 7.00			
			ion of total dissolv water >10,000 mg		Yes No			
Condensa	ite	Volume Release			Volume Reco	overed (bbls)		
Natural C	ias	Volume Release	d (Mcf)		Volume Recovered (Mcf)			
Other (de	scribe)	Volume/Weight	Released (provide	units)	Volume/Weight Recovered (provide units)			
Cause of Rel	ease Interna	l corrosion caused	a 8" CS main PW	line to release fluid	ds to pad. A va	c truck recovered all free fluids. A		
				remediation purpos				

Received by OCD: 7/25/2024 4:59:39 PM Form C-141 State of New Mexico Page 2 Oil Conservation Division

Page	18	of	`249
1 1180	20	\mathbf{v}_{J}	

Incident ID	nAPP2331041267
District RP	
Facility ID	
Application ID	

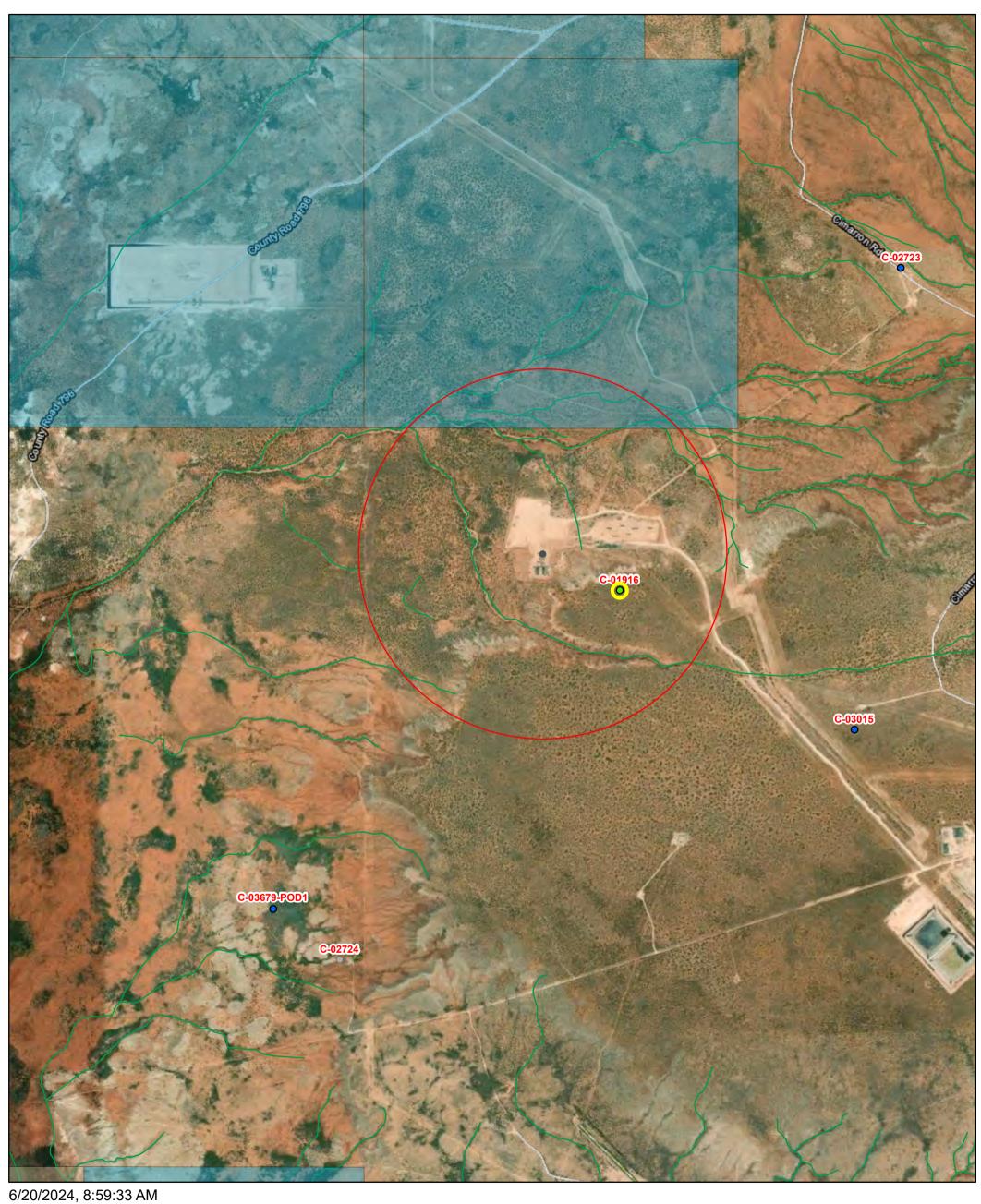
Was this a major	If YES, for what reason(s) does the respon	sible party consider this a major release?
release as defined by 19.15.29.7(A) NMAC?	N/A	
19.13.29.7(A) NMAC:		
Yes 🗷 No		
If YES, was immediate no	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
N/A		
	Initial Re	esponse
The responsible j	party must undertake the following actions immediately	unless they could create a safety hazard that would result in injury
➤ The source of the rele	ease has been stopped.	
▼ The impacted area ha	s been secured to protect human health and	the environment.
Released materials ha	ave been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.
∡ All free liquids and re	ecoverable materials have been removed and	managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain v	vhy:
NA		
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain release notified. The acceptance of a C-141 report by the Oate and remediate contamination that pose a threat	best of my knowledge and understand that pursuant to OCD rules and ications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name: Garrett G		Title: Environmental Coordinator
Signature:	M Sun	Date:
email: garrett.green@exx	konmobil.com	Telephone: 575-200-0729
OCD Only		
Received by:		Date:

Location:	James Ranch Unit DI 1A			
Spill Date:	10/26/2023			
	Area 1			
Approximate A	rea =	5499.00	sq. ft.	
Average Satura	tion (or depth) of spill =	1.00	inches	
Average Porosi	ty Factor =	0.03		
	VOLUME OF LEAK			
Total Crude Oil	=	0.00	bbls	
Total Produced	otal Produced Water = 9.45 l			
	TOTAL VOLUME OF LEAK			
Total Crude Oi	=	0.00	bbls	
Total Produced	Water =	9.45	bbls	
	TOTAL VOLUME RECOVERED			
Total Crude Oi	=	0.00	bbls	
Total Produced	Water =	7.00	bbls	

APPENDIX B

CLOSURE CRITERIA RESEARCH DOCUMENTATION

JRU DI 1A CTB 0.5-Mile Radius



GIS WATERS PODs

Active

Pending

OSE District Boundary

Water Right Regulations

Artesian Planning Area

New Mexico State Trust Lands

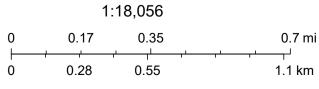
Subsurface Estate

Both Estates

NHD Flowlines

Connector

Stream River



Esri, HERE, iPC, Esri, HERE, Garmin, iPC, Maxar



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.

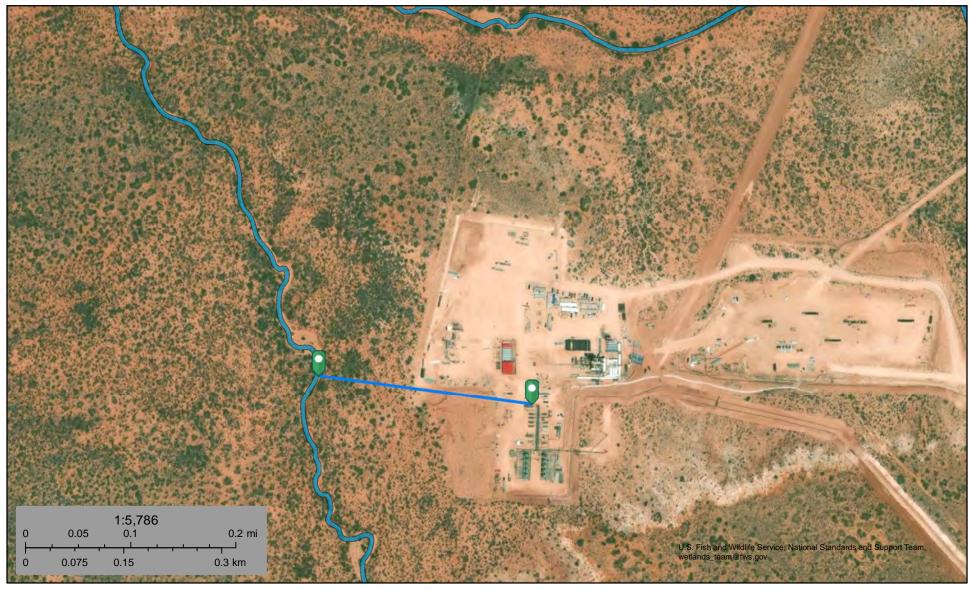
	NG FEE: There is no till						
	Office of the State Engin		lall Miss	whom) for well to l	na mluacadi	C 01016	
_	Office of the State Enginerry f well owner: BOPCO	•		•			
	address: P.O. Be						
_	Midland					Zin code:	79702
	umber: 432-55						
III. WE	CLL DRILLER INFORM	<u> 1ATION:</u>					
Well Dr	iller contracted to provide	plugging services:		Straub Corporat	ion – Raymond Stra	aub	
	exico Well Driller License	-			-		
IV. WE Note: A 1)	CLL INFORMATION: Copy of the existing Well GPS Well Location: Reason(s) for plugging w	Record for the well Latitude: Longitude:	to be pl 32 -103 Water w	lugged should be _deg,22 _deg,53 rell is in the path	attached to this pla min, 54.42 min, 00.57 of new construction	n. Posec - sec, NAD 83	STATE ENGINEER OF FOR W
	useable quality.					<i>ى</i> د.	
3)	Was well used for any ty what hydrogeologic para water, authorization from	imeters were monitor	ored. I	f the well was u	sed to monitor co	ntaminated or	poor quality
4)	Does the well tap brackis	h, saline, or otherwi	se poor	quality water?	YES If yes,	provide additi	onal detail,
	including analytical resul	ts and/or laboratory	report(s): See Att	achments		
5)	Static water level: ~ 110	feet below land s	urface /	feet above land s	urface (circle one	e)	
6)	Depth of the well:	188 feet					

Well Plugging Plan Version: December, 2011 Page 1 of 5

> C-1916 465776



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

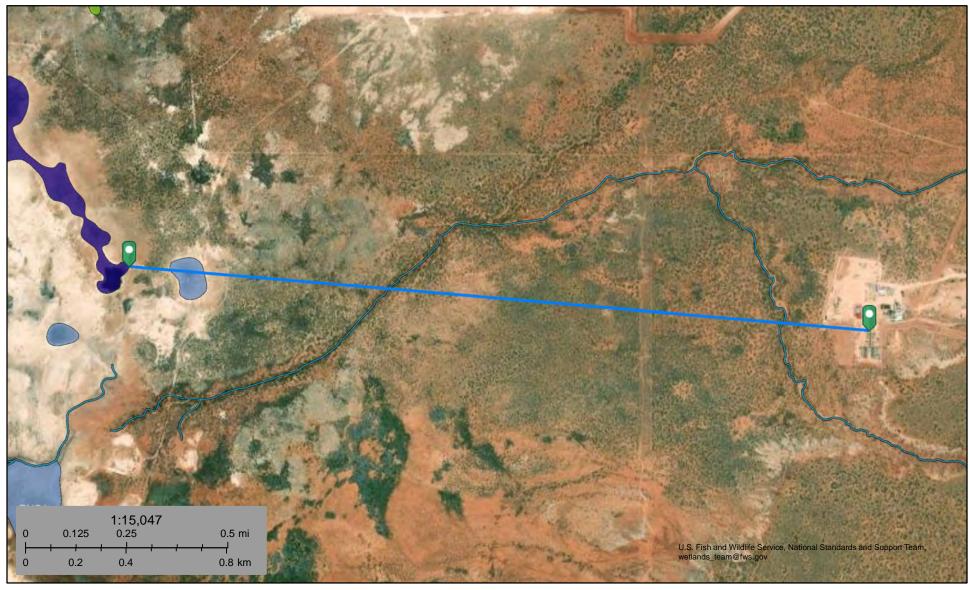
Other

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.



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

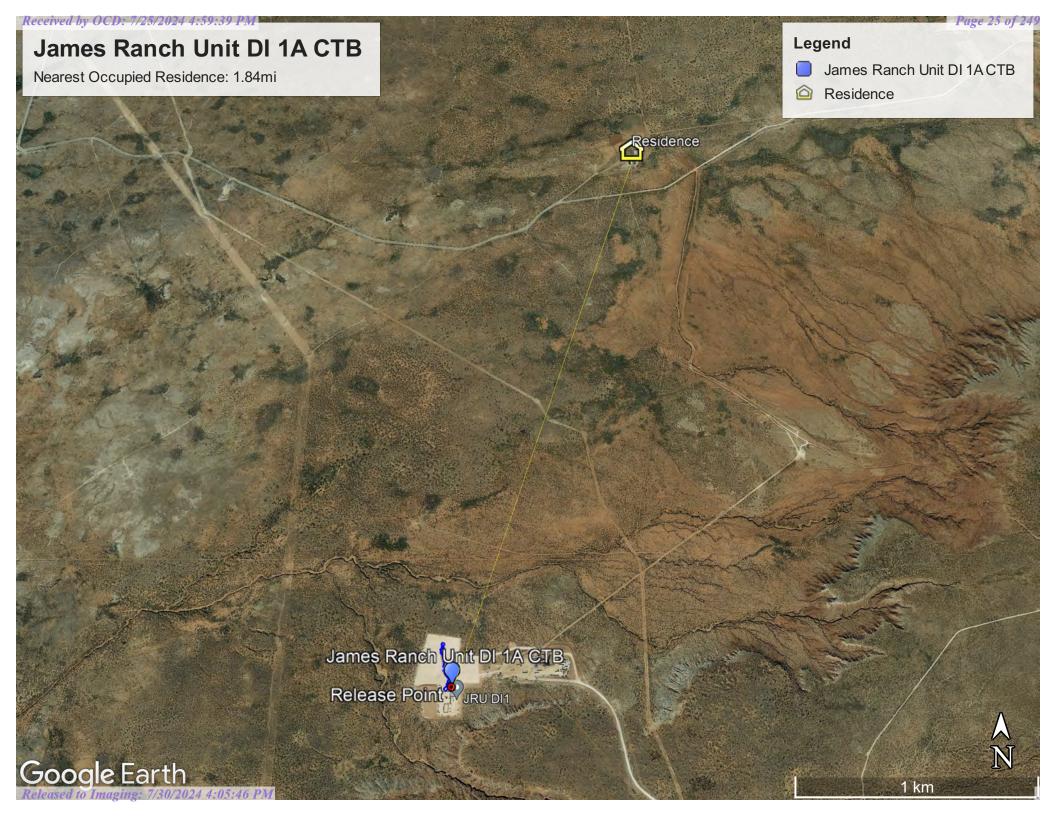
Freshwater Pond

Lake

Other

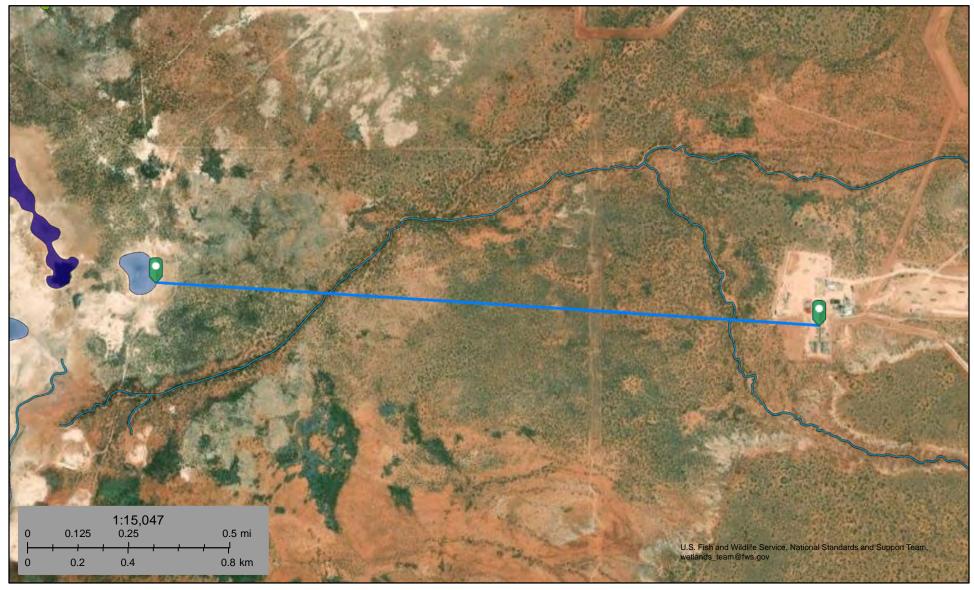
Riverine

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.





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

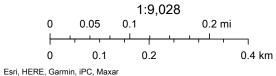
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Received by OCD: 7/25/2024 4:59:39 PM

James Ranch Unit DI 1A CTB Mine

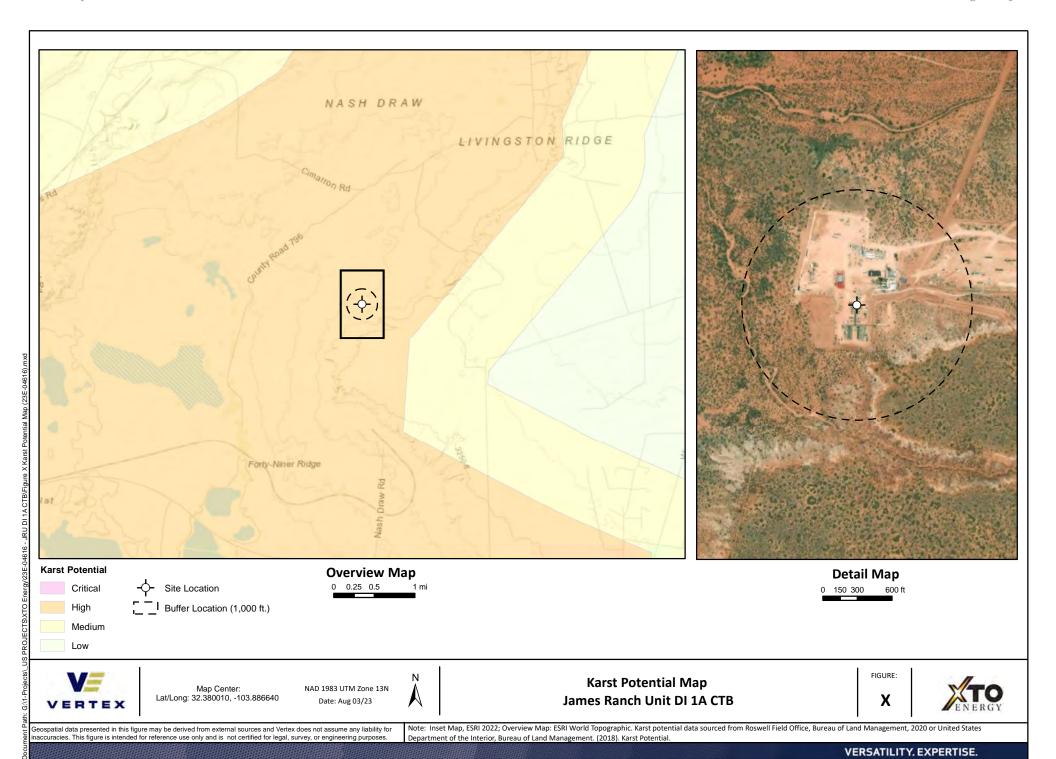


8/3/2023, 1:22:37 PM



Page 27 of 249

Received by OCD: 7/25/2024 4:59:39 PM



Received by OCD: 7/25/2024 4:59:39 PM National Flood Hazard Layer FIRMette





SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD HAZARD AREAS Regulatory Floodway 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 OTHER AREAS OF FLOOD HAZARD Area with Flood Risk due to Levee Zone D NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLIL Levee, Dike, or Floodwall 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** OTHER **Profile Baseline FEATURES** Hydrographic Feature Digital Data Available No Digital Data Available MAP PANELS Unmapped

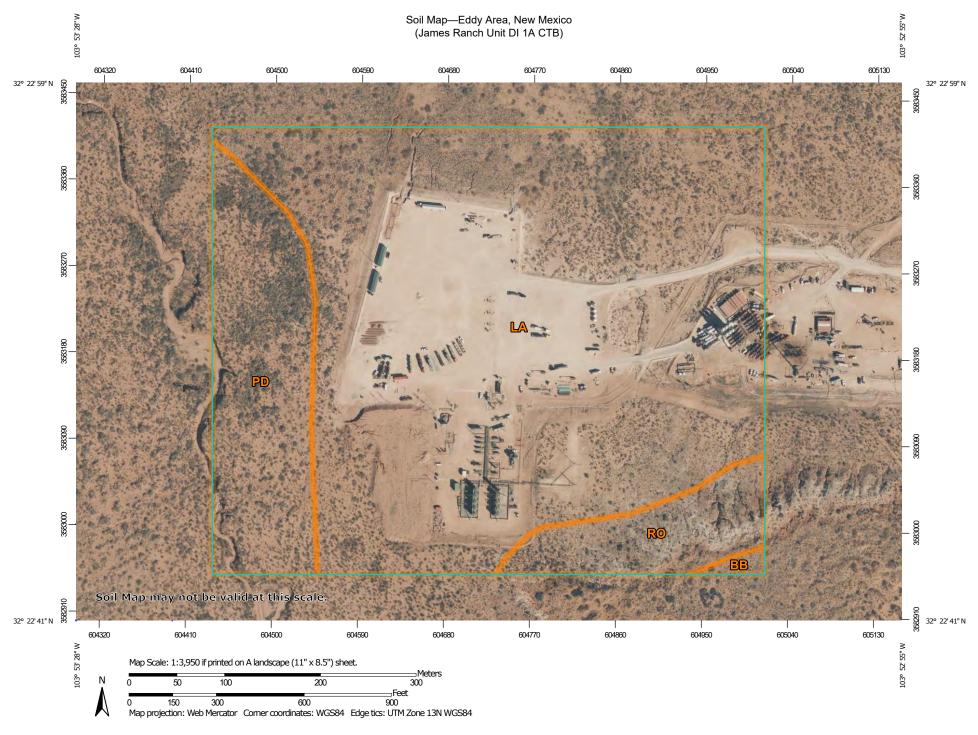
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location. This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy 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.



2,000



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

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

MAP LEGEND

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Water Features

Transportation

Background

Spoil Area

Stony Spot

Wet Spot

Other

Rails

US Routes

Major Roads

Local Roads

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

Aerial Photography

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



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

Sailne Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

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

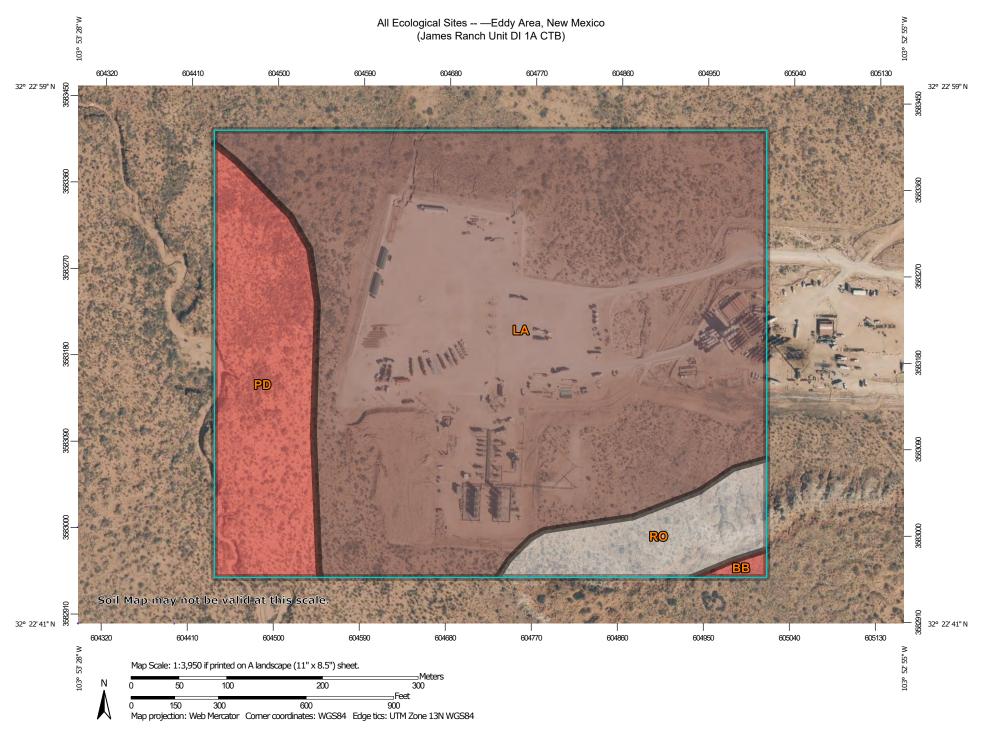
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

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

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ВВ	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%



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

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

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US Routes

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Major Roads

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Local Roads

Background

The same

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.

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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.

All Ecological Sites —

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
ВВ	Berino complex, 0 to 3 percent	Berino (60%)	R070BD003NM — Loamy Sand	0.3	0.4%
	slopes, eroded	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	Pajarito (46%)	R070BD003NM — Loamy Sand	10.5	15.8%
	percent slopes	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 Ir	nterest			66.8	100.0%

APPENDIX C

DAILY FIELD REPORT



Site Photos

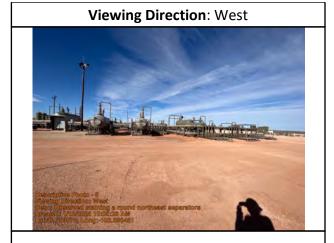
Viewing Direction: South



Viewing Direction: Southeast















Site Photos

Viewing Direction: West





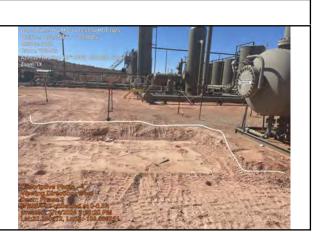






Site Photos











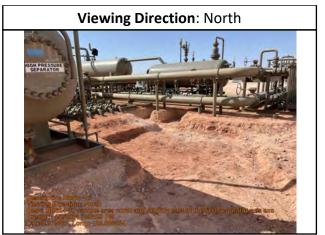
Site Photos













Site Photos









APPENDIX D

Laboratory Data Reports and Chain of Custody Forms

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/2/2024 9:13:13 PM

JOB DESCRIPTION

JRU DI 1A CTB

JOB NUMBER

885-990-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization

Generated 4/2/2024 9:13:13 PM

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

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Client: Vertex

Laboratory Job ID: 885-990-1

Project/Site: JRU DI 1A CTB

Table of Contents

Cover Page	1
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Lab Chronicle	15
Certification Summary	17
Chain of Custody	18
Receipt Checklists	19

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Definitions/Glossary

Client: Vertex Job ID: 885-990-1

Project/Site: JRU DI 1A CTB

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.					
n	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 Job ID: 885-990-1

Project: JRU DI 1A CTB

Job ID: 885-990-1 Eurofins Albuquerque

Job Narrative 885-990-1

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 3/12/2024 9:05 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 1.4°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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

HPLC/IC

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

Eurofins Albuquerque

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Project/Site: JRU DI 1A CTB

Date Received: 03/12/24 09:05

Client: Vertex

Client Sample ID: WES24-01 0-2'

Date Collected: 03/09/24 13:00

Lab Sample ID: 885-990-1

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		03/13/24 15:53	03/18/24 14:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 244			03/13/24 15:53	03/18/24 14:12	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	0.025	mg/Kg		03/13/24 15:53	03/14/24 15:58	1
Ethylbenzene	ND	0.050	mg/Kg		03/13/24 15:53	03/14/24 15:58	1
Toluene	ND	0.050	mg/Kg		03/13/24 15:53	03/14/24 15:58	1
Xylenes, Total	ND	0.099	mg/Kg		03/13/24 15:53	03/14/24 15:58	1
Surrogate	%Recovery Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		39 - 146			03/13/24 15:53	03/14/24 15:58	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		03/14/24 14:20	03/15/24 19:40	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		03/14/24 14:20	03/15/24 19:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		69 - 147			03/14/24 14:20	03/15/24 19:40	1

Method: EPA 300.0 - Anions, Ion Chromatography							
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290	60	mg/Kg		03/14/24 16:14	03/14/24 21:59	20

Client Sample ID: BES24-01 2'

Date Collected: 03/09/24 13:10

Date Received: 03/12/24 09:05

Lab Sample ID: 885-990-2

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		4.9	mg/Kg		03/13/24 15:53	03/18/24 14:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared 00/40/04 45:50	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 244			03/13/24 15:53	03/18/24 14:34	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/13/24 15:53	03/14/24 16:20	1
Ethylbenzene	ND		0.049	mg/Kg		03/13/24 15:53	03/14/24 16:20	1
Toluene	ND		0.049	mg/Kg		03/13/24 15:53	03/14/24 16:20	1
Xylenes, Total	ND		0.097	mg/Kg		03/13/24 15:53	03/14/24 16:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			03/13/24 15:53	03/14/24 16:20	1

Method: SW846 8015D - Diese	I Range Org	janics (DRC)) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		03/14/24 14:20	03/15/24 20:03	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		03/14/24 14:20	03/15/24 20:03	1

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Client: Vertex

Project/Site: JRU DI 1A CTB

Client Sample ID: BES24-01 2'

Date Collected: 03/09/24 13:10 Date Received: 03/12/24 09:05

Lab Sample ID: 885-990-2

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		69 - 147	03/14/24 14:20 03	3/15/24 20:03	1

Client Sample Results

Method: EPA 300.0 - Anions, Ion Chromatography Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride 290 60 03/14/24 16:14 03/14/24 22:36 mg/Kg

Client Sample ID: BES24-02 0.5'

Date Collected: 03/09/24 13:20 Date Received: 03/12/24 09:05 Lab Sample ID: 885-990-3

Matrix: Solid

Method: SW846 8015D - Gaso	line Range	Organics ((GRO) (GC)				
Analyte	Result	Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg	03/13/24 15:5	03/18/24 14:55	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 244		03/13/24 15:5	03/18/24 14:55	1

Method: SW846 8021B -	 Volatile Organic Compound 	ds (GC)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	0.025	mg/Kg		03/13/24 15:53	03/14/24 16:42	1
Ethylbenzene	ND	0.049	mg/Kg		03/13/24 15:53	03/14/24 16:42	1
Toluene	ND	0.049	mg/Kg		03/13/24 15:53	03/14/24 16:42	1
Xylenes, Total	ND	0.099	mg/Kg		03/13/24 15:53	03/14/24 16:42	1
Surrogate	%Recovery Qualifier	l imite			Prenared	Analyzod	Dil Fac

Surrogate	%Recovery	Qualifier L	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146	03/13/24 15:53	03/14/24 16:42	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac ND 03/14/24 14:20 03/15/24 20:50 Diesel Range Organics [C10-C28] 9.7 mg/Kg Motor Oil Range Organics [C28-C40] 03/14/24 14:20 03/15/24 20:50 ND 49 mg/Kg

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 121 69 - 147 03/14/24 14:20 03/15/24 20:50

Method: EPA 300.0 - Anions, Ion Chromatography Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac 60 03/14/24 16:14 03/14/24 22:48 Chloride 190 mg/Kg 20

Client Sample ID: BES24-03 0.5' Lab Sample ID: 885-990-4 Date Collected: 03/09/24 13:30 Matrix: Solid Date Received: 03/12/24 09:05

Method: SW846 8015D - Gasol	ine Range	Organics	(GRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		03/13/24 15:53	03/18/24 15:17	1
Surrogate 4-Bromofluorobenzene (Surr)	%Recovery 96	Qualifier	Limits 15 - 244			Prepared 03/13/24 15:53	Analyzed 03/18/24 15:17	Dil Fac

Method: SW846 8021B - Volati	le Organic (Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/13/24 15:53	03/14/24 17:03	1

Project/Site: JRU DI 1A CTB

Client: Vertex

Client Sample ID: BES24-03 0.5'

Date Collected: 03/09/24 13:30

Date Received: 03/12/24 09:05

Lab Sample ID: 885-990-4

Matrix: Solid

Method: SW846 8021B - Volati	le Organic	Compound	ls (GC) (Cor	ntinued)	
Analyte	Result	Qualifier	RL	Unit	
Ethylbenzene	ND		0.050	ma/Ka	

Analyte	Resuit	Qualifier	KL	Onit	U	Frepareu	Allalyzeu	DII Fac
Ethylbenzene	ND		0.050	mg/Kg		03/13/24 15:53	03/14/24 17:03	1
Toluene	ND		0.050	mg/Kg		03/13/24 15:53	03/14/24 17:03	1
Xylenes, Total	ND		0.099	mg/Kg		03/13/24 15:53	03/14/24 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyze	d Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146	03/13/24 15:53 03/14/24 1	:03 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		03/14/24 14:20	03/15/24 21:14	1
Motor Oil Range Organics [C28-C40]	ND	48	mg/Kg		03/14/24 14:20	03/15/24 21:14	1

Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	71	69 - 147	03/14/24 14:20	03/15/24 21:14	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	390	60	mg/Kg		03/14/24 16:14	03/14/24 23:01	20

Client Sample ID: BES24-04 0.5'

Date Collected: 03/09/24 13:40 Date Received: 03/12/24 09:05

Gasoline Range Organics [C6 - C10]

Prepared	Analyzed	Dil Fac

03/13/24 15:53 03/18/24 15:39

Lab Sample ID: 885-990-5

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 244	03/13/24 15:53	03/18/24 15:39	1

4.9

Unit

mg/Kg

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

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

Result Qualifier

ND

method: 044040 0021B - Volatile Organic Compounds (OC)							
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	0.024	mg/Kg		03/13/24 15:53	03/14/24 17:25	1
Ethylbenzene	ND	0.049	mg/Kg		03/13/24 15:53	03/14/24 17:25	1
Toluene	ND	0.049	mg/Kg		03/13/24 15:53	03/14/24 17:25	1
Xylenes, Total	ND	0.097	mg/Kg		03/13/24 15:53	03/14/24 17:25	1

Surrogate	%Recovery Qualifier	Limits	Prepared A	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87	39 - 146	03/13/24 15:53 03/1	14/24 17:25	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		03/14/24 14:20	03/15/24 21:37	1
Motor Oil Range Organics [C28-C40]	ND	47	mg/Kg		03/14/24 14:20	03/15/24 21:37	1

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	117	69 - 147	03/14/24 14:20	03/15/24 21:37	1

Method: EPA 300.0 - Anions, Ion Chromatography

	one, ion omatography							
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	150	60	mg/Kg	;	03/15/24 11:40	03/15/24 17:03	20	

Project/Site: JRU DI 1A CTB

Client: Vertex

Client Sample ID: BES24-05 2'

Lab Sample ID: 885-990-6 Date Collected: 03/09/24 13:50

Matrix: Solid Date Received: 03/12/24 09:05

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/13/24 15:53	03/18/24 16:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 244			03/13/24 15:53	03/18/24 16:01	1
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/13/24 15:53	03/14/24 18:09	1
Ethylbenzene	ND		0.049	mg/Kg		03/13/24 15:53	03/14/24 18:09	1
Toluene	ND		0.049	mg/Kg		03/13/24 15:53	03/14/24 18:09	1
Xylenes, Total	ND		0.098	mg/Kg		03/13/24 15:53	03/14/24 18:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			03/13/24 15:53	03/14/24 18:09	1
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	ixesuit							
	ND		9.4	mg/Kg		03/14/24 14:20	03/15/24 22:01	1
Diesel Range Organics [C10-C28]			9.4	mg/Kg mg/Kg			03/15/24 22:01 03/15/24 22:01	1
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	ND	Qualifier		0 0				Dil Fac
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	ND ND	Qualifier	47	0 0		03/14/24 14:20	03/15/24 22:01	Dil Fa
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I	ND ND %Recovery 113		47 Limits	0 0		03/14/24 14:20 Prepared	03/15/24 22:01 Analyzed	Dil Fac
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	ND ND %Recovery 113		47 Limits	0 0		03/14/24 14:20 Prepared	03/15/24 22:01 Analyzed	Dil Fac

Released to Imaging: 7/30/2024 4:05:46 PM

Prep Type: Total/NA

Prep Batch: 1670

Prep Batch: 1670

Job ID: 885-990-1

Project/Site: JRU DI 1A CTB

Client: Vertex

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

Lab Sample ID: MB 885-1670/1-A Client Sample ID: Method Blank

Matrix: Solid Analysis Batch: 1972

MB MB Result Qualifier RL Unit Analyzed Dil Fac Analyte Prepared 03/13/24 15:53 03/18/24 10:53 Gasoline Range Organics [C6 - C10] 5.0 mg/Kg

ND MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 15 - 244 03/13/24 15:53 03/18/24 10:53 4-Bromofluorobenzene (Surr) 95

Lab Sample ID: LCS 885-1670/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 1972

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits

Gasoline Range Organics [C6 -25.0 21.1 mg/Kg 84 70 - 130

C10]

LCS LCS

Limits Surrogate %Recovery Qualifier 4-Bromofluorobenzene (Surr) 204 15 - 244

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-1670/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 1783** Prep Batch: 1670 MB MB

Analyte	Result Qualifie	er RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	0.025	mg/Kg		03/13/24 15:53	03/14/24 12:20	1
Ethylbenzene	ND	0.050	mg/Kg		03/13/24 15:53	03/14/24 12:20	1
Toluene	ND	0.050	mg/Kg		03/13/24 15:53	03/14/24 12:20	1
Xylenes, Total	ND	0.10	mg/Kg		03/13/24 15:53	03/14/24 12:20	1

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 39 - 146 03/13/24 15:53 03/14/24 12:20 87

Lab Sample ID: LCS 885-1670/3-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 1783 Prep Batch: 1670

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	1.00	0.857		mg/Kg		86	70 - 130	
Ethylbenzene	1.00	0.863		mg/Kg		86	70 - 130	
m,p-Xylene	2.00	1.73		mg/Kg		86	70 - 130	
o-Xylene	1.00	0.863		mg/Kg		86	70 - 130	
Toluene	1.00	0.860		mg/Kg		86	70 - 130	
Xylenes, Total	3.00	2.59		mg/Kg		86	70 - 130	

LCS LCS

Surrogate %Recovery Qualifier Limits 39 - 146 4-Bromofluorobenzene (Surr) 90

Prep Batch: 1732

Prep Type: Total/NA

Prep Batch: 1690

Prep Batch: 1690

Prep Type: Total/NA

Prep Batch: 1780

Client Sample ID: Lab Control Sample

Client: Vertex Job ID: 885-990-1

Project/Site: JRU DI 1A CTB

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

Lab Sample ID: MB 885-1732/1-A Client Sample ID: Method Blank **Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 1807

MB MB Result Qualifier RL Unit D Analyzed Dil Fac Analyte **Prepared** 03/14/24 14:20 03/15/24 15:43 Diesel Range Organics [C10-C28] ND 10 mg/Kg Motor Oil Range Organics [C28-C40] ND 50 mg/Kg 03/14/24 14:20 03/15/24 15:43

MB MB

Surrogate %Recovery Qualifier I imite Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 119 69 - 147 03/14/24 14:20 03/15/24 15:43

Lab Sample ID: LCS 885-1732/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 1807

Prep Batch: 1732 Spike LCS LCS %Rec Added Result Qualifier Limits Unit %Rec Analyte D 50.0 60 - 135 52.1 mg/Kg 104

Diesel Range Organics

[C10-C28]

LCS LCS

Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 103 69 - 147

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-1690/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 1752

MB MB

RL Dil Fac Analyte Result Qualifier Unit D Analyzed Prepared 3.0 03/14/24 10:29 03/14/24 20:32 Chloride ND mg/Kg

Lab Sample ID: LCS 885-1690/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA**

Analysis Batch: 1752

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits

Chloride 30.0 29.0 97 90 - 110 mg/Kg

Lab Sample ID: MRL 885-1752/3

Matrix: Solid

Analysis Batch: 1752

Spike MRL MRL %Rec Analyte Added Result Qualifier Unit %Rec Limits 0.500 Chloride 0.542 mg/L 108 50 - 150

Lab Sample ID: MB 885-1780/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 1813

MB MB

Analyte Result Qualifier RL Unit Prepared Analyzed Chloride ND 3.0 mg/Kg 03/15/24 11:40 03/15/24 12:46

QC Sample Results

Client: Vertex Job ID: 885-990-1

Project/Site: JRU DI 1A CTB

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-1780/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 1813** Prep Batch: 1780 LCS LCS Spike %Rec

Added Analyte Result Qualifier Unit %Rec Limits D Chloride 30.0 28.2 mg/Kg 94 90 - 110

Lab Sample ID: MB 885-1813/4 **Client Sample ID: Method Blank**

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 1813

MB MB **Analyte** Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride 0.50 03/15/24 12:15 ND mg/Kg

Lab Sample ID: MRL 885-1813/3 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 1813

Spike MRL MRL %Rec Analyte Added Result Qualifier Limits Unit %Rec Chloride 0.500 0.537 mg/L 107 50 - 150

QC Association Summary

Job ID: 885-990-1 Client: Vertex

Project/Site: JRU DI 1A CTB

GC VOA

Prep Batch: 1670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-990-1	WES24-01 0-2'	Total/NA	Solid	5030C	
885-990-2	BES24-01 2'	Total/NA	Solid	5030C	
885-990-3	BES24-02 0.5'	Total/NA	Solid	5030C	
885-990-4	BES24-03 0.5'	Total/NA	Solid	5030C	
885-990-5	BES24-04 0.5'	Total/NA	Solid	5030C	
885-990-6	BES24-05 2'	Total/NA	Solid	5030C	
MB 885-1670/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-1670/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-1670/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 1783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-990-1	WES24-01 0-2'	Total/NA	Solid	8021B	1670
885-990-2	BES24-01 2'	Total/NA	Solid	8021B	1670
885-990-3	BES24-02 0.5'	Total/NA	Solid	8021B	1670
885-990-4	BES24-03 0.5'	Total/NA	Solid	8021B	1670
885-990-5	BES24-04 0.5'	Total/NA	Solid	8021B	1670
885-990-6	BES24-05 2'	Total/NA	Solid	8021B	1670
MB 885-1670/1-A	Method Blank	Total/NA	Solid	8021B	1670
LCS 885-1670/3-A	Lab Control Sample	Total/NA	Solid	8021B	1670

Analysis Batch: 1972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-990-1	WES24-01 0-2'	Total/NA	Solid	8015D	1670
885-990-2	BES24-01 2'	Total/NA	Solid	8015D	1670
885-990-3	BES24-02 0.5'	Total/NA	Solid	8015D	1670
885-990-4	BES24-03 0.5'	Total/NA	Solid	8015D	1670
885-990-5	BES24-04 0.5'	Total/NA	Solid	8015D	1670
885-990-6	BES24-05 2'	Total/NA	Solid	8015D	1670
MB 885-1670/1-A	Method Blank	Total/NA	Solid	8015D	1670
LCS 885-1670/2-A	Lab Control Sample	Total/NA	Solid	8015D	1670

GC Semi VOA

Prep Batch: 1732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-990-1	WES24-01 0-2'	Total/NA	Solid	SHAKE	
885-990-2	BES24-01 2'	Total/NA	Solid	SHAKE	
885-990-3	BES24-02 0.5'	Total/NA	Solid	SHAKE	
885-990-4	BES24-03 0.5'	Total/NA	Solid	SHAKE	
885-990-5	BES24-04 0.5'	Total/NA	Solid	SHAKE	
885-990-6	BES24-05 2'	Total/NA	Solid	SHAKE	
MB 885-1732/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-1732/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 1807

Lab Sample ID 885-990-1	Client Sample ID WES24-01 0-2'	Prep Type Total/NA	Matrix Solid	Method 8015D	Prep Batch 1732
885-990-2	BES24-01 2'	Total/NA	Solid	8015D	1732
885-990-3	BES24-02 0.5'	Total/NA	Solid	8015D	1732
885-990-4	BES24-03 0.5'	Total/NA	Solid	8015D	1732

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QC Association Summary

Client: Vertex Job ID: 885-990-1

Project/Site: JRU DI 1A CTB

GC Semi VOA (Continued)

Analysis Batch: 1807 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-990-5	BES24-04 0.5'	Total/NA	Solid	8015D	1732
885-990-6	BES24-05 2'	Total/NA	Solid	8015D	1732
MB 885-1732/1-A	Method Blank	Total/NA	Solid	8015D	1732
LCS 885-1732/2-A	Lab Control Sample	Total/NA	Solid	8015D	1732

HPLC/IC

Prep Batch: 1690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-990-1	WES24-01 0-2'	Total/NA	Solid	300_Prep	
885-990-2	BES24-01 2'	Total/NA	Solid	300_Prep	
885-990-3	BES24-02 0.5'	Total/NA	Solid	300_Prep	
885-990-4	BES24-03 0.5'	Total/NA	Solid	300_Prep	
MB 885-1690/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-1690/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 1752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-990-1	WES24-01 0-2'	Total/NA	Solid	300.0	1690
885-990-2	BES24-01 2'	Total/NA	Solid	300.0	1690
885-990-3	BES24-02 0.5'	Total/NA	Solid	300.0	1690
885-990-4	BES24-03 0.5'	Total/NA	Solid	300.0	1690
MB 885-1690/1-A	Method Blank	Total/NA	Solid	300.0	1690
LCS 885-1690/2-A	Lab Control Sample	Total/NA	Solid	300.0	1690
MRL 885-1752/3	Lab Control Sample	Total/NA	Solid	300.0	

Prep Batch: 1780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-990-5	BES24-04 0.5'	Total/NA	Solid	300_Prep	
885-990-6	BES24-05 2'	Total/NA	Solid	300_Prep	
MB 885-1780/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-1780/2-A	Lab Control Sample	Total/NA	Solid	300 Prep	

Analysis Batch: 1813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-990-5	BES24-04 0.5'	Total/NA	Solid	300.0	1780
885-990-6	BES24-05 2'	Total/NA	Solid	300.0	1780
MB 885-1780/1-A	Method Blank	Total/NA	Solid	300.0	1780
MB 885-1813/4	Method Blank	Total/NA	Solid	300.0	
LCS 885-1780/2-A	Lab Control Sample	Total/NA	Solid	300.0	1780
MRL 885-1813/3	Lab Control Sample	Total/NA	Solid	300.0	

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Client: Vertex

Client Sample ID: WES24-01 0-2'

Date Collected: 03/09/24 13:00

Lab Sample ID: 885-990-1

Matrix: Solid

Date Received: 03/12/24 09:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/18/24 14:12
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 15:58
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/15/24 19:40
Total/NA	Prep	300_Prep			1690	JT	EET ALB	03/14/24 16:14
Total/NA	Analysis	300.0		20	1752	RC	EET ALB	03/14/24 21:59

Client Sample ID: BES24-01 2' Lab Sample ID: 885-990-2

Date Collected: 03/09/24 13:10

Date Received: 03/12/24 09:05

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/18/24 14:34
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 16:20
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/15/24 20:03
Total/NA	Prep	300_Prep			1690	JT	EET ALB	03/14/24 16:14
Total/NA	Analysis	300.0		20	1752	RC	EET ALB	03/14/24 22:36

Lab Sample ID: 885-990-3 Client Sample ID: BES24-02 0.5'

Date Collected: 03/09/24 13:20

Date Received: 03/12/24 09:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/18/24 14:55
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 16:42
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/15/24 20:50
Total/NA	Prep	300_Prep			1690	JT	EET ALB	03/14/24 16:14
Total/NA	Analysis	300.0		20	1752	RC	EET ALB	03/14/24 22:48

Client Sample ID: BES24-03 0.5' Lab Sample ID: 885-990-4

Date Collected: 03/09/24 13:30

Date Received: 03/12/24 09:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	FFT ALB	03/18/24 15:17

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Matrix: Solid

Matrix: Solid

Project/Site: JRU DI 1A CTB

Client: Vertex

Client Sample ID: BES24-03 0.5'

Date Collected: 03/09/24 13:30

Lab Sample ID: 885-990-4

Matrix: Solid

Date Received: 03/12/24 09:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 17:03
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/15/24 21:14
Total/NA	Prep	300_Prep			1690	JT	EET ALB	03/14/24 16:14
Total/NA	Analysis	300.0		20	1752	RC	EET ALB	03/14/24 23:01

Client Sample ID: BES24-04 0.5'

Date Collected: 03/09/24 13:40 Date Received: 03/12/24 09:05

Lab Sample ID: 885-990-5

Matrix: Solid

Batch Batch Dilution Batch **Prepared** Method **Prep Type** Type Run **Factor** Number Analyst Lab or Analyzed Total/NA Prep 5030C 1670 IMR **EET ALB** 03/13/24 15:53 Total/NA 8015D 03/18/24 15:39 Analysis 1972 RA **EET ALB** 1 Total/NA Prep 5030C 1670 IMR **EET ALB** 03/13/24 15:53 Total/NA 8021B 1783 IMR **EET ALB** Analysis 1 03/14/24 17:25 Total/NA SHAKE 1732 SB **EET ALB** 03/14/24 14:20 Prep Total/NA 8015D 1807 JU **EET ALB** 03/15/24 21:37 Analysis 1 Total/NA Prep 300 Prep 1780 JT **EET ALB** 03/15/24 11:40 Total/NA 03/15/24 17:03 300.0 20 1813 MA **EET ALB** Analysis

Client Sample ID: BES24-05 2'

Date Collected: 03/09/24 13:50

Date Received: 03/12/24 09:05

Lab Sample ID: 885-990-6

Matrix: Solid

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/18/24 16:01
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 18:09
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/15/24 22:01
Total/NA	Prep	300_Prep			1780	JT	EET ALB	03/15/24 11:40
Total/NA	Analysis	300.0		20	1813	MA	EET ALB	03/15/24 17:18

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex Job ID: 885-990-1

Project/Site: JRU DI 1A CTB

Laboratory: Eurofins Albuquerque

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

authority	Progr	am	Identification Number	Expiration Date		
ew Mexico	State		NM9425, NM0901	02-26-25		
,	s are included in this repo does not offer certification		not certified by the governing autho	ority. This list may include analytes		
Analysis Method	Prep Method	Matrix	Analyte			
300.0	300_Prep	Solid	Chloride	Chloride		
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]			
8015D	SHAKE	Solid	Diesel Range Organics	[C10-C28]		
8015D	SHAKE	Solid	Motor Oil Range Organ	ics [C28-C40]		
8021B	5030C	Solid	Benzene			
8021B	5030C	Solid	Ethylbenzene	Ethylbenzene		
8021B	5030C	Solid	Toluene	Toluene		
8021B	5030C	Solid	Xylenes, Total			
regon	NELA	P	NM100001	02-26-25		

REMARKS: Direct Bill to XTO Energy, Inc., Cost Center #: 1082151001, Incident #: nAPP2331041267 CC. Chance Dixon (CDixon@vertex.ca) for Final Report.

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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) 982-7550, Cartsbad. NM (575) 988-3199

Environment Testing Xenco + ta //

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CC: CDixon@vertex.ca for Final Report

Project Manager					Rill to: (if different)	(Jue.	VTO	Townson I.						W	Work Order Comments	Commen	ţe.		
- Barrier - Control	Chance Dixon (CDixona vertex.ca)	CDIXON	a venex.ca)			(OIV.	ATO Energy, Inc.	ć.			1		- 1			1		
Company Name:	Vertex Resource Services	e Service	X		Company Name:	me:	XTO	XTO Energy, Inc.	ć.			<u>a</u>	Program: UST/PST	PST PAP		Brownfields	RR Sup	Superfund	
Address:	3101 Boyd Drive	9.			Address:		31041	3104 E. Greene St	St			S	State of Project:						
City, State ZIP:	Carlsbad NM, 88220	8220			City, State ZIP:	Ġ.	Carlsb	Carlsbad NM. 88220	8220			œ.	Reporting: Level II	III Legyel III		PSmust 1	TRRL	Leve	
Phone:	575.725.5001			Email:	CC: CDixon@vertex.ca for Final Report	n@vert	ex.ca for	Final Rep	no				Deliverables: EDD		_	ADaPT	Other:	u	
Project Name:	JRU DI 1A CTB	_		Turn Around	pun					٩	ANALYSIS REQUEST	REQUE	ST				Preserva	Preservative Codes	
Project Number:	23E-04616			Routine V	Rush V	Pres	<i>i</i> •									2	None: NO	DI Water: H ₂ O	O,
Project Location:				Due Date:	5000											<u>8</u>	Cool: Cool	MeOH: Me	6)
Sampler's Name:	Deusavan Costa			TAT starts the day received by the	y received by	the	(/ O								P	HCL: HC	HNO. HN	
PO #:				lab, if received by 4:30pm	4:30pm		17	ЯC								Ï	H2S04: H2	NaOH: Na	
SAMPLE RECEIPT	Temp Blank:	ık:	Yes No	Wet Ice:	Yes No		08)									ľ	H ₃ PO ₂ HP		
Samples Received Intact:	Yes	No	Thermometer ID:	ä			X	3R(O) (O) bird		_						Na	NaHSO,: NABIS	10	
Cooler Custody Seals:	Yes No	N/A	Correction Factor	tor:		S101	3T8	NB						-		N.	Na,S,O, NaSO,	·.	
Sample Custody Seals:	Yes No	N/A	Temperature Reading:	eading:		əwi	ł		_							Zn	Zn Acetate+NaOH: Zn	OH: Zn	
Total Containers:			Corrected Temperature:	perature:		Para)8:I								Na	NaOH+Ascorbic Acid: SAPC	Acid: SAPC	
Sample Identification	tion	Matrix	Matrix Date Sampled Time	pelc	Depth G	Grab/# of Comp Cont	L×	ldT									Sample C	Sample Comments	
WES24-01 0-2'		Soil	03.09.24	13:00	1	Com	×	×								-		ا :	
BES24-01 2'		Soil	03.09.24	13:10	1 C	Com	×	×											
BES24-02 0.5'		Soil	03.09.24	13:20	1	Com	×	×									¥,	36) 36)	
BES24-03 0.5		Soil	03.09.24	13:30	1 C	Com	×	X									ľ	91	
BES24-04 0.5		Soil	03.09.24	13:40	1 C	Com	×	×									,000	9	
BES24-05 2'		Soil	03.09.24	13:50	1	Com	×	X)))))))	ا ۲	
						+				+	-			+	1				
Total 200,7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	200.8 / 6020: Aetal(s) to be anal	yzed	8RCF	BRCRA 13PPM Texas 11 AI Sb TCLP / SPLP 6010: BRCRA	Texas 11 AI Sb As Ba Be B 6010: 8RCRA Sb As Ba Be	RA Sb	Ba Be As Ba E	As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U	u Fe Pb	Mg Mn Ni Se	Mo Ni K	Se Ag	SiO ₂ Na Sr	Sr Tl Sn U V Zn Hg: 1631 / 24	V Zn 31 / 245.1	Sn Ú V Zn Hg: 1631 / 245.1 / 7470 / 7471	471	
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 forms 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 exponses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco A minimum channers of SSS 00 will be abolised to near project and a channer of SSS on each submitted to Eurofins Xenco but not analyzed. Those professor under project and a channer of SSS on each submitted to Eurofins Xenco but not analyzed. Those forms will be ordered unlikes previously needling.	ment and relinquishme III be liable only for the m charce of \$85.00 will	ont of sampi cost of sam	es constitutes a va ples and shall not to each project and	assume any respon	from client cor sublity for any	pany to Elosses or continued to	xpenses incl	b, its affiliates arred by the c	and subconti lont if such k	ractors. It as bases are du	signs stands o to circumst	ard terms at	nd conditions ind the control ously negotiated						
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Login Sample Receipt Checklist

Client: Vertex Job Number: 885-990-1

List Source: Eurofins Albuquerque Login Number: 990

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Eurofins Albuquerque

Released to Imaging: 7/30/2024 4:05:46 PM

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/28/2024 6:37:31 PM

JOB DESCRIPTION

JRU DI IA CTB

JOB NUMBER

885-1287-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization

Generated 3/28/2024 6:37:31 PM

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

3/28/2024

Client: Vertex

Laboratory Job ID: 885-1287-1

Project/Site: JRU DI IA CTB

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Definitions/Glossary

Client: Vertex Job ID: 885-1287-1

Project/Site: JRU DI IA CTB

Glossary

LOD

LOQ

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)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit

Limit of Detection (DoD/DOE)

Limit of Quantitation (DoD/DOE)

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 Job ID: 885-1287-1 Project: JRU DI IA CTB

Job ID: 885-1287-1 **Eurofins Albuquerque**

> Job Narrative 885-1287-1

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 3/15/2024 7:40 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 0.2°C.

Gasoline Range Organics

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

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

Diesel Range Organics

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

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

Released to Imaging: 7/30/2024 4:05:46 PM

Client: Vertex Job ID: 885-1287-1

Project/Site: JRU DI IA CTB

Client Sample ID: BES24-06 2' Lab Sample ID: 885-1287-1

Date Collected: 03/12/24 09:30 Matrix: Solid
Date Received: 03/15/24 07:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		03/15/24 12:11	03/19/24 05:04	-
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		<u> 15 - 244</u>			03/15/24 12:11	03/19/24 05:04	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/15/24 12:11	03/19/24 05:04	1
Ethylbenzene	ND		0.046	mg/Kg		03/15/24 12:11	03/19/24 05:04	1
Toluene	ND		0.046	mg/Kg		03/15/24 12:11	03/19/24 05:04	1
Xylenes, Total	ND		0.093	mg/Kg		03/15/24 12:11	03/19/24 05:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			03/15/24 12:11	03/19/24 05:04	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		03/18/24 11:00	03/18/24 18:47	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		03/18/24 11:00	03/18/24 18:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			03/18/24 11:00	03/18/24 18:47	1

Method: EPA 300.0 - Anions, Ion Chromatography								
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	110	60	mg/Kg		03/18/24 10:55	03/18/24 16:24	20

Client Sample ID: BES24-08 2'

Date Collected: 03/12/24 09:35

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1287-2

Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)										
Analyte	ı	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasolin	e Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/15/24 12:11	03/19/24 05:26	1	
Surroga 4-Brome	ate ofluorobenzene (Surr)	%Recovery	Qualifier	Limits 15 - 244			Prepared 03/15/24 12:11	Analyzed 03/19/24 05:26	Dil Fac	

Analyte	Result Qua	alifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	0.024	mg/Kg		03/15/24 12:11	03/19/24 05:26	1
Ethylbenzene	ND	0.049	mg/Kg		03/15/24 12:11	03/19/24 05:26	1
Toluene	ND	0.049	mg/Kg		03/15/24 12:11	03/19/24 05:26	1
Xylenes, Total	ND	0.097	mg/Kg		03/15/24 12:11	03/19/24 05:26	1
Surrogate	%Recovery Qu	alifier Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90	39 - 146			03/15/24 12:11	03/19/24 05:26	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		03/18/24 11:00	03/18/24 18:59	1	
	Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		03/18/24 11:00	03/18/24 18:59	1	

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Job ID: 885-1287-1

Project/Site: JRU DI IA CTB

Client: Vertex

Client Sample ID: BES24-08 2' Lab Sample ID: 885-1287-2

Date Collected: 03/12/24 09:35 **Matrix: Solid**

Date Received: 03/15/24 07:40

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 106 62 - 134 03/18/24 11:00 03/18/24 18:59

Method: EPA 300.0 - Anions, Ion Chromatography Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride 120 60 mg/Kg 03/18/24 10:55 03/18/24 16:36

Client Sample ID: BES24-09 0.5' Lab Sample ID: 885-1287-3

Date Collected: 03/12/24 09:40 **Matrix: Solid**

Date Received: 03/15/24 07:40

Method: SW846 8015D - Gaso Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		03/15/24 12:11	03/19/24 05:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 244			03/15/24 12:11	03/19/24 05:48	1

Method: SW846 8021B	•	· ,	11.24	_	5	A	D'' E
Analyte	Result Quali	fier RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	0.023	mg/Kg		03/15/24 12:11	03/19/24 05:48	1
Ethylbenzene	ND	0.047	mg/Kg		03/15/24 12:11	03/19/24 05:48	1
Toluene	ND	0.047	mg/Kg		03/15/24 12:11	03/19/24 05:48	1
Xylenes, Total	ND	0.093	mg/Kg		03/15/24 12:11	03/19/24 05:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146	03/15/24 12:11	03/19/24 05:48	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 ND	9.2	mg/Kg		03/18/24 11:07	03/18/24 19:11	1
	Motor Oil Range Organics [C28-C40]	ND	46	mg/Kg		03/18/24 11:07	03/18/24 19:11	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108	62 - 134	03/18/24 11:07	03/18/24 19:11	1

Method: EPA 300.0 - Anions, Ion Chromatography							
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93	60	mg/Kg		03/18/24 10:55	03/18/24 16:49	20

Client Sample ID: BES24-10 0.5' Lab Sample ID: 885-1287-4 Date Collected: 03/12/24 09:45 **Matrix: Solid**

Date Received: 03/15/24 07:40

Released to Imaging: 7/30/2024 4:05:46 PM

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		03/15/24 12:11	03/19/24 06:09	1		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
4-Bromofluorobenzene (Surr)	94		15 - 244			03/15/24 12:11	03/19/24 06:09	1		

Method: SW846 8021B - Volati	le Organic Co	ompounds (GC)					
Analyte	Result Q	ualifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	0.025	mg/Kg		03/15/24 12:11	03/19/24 06:09	1

Project/Site: JRU DI IA CTB

Client Sample ID: BES24-10 0.5'

Date Collected: 03/12/24 09:45 Date Received: 03/15/24 07:40 Lab Sample ID: 885-1287-4

Lab Sample ID: 885-1287-5

Matrix: Solid

Matrix: Solid

Job ID: 885-1287-1

Method: SW846 8021B -	Volatile Organic Compounds	(GC) (Continued)	
A L . d .	D	D.	ě

Analyte	Result Qua	lifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND ND	0.049	mg/Kg		03/15/24 12:11	03/19/24 06:09	1
Toluene	ND	0.049	mg/Kg		03/15/24 12:11	03/19/24 06:09	1
Xylenes, Total	ND	0.099	mg/Kg		03/15/24 12:11	03/19/24 06:09	1
0	0/5				5	A 1 1	D'' E

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88	39 - 146	03/15/24 12:11	03/19/24 06:09	1

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

mothodi Offoto Corob Biooc	i italigo organioo (bitt	2) (33)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND -	9.7	mg/Kg		03/18/24 11:07	03/18/24 19:23	1
Motor Oil Range Organics [C28-C40]	ND	48	mg/Kg		03/18/24 11:07	03/18/24 19:23	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104	62 - 134	03/18/24 11:07	03/18/24 19:23	1

Method: EPA 300.0 - Anions, Ion Chromatography Analyte Result Qualifier

Analyte	Result Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
Chloride	98	60	mg/Kg	03/18/24 10:55	03/18/24 17:01	20

Client Sample ID: BES24-11 0.5'

Date Collected: 03/12/24 09:50 Date Received: 03/15/24 07:40

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		03/15/24 15:58	03/20/24 07:02	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97	15 - 244	03/15/24 15:58	03/20/24 07:02	1

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

			- (/					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/15/24 15:58	03/20/24 07:02	1
Ethylbenzene	ND		0.048	mg/Kg		03/15/24 15:58	03/20/24 07:02	1
Toluene	ND		0.048	mg/Kg		03/15/24 15:58	03/20/24 07:02	1
Xylenes, Total	ND		0.096	mg/Kg		03/15/24 15:58	03/20/24 07:02	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89	39 - 146	03/15/24 15:58	03/20/24 07:02	1

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

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	9.3	mg/Kg		03/18/24 11:07	03/18/24 19:35	1
Motor Oil Range Organics [C28-C40]	ND	47	mg/Kg		03/18/24 11:07	03/18/24 19:35	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104	62 - 134	03/18/24 11:07	03/18/24 19:35	1

Method: EPA 300.0 - Anions, Ion Chromatography

Released to Imaging: 7/30/2024 4:05:46 PM

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110	60	ma/Ka	_	03/18/24 10:55	03/18/24 17:13	20

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0/24 07:02

Project/Site: JRU DI IA CTB

Lab Sample ID: 885-1287-6 Client Sample ID: BES24-12 0.5'

Date Collected: 03/12/24 09:55 Matrix: Solid Date Received: 03/15/24 07:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		03/15/24 15:58	03/20/24 07:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			03/15/24 15:58	03/20/24 07:25	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/15/24 15:58	03/20/24 07:25	1
Ethylbenzene	ND		0.046	mg/Kg		03/15/24 15:58	03/20/24 07:25	1
Toluene	ND		0.046	mg/Kg		03/15/24 15:58	03/20/24 07:25	1
Xylenes, Total	ND		0.091	mg/Kg		03/15/24 15:58	03/20/24 07:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			03/15/24 15:58	03/20/24 07:25	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		03/19/24 09:41	03/22/24 14:04	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		03/19/24 09:41	03/22/24 14:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			03/19/24 09:41	03/22/24 14:04	1

Method: EPA 300.0 - Anions, lo	n Chromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90	60	mg/Kg		03/18/24 10:55	03/18/24 17:26	20

Client Sample ID: BES24-13 0.5' Lab Sample ID: 885-1287-7 Date Collected: 03/12/24 10:00 **Matrix: Solid** Date Received: 03/15/24 07:40

Method: SW846 8015D - Gaso	line Range Orga	anics (GRO) (GC)				
Analyte	Result Quali	lifier RL	Unit	D Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND	4.7	mg/Kg	03/15/24 15:58	03/20/24 07:49	1
Surrogate	%Recovery Quali	lifier Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99	15 - 244		03/15/24 15:58	03/20/24 07:49	1

Analyte	Result Qualifi	ier RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	0.023	mg/Kg		03/15/24 15:58	03/20/24 07:49	1
Ethylbenzene	ND	0.047	mg/Kg		03/15/24 15:58	03/20/24 07:49	1
Toluene	ND	0.047	mg/Kg		03/15/24 15:58	03/20/24 07:49	1
Xylenes, Total	ND	0.093	mg/Kg		03/15/24 15:58	03/20/24 07:49	1
Surrogate	%Recovery Qualif	ier Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90	39 - 146			03/15/24 15:58	03/20/24 07:49	

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result Qua	alifier RL	Unit	D	Prepared	Analyzed	Dil Fac		
Diesel Range Organics [C10-C28]	ND	9.9	mg/Kg		03/19/24 09:41	03/19/24 19:19	1		
Motor Oil Range Organics [C28-C40]	ND	49	mg/Kg		03/19/24 09:41	03/19/24 19:19	1		

Job ID: 885-1287-1

Client: Vertex

Project/Site: JRU DI IA CTB

Lab Sample ID: 885-1287-7 Client Sample ID: BES24-13 0.5' Date Collected: 03/12/24 10:00

Matrix: Solid

Date Received: 03/15/24 07:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	111		62 - 134	03/19/24 09:41	03/19/24 19:19	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac 03/18/24 10:55 03/18/24 17:38 Chloride 60 89 mg/Kg

Client Sample ID: BES24-14 0.5' Lab Sample ID: 885-1287-8

Date Collected: 03/12/24 10:05 Matrix: Solid

Date Received: 03/15/24 07:40

Method: SW846 8015D - Gaso Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/15/24 15:58	03/20/24 08:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			03/15/24 15:58	03/20/24 08:12	1

Method: SW846 8021B - Vo	olatile Organic Compoun	ds (GC)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	0.024	mg/Kg		03/15/24 15:58	03/20/24 08:12	1
Ethylbenzene	ND	0.048	mg/Kg		03/15/24 15:58	03/20/24 08:12	1
Toluene	ND	0.048	mg/Kg		03/15/24 15:58	03/20/24 08:12	1
Xylenes, Total	ND	0.096	mg/Kg		03/15/24 15:58	03/20/24 08:12	1
Surrogate	%Recovery Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		39 - 146	03/15/24 15:58	03/20/24 08:12	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac ND 9.7 03/19/24 09:41 03/19/24 19:31 Diesel Range Organics [C10-C28] mg/Kg Motor Oil Range Organics [C28-C40] 03/19/24 09:41 03/19/24 19:31 ND 49 mg/Kg

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 62 - 134 03/19/24 09:41 03/19/24 19:31 110

Method: EPA 300.0 - Anions, Ion Chromatography Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac 61 03/18/24 10:55 03/18/24 17:50 Chloride 100 mg/Kg 20

Client Sample ID: BES24-18 0.5' Lab Sample ID: 885-1287-9 Date Collected: 03/12/24 10:10 Matrix: Solid Date Received: 03/15/24 07:40

Method: SW846 8015D - Gaso	line Range	Organics	(GRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		03/15/24 15:58	03/20/24 08:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244			03/15/24 15:58	03/20/24 08:36	1

Method: SW846 8021B - Volatile Organic Compounds (GC)									
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Benzene	ND		0.025	mg/Kg		03/15/24 15:58	03/20/24 08:36	1

Job ID: 885-1287-1

Client: Vertex Project/Site: JRU DI IA CTB

Client Sample ID: BES24-18 0.5'

Lab Sample ID: 885-1287-9 Date Collected: 03/12/24 10:10

Matrix: Solid

Date Received: 03/15/24 07:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.050	mg/Kg		03/15/24 15:58	03/20/24 08:36	
Toluene	ND		0.050	mg/Kg		03/15/24 15:58	03/20/24 08:36	•
Xylenes, Total	ND		0.10	mg/Kg		03/15/24 15:58	03/20/24 08:36	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	94		39 - 146			03/15/24 15:58	03/20/24 08:36	7
				Oille	ט	riepaieu	Analyzed	Dil Fac
Method: SW846 8015D - Diese Analyte		Qualifier	RL	Unit	D	Prepared	A l	
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		03/19/24 09:41	03/22/24 14:28	Dil Fac
Diesel Range Organics [C10-C28]								Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg	_ =	03/19/24 09:41	03/22/24 14:28	Dil Fa
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	ND ND %Recovery		9.6 48 Limits	mg/Kg		03/19/24 09:41 03/19/24 09:41 Prepared	03/22/24 14:28 03/22/24 14:28 Analyzed	
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	ND ND %Recovery 109	Qualifier	9.6	mg/Kg		03/19/24 09:41 03/19/24 09:41	03/22/24 14:28 03/22/24 14:28	
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	ND ND **Recovery 109	Qualifier	9.6 48 Limits	mg/Kg	<u>D</u>	03/19/24 09:41 03/19/24 09:41 Prepared	03/22/24 14:28 03/22/24 14:28 Analyzed	

Client Sample ID: BES24-19 0.5'

Lab Sample ID: 885-1287-10 Date Collected: 03/12/24 10:15 **Matrix: Solid**

Date Received: 03/15/24 07:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		03/15/24 15:58	03/20/24 08:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		15 - 244			03/15/24 15:58	03/20/24 08:59	1
- Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/15/24 15:58	03/20/24 08:59	1
Ethylbenzene	ND		0.046	mg/Kg		03/15/24 15:58	03/20/24 08:59	1
Toluene	ND		0.046	mg/Kg		03/15/24 15:58	03/20/24 08:59	1
Xylenes, Total	ND		0.092	mg/Kg		03/15/24 15:58	03/20/24 08:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		39 - 146			03/15/24 15:58	03/20/24 08:59	1
- Method: SW846 8015D - Diese	el Range Or	ganics (DF	(GC)					
Method: SW846 8015D - Diese Analyte	_	ganics (DF Qualifier	RO) (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
	_	•	, , ,	Unit mg/Kg	<u>D</u>	Prepared 03/19/24 09:41	Analyzed 03/19/24 19:55	Dil Fac
Analyte	Result	•	RL		<u>D</u>			Dil Fac
Analyte Diesel Range Organics [C10-C28]	Result ND	Qualifier	9.5	mg/Kg	<u>D</u>	03/19/24 09:41	03/19/24 19:55	Dil Fac
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	Result ND ND	Qualifier	9.5 48	mg/Kg	<u>D</u>	03/19/24 09:41 03/19/24 09:41	03/19/24 19:55 03/19/24 19:55	1
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	Result ND ND **Recovery 109	Qualifier Qualifier	9.5 48 <i>Limits</i>	mg/Kg	<u>D</u>	03/19/24 09:41 03/19/24 09:41 Prepared	03/19/24 19:55 03/19/24 19:55 <i>Analyzed</i>	1
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	Result ND ND **Recovery 109 On Chroma	Qualifier Qualifier	9.5 48 <i>Limits</i>	mg/Kg	<u>D</u>	03/19/24 09:41 03/19/24 09:41 Prepared	03/19/24 19:55 03/19/24 19:55 <i>Analyzed</i>	1

Project/Site: JRU DI IA CTB

Client Sample ID: BES24-20 0.5' Lab Sample ID: 885-1287-11

Date Collected: 03/12/24 10:20 **Matrix: Solid**

Date Received: 03/15/24 07:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/15/24 15:58	03/20/24 09:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		15 - 244			03/15/24 15:58	03/20/24 09:23	

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	0.024	mg/Kg		03/15/24 15:58	03/20/24 09:23	1
Ethylbenzene	ND	0.048	mg/Kg		03/15/24 15:58	03/20/24 09:23	1
Toluene	ND	0.048	mg/Kg		03/15/24 15:58	03/20/24 09:23	1
Xylenes, Total	ND	0.095	mg/Kg		03/15/24 15:58	03/20/24 09:23	1
Surrogate	%Recovery Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99	39 - 146			03/15/24 15:58	03/20/24 09:23	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		03/19/24 09:41	03/19/24 20:07	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		03/19/24 09:41	03/19/24 20:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		62 - 134			03/19/24 09:41	03/19/24 20:07	1

Method: EPA 300.0 - Anions, lo	n Chromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120	60	mg/Kg		03/18/24 10:55	03/18/24 18:52	20

Lab Sample ID: 885-1287-12 Client Sample ID: WES24-02 2' Date Collected: 03/12/24 10:25 **Matrix: Solid** Date Received: 03/15/24 07:40

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)											
Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/18/24 11:35	03/20/24 17:40	1			
Surrogate 4-Bromofluorobenzene (Surr)	%Recovery 100	Qualifier	Limits 15 - 244			Prepared 03/18/24 11:35	Analyzed 03/20/24 17:40	Dil Fac			

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/18/24 11:35	03/20/24 17:40	1
Ethylbenzene	ND		0.049	mg/Kg		03/18/24 11:35	03/20/24 17:40	1
Toluene	ND		0.049	mg/Kg		03/18/24 11:35	03/20/24 17:40	1
Xylenes, Total	ND		0.097	mg/Kg		03/18/24 11:35	03/20/24 17:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			03/18/24 11:35	03/20/24 17:40	1

Method: SW846 8015D - Diesel	Range Organics (DRO	O) (GC)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND —	8.9	mg/Kg		03/19/24 09:41	03/19/24 20:19	1
Motor Oil Range Organics [C28-C40]	ND	45	mg/Kg		03/19/24 09:41	03/19/24 20:19	1

Client Sample Results

Client: Vertex Job ID: 885-1287-1

Project/Site: JRU DI IA CTB

Client Sample ID: WES24-02 2' Lab Sample ID: 885-1287-12

Date Collected: 03/12/24 10:25 Matrix: Solid Date Received: 03/15/24 07:40

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		62 - 134	03/19/24 09:41 03/19/24 20:19	1

Method: EPA 300.0 - Anions, Id	on Chromat	ography						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		60	mg/Kg		03/19/24 09:04	03/19/24 14:40	20

Project/Site: JRU DI IA CTB

Prep Batch: 1670

Prep Batch: 1786

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

Lab Sample ID: MB 885-1670/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Total/NA**

Analysis Batch: 1972

MB MB Result Qualifier RL Unit Analyzed Dil Fac Analyte Prepared Gasoline Range Organics [C6 - C10] 03/13/24 15:53 03/18/24 10:53 ND 5.0 mg/Kg

MB MB

%Recovery Surrogate Qualifier Limits Prepared Analyzed Dil Fac 03/13/24 15:53 03/18/24 10:53 4-Bromofluorobenzene (Surr) 95 15 - 244

Lab Sample ID: MB 885-1786/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 1972

MB MB

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Gasoline Range Organics [C6 - C10] ND 5.0 mg/Kg 03/15/24 12:11 03/18/24 21:05

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 03/15/24 12:11 03/18/24 21:05 92 15 - 244

Lab Sample ID: LCS 885-1786/2-A

Matrix: Solid

Analysis Batch: 1972

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 1786

%Rec

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics [C6 -25.0 22.1 mg/Kg 70 - 130

C10]

LCS LCS

%Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 211 15 - 244

Lab Sample ID: MB 885-1812/1-A

Matrix: Solid

Analysis Batch: 2106

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1812

MR MR

Result Qualifier RL Unit Prepared Analyzed Dil Fac Gasoline Range Organics [C6 - C10] ND 5.0 mg/Kg 03/15/24 15:58 03/19/24 09:57

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 102 15 - 244 03/15/24 15:58 03/19/24 09:57

Lab Sample ID: LCS 885-1812/2-A

Matrix: Solid

Analysis Batch: 2106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 1812

%Rec

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits

Gasoline Range Organics [C6 -25.0 20.4 mg/Kg 82 70 - 130

C10]

LCS LCS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 197 15 - 244

Dil Fac

Dil Fac

Client: Vertex Job ID: 885-1287-1

RL

5.0

Unit

mg/Kg

D

Project/Site: JRU DI IA CTB

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

Lab Sample ID: MB 885-1849/1-A **Matrix: Solid**

Analysis Batch: 2109

MB MB Result Qualifier Analyte

Gasoline Range Organics [C6 - C10] ND MB MB Surrogate

Lab Sample ID: LCS 885-1849/2-A

%Recovery Qualifier 4-Bromofluorobenzene (Surr) 98

Limits 15 - 244

Prepared

Prepared

03/18/24 11:35

%Rec

%Rec

Prepared

03/15/24 12:11 03/18/24 21:05

03/15/24 12:11 03/18/24 21:05

03/15/24 12:11 03/18/24 21:05

94

105

Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 1849

03/18/24 11:35 03/20/24 17:19

Client Sample ID: Method Blank

Analyzed

Analyzed

03/20/24 17:19

Client Sample ID: WES24-02 2'

%Rec

Limits

70 - 130

Prep Type: Total/NA

Prep Batch: 1849

Prep Type: Total/NA

Prep Batch: 1849

Analysis Batch: 2109 LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics [C6 -25.0 26.0 mg/Kg 104 70 - 130

Spike

Added

24.2

Spike

Added

24.4

C10]

LCS LCS

Limits Surrogate %Recovery Qualifier 4-Bromofluorobenzene (Surr) 222 15 - 244

Lab Sample ID: 885-1287-12 MS

Matrix: Solid

Matrix: Solid

Analysis Batch: 2109

Analyte Result Qualifier Gasoline Range Organics [C6 -ND C10]

Surrogate

4-Bromofluorobenzene (Surr)

Sample Sample

MS MS %Recovery Qualifier Limits 217 15 - 244

Lab Sample ID: 885-1287-12 MSD

Matrix: Solid

Analysis Batch: 2109

Analyte Gasoline Range Organics [C6 -C10]

Surrogate

4-Bromofluorobenzene (Surr)

MSD MSD %Recovery Qualifier

Sample Sample

ND

215

Result Qualifier

Limits 15 - 244

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-1786/1-A

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Matrix: Solid

Analysis Batch: 1973

MB MB

Analyte Result Qualifier Benzene ND

0.025 Ethylbenzene ND 0.050 Toluene ND 0.050

mg/Kg

Unit

mg/Kg

mg/Kg

MS MS

MSD MSD

23.0

Result Qualifier

25.6

Result Qualifier

Unit

Unit

mg/Kg

mg/Kg

Eurofins Albuquerque

Analyzed

RL

Client Sample ID: WES24-02 2' Prep Type: Total/NA

Prep Batch: 1849 %Rec **RPD**

Limits RPD Limit

11

70 - 130

Dil Fac

Client Sample ID: Method Blank **Prep Type: Total/NA** Prep Batch: 1786

Project/Site: JRU DI IA CTB

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

Lab Sample ID: MB 885-1786/1-A **Matrix: Solid**

Analysis Batch: 1973

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

Prep Batch: 1786

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Xylenes, Total ND 0.10 mg/Kg 03/15/24 12:11 03/18/24 21:05

MR MR

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 87 39 - 146 03/15/24 12:11 03/18/24 21:05

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 885-1786/3-A **Matrix: Solid**

Analysis Batch: 1973

Prep Type: Total/NA

Prep Batch: 1786

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	1.00	1.00		mg/Kg	_	100	70 - 130	
Ethylbenzene	1.00	1.02		mg/Kg		102	70 - 130	
m,p-Xylene	2.00	2.04		mg/Kg		102	70 - 130	
o-Xylene	1.00	1.02		mg/Kg		102	70 - 130	
Toluene	1.00	1.00		mg/Kg		100	70 - 130	
Xylenes, Total	3.00	3.06		mg/Kg		102	70 - 130	

LCS LCS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 88 39 - 146

Lab Sample ID: MB 885-1812/1-A

Matrix: Solid

Analysis Batch: 2107

Client Sample ID: Method Blank **Prep Type: Total/NA**

Prep Batch: 1812

мв мв Analyte Qualifier RL Unit Prepared Analyzed Dil Fac Result Benzene ND 0.025 mg/Kg 03/15/24 15:58 03/19/24 09:57 mg/Kg Ethylbenzene ND 0.050 03/15/24 15:58 03/19/24 09:57 Toluene ND 0.050 mg/Kg 03/15/24 15:58 03/19/24 09:57 Xylenes, Total ND 0.10 mg/Kg 03/15/24 15:58 03/19/24 09:57

MB MB

Qualifier Limits Surrogate %Recovery Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 94 39 - 146 03/15/24 15:58 03/19/24 09:57

Lab Sample ID: LCS 885-1812/3-A

Matrix: Solid

Analysis Batch: 2107

Released to Imaging: 7/30/2024 4:05:46 PM

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 1812

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	1.00	0.882		mg/Kg		88	70 - 130	
Ethylbenzene	1.00	0.903		mg/Kg		90	70 - 130	
m,p-Xylene	2.00	1.83		mg/Kg		92	70 - 130	
o-Xylene	1.00	0.896		mg/Kg		90	70 - 130	
Toluene	1.00	0.894		mg/Kg		89	70 - 130	
Xylenes, Total	3.00	2.73		mg/Kg		91	70 - 130	

LCS LCS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 96 39 - 146

Project/Site: JRU DI IA CTB

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

Lab Sample ID: MB 885-1849/1-A **Matrix: Solid**

Analysis Batch: 2114

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1849

	1410	111.0						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/18/24 11:35	03/20/24 17:19	1
Ethylbenzene	ND		0.050	mg/Kg		03/18/24 11:35	03/20/24 17:19	1
Toluene	ND		0.050	mg/Kg		03/18/24 11:35	03/20/24 17:19	1
Xylenes, Total	ND		0.10	mg/Kg		03/18/24 11:35	03/20/24 17:19	1

MB MB

MR MR

%Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 39 - 146 03/18/24 11:35 03/20/24 17:19 4-Bromofluorobenzene (Surr) 88

Lab Sample ID: LCS 885-1849/3-A

Matrix: Solid

Analysis Batch: 2114

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1849

•	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	1.00	1.03		mg/Kg		103	70 - 130
Ethylbenzene	1.00	1.06		mg/Kg		106	70 - 130
m,p-Xylene	2.00	2.11		mg/Kg		105	70 - 130
o-Xylene	1.00	1.06		mg/Kg		106	70 - 130
Toluene	1.00	1.04		mg/Kg		104	70 - 130
Xylenes, Total	3.00	3.16		mg/Kg		105	70 - 130

LCS LCS

MB MB

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

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

Lab Sample ID: MB 885-1847/1-A

Lab Sample ID: LCS 885-1847/2-A

Matrix: Solid

Analysis Batch: 1898

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

Prep Batch: 1847

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	10	mg/Kg		03/18/24 10:59	03/18/24 14:13	1
Motor Oil Range Organics [C28-C40]	ND	50	mg/Kg		03/18/24 10:59	03/18/24 14:13	1
	MR MR						

Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 122 62 - 134

03/18/24 10:59 03/18/24 14:13

Prepared

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

Analyzed

Prep Batch: 1847

Dil Fac

Analysis Batch: 1898 Spike LCS LCS %Rec Added Result Qualifier Limits **Analyte** Unit D %Rec Diesel Range Organics 50.0 48.9 mg/Kg 98 60 - 135

[C10-C28]

Matrix: Solid

LCS LCS Surrogate %Recovery Qualifier Limits 62 - 134 Di-n-octyl phthalate (Surr) 118

Project/Site: JRU DI IA CTB

%Rec

91

D

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

Lab Sample ID: 885-1287-5 MS **Matrix: Solid**

Analysis Batch: 1898

Client Sample ID: BES24-11 0.5'

44 - 136

Client Sample ID: BES24-11 0.5

%Rec

Prep Type: Total/NA Prep Batch: 1847

%Rec Limits

Analyte **Diesel Range Organics**

[C10-C28]

Surrogate

MS MS %Recovery Qualifier 114

ND

Sample Sample

Result Qualifier

Limits

Spike

Added

47.6

46.6

62 - 134

Lab Sample ID: 885-1287-5 MSD

Matrix: Solid

Di-n-octyl phthalate (Surr)

Analysis Batch: 1898

Sample Sample Spike Result Qualifier Added

MSD MSD

43.3

MS MS

43.5

Result Qualifier

Unit

mg/Kg

Result Qualifier Unit

D mg/Kg

%Rec 93

RPD Limits 44 - 136

Prep Type: Total/NA

Prep Batch: 1847

0

RPD

Limit

32

[C10-C28]

Analyte

MSD MSD

ND

Surrogate Di-n-octyl phthalate (Surr)

Diesel Range Organics

%Recovery Qualifier I imite 62 - 134 115

Lab Sample ID: MB 885-1913/1-A

Matrix: Solid

Analysis Batch: 1993

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 1913

MB MB

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] ND 10 mg/Kg 03/19/24 09:41 03/19/24 15:50 Motor Oil Range Organics [C28-C40] ND 50 03/19/24 09:41 03/19/24 15:50 mg/Kg

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 103 62 - 134 03/19/24 09:41 03/19/24 15:50

43.6

Lab Sample ID: LCS 885-1913/2-A

Matrix: Solid

Analysis Batch: 1993

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

87

Prep Batch: 1913

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits

Diesel Range Organics [C10-C28]

LCS LCS

Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 105

62 - 134

50.0

Lab Sample ID: 885-1287-12 MS

Matrix: Solid

Analysis Batch: 1993

Client Sample ID: WES24-02 2'

mg/Kg

Prep Type: Total/NA

Prep Batch: 1913

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Unit %Rec Limits Diesel Range Organics ND 45.1 41.4 mg/Kg 44 - 136

[C10-C28]

Project/Site: JRU DI IA CTB

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

%Recovery Qualifier

115

Lab Sample ID: 885-1287-12 MS Client Sample ID: WES24-02 2'

> Limits 62 - 134

> > Spike

Matrix: Solid

Analysis Batch: 1993

Prep Type: Total/NA

Prep Batch: 1913

MS MS

MSD MSD

Lab Sample ID: 885-1287-12 MSD **Matrix: Solid**

Analysis Batch: 1993

Di-n-octyl phthalate (Surr)

Client Sample ID: WES24-02 2'

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 1913

%Rec **RPD**

Prep Type: Total/NA

Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec 44 - 136 ND 48.0 90 32 Diesel Range Organics 43.0 mg/Kg 4

[C10-C28]

Surrogate

MSD MSD

Sample Sample

%Recovery Qualifier Limits Surrogate 62 - 134 Di-n-octyl phthalate (Surr) 113

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-1845/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 1909

Prep Batch: 1845 MB MB

Result Qualifier RL Unit Analyzed Dil Fac Analyte Prepared 3.0 03/18/24 10:55 03/18/24 13:56 Chloride ND mg/Kg

Lab Sample ID: LCS 885-1845/2-A

Matrix: Solid

Analysis Batch: 1909 Prep Batch: 1845 Spike LCS LCS %Rec

Analyte Added Result Qualifier Limits Unit D %Rec Chloride 30.0 28.2 mg/Kg 94 90 - 110

Lab Sample ID: MB 885-1910/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 2271

Prep Type: Total/NA Prep Batch: 1910 MB MB

Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Chloride $\overline{\mathsf{ND}}$ 3.0 03/19/24 09:04 03/19/24 11:35 mg/Kg

Lab Sample ID: LCS 885-1910/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA**

Analysis Batch: 2271 Prep Batch: 1910 Spike LCS LCS %Rec

Analyte Added Result Qualifier Unit %Rec Limits Chloride 30.0 28.9 96 90 - 110 mg/Kg

Client: Vertex

Project/Site: JRU DI IA CTB

Job ID: 885-1287-1

GC VOA

Prep Batch: 1670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-1670/1-A	Method Blank	Total/NA	Solid	5030C	

Prep Batch: 1786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-1	BES24-06 2'	Total/NA	Solid	5030C	
885-1287-2	BES24-08 2'	Total/NA	Solid	5030C	
885-1287-3	BES24-09 0.5'	Total/NA	Solid	5030C	
885-1287-4	BES24-10 0.5'	Total/NA	Solid	5030C	
MB 885-1786/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-1786/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-1786/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 1812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-5	BES24-11 0.5'	Total/NA	Solid	5030C	
885-1287-6	BES24-12 0.5'	Total/NA	Solid	5030C	
885-1287-7	BES24-13 0.5'	Total/NA	Solid	5030C	
885-1287-8	BES24-14 0.5'	Total/NA	Solid	5030C	
885-1287-9	BES24-18 0.5'	Total/NA	Solid	5030C	
885-1287-10	BES24-19 0.5'	Total/NA	Solid	5030C	
885-1287-11	BES24-20 0.5'	Total/NA	Solid	5030C	
MB 885-1812/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-1812/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-1812/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 1849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-12	WES24-02 2'	Total/NA	Solid	5030C	
MB 885-1849/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-1849/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-1849/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-1287-12 MS	WES24-02 2'	Total/NA	Solid	5030C	
885-1287-12 MSD	WES24-02 2'	Total/NA	Solid	5030C	

Analysis Batch: 1972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-1	BES24-06 2'	Total/NA	Solid	8015D	1786
885-1287-2	BES24-08 2'	Total/NA	Solid	8015D	1786
885-1287-3	BES24-09 0.5'	Total/NA	Solid	8015D	1786
885-1287-4	BES24-10 0.5'	Total/NA	Solid	8015D	1786
MB 885-1670/1-A	Method Blank	Total/NA	Solid	8015D	1670
MB 885-1786/1-A	Method Blank	Total/NA	Solid	8015D	1786
LCS 885-1786/2-A	Lab Control Sample	Total/NA	Solid	8015D	1786

Analysis Batch: 1973

Released to Imaging: 7/30/2024 4:05:46 PM

Lab Sample ID 885-1287-1	Client Sample ID BES24-06 2'	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 1786
885-1287-2	BES24-08 2'	Total/NA	Solid	8021B	1786
885-1287-3	BES24-09 0.5'	Total/NA	Solid	8021B	1786
885-1287-4	BES24-10 0.5'	Total/NA	Solid	8021B	1786
MB 885-1786/1-A	Method Blank	Total/NA	Solid	8021B	1786

Eurofins Albuquerque

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2

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9

10

Client: Vertex Job ID: 885-1287-1

Project/Site: JRU DI IA CTB

GC VOA (Continued)

Analysis Batch: 1973 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-1786/3-A	Lab Control Sample	Total/NA	Solid	8021B	1786

Analysis Batch: 2106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-5	BES24-11 0.5'	Total/NA	Solid	8015D	1812
885-1287-6	BES24-12 0.5'	Total/NA	Solid	8015D	1812
885-1287-7	BES24-13 0.5'	Total/NA	Solid	8015D	1812
885-1287-8	BES24-14 0.5'	Total/NA	Solid	8015D	1812
885-1287-9	BES24-18 0.5'	Total/NA	Solid	8015D	1812
885-1287-10	BES24-19 0.5'	Total/NA	Solid	8015D	1812
885-1287-11	BES24-20 0.5'	Total/NA	Solid	8015D	1812
MB 885-1812/1-A	Method Blank	Total/NA	Solid	8015D	1812
LCS 885-1812/2-A	Lab Control Sample	Total/NA	Solid	8015D	1812

Analysis Batch: 2107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-5	BES24-11 0.5'	Total/NA	Solid	8021B	1812
885-1287-6	BES24-12 0.5'	Total/NA	Solid	8021B	1812
885-1287-7	BES24-13 0.5'	Total/NA	Solid	8021B	1812
885-1287-8	BES24-14 0.5'	Total/NA	Solid	8021B	1812
885-1287-9	BES24-18 0.5'	Total/NA	Solid	8021B	1812
885-1287-10	BES24-19 0.5'	Total/NA	Solid	8021B	1812
885-1287-11	BES24-20 0.5'	Total/NA	Solid	8021B	1812
MB 885-1812/1-A	Method Blank	Total/NA	Solid	8021B	1812
LCS 885-1812/3-A	Lab Control Sample	Total/NA	Solid	8021B	1812

Analysis Batch: 2109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-12	WES24-02 2'	Total/NA	Solid	8015D	1849
MB 885-1849/1-A	Method Blank	Total/NA	Solid	8015D	1849
LCS 885-1849/2-A	Lab Control Sample	Total/NA	Solid	8015D	1849
885-1287-12 MS	WES24-02 2'	Total/NA	Solid	8015D	1849
885-1287-12 MSD	WES24-02 2'	Total/NA	Solid	8015D	1849

Analysis Batch: 2114

Lab Sample ID 885-1287-12	Client Sample ID WES24-02 2'	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 1849
MB 885-1849/1-A	Method Blank	Total/NA	Solid	8021B	1849
LCS 885-1849/3-A	Lab Control Sample	Total/NA	Solid	8021B	1849

GC Semi VOA

Prep Batch: 1847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-1	BES24-06 2'	Total/NA	Solid	SHAKE	
885-1287-2	BES24-08 2'	Total/NA	Solid	SHAKE	
885-1287-3	BES24-09 0.5'	Total/NA	Solid	SHAKE	
885-1287-4	BES24-10 0.5'	Total/NA	Solid	SHAKE	
885-1287-5	BES24-11 0.5'	Total/NA	Solid	SHAKE	
MB 885-1847/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-1847/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

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Client: Vertex Job ID: 885-1287-1

Project/Site: JRU DI IA CTB

GC Semi VOA (Continued)

Prep Batch: 1847 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-5 MS	BES24-11 0.5'	Total/NA	Solid	SHAKE	
885-1287-5 MSD	BES24-11 0.5'	Total/NA	Solid	SHAKE	

Analysis Batch: 1898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-1	BES24-06 2'	Total/NA	Solid	8015D	1847
885-1287-2	BES24-08 2'	Total/NA	Solid	8015D	1847
885-1287-3	BES24-09 0.5'	Total/NA	Solid	8015D	1847
885-1287-4	BES24-10 0.5'	Total/NA	Solid	8015D	1847
885-1287-5	BES24-11 0.5'	Total/NA	Solid	8015D	1847
MB 885-1847/1-A	Method Blank	Total/NA	Solid	8015D	1847
LCS 885-1847/2-A	Lab Control Sample	Total/NA	Solid	8015D	1847
885-1287-5 MS	BES24-11 0.5'	Total/NA	Solid	8015D	1847
885-1287-5 MSD	BES24-11 0.5'	Total/NA	Solid	8015D	1847

Prep Batch: 1913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-6	BES24-12 0.5'	Total/NA	Solid	SHAKE	
885-1287-7	BES24-13 0.5'	Total/NA	Solid	SHAKE	
885-1287-8	BES24-14 0.5'	Total/NA	Solid	SHAKE	
885-1287-9	BES24-18 0.5'	Total/NA	Solid	SHAKE	
885-1287-10	BES24-19 0.5'	Total/NA	Solid	SHAKE	
885-1287-11	BES24-20 0.5'	Total/NA	Solid	SHAKE	
885-1287-12	WES24-02 2'	Total/NA	Solid	SHAKE	
MB 885-1913/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-1913/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-1287-12 MS	WES24-02 2'	Total/NA	Solid	SHAKE	
885-1287-12 MSD	WES24-02 2'	Total/NA	Solid	SHAKE	

Analysis Batch: 1993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-7	BES24-13 0.5'	Total/NA	Solid	8015D	1913
885-1287-8	BES24-14 0.5'	Total/NA	Solid	8015D	1913
885-1287-10	BES24-19 0.5'	Total/NA	Solid	8015D	1913
885-1287-11	BES24-20 0.5'	Total/NA	Solid	8015D	1913
885-1287-12	WES24-02 2'	Total/NA	Solid	8015D	1913
MB 885-1913/1-A	Method Blank	Total/NA	Solid	8015D	1913
LCS 885-1913/2-A	Lab Control Sample	Total/NA	Solid	8015D	1913
885-1287-12 MS	WES24-02 2'	Total/NA	Solid	8015D	1913
885-1287-12 MSD	WES24-02 2'	Total/NA	Solid	8015D	1913

Analysis Batch: 2245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-6	BES24-12 0.5'	Total/NA	Solid	8015D	1913
885-1287-9	BES24-18 0.5'	Total/NA	Solid	8015D	1913

HPLC/IC

Prep Batch: 1845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-1	BES24-06 2'	Total/NA	Solid	300_Prep	

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Client: Vertex Job ID: 885-1287-1 Project/Site: JRU DI IA CTB

HPLC/IC (Continued)

Prep Batch: 1845 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-2	BES24-08 2'	Total/NA	Solid	300_Prep	
885-1287-3	BES24-09 0.5'	Total/NA	Solid	300_Prep	
885-1287-4	BES24-10 0.5'	Total/NA	Solid	300_Prep	
885-1287-5	BES24-11 0.5'	Total/NA	Solid	300_Prep	
885-1287-6	BES24-12 0.5'	Total/NA	Solid	300_Prep	
885-1287-7	BES24-13 0.5'	Total/NA	Solid	300_Prep	
885-1287-8	BES24-14 0.5'	Total/NA	Solid	300_Prep	
885-1287-9	BES24-18 0.5'	Total/NA	Solid	300_Prep	
885-1287-10	BES24-19 0.5'	Total/NA	Solid	300_Prep	
885-1287-11	BES24-20 0.5'	Total/NA	Solid	300_Prep	
MB 885-1845/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-1845/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 1909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-1	BES24-06 2'	Total/NA	Solid	300.0	1845
885-1287-2	BES24-08 2'	Total/NA	Solid	300.0	1845
885-1287-3	BES24-09 0.5'	Total/NA	Solid	300.0	1845
885-1287-4	BES24-10 0.5'	Total/NA	Solid	300.0	1845
885-1287-5	BES24-11 0.5'	Total/NA	Solid	300.0	1845
885-1287-6	BES24-12 0.5'	Total/NA	Solid	300.0	1845
885-1287-7	BES24-13 0.5'	Total/NA	Solid	300.0	1845
885-1287-8	BES24-14 0.5'	Total/NA	Solid	300.0	1845
885-1287-9	BES24-18 0.5'	Total/NA	Solid	300.0	1845
885-1287-10	BES24-19 0.5'	Total/NA	Solid	300.0	1845
885-1287-11	BES24-20 0.5'	Total/NA	Solid	300.0	1845
MB 885-1845/1-A	Method Blank	Total/NA	Solid	300.0	1845
LCS 885-1845/2-A	Lab Control Sample	Total/NA	Solid	300.0	1845

Prep Batch: 1910

Lab Sample ID 885-1287-12	Client Sample ID WES24-02 2'	Prep Type Total/NA	Solid	Method 300_Prep	Prep Batch
MB 885-1910/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-1910/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 2271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1287-12	WES24-02 2'	Total/NA	Solid	300.0	1910
MB 885-1910/1-A	Method Blank	Total/NA	Solid	300.0	1910
LCS 885-1910/2-A	Lab Control Sample	Total/NA	Solid	300.0	1910

Project/Site: JRU DI IA CTB

Client: Vertex

Total/NA

Client Sample ID: BES24-06 2'

Date Collected: 03/12/24 09:30 Date Received: 03/15/24 07:40 Lab Sample ID: 885-1287-1

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/19/24 05:04
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		1	1973	RA	EET ALB	03/19/24 05:04
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 11:00
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 18:47
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55

Client Sample ID: BES24-08 2' Lab Sample ID: 885-1287-2

1909 KB

EET ALB

20

Date Collected: 03/12/24 09:35

Analysis

300.0

Date Received: 03/15/24 07:40

03/18/24 16:24

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/19/24 05:26
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		1	1973	RA	EET ALB	03/19/24 05:26
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 11:00
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 18:59
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 16:36

Client Sample ID: BES24-09 0.5'

Date Collected: 03/12/24 09:40

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1287-3

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/19/24 05:48
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		1	1973	RA	EET ALB	03/19/24 05:48
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 11:07
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 19:11
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 16:49

Client Sample ID: BES24-10 0.5'

Date Collected: 03/12/24 09:45

Date Received: 03/15/24 07:40

Lab Sam	ple	ID:	885-	1287-4
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Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/19/24 06:09

Client Sample ID: BES24-10 0.5'

Date Collected: 03/12/24 09:45

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1287-4

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1786	JP	EET ALB	03/15/24 12:11
Total/NA	Analysis	8021B		1	1973	RA	EET ALB	03/19/24 06:09
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 11:07
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 19:23
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 17:01

Client Sample ID: BES24-11 0.5'

Date Collected: 03/12/24 09:50

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1287-5

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8015D		1	2106	JP	EET ALB	03/20/24 07:02
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8021B		1	2107	JP	EET ALB	03/20/24 07:02
Total/NA	Prep	SHAKE			1847	JU	EET ALB	03/18/24 11:07
Total/NA	Analysis	8015D		1	1898	JU	EET ALB	03/18/24 19:35
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 17:13

Client Sample ID: BES24-12 0.5'

Date Collected: 03/12/24 09:55

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1287-6

Matrix: Solid

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8015D		1	2106	JP	EET ALB	03/20/24 07:25
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8021B		1	2107	JP	EET ALB	03/20/24 07:25
Total/NA	Prep	SHAKE			1913	JU	EET ALB	03/19/24 09:41
Total/NA	Analysis	8015D		1	2245	JU	EET ALB	03/22/24 14:04
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 17:26

Client Sample ID: BES24-13 0.5'

Date Collected: 03/12/24 10:00

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1287-7

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8015D		1	2106	JP	EET ALB	03/20/24 07:49
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8021B		1	2107	JP	EET ALB	03/20/24 07:49

Project/Site: JRU DI IA CTB

Client Sample ID: BES24-13 0.5'

Date Collected: 03/12/24 10:00 Date Received: 03/15/24 07:40 Lab Sample ID: 885-1287-7

Matrix: Solid

Job ID: 885-1287-1

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	SHAKE			1913	JU	EET ALB	03/19/24 09:41
Total/NA	Analysis	8015D		1	1993	JU	EET ALB	03/19/24 19:19
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 17:38

Client Sample ID: BES24-14 0.5'

Date Collected: 03/12/24 10:05

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1287-8

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8015D		1	2106	JP	EET ALB	03/20/24 08:12
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8021B		1	2107	JP	EET ALB	03/20/24 08:12
Total/NA	Prep	SHAKE			1913	JU	EET ALB	03/19/24 09:41
Total/NA	Analysis	8015D		1	1993	JU	EET ALB	03/19/24 19:31
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 17:50

Client Sample ID: BES24-18 0.5'

Date Collected: 03/12/24 10:10

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1287-9

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8015D		1	2106	JP	EET ALB	03/20/24 08:36
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8021B		1	2107	JP	EET ALB	03/20/24 08:36
Total/NA	Prep	SHAKE			1913	JU	EET ALB	03/19/24 09:41
Total/NA	Analysis	8015D		1	2245	JU	EET ALB	03/22/24 14:28
Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 18:03

Client Sample ID: BES24-19 0.5'

Date Collected: 03/12/24 10:15

Date Received: 03/15/24 07:40

Lab Sa	ample	ID:	885-1	287-10

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8015D		1	2106	JP	EET ALB	03/20/24 08:59
Total/NA	Prep	5030C			1812	JP	EET ALB	03/15/24 15:58
Total/NA	Analysis	8021B		1	2107	JP	EET ALB	03/20/24 08:59
Total/NA	Prep	SHAKE			1913	JU	EET ALB	03/19/24 09:41
Total/NA	Analysis	8015D		1	1993	JU	EET ALB	03/19/24 19:55

Project/Site: JRU DI IA CTB

Lab Sample ID: 885-1287-10

Matrix: Solid

Job ID: 885-1287-1

Client Sample ID: BES24-19 0.5' Date Collected: 03/12/24 10:15

Date Received: 03/15/24 07:40

		Batch	Batch		Dilution	Batch			Prepared
	Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
	Total/NA	Prep	300_Prep			1845	JT	EET ALB	03/18/24 10:55
l	Total/NA	Analysis	300.0		20	1909	KB	EET ALB	03/18/24 18:15

Client Sample ID: BES24-20 0.5'

Lab Sample ID: 885-1287-11

Date Collected: 03/12/24 10:20 **Matrix: Solid** Date Received: 03/15/24 07:40

Batch Batch Dilution Batch Prepared Method **Prep Type Number Analyst** or Analyzed Type Run **Factor** Lab 03/15/24 15:58 Total/NA Prep 5030C 1812 JΡ **EET ALB** Total/NA 8015D 2106 JP 03/20/24 09:23 Analysis **EET ALB** 1 Total/NA Prep 5030C 1812 JΡ **EET ALB** 03/15/24 15:58 Total/NA 8021B 2107 JΡ **EET ALB** 03/20/24 09:23 Analysis 1 Total/NA Prep SHAKE 1913 **EET ALB** 03/19/24 09:41 Total/NA 8015D 1993 JU **EET ALB** 03/19/24 20:07 Analysis 1 Total/NA 300 Prep **EET ALB** 03/18/24 10:55 Prep 1845 Total/NA 300.0 20 1909 KB **EET ALB** 03/18/24 18:52 Analysis

Client Sample ID: WES24-02 2' Lab Sample ID: 885-1287-12

Date Collected: 03/12/24 10:25 Matrix: Solid Date Received: 03/15/24 07:40

Batch Batch Dilution Batch Prepared **Prep Type** Method or Analyzed Type Run **Factor** Number Analyst Lab Total/NA Prep 5030C 1849 IMR **EET ALB** 03/18/24 11:35 Total/NA 8015D 2109 RA 03/20/24 17:40 Analysis **EET ALB** 1 Total/NA Prep 5030C 1849 IMR **EET ALB** 03/18/24 11:35 Total/NA 8021B 2114 RA 03/20/24 17:40 Analysis 1 **EET ALB** Total/NA SHAKE 1913 JU **EET ALB** 03/19/24 09:41 Prep Total/NA 8015D JU **EET ALB** 03/19/24 20:19 1993 Analysis 1 Total/NA 300 Prep 1910 JT **EET ALB** 03/19/24 09:04 Prep 03/19/24 14:40 Total/NA 300.0 20 2271 RC **EET ALB** Analysis

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex Job ID: 885-1287-1

Project/Site: JRU DI IA CTB

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 Or	ganics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Orga	nics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Or	ganics [C28-C40]
8021B	5030C	Solid	Benzene	
8021B	5030C	Solid	Ethylbenzene	
8021B	5030C	Solid	Toluene	
8021B	5030C	Solid	Xylenes, Total	
regon	NELA	P	NM100001	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
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

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Method Summary

Client: Vertex

Project/Site: JRU DI IA CTB

Job ID: 885-1287-1

Method	Method Description	Protocol	Laboratory
3015D	Gasoline Range Organics (GRO) (GC)	SW846	EET ALB
3021B	Volatile Organic Compounds (GC)	SW846	EET ALB
3015D	Diesel Range Organics (DRO) (GC)	SW846	EET ALB
300.0	Anions, Ion Chromatography	EPA	EET ALB
00_Prep	Anions, Ion Chromatography, 10% Wt/Vol	EPA	EET ALB
5030C	Purge and Trap	SW846	EET ALB
SHAKE	Preparation, Shake Jar	TestAmerica SOP	EET ALB

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TestAmerica SOP = TestAmerica, Inc., Standard Operating Procedure

Laboratory References:

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

Eurofins Albuquerque

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885-1287 COC

Center #: 1082151001, Incident #: nAPP233104126;

REMARKS: Direct Bill to XTO Energy, Inc., Cost CC. Chance Dixon (CDixon@vertex.ca) for Final

Chain of Custody

EL Paso TX (915) 585-3443 Lubbock, TX (806) 794-1298 Houston TX (281) 240-4200 Dallas TX (214) 902-0300 Midland TX (432) 704-5440 San Antonio TX (210) 509-3334

Environment Testing

eurofins

CC CDixon@vertex.ca for Final Report

Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

3/15/2 7-2 DI Water H₂O MeOH Me NaOH Na HNO3. HN Date/Time VaOH+Ascorbic Acid SAPC Preservative Codes Sample Comments 1 of RR Superfund Leve Zn Acetate+NaOH Zn Hg 1631 / 245 1 / 7470 / 7471 Other: VaHSO4. NABIS Na₂S₂O₃. NaSO₃ HCL HC H₂SO₄, H₂ H₃PO₄, HP TRR Cool Cool None NO Work Order Comments 9 てろり 2000 Brownfields PSTIJUST ADaPT Ti Sn U V Zr Received by (Signature) ∭ela III È ഗ് Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Program, UST/PST Deliverables EDD Reporting Level II State of Project sorvice. Eurofins Xonco will be liable only for the cost of samples and shall not assume any responsibility for any lesses or exponses incurred by the citor if such lesses and due to citorinas more than a charge of \$55 for each sample submitted to Eurofins Xonco, but not analyzed. These terms will be enforced unless proviously regelated. bolloo. Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Koreo, its affiliates and subcontractors. It assigns standard terms and cond ANALYSIS REQUEST TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U Relinquished by (Signature) Carlsbad NM, 88220 3104 E Greene St Email CC CDixon@vertex.ca for Final Report XTO Energy, Inc XTO Energy, Inc СЫопае × × × × WKO) 3/14/24 930 Date/Time PH 8015D(GRO / DRO BLEX (8051) × × × Pres. Camp Com Grab/ Com Com Com Com Com Com Com Com Com Bill to, (if different) Company Name Due bate. F MM TAT starts the day received by the lab, if received by 4 30pm City State ZIP Ves No 305 0.0 40 0.5 9.5 0.5 Routing A Rush 0.5 0.5 0.5 0.5 0 0.5 Turn Around Received by (Signature) BRCRA 13PPM 09:35 09:55 10:05 10:10 10:15 09:30 09:40 09:50 10:00 09:45 Wet Ice. Date Sampled Time Sampled Corrected Temperature Temperature Reading: Correction Factor: Chance Dixon (CDixon@vertex.ca) 03.12.24 03.12.24 03.12.24 03.12.24 03.12.24 03.12.24 03.12.24 03.12.24 03.12.24 03.12.24 **∰** ‱, Now-Vertex Resource Services Soil Soil Soil Soil Soil Soil Soil Carlsbad NM, 88220 Circle Method(s) and Metal(s) to be analyzed Yes No N/A 3101 Boyd Drive Temp Blank: ş IRU DI 1A CTB Deusavan Costa 575 725 5001 Ø 23E-04616 Relinquished by (Signature) Sample Identification Samples Received Intact; SAMPLE RECEIPT Total 200.7 / 6010 Sample Custody Seals. oler Custody Seals. BES24-1205' BES24-1805 BES24-0905 BES24-10-0 5' BES24-1105 BES24-1305 BES24-1405' BES24- 19 0 5' Company Name. Sampler's Name otal Containers. roject Number roject Location BES24-06 2' BES24-08 2' City, State ZIP roject Name Address. hone.

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Login Sample Receipt Checklist

Client: Vertex Job Number: 885-1287-1

List Source: Eurofins Albuquerque Login Number: 1287

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
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	
s 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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/2/2024 9:26:17 PM

JOB DESCRIPTION

JRU DI 1A CTB

JOB NUMBER

885-1289-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

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 3

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Released to Imaging: 7/30/2024 4:05:46 PM

Client: Vertex Laboratory Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

Table of Contents

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Definitions/Glossary

Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

Glossary

DLC EDL

LOD

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

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Decision Level 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

Job ID: 885-1289-1

Case Narrative

Client: Vertex Job ID: 885-1289-1

Project: JRU DI 1A CTB

Eurofins Albuquerque

Job Narrative 885-1289-1

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 3/15/2024 7:40 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 0.2°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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

HPLC/IC

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

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Job ID: 885-1289-1

Client: Vertex

Project/Site: JRU DI 1A CTB

Client Sample ID: WES24-03 2'

Date Collected: 03/13/24 10:00

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1289-1

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		03/18/24 11:35	03/20/24 18:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			03/18/24 11:35	03/20/24 18:46	1

Method: SW846 8021B - Volatile Organic Compounds (GC) **Analyte** Result Qualifier RL Unit Prepared Analyzed Dil Fac Benzene ND 0.023 mg/Kg 03/18/24 11:35 03/20/24 18:46 Ethylbenzene ND 0.046 mg/Kg 03/18/24 11:35 03/20/24 18:46 Toluene ND 0.046 mg/Kg 03/18/24 11:35 03/20/24 18:46 ND 0.093 03/18/24 11:35 03/20/24 18:46 Xylenes, Total mg/Kg

 Surrogate
 %Recovery 4-Bromofluorobenzene (Surr)
 Qualifier 88
 Limits 39 - 146
 Prepared 03/18/24 11:35
 Analyzed 03/20/24 18:46
 Dil Factoria

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)								
	Analyte	Result	Qualifier	RL				
	Diesel Range Organics [C10-C28]	ND		9.9				

Motor Oil Range Organics [C28-C40] ND 49 mg/Kg 03/19/24 12:03 03/19/24 23:25 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 62 - 134 03/19/24 12:03 03/19/24 23:25 98

Di-n-octyl phthalate (Surr) 98 62 - 134 03/19/24 12:03 03/19/24 23:25

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride 300 mg/Kg 03/20/24 12:17 03/28/24 15:34 100

Client Sample ID: WES24-04 2'

Date Collected: 03/13/24 10:05 Date Received: 03/15/24 07:40 Lab Sample ID: 885-1289-2 Matrix: Solid

Prepared

03/19/24 12:03 03/19/24 23:25

Unit

mg/Kg

	Method: SW846 8015D - Gasoline	Range Organics	(GRO) (GC)
ı	A 14 -	D 14 O 11 C	

 Surrogate
 %Recovery 4-Bromofluorobenzene (Surr)
 Qualifier 104
 Limits 15 - 244
 Prepared 03/18/24 11:35
 Analyzed 03/20/24 19:51
 Dil Fac 03/18/24 11:35

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

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Benzene $\overline{\mathsf{ND}}$ 0.024 mg/Kg 03/18/24 11:35 03/20/24 19:51 03/20/24 19:51 Ethylbenzene 03/18/24 11:35 ND 0.049 mg/Kg Toluene ND 0.049 mg/Kg 03/18/24 11:35 03/20/24 19:51 03/18/24 11:35 03/20/24 19:51 Xylenes, Total ND 0.097 mg/Kg

 Surrogate
 %Recovery 4-Bromofluorobenzene (Surr)
 Qualifier 92
 Limits 39 - 146
 Prepared 03/18/24 11:35
 Analyzed 03/20/24 19:51
 Dil Fac 03/18/24 11:35

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

Analyte	Result Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND -	9.3	mg/Kg	03/19/24 12:03	03/19/24 23:49	1
Motor Oil Range Organics [C28-C40]	ND	46	mg/Kg	03/19/24 12:03	3 03/19/24 23:49	1

Eurofins Albuquerque

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Dil Fac

Analyzed

Matrix: Solid

Dil Fac

Client Sample Results

Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

Client Sample ID: WES24-04 2' Lab Sample ID: 885-1289-2

Date Collected: 03/13/24 10:05 **Matrix: Solid**

Date Received: 03/15/24 07:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134	03/19/24 12:03	03/19/24 23:49	1

Method: EPA 300.0 - Anions, Ion Chromatography								
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	200	60	mg/Kg	_	03/20/24 12:17	03/20/24 14:43	20

Client Sample ID: BES24-07 0.5' Lab Sample ID: 885-1289-3

Date Collected: 03/13/24 10:10 Date Received: 03/15/24 07:40

Method: SW846 8015D - Gaso	line Range	Organics ((GRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/18/24 11:35	03/20/24 20:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			03/18/24 11:35	03/20/24 20:13	1

Method: SW846 8021 Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/18/24 11:35	03/20/24 20:13	1
Ethylbenzene	ND		0.049	mg/Kg		03/18/24 11:35	03/20/24 20:13	1
Toluene	ND		0.049	mg/Kg		03/18/24 11:35	03/20/24 20:13	1
Xylenes, Total	ND		0.099	mg/Kg		03/18/24 11:35	03/20/24 20:13	1
Surrogate	%Recovery	Qualifier	l imite			Prenared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89	39 - 146	03/18/24 11:35	03/20/24 20:13	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed		
	Diesel Range Organics [C10-C28]	ND	9.7	mg/Kg		03/19/24 12:03	03/20/24 00:12		

Motor Oil Range Organics [C28-C40]	ND	49	mg/Kg	03/19/24 12:03	03/20/24 00:12	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102	62 - 134		03/19/24 12:03	03/20/24 00:12	1

Method: EPA 300.0 - Anions, lo							
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3400	150	mg/Kg		03/20/24 12:17	03/28/24 15:46	50

Client Sample ID: BES24-15 0.5' Lab Sample ID: 885-1289-4 **Matrix: Solid**

Date Collected: 03/13/24 10:15 Date Received: 03/15/24 07:40

Analyte	Result	Qualifier	(GRO) (GC) RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		03/18/24 11:35	03/20/24 20:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 244			03/18/24 11:35	03/20/24 20:35	1

Method: SW846 8021B - Volati	le Organic C	ompoun	ds (GC)					
Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/18/24 11:35	03/20/24 20:35	1

Job ID: 885-1289-1

Lab Sample ID: 885-1289-5

Matrix: Solid

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

Client Sample ID: BES24-15 0.5' Lab Sample ID: 885-1289-4

Date Collected: 03/13/24 10:15 **Matrix: Solid**

Date Received: 03/15/24 07:40

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

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND	0.047	mg/Kg		03/18/24 11:35	03/20/24 20:35	1
Toluene	ND	0.047	mg/Kg		03/18/24 11:35	03/20/24 20:35	1
Xylenes, Total	ND	0.095	mg/Kg		03/18/24 11:35	03/20/24 20:35	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87	39 - 146	03/18/24 11:35	03/20/24 20:35	1

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

Method. Strotto do 13D - Dieser	Italige Organics (Dit	O) (OO)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	9.4	mg/Kg		03/19/24 12:03	03/20/24 00:36	1
Motor Oil Range Organics [C28-C40]	ND	47	mg/Kg		03/19/24 12:03	03/20/24 00:36	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99	62 - 134	03/19/24 12:03	03/20/24 00:36	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result Qualifie	er RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	410	60	mg/Kg		03/20/24 12:17	03/20/24 15:08	20

Client Sample ID: BES24-16 0.5'

Date Collected: 03/13/24 10:20

Date Received: 03/15/24 07:40

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		03/18/24 11:35	03/20/24 20:56	1

Surrogate	%Recovery Qu	ualifier)	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244	03/18/24 11:35	03/20/24 20:56	1

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

mothodi Offo-to COLID	Tolumo Organio	Compound	3 (33)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/18/24 11:35	03/20/24 20:56	1
Ethylbenzene	ND		0.049	mg/Kg		03/18/24 11:35	03/20/24 20:56	1
Toluene	ND		0.049	mg/Kg		03/18/24 11:35	03/20/24 20:56	1
Xylenes, Total	ND		0.098	mg/Kg		03/18/24 11:35	03/20/24 20:56	1

Surrogate	%Recovery Qualifie	er Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90	39 - 146	03/18/24 11:35	03/20/24 20:56	1

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

Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		03/19/24 12:03	03/20/24 00:59	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		03/19/24 12:03	03/20/24 00:59	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102	62 - 134	03/19/24 12:03	03/20/24 00:59	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
Chloride	1400	59	ma/Ka	03/20/24 12:17	03/20/24 15:20	20

Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

Client: Vertex

Client Sample ID: BES24-17 0.5

Date Collected: 03/13/24 10:25 Date Received: 03/15/24 07:40

Lab Sample ID: 885-1289-6

Matrix: Solid

Method: SW846 8015D - Gaso	line Range	Organics	(GRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		03/18/24 11:35	03/20/24 21:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			03/18/24 11:35	03/20/24 21:18	1

Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Benzene ND 0.023 mg/Kg 03/18/24 11:35 03/20/24 21:18 Ethylbenzene ND 0.047 mg/Kg 03/18/24 11:35 03/20/24 21:18 Toluene ND 0.047 mg/Kg 03/18/24 11:35 03/20/24 21:18 ND 0.094 03/18/24 11:35 03/20/24 21:18 Xylenes, Total mg/Kg %Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 4-Bromofluorobenzene (Surr) 90 39 - 146 03/18/24 11:35 03/20/24 21:18

Method: SW846 8015D - Diese	el Range Org	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		03/19/24 12:03	03/20/24 01:23	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		03/19/24 12:03	03/20/24 01:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			03/19/24 12:03	03/20/24 01:23	1

Method: EPA 300.0 - Anions, lo	n Chromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3100	150	mg/Kg		03/20/24 12:17	03/28/24 15:59	50

Client Sample ID: WES24-05 0.5'

Date Collected: 03/13/24 10:40 Date Received: 03/15/24 07:40

Lab Sample ID: 885-1289-7 **Matrix: Solid**

03/18/24 11:35 03/20/24 21:40

Method: SW846 8015D - Gaso	oline Range	Organics ((GRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/18/24 11:35	03/20/24 21:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			03/18/24 11:35	03/20/24 21:40	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/18/24 11:35	03/20/24 21:40	1
Ethylbenzene	ND		0.049	mg/Kg		03/18/24 11:35	03/20/24 21:40	1
Toluene	ND		0.049	mg/Kg		03/18/24 11:35	03/20/24 21:40	1
Xylenes, Total	ND		0.099	mg/Kg		03/18/24 11:35	03/20/24 21:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Method: SW846 8015D - Diesel	Range Organics (DI	RO) (GC)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	9.2	mg/Kg		03/19/24 12:03	03/20/24 01:47	1
Motor Oil Range Organics [C28-C40]	ND	46	mg/Kg		03/19/24 12:03	03/20/24 01:47	1

39 - 146

89

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4-Bromofluorobenzene (Surr)

Client Sample Results

Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

Lab Sample ID: 885-1289-7 Client Sample ID: WES24-05 0.5'

Date Collected: 03/13/24 10:40 **Matrix: Solid**

Date Received: 03/15/24 07:40

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 102 62 - 134 03/19/24 12:03 03/20/24 01:47

Method: EPA 300.0 - Anions, Ion Chromatography Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac

Chloride 150 61 mg/Kg 03/20/24 12:17 03/20/24 15:45 20

Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

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

Lab Sample ID: MB 885-1849/1-A **Matrix: Solid**

Analysis Batch: 2109

MB MB Result Qualifier RL Unit D Analyzed Dil Fac Analyte Prepared 03/18/24 11:35 03/20/24 17:19 Gasoline Range Organics [C6 - C10] ND 5.0 mg/Kg

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 15 - 244 03/18/24 11:35 4-Bromofluorobenzene (Surr) 98 03/20/24 17:19

RL

0.025

25.0

LCS LCS

26.0

Result Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Lab Sample ID: LCS 885-1849/2-A

Matrix: Solid Analysis Batch: 2109

Spike Analyte Added

Gasoline Range Organics [C6 -C10]

4-Bromofluorobenzene (Surr)

LCS LCS Surrogate

Limits %Recovery Qualifier 222 15 - 244

ND

88

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-1849/1-A

Matrix: Solid

Benzene

Analysis Batch: 2114

MB MB Analyte Result Qualifier

Ethylbenzene ND 0.050 Toluene ND 0.050 Xylenes, Total ND 0.10 MB MB Qualifier Surrogate %Recovery Limits

Lab Sample ID: LCS 885-1849/3-A

Matrix: Solid

Analysis Batch: 2114

4-Bromofluorobenzene (Surr)

o-Xylene Toluene Xylenes, Total

Surrogate %Recovery Qualifier 4-Bromofluorobenzene (Surr) 89

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1849

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1849

%Rec

%Rec Limits

Unit mg/Kg 104 70 - 130

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1849

Prepared Analyzed Dil Fac 03/18/24 11:35 03/20/24 17:19 03/18/24 11:35 03/20/24 17:19 03/18/24 11:35 03/20/24 17:19 03/18/24 11:35 03/20/24 17:19

> Prepared Analyzed Dil Fac 03/18/24 11:35 03/20/24 17:19

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

Prep Batch: 1849

%Rec Limits

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Benzene 1.00 1.03 mg/Kg 103 70 - 130 Ethylbenzene 1.00 1.06 mg/Kg 106 70 - 130 m,p-Xylene 2.00 2.11 mg/Kg 105 70 - 130 1.00 1.06 mg/Kg 106 70 - 130 1.00 104 70 - 130 1 04 mg/Kg 3.00 3.16 mg/Kg 105 70 - 130

39 - 146

LCS LCS

Limits

39 - 146

Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

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

Lab Sample ID: 885-1289-1 MS

Matrix: Solid Analysis Batch: 2114 Client Sample ID: WES24-03 2'

Prep Type: Total/NA Prep Batch: 1849

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier %Rec Limits Analyte Unit D Benzene ND 0.935 0.944 mg/Kg 101 70 - 130 Ethylbenzene ND 0.935 0.971 mg/Kg 104 70 - 130 ND 1.94 104 70 - 130 m,p-Xylene 1.87 mg/Kg o-Xylene ND 0.935 0.969 70 - 130 mg/Kg 104 0.960 Toluene ND 0.935 mg/Kg 103 70 - 130 Xylenes, Total ND 2.81 2.91 104 70 - 130 mg/Kg

MS MS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 39 - 146 91

Lab Sample ID: 885-1289-1 MSD

Matrix: Solid

Analysis Batch: 2114

Client Sample ID: WES24-03 2'

Prep Type: Total/NA Prep Batch: 1849

Sample Sample Spike MSD MSD %Rec **RPD** Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit ND 0.986 Benzene 0.930 mg/Kg 106 70 - 130 4 20 Ethylbenzene ND 0.930 1.02 mg/Kg 110 70 - 130 5 20 ND 1.86 2.06 70 - 130 m,p-Xylene mg/Kg 111 6 20 ND 0.930 o-Xylene 1.03 mg/Kg 111 70 - 130 20 108 Toluene ND 0.930 mg/Kg 70 - 1305 20 1.01 Xylenes, Total ND 2.79 3.09 mg/Kg 111 70 - 13020

> MSD MSD

%Recovery Qualifier Limits Surrogate 39 - 146 4-Bromofluorobenzene (Surr) 94

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

Lab Sample ID: MB 885-1942/1-A

Matrix: Solid

Analysis Batch: 1998

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

Prep Batch: 1942

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] 10 03/19/24 12:03 03/19/24 18:15 mg/Kg ND Motor Oil Range Organics [C28-C40] 50 03/19/24 12:03 03/19/24 18:15 ND mg/Kg

Dil Fac Prepared Analyzed Di-n-octyl phthalate (Surr) 62 - 134 03/19/24 12:03 03/19/24 18:15 99

Lab Sample ID: LCS 885-1942/2-A

Released to Imaging: 7/30/2024 4:05:46 PM

Matrix: Solid

Analysis Batch: 1998

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 1942

%Rec

Spike LCS LCS Added Result Qualifier %Rec Limits **Analyte** Unit D 60 - 135 Diesel Range Organics 50.0 49.5 mg/Kg 99

[C10-C28]

LCS LCS

Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 96 62 - 134

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MB MB Qualifier Surrogate %Recovery Limits

MB MB

Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

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

Lab Sample ID: 885-1289-7 MS Client Sample ID: WES24-05 0.5'

Matrix: Solid

Analysis Batch: 1998

Prep Type: Total/NA Prep Batch: 1942

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 48.8 **Diesel Range Organics** ND 49.0 mg/Kg 101 44 - 136

[C10-C28]

MS MS Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 62 - 134 88

Client Sample ID: WES24-05 0.5'

Client Sample ID: Method Blank

Prep Type: Total/NA

Matrix: Solid

Lab Sample ID: 885-1289-7 MSD

Analysis Batch: 1998 Prep Batch: 1942 MSD MSD Sample Sample Spike

RPD Result Qualifier Added Result Qualifier Limits RPD Analyte Unit D %Rec Limit 49.5 **Diesel Range Organics** ND 50.5 mg/Kg 102 44 - 136 3 32

[C10-C28]

MSD MSD

MB MB

%Recovery Qualifier Limits Surrogate 62 - 134 Di-n-octyl phthalate (Surr) 91

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-2010/1-A

Matrix: Solid

Analysis Batch: 2062

Prep Type: Total/NA

Prep Batch: 2010

Dil Fac

Unit Analyte Result Qualifier RL D Prepared Analyzed 3.0 03/20/24 12:17 03/20/24 13:22 Chloride ND mg/Kg

Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

GC VOA

Prep Batch: 1849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1289-1	WES24-03 2'	Total/NA	Solid	5030C	
885-1289-2	WES24-04 2'	Total/NA	Solid	5030C	
885-1289-3	BES24-07 0.5'	Total/NA	Solid	5030C	
885-1289-4	BES24-15 0.5'	Total/NA	Solid	5030C	
885-1289-5	BES24-16 0.5'	Total/NA	Solid	5030C	
885-1289-6	BES24-17 0.5'	Total/NA	Solid	5030C	
885-1289-7	WES24-05 0.5'	Total/NA	Solid	5030C	
MB 885-1849/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-1849/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-1849/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-1289-1 MS	WES24-03 2'	Total/NA	Solid	5030C	
885-1289-1 MSD	WES24-03 2'	Total/NA	Solid	5030C	

Analysis Batch: 2109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1289-1	WES24-03 2'	Total/NA	Solid	8015D	1849
885-1289-2	WES24-04 2'	Total/NA	Solid	8015D	1849
885-1289-3	BES24-07 0.5'	Total/NA	Solid	8015D	1849
885-1289-4	BES24-15 0.5'	Total/NA	Solid	8015D	1849
885-1289-5	BES24-16 0.5'	Total/NA	Solid	8015D	1849
885-1289-6	BES24-17 0.5'	Total/NA	Solid	8015D	1849
885-1289-7	WES24-05 0.5'	Total/NA	Solid	8015D	1849
MB 885-1849/1-A	Method Blank	Total/NA	Solid	8015D	1849
LCS 885-1849/2-A	Lab Control Sample	Total/NA	Solid	8015D	1849

Analysis Batch: 2114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1289-1	WES24-03 2'	Total/NA	Solid	8021B	1849
885-1289-2	WES24-04 2'	Total/NA	Solid	8021B	1849
885-1289-3	BES24-07 0.5'	Total/NA	Solid	8021B	1849
885-1289-4	BES24-15 0.5'	Total/NA	Solid	8021B	1849
885-1289-5	BES24-16 0.5'	Total/NA	Solid	8021B	1849
885-1289-6	BES24-17 0.5'	Total/NA	Solid	8021B	1849
885-1289-7	WES24-05 0.5'	Total/NA	Solid	8021B	1849
MB 885-1849/1-A	Method Blank	Total/NA	Solid	8021B	1849
LCS 885-1849/3-A	Lab Control Sample	Total/NA	Solid	8021B	1849
885-1289-1 MS	WES24-03 2'	Total/NA	Solid	8021B	1849
885-1289-1 MSD	WES24-03 2'	Total/NA	Solid	8021B	1849

GC Semi VOA

Prep Batch: 1942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1289-1	WES24-03 2'	Total/NA	Solid	SHAKE	<u> </u>
885-1289-2	WES24-04 2'	Total/NA	Solid	SHAKE	
885-1289-3	BES24-07 0.5'	Total/NA	Solid	SHAKE	
885-1289-4	BES24-15 0.5'	Total/NA	Solid	SHAKE	
885-1289-5	BES24-16 0.5'	Total/NA	Solid	SHAKE	
885-1289-6	BES24-17 0.5'	Total/NA	Solid	SHAKE	
885-1289-7	WES24-05 0.5'	Total/NA	Solid	SHAKE	
MB 885-1942/1-A	Method Blank	Total/NA	Solid	SHAKE	

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Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

GC Semi VOA (Continued)

Prep Batch: 1942 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-1942/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-1289-7 MS	WES24-05 0.5'	Total/NA	Solid	SHAKE	
885-1289-7 MSD	WES24-05 0.5'	Total/NA	Solid	SHAKE	

Analysis Batch: 1998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1289-1	WES24-03 2'	Total/NA	Solid	8015D	1942
885-1289-2	WES24-04 2'	Total/NA	Solid	8015D	1942
885-1289-3	BES24-07 0.5'	Total/NA	Solid	8015D	1942
885-1289-4	BES24-15 0.5'	Total/NA	Solid	8015D	1942
885-1289-5	BES24-16 0.5'	Total/NA	Solid	8015D	1942
885-1289-6	BES24-17 0.5'	Total/NA	Solid	8015D	1942
885-1289-7	WES24-05 0.5'	Total/NA	Solid	8015D	1942
MB 885-1942/1-A	Method Blank	Total/NA	Solid	8015D	1942
LCS 885-1942/2-A	Lab Control Sample	Total/NA	Solid	8015D	1942
885-1289-7 MS	WES24-05 0.5'	Total/NA	Solid	8015D	1942
885-1289-7 MSD	WES24-05 0.5'	Total/NA	Solid	8015D	1942

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Prep Batch: 2010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1289-1	WES24-03 2'	Total/NA	Solid	300_Prep	_
885-1289-2	WES24-04 2'	Total/NA	Solid	300_Prep	
885-1289-3	BES24-07 0.5'	Total/NA	Solid	300_Prep	
885-1289-4	BES24-15 0.5'	Total/NA	Solid	300_Prep	
885-1289-5	BES24-16 0.5'	Total/NA	Solid	300_Prep	
885-1289-6	BES24-17 0.5'	Total/NA	Solid	300_Prep	
885-1289-7	WES24-05 0.5'	Total/NA	Solid	300_Prep	
MB 885-2010/1-A	Method Blank	Total/NA	Solid	300_Prep	

Analysis Batch: 2062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1289-2	WES24-04 2'	Total/NA	Solid	300.0	2010
885-1289-4	BES24-15 0.5'	Total/NA	Solid	300.0	2010
885-1289-5	BES24-16 0.5'	Total/NA	Solid	300.0	2010
885-1289-7	WES24-05 0.5'	Total/NA	Solid	300.0	2010
MB 885-2010/1-A	Method Blank	Total/NA	Solid	300.0	2010

Analysis Batch: 2473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1289-1	WES24-03 2'	Total/NA	Solid	300.0	2010
885-1289-3	BES24-07 0.5'	Total/NA	Solid	300.0	2010
885-1289-6	BES24-17 0.5'	Total/NA	Solid	300.0	2010

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Lab Chronicle

Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

Client Sample ID: WES24-03 2'

Date Collected: 03/13/24 10:00 Date Received: 03/15/24 07:40 Lab Sample ID: 885-1289-1

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8015D		1	2109	RA	EET ALB	03/20/24 18:46
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8021B		1	2114	RA	EET ALB	03/20/24 18:46
Total/NA	Prep	SHAKE			1942	JU	EET ALB	03/19/24 12:03
Total/NA	Analysis	8015D		1	1998	DH	EET ALB	03/19/24 23:25
Total/NA	Prep	300_Prep			2010	JT	EET ALB	03/20/24 12:17
Total/NA	Analysis	300.0		100	2473	KB	EET ALB	03/28/24 15:34

Client Sample ID: WES24-04 2'

Date Collected: 03/13/24 10:05 Date Received: 03/15/24 07:40 Lab Sample ID: 885-1289-2

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8015D		1	2109	RA	EET ALB	03/20/24 19:51
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8021B		1	2114	RA	EET ALB	03/20/24 19:51
Total/NA	Prep	SHAKE			1942	JU	EET ALB	03/19/24 12:03
Total/NA	Analysis	8015D		1	1998	DH	EET ALB	03/19/24 23:49
Total/NA	Prep	300_Prep			2010	JT	EET ALB	03/20/24 12:17
Total/NA	Analysis	300.0		20	2062	KB	EET ALB	03/20/24 14:43

Client Sample ID: BES24-07 0.5'

Date Collected: 03/13/24 10:10

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1289-3

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8015D		1	2109	RA	EET ALB	03/20/24 20:13
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8021B		1	2114	RA	EET ALB	03/20/24 20:13
Total/NA	Prep	SHAKE			1942	JU	EET ALB	03/19/24 12:03
Total/NA	Analysis	8015D		1	1998	DH	EET ALB	03/20/24 00:12
Total/NA	Prep	300_Prep			2010	JT	EET ALB	03/20/24 12:17
Total/NA	Analysis	300.0		50	2473	KB	EET ALB	03/28/24 15:46

Client Sample ID: BES24-15 0.5'

Date Collected: 03/13/24 10:15

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1289-4

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8015D		1	2109	RA	EET ALB	03/20/24 20:35

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Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

Client: Vertex

Client Sample ID: BES24-15 0.5'

Date Collected: 03/13/24 10:15 Date Received: 03/15/24 07:40 Lab Sample ID: 885-1289-4

Matrix: Solid

Batch Batch Dilution **Prepared** Batch **Prep Type** Method **Factor** Number Analyst or Analyzed Type Run Lab Total/NA 5030C 1849 IMR EET ALB 03/18/24 11:35 Prep Total/NA 8021B 03/20/24 20:35 2114 RA Analysis 1 **EET ALB** Total/NA Prep SHAKE 1942 JU **EET ALB** 03/19/24 12:03 Total/NA Analysis 8015D 1998 DH **EET ALB** 03/20/24 00:36 1 Total/NA 300 Prep 2010 JT **EET ALB** 03/20/24 12:17 Prep 2062 KB Total/NA Analysis 300.0 20 **EET ALB** 03/20/24 15:08

Client Sample ID: BES24-16 0.5'

Date Collected: 03/13/24 10:20 Date Received: 03/15/24 07:40 Lab Sample ID: 885-1289-5

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8015D		1	2109	RA	EET ALB	03/20/24 20:56
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8021B		1	2114	RA	EET ALB	03/20/24 20:56
Total/NA	Prep	SHAKE			1942	JU	EET ALB	03/19/24 12:03
Total/NA	Analysis	8015D		1	1998	DH	EET ALB	03/20/24 00:59
Total/NA	Prep	300_Prep			2010	JT	EET ALB	03/20/24 12:17
Total/NA	Analysis	300.0		20	2062	KB	EET ALB	03/20/24 15:20

Client Sample ID: BES24-17 0.5'

Date Collected: 03/13/24 10:25

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1289-6

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8015D		1	2109	RA	EET ALB	03/20/24 21:18
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8021B		1	2114	RA	EET ALB	03/20/24 21:18
Total/NA	Prep	SHAKE			1942	JU	EET ALB	03/19/24 12:03
Total/NA	Analysis	8015D		1	1998	DH	EET ALB	03/20/24 01:23
Total/NA	Prep	300_Prep			2010	JT	EET ALB	03/20/24 12:17
Total/NA	Analysis	300.0		50	2473	KB	EET ALB	03/28/24 15:59

Client Sample ID: WES24-05 0.5'

Date Collected: 03/13/24 10:40

Date Received: 03/15/24 07:40

Lab Sample ID: 885-1289-7

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8015D		1	2109	RA	EET ALB	03/20/24 21:40
Total/NA	Prep	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8021B		1	2114	RA	EET ALB	03/20/24 21:40

Lab Chronicle

Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

Client Sample ID: WES24-05 0.5'

Lab Sample ID: 885-1289-7

Date Collected: 03/13/24 10:40 Matrix: Solid

Date Received: 03/15/24 07:40

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	SHAKE			1942	JU	EET ALB	03/19/24 12:03
Total/NA	Analysis	8015D		1	1998	DH	EET ALB	03/20/24 01:47
Total/NA	Prep	300_Prep			2010	JT	EET ALB	03/20/24 12:17
Total/NA	Analysis	300.0		20	2062	KB	EET ALB	03/20/24 15:45

Laboratory References:

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

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Accreditation/Certification Summary

Client: Vertex Job ID: 885-1289-1

Project/Site: JRU DI 1A CTB

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 Or	ganics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organ	nics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Or	ganics [C28-C40]
8021B	5030C	Solid	Benzene	
8021B	5030C	Solid	Ethylbenzene	
8021B	5030C	Solid	Toluene	
8021B	5030C	Solid	Xylenes, Total	
Oregon	NELA	P	NM100001	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
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

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885-1289 COC

Chain of Custody

STEDING STE	Environment Testing Xenco	Houstor Midland TX (43 EL Paso	Houston TX (281) 240-4200 Dallas TX (214) 902-0300 Aldland TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso TX (915) 585-3443, Lubbock, TX (806) 794-1296	REMARKS: Direct Bill to XTO Energy, Inc., Cost Center #: 1082151001, Incident #: nAPP2331041267 CC. Chance Dixon (CDixon@vertex.ca) for Final
CC CD!	CC CDixon@vertex.ca for Final Report	N sddoH	MM (575) 392-7550 Carlsbad NM (575) 988-3199	Report.
				www.xenco.com Page 1 of 1
Project Manager	Chance Dixon (CDixon@vertex ca)	Bill to: (if different)	Bill to: (if different) XTO Energy, Inc	Work Order Comments
Sompany Name:	Vertex Resource Services	Company Name	XTO Energy, Inc	Program UST/PST PRP Brownfields RR Superfund
Adress:	3101 Boyd Drive	Address.	3104 E Greene St	State of Project,

Company Name Comp	XTO Energy, Inc		AM	Work Order Comments	ents	
Company Name Vorticx Resource Services Company Name XTOE Address 3101 Boyd Drive Carlsbad NM, 8220 Emel CC CDixon@vertex, ca for I Project Location: S75 725 5001 Emel CC CDixon@vertex, ca for I Project Location: S75 725 5001 Emel CC CDixon@vertex, ca for I Project Location: S75 725 5001 Emel CC CDixon@vertex, ca for I Project Location: S75 725 5001 Emel CC CDixon@vertex, ca for I Project Location: S75 725 5001 Emel CC CDixon@vertex, ca for I Project Location: S75 725 5001 Due Date S100 Project Location: Sample's Name Deutsavan Costa Town Plank Yes (No West town Yes No Thermometer ID No Town Sample Identification Matrix Date Sampled Time Sample Identification X BES24-17 0.5 Soil 03.13.24 10:00 2.5 Com X BES24-17 0.5 Soil 03.13.24 10:10 0.5 Com X BES24-10 0.5 Soil 03.13.24 10:10 0.5 Com X BES24-10 0.5 Soil 03.13.24 10:10 0.5 Com X BES24-10 0.5 Soil 03.13.24 10:20 0.5 Com X BES24-10 0.5 Soil 03.13.24 10:10 0.5 Com X BES24-10 0.5 Soil 03.13.24 10:20 Soi						
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Priore First CC Dixon@vertex.ca for	Carlsbad NM, 88220		Reporting Level II Legy	प्लुखा॥ Pstraust	TRR Levelly	
Project Name	for Final Report		Deliverables, EDD	☐ ADaPT	Other	
Project Number 23E-04616 Routing Routi		ANALYSIS REQUEST	UEST		Preservative Codes	
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Login Sample Receipt Checklist

Client: Vertex Job Number: 885-1289-1

List Source: Eurofins Albuquerque Login Number: 1289

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/2/2024 9:29:58 PM

JOB DESCRIPTION

JRU DI 1A CTB

JOB NUMBER

885-1341-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

Released to Imaging: 7/30/2024 4:05:46 PM

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

Page 2 of 21 4/2/2024

Laboratory Job ID: 885-1341-1

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

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Definitions/Glossary

Client: Vertex Job ID: 885-1341-1

Project/Site: JRU DI 1A CTB

Qualifiers

HPLC/IC

Qualifier **Qualifier Description**

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 Contains Free Liquid **CFL** 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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE) LOQ

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)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) TEQ

TNTC Too Numerous To Count

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Case Narrative

Client: Vertex Job ID: 885-1341-1

Project: JRU DI 1A CTB

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.

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Project/Site: JRU DI 1A CTB

Client: Vertex

Client Sample ID: WES24-06 0-0.5'

Data Collected: 02/14/24 10:30

Date Collected: 03/14/24 10:30 Date Received: 03/16/24 08:05 Lab Sample ID: 885-1341-1

Matrix: Solid

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

Analyte	Result Qu	ualifier	RL Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	0.0	24 mg/Kg		03/19/24 11:34	03/23/24 05:55	1
Ethylbenzene	ND	0.0	48 mg/Kg		03/19/24 11:34	03/23/24 05:55	1
Toluene	ND	0.0	48 mg/Kg		03/19/24 11:34	03/23/24 05:55	1
Xylenes, Total	ND	0.0	95 mg/Kg		03/19/24 11:34	03/23/24 05:55	1
Surrogate	%Recovery Qu	ualifier Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90	39 - 14	6		03/19/24 11:34	03/23/24 05:55	1

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, lo	n 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 - Gaso	line 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 4-Bromofluorobenzene (Surr)	%Recovery 103	Qualifier	Limits 15 - 244		Prepared 03/19/24 11:34	Analyzed 03/23/24 06:17	Dil Fac

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 (I	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

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Client Sample Results

Client: Vertex Job ID: 885-1341-1

Project/Site: JRU DI 1A CTB

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

Surrog	gate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-od	ctyl 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 Prepared Analyzed Dil Fac Chloride 320 60 mg/Kg 03/19/24 13:43 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

Method: SW846 8015D - Gaso	line 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

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 - Diese	I Range Organics (D	RO) (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, Id	on 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' Lab Sample ID: 885-1341-4 Date Collected: 03/14/24 11:30 **Matrix: Solid**

Date Received: 03/16/24 08:05

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

Project/Site: JRU DI 1A CTB

Client: Vertex

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

Lab Sample ID: 885-1341-5

Matrix: Solid

Matrix: Solid

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 - Diese Analyte		ganics (DF Qualifier	RO) (GC) 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

Method: SW846 8015D - Gaso	line 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		

Analyte	Result Qualifier	ds (GC) 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

Analyte	Result Qualifi	er 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 Qualifi	er Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	68	62 - 134			03/20/24 08:58	03/20/24 19:04	

RL

60

Unit

mg/Kg

Prepared

03/19/24 14:21 03/19/24 18:59

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Analyzed

Result Qualifier

130

Dil Fac

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Analyte

Chloride

Project/Site: JRU DI 1A CTB

Client: Vertex

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

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 - Volat Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
				Unit	п	Prenared	Analyzed	Dil Fac
				Unit mg/Kg	<u>D</u>	Prepared 03/19/24 11:34	Analyzed 03/23/24 07:45	Dil Fac
Analyte Benzene	Result		RL		<u>D</u>	<u> </u>		Dil Fac
Analyte Benzene	Result		RL 0.023	mg/Kg	<u>D</u>	03/19/24 11:34	03/23/24 07:45	1 1 1
Analyte Benzene Ethylbenzene	Result ND ND		RL 0.023 0.046	mg/Kg mg/Kg	<u>D</u>	03/19/24 11:34 03/19/24 11:34	03/23/24 07:45 03/23/24 07:45	1 1 1 1
Analyte Benzene Ethylbenzene Toluene	Result ND ND ND	Qualifier	0.023 0.046 0.046	mg/Kg mg/Kg mg/Kg	<u>D</u>	03/19/24 11:34 03/19/24 11:34 03/19/24 11:34	03/23/24 07:45 03/23/24 07:45 03/23/24 07:45	Dil Fac 1 1 1 1 Dil Fac

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

Wethou: EPA 300.0 - Anions, i	ograpny							
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

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 1938

Prep Batch: 1929

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Project/Site: JRU DI 1A CTB

Client: Vertex

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

Lab Sample ID: MB 885-1929/1-A

Matrix: Solid

Analysis Batch: 2216

MB MB Result Qualifier RL Unit D Analyzed Dil Fac Analyte Prepared Gasoline Range Organics [C6 - C10] 03/19/24 10:24 03/22/24 12:30 ND 5.0 mg/Kg

MB MB

%Recovery Surrogate Qualifier Limits Prepared Analyzed Dil Fac 03/19/24 10:24 03/22/24 12:30 4-Bromofluorobenzene (Surr) 99 15 - 244

Lab Sample ID: MB 885-1938/1-A

Matrix: Solid

Analysis Batch: 2216

MB MB

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Gasoline Range Organics [C6 - C10] ND 5.0 mg/Kg 03/19/24 11:34 03/22/24 23:22

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 03/19/24 11:34 03/22/24 23:22 102 15 - 244

23.0

mg/Kg

Lab Sample ID: LCS 885-1938/2-A

Matrix: Solid

Analysis Batch: 2216

Client Sample ID: Lab Control Sample

92

Prep Type: Total/NA Prep Batch: 1938

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits

25.0

Gasoline Range Organics [C6 -

C10]

LCS LCS

%Recovery Qualifier Limits Surrogate 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

70 - 130

Prep Type: Total/NA

Prep Batch: 1929

MB MB

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac ND Benzene 0.025 mg/Kg 03/19/24 10:24 03/22/24 12:30 Ethylbenzene ND 0.050 mg/Kg 03/19/24 10:24 03/22/24 12:30 Toluene ND 0.050 mg/Kg 03/19/24 10:24 03/22/24 12:30 Xylenes, Total ND 0.10 03/19/24 10:24 03/22/24 12:30 mg/Kg

MB MB

%Recovery Surrogate Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 89 39 - 146

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

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Benzene ND 0.025 mg/Kg 03/19/24 11:34 03/22/24 23:22 03/19/24 11:34 03/22/24 23:22 Ethylbenzene ND 0.050 mg/Kg

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 Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 2224** Prep Batch: 1938 MR ME

	IVID I	AID						
Analyte	Result (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
	MB I	МВ						

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 91 39 - 146 03/19/24 11:34 03/22/24 23:22

Lab Sample ID: LCS 885-1938/3-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 2224 Prep Batch: 1938

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%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	
	LCS LCS							

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 39 - 146 91

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

Lab Sample ID: MB 885-1985/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 2016** Prep Batch: 1985

MB MB Unit Result Qualifier RL Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] 10 $\overline{\mathsf{ND}}$ mg/Kg Motor Oil Range Organics [C28-C40] ND 50 mg/Kg 03/20/24 08:58 03/20/24 14:47

MB MB Qualifier Surrogate %Recovery Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 89 62 - 134 03/20/24 08:58 03/20/24 14:47

Lab Sample ID: LCS 885-1985/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 2016 Prep Batch: 1985 Spike LCS LCS %Rec Analyte Added Result Qualifier Limits Unit %Rec

Diesel Range Organics 50.0 44.5 mg/Kg 89 60 - 135 [C10-C28]

LCS LCS Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 62 - 134 89

Client: Vertex Job ID: 885-1341-1

Project/Site: JRU DI 1A CTB

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

Lab Sample ID: 885-1341-6 MS Client Sample ID: BES24-226 1.25' Prep Type: Total/NA

Matrix: Solid Analysis Batch: 2016

Prep Batch: 1985 Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Unit %Rec Limits D 48.5 **Diesel Range Organics** ND 40.5 mg/Kg 83 44 - 136

[C10-C28]

Analyte

MS MS %Recovery Qualifier Limits Surrogate Di-n-octyl phthalate (Surr) 62 - 134 65

Lab Sample ID: 885-1341-6 MSD

Matrix: Solid

Analysis Batch: 2016

Prep Batch: 1985 MSD MSD Sample Sample Spike %Rec **RPD** Result Qualifier Added Result Qualifier Limits RPD Analyte Unit D %Rec Limit 49 7 2 **Diesel Range Organics** ND 41.1 mg/Kg 83 44 - 136 32

[C10-C28]

MSD MSD

%Recovery Qualifier I imite Surrogate 66

62 - 134 Di-n-octyl phthalate (Surr)

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-1946/1-A

Matrix: Solid

Analysis Batch: 2019

MR MR

Analyte Result Qualifier RL Unit Analyzed Dil Fac Prepared 3.0 Chloride ND 03/19/24 13:43 03/19/24 16:35 mg/Kg

Lab Sample ID: LCS 885-1946/2-A

Matrix: Solid

Analysis Batch: 2019

%Rec Spike LCS LCS Added Result Qualifier %Rec Limits Analyte Unit D 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

Client Sample ID: BES24-226 1.25

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 1946

Prep Batch: 1946

MB MB

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride ND 3.0 mg/Kg 03/19/24 14:21 03/19/24 17:33

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 MB MB

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride ND 3.0 mg/Kg 03/19/24 14:21 03/20/24 12:20

QC Sample Results

Client: Vertex Job ID: 885-1341-1

Project/Site: JRU DI 1A CTB

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-1949/2-A				Clien	t Sai	mple ID	: Lab Cor	itrol Sample
Matrix: Solid							Prep Ty	pe: Total/NA
Analysis Batch: 2271							Prep	Batch: 1949
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	30.0	29.1		mg/Kg		97	90 - 110	

Lab Sample ID: LCS 885-1949/2-A				Clien	it Sar	nple ID	: Lab Control Sam	ıple
Matrix: Solid							Prep Type: Total	/NA
Analysis Batch: 2062							Prep Batch: 1	949
_	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	30.0	29.0		ma/Ka		97	90 110	

Lab Sample ID: 885-1341-4 MS Matrix: Solid Analysis Batch: 2271							Client	t Sampl	Prep Ty	24-213 1.25' pe: Total/NA Batch: 1949
•	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	ND		30.2	79.2		mg/Kg		NC	50 - 150	

Lab Sample ID: 885-1341-4 MS Matrix: Solid Analysis Batch: 2271	SD						Client	t Sampl	le ID: BES Prep Ty Prep		al/NA
•	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	ND		29.9	79.2		mg/Kg		NC	50 - 150	0	20

Matrix: Solid Analysis Batch: 2271									Prep Ty Prep	pe: Tota Batch:	
-	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	130		29.9	152	4	mg/Kg		82	50 - 150		

Lab Sample ID: 885-1341-5 MSD							Client	Sampl	e ID: BES	24-225	1.25'
Matrix: Solid									Prep Ty	pe: Tot	al/NA
Analysis Batch: 2271									Prep	Batch:	1949
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	130		29.7	150	4	ma/Ka		77	50 - 150		20

Client Sample ID: BES24-225 1.25'

Lab Sample ID: 885-1341-5 MS

Client: Vertex

Job ID: 885-1341-1 Project/Site: JRU DI 1A CTB

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	

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Client: Vertex Job ID: 885-1341-1

Project/Site: JRU DI 1A CTB

GC Semi VOA (Continued)

Prep	Batch: 1985	(Continued)
		100

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	35-1341-3 WES24-08 0-0.5'		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 885-1341-1	Client Sample ID WES24-06 0-0.5'	Prep Type Total/NA	Matrix Solid	Method 300.0	Prep Batch 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

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Client: Vertex Job ID: 885-1341-1

Project/Site: JRU DI 1A CTB

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

Client: Vertex

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

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	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

Lab Sample ID: 885-1341-2 Client Sample ID: WES24-07 0-0.5'

Date Collected: 03/14/24 10:35

Date Received: 03/16/24 08:05

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	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'

Date Collected: 03/14/24 10:40

Date Received: 03/16/24 08:05

Lab Sample ID: 885-1341-3

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	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'

Date Collected: 03/14/24 11:30

Date Received: 03/16/24 08:05

Lab Sample ID: 885-1341-4

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	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

Project/Site: JRU DI 1A CTB

Client: Vertex

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

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	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'

Date Collected: 03/14/24 11:35 Date Received: 03/16/24 08:05 Lab Sample ID: 885-1341-5

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	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'

Date Collected: 03/14/24 11:40 Date Received: 03/16/24 08:05 Lab Sample ID: 885-1341-6

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	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 Job ID: 885-1341-1

Project/Site: JRU DI 1A CTB

Laboratory: Eurofins Albuquerque

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

authority	Progr	am	Identification Number	Expiration Date
ew Mexico	State		NM9425, NM0901	02-26-25
,	s are included in this repo does not offer certification		not certified by the governing autho	ority. This list may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
300.0	300_Prep	Solid	Chloride	
8015D	5030C	Solid	Gasoline Range Organi	ics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics	[C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organ	ics [C28-C40]
8021B	5030C	Solid	Benzene	
8021B	5030C	Solid	Ethylbenzene	
8021B	5030C	Solid	Toluene	
8021B	5030C	Solid	Xylenes, Total	
regon	NELA	P	NM100001	02-26-25

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REMARKS: Direct Bill to XTO Energy, Inc., cost Center #: 1082151001, Incident #: nAPP2331041267 CC. Chance Dixon (CDixon@vertex.ca) for Final

885-1341 COC

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Chain of Custody

EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334

Environment Testing

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	Chance Dixon (CDixon(a) vertex.ca)	Dixon	avertex.ca)		Bill to: (if different)	grenty	XTO	XTO Energy, Inc.						WORK	Work Order Comments	ents		
Company Name:	Vertex Resource Services	Service	N		Company Name:	ame:	XTO	XTO Energy, Inc.	JC.			Program	Program: UST/PST	æ	Brownflolds	RR	Superfund	
Address:	3101 Boyd Drive				Address:		3104	3104 E. Greene St	St			State of	State of Project:		1		ı	
City, State ZIP:	Carlsbad NM, 88220	3220			City, State ZIP	JIP.	Carls	Carlsbad NM, 88220	8220			Reportir	Reporting: Level II		PSTIJUST	TRR	Leve	
Phone:	575.725.5001			Email: CC:		on@vert	ex.ca for	CDixon@vertex.ca for Final Report	ort			Delivera	Deliverables: EDD		ADaPT		Other	
Project Name:	JRU DI 1A CTB			Turn Around	punc						NALYSK	ANALYSIS REQUEST				Preser	Preservative Codes	_
Project Number:	23E-04616			Routine X	Rush	Pres.	j .		_		_		_			None: NO	DI Wat	DI Water: H ₂ O
Project Location:				Due Date:	200	NIK							-			Cool: Cool	MeOH: Me	Me
Sampler's Name:	Deusavan Costa			TAT starts the day received by the	y received b	y the		/ 0	-				_			HCL: HC	HNO3: HN	Z
PO #:				lab, if received by 4:30	y 4:30pm		(17	DK					_			H2SO4 H2	NaOH: Na	Na
SAMPLE RECEIPT	Temp Blank	¥	Yes No	Wet Ice:	Yes No		08)		_							н₃РО4 НР		
Samples Received Intact:	Yes No	0	Thermometer ID				X	(O:	birid				_			NaHSO4 NABIS	BIS	
Cooler Custody Seals:	Yes No N	N/A	Correction Factor	tor		E191	TE	MB	0111				_			Na ₂ S ₂ O ₃ : NaSO ₃	SO ₃	
Sample Custody Seals:	Yes No N	N/A	Temperature Reading:	eading:		ew	E		_							Zn Acetate+NaOH: Zn	VaOH: Zn	
Total Containers:			Corrected Temperature:	perature:		Para)8:I			_					NaOH+Asco.	NaOH+Ascorbic Acid SAPC	
Sample Identification	ion	Matrix	Date Sampled Time		Depth	Grab/ # of	L	IdI								Sample	Sample Comments	
				Sampled		Comp Cont	ŧ										341	
WES24-06 0-0.5'		Soil	03.14.24	10:30	1	Com	×	×	×									
WES24-07 0-0.5'		Soil	03.14.24	10:35	1	Com	×	X	x							2		
WES24-08 0-0.5'		Soil	03.14.24	10:40	1	Com	×	×	X							,* 1	3	
BES24-213 1.25'		Soil	03.14.24	11:30	1	Com	×	X	×							7		
BES24-225 1.25'		Soil	03.14.24	11:35	1	Com	×	X	X							5	5	
BES24-226 1.25'		Soil	03.14.24	11:40	1	Com	X	X	×							3		
						+	+	#	+				+	+				
						+	+		+	1	-		+	1				
Total 200.7 / 6010	200.8 / 6020:		8RC	BRCRA 13PPM 1	Texas 11 Al Sb	Al Sb As	As Ba Be	B Cd Ca	ပီ ပ	Co Cu Fe Pb Mg Mn Mo Ni K	Mg Mn		Se Ag SiO ₂ Na	က်	TI Sn U V Zn			
Circle Method(s) and Metal(s) to be analyzed	fletal(s) to be analy	/zed		TCLP / SPLP 601	6010: BRCRA	CRA Sb	As	Be Cd C	Co Co	Ba Be Cd Cr Co Cu Pb Mn Mo Ni	o Ni Se Ag				Hg: 1631 / 245.1 / 7470 / 7471	5.1/7470/	7471	
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofina Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofina 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 and a character of \$5 for each samples submitted to Eurofina Xenco. But not analyzed, These terms will be enforced unless previously negociates and a character of \$5 for each sample submitted to Eurofina Xenco. But not analyzed, These terms will be enforced unless previously negociates	ment and relinquishmer Il be liable only for the contract of \$85.00 will be	ost of sample	ples and shall not	alid purchase orderseume any responsable to charge of \$5 for	r from client or naibility for an	y losses or e	urofins Xend ixpenses inc Eurofins Xe	o, its affillate urred by the	lent if such	ntractors. It as losses are du	seigns stand e to circums be enforced	client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions by for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control sample submitted to Eurofins. Astroc. but not analyzed. These terms will be enforced unless previously needstand.	litions control sootlated.		20-6'0	0	4 76.0	
Relinquished by: (Signature)	gnature)		Received t	Received by: (Signature)		-	Date/Time	ime	Re	Relinquished by: (Signature)	by: (Signa	iture)	Rece	Received by: (Signature)	ignature)		Date/Time	-
		3	MILLIALA	Sans		30	H2 51 9	da01 +	20		١		an	N	Center	1	Shelv	1 0805
		_							4									

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-1341-1

List Source: Eurofins Albuquerque Login Number: 1341

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	

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/18/2024 12:05:01 PM

JOB DESCRIPTION

JRU DI IA CTB

JOB NUMBER

885-2783-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization

Generated 4/18/2024 12:05:01 PM

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

Client: Vertex

Laboratory Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

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Definitions/Glossary

Client: Vertex Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

Qualifiers

HPLC/IC

Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

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 Job ID: 885-2783-1

Project: JRU DI IA CTB

Job ID: 885-2783-1 Eurofins Albuquerque

Job Narrative 885-2783-1

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

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

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

Receipt

The samples were received on 4/12/2024 7:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.9°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

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 Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-78412 and analytical batch 880-78530 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.

WES24-09 2ft (885-2783-1), BES24-07 1.5ft (885-2783-2) and BES24-16 1ft (885-2783-3)

Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-78412 and analytical batch 880-78530 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.

BES24-17 1ft (885-2783-4), WES24-10 0.5ft (885-2783-5), (885-2783-B-4-B MS) and (885-2783-B-4-C MSD)

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

Eurofins Albuquerque

2

3

4

5

9

10

Client: Vertex Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

Client Sample ID: WES24-09 2ft

Lab Sample ID: 885-2783-1

Date Collected: 04/08/24 10:00 **Matrix: Solid** Date Received: 04/12/24 07:50

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 17:15	04/16/24 21:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/12/24 17:15	04/16/24 21:28	1
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 17:15	04/16/24 21:28	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 17:15	04/16/24 21:28	1
Toluene	ND		0.048	mg/Kg		04/12/24 17:15	04/16/24 21:28	1
Xylenes, Total	ND		0.096	mg/Kg		04/12/24 17:15	04/16/24 21:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			04/12/24 17:15	04/16/24 21:28	1
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		04/15/24 13:24	04/15/24 19:17	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/15/24 13:24	04/15/24 19:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			04/15/24 13:24	04/15/24 19:17	1
Method: EPA 300.0 - Anions,	on Chroma	tography -	Soluble					
					_			
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Vertex Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

Client Sample ID: BES24-07 1.5ft

Date Collected: 04/09/24 10:00 Date Received: 04/12/24 07:50 Lab Sample ID: 885-2783-2

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 17:15	04/16/24 22:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		15 - 244			04/12/24 17:15	04/16/24 22:35	1
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 17:15	04/16/24 22:35	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 17:15	04/16/24 22:35	1
Toluene	ND		0.048	mg/Kg		04/12/24 17:15	04/16/24 22:35	1
Xylenes, Total	ND		0.097	mg/Kg		04/12/24 17:15	04/16/24 22:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		39 - 146			04/12/24 17:15	04/16/24 22:35	1
Method: SW846 8015D - Diese	l Range Or	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		04/15/24 13:24	04/15/24 19:29	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/15/24 13:24	04/15/24 19:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98	· 	62 - 134			04/15/24 13:24	04/15/24 19:29	1

50

Unit

mg/Kg

Result Qualifier

2700

Analyzed

04/17/24 22:38

Prepared

Dil Fac

10

Analyte

Chloride

Client: Vertex Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

Client Sample ID: BES24-16 1ft

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

Lab Sample ID: 885-2783-3 Date Collected: 04/09/24 10:30

Matrix: Solid

Date	Received:	04/12/24	07:50

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 17:15	04/16/24 23:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/12/24 17:15	04/16/24 23:42	1
- Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 17:15	04/16/24 23:42	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 17:15	04/16/24 23:42	1
Toluene	ND		0.048	mg/Kg		04/12/24 17:15	04/16/24 23:42	1
Xylenes, Total	ND		0.096	mg/Kg		04/12/24 17:15	04/16/24 23:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Juliogate						04/12/24 17:15	04/16/24 23:42	

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	8.9	mg/Kg		04/15/24 13:24	04/15/24 19:41	1
Motor Oil Range Organics [C28-C40]	ND	44	mg/Kg		04/15/24 13:24	04/15/24 19:41	1
Surrogate	%Recovery Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100	62 - 134			04/15/24 13:24	04/15/24 19:41	1

Method: EPA 300.0 - Anions, Id	on Chromatog	graphy - So	oluble					
Analyte	Result Q	ualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4300		100	mg/Kg			04/17/24 22:43	20

Client: Vertex Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

Client Sample ID: BES24-17 1ft

Date Collected: 04/09/24 12:00

Date Received: 04/12/24 07:50

Surrogate

Analyte

Chloride

Di-n-octyl phthalate (Surr)

Lab Sample ID: 885-2783-4

Prepared

Prepared

D

Analyzed

Analyzed

04/17/24 22:48

Matrix: Solid

Method: SW846 8015D - Gaso	line Range	Organics (GRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/12/24 17:15	04/17/24 00:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/12/24 17:15	04/17/24 00:04	1
- Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/12/24 17:15	04/17/24 00:04	1
Ethylbenzene	ND		0.046	mg/Kg		04/12/24 17:15	04/17/24 00:04	1
Toluene	ND		0.046	mg/Kg		04/12/24 17:15	04/17/24 00:04	1
Xylenes, Total	ND		0.092	mg/Kg		04/12/24 17:15	04/17/24 00:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			04/12/24 17:15	04/17/24 00:04	1
- Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.7	mg/Kg		04/15/24 13:24	04/15/24 19:54	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/15/24 13:24	04/15/24 19:54	1

Limits

62 - 134

51

Unit

mg/Kg

%Recovery

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

99

Result Qualifier

770 F1

Qualifier

Dil Fac

Dil Fac

Client: Vertex Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

Chloride

Client Sample ID: WES24-10 0.5ft Lab Sample ID: 885-2783-5

Date Collected: 04/09/24 12:30 **Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/12/24 17:15	04/17/24 00:26	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	101		15 - 244			04/12/24 17:15	04/17/24 00:26	
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.024	mg/Kg		04/12/24 17:15	04/17/24 00:26	
Ethylbenzene	ND		0.049	mg/Kg		04/12/24 17:15	04/17/24 00:26	
Toluene	ND		0.049	mg/Kg		04/12/24 17:15	04/17/24 00:26	
Xylenes, Total	ND		0.098	mg/Kg		04/12/24 17:15	04/17/24 00:26	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	89		39 - 146			04/12/24 17:15	04/17/24 00:26	
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	ND		8.4	mg/Kg		04/15/24 13:24	04/15/24 20:06	
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		04/15/24 13:24	04/15/24 20:06	
	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Surrogate	70110001019							

25

mg/Kg

100

04/17/24 23:02

Job ID: 885-2783-1

Prep Type: Total/NA

Prep Batch: 3206

Dil Fac

Dil Fac

Dil Fac

Dil Fac

Client Sample ID: Method Blank

04/12/24 13:27 04/16/24 10:07

Analyzed

Analyzed

Client: Vertex Project/Site: JRU DI IA CTB

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

RL

5.0

RL

5.0

Unit

Unit

LCS LCS

MS MS

MSD MSD

Qualifier

Result

24.0

23.5

Result Qualifier

26.9

Result Qualifier

mg/Kg

Unit

Unit

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Lab Sample ID: MB 885-3206/1-A **Matrix: Solid**

Gasoline Range Organics [C6 - C10]

Analysis Batch: 3430

MB MB Result Qualifier Analyte

MB MB Surrogate %Recovery

111

Qualifier

Limits 15 - 244

04/12/24 13:27 04/16/24 10:07

Prepared

Prepared

%Rec

%Rec

%Rec

99

108

Prepared

Prepared

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 3240

Analyzed

Analyzed

MB MB

ND

Analysis Batch: 3430

Matrix: Solid

4-Bromofluorobenzene (Surr)

Analyte Gasoline Range Organics [C6 - C10]

Lab Sample ID: MB 885-3240/1-A

Surrogate

4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885-3240/2-A

ND MB MB

Result Qualifier

%Recovery Qualifier 102

Limits 15 - 244

04/12/24 17:15 04/16/24 21:06

%Rec

Limits

70 - 130

04/12/24 17:15 04/16/24 21:06

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

Prep Batch: 3240

Matrix: Solid

Analysis Batch: 3430

Analyte Gasoline Range Organics [C6 -C10]

Surrogate

4-Bromofluorobenzene (Surr)

226

LCS LCS %Recovery Qualifier

Sample Sample

MS MS

Sample Sample

Result

ND

Qualifier

Qualifier

ND

224

%Recovery

Result Qualifier

Limits 15 - 244

Spike

Added

Limits

15 - 244

Spike

Added

24.2

24.3

Spike

Added

25.0

Lab Sample ID: 885-2783-1 MS

Matrix: Solid

Analysis Batch: 3430

Gasoline Range Organics [C6 -C10]

Surrogate 4-Bromofluorobenzene (Surr)

Lab Sample ID: 885-2783-1 MSD **Matrix: Solid**

Analysis Batch: 3430

Analyte

Gasoline Range Organics [C6 -C10]

Released to Imaging: 7/30/2024 4:05:46 PM

Surrogate 4-Bromofluorobenzene (Surr)

MSD MSD %Recovery Qualifier 224

Limits 15 - 244 Client Sample ID: WES24-09 2ft

Prep Type: Total/NA

Prep Batch: 3240

Limits

%Rec

70 - 130

Client Sample ID: WES24-09 2ft

Prep Type: Total/NA Prep Batch: 3240

RPD %Rec RPD Limits Limit 70 - 130

Client: Vertex Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3206/1-A

Matrix: Solid Analysis Batch: 3432 **Client Sample ID: Method Blank** Prep Type: Total/NA

Prep Batch: 3206

Prep Batch: 3240

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Toluene	ND		0.050	mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 13:27	04/16/24 10:07	1

MB MB

Surrogate %Recovery Qualifier Limits Prepared Dil Fac Analyzed 4-Bromofluorobenzene (Surr) 39 - 146 04/12/24 13:27 04/16/24 10:07 97

Lab Sample ID: MB 885-3240/1-A **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 3432

MB MB Analyte Result Qualifier RL Unit D Prepared Dil Fac Analyzed Benzene ND 0.025 mg/Kg 04/12/24 17:15 04/16/24 21:06 Ethylbenzene ND 0.050 mg/Kg 04/12/24 17:15 04/16/24 21:06 Toluene ND mg/Kg 04/12/24 17:15 04/16/24 21:06 0.050 ND Xylenes, Total 0.10 mg/Kg 04/12/24 17:15 04/16/24 21:06

MB MB

%Recovery Qualifier Surrogate Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 90 39 - 146 04/12/24 17:15 04/16/24 21:06

Lab Sample ID: LCS 885-3240/3-A

Matrix: Solid

Analysis Batch: 3432

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

Prep Batch: 3240

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	1.00	0.962		mg/Kg		96	70 - 130	
Ethylbenzene	1.00	0.971		mg/Kg		97	70 - 130	
m,p-Xylene	2.00	1.95		mg/Kg		98	70 - 130	
o-Xylene	1.00	0.988		mg/Kg		99	70 - 130	
Toluene	1.00	0.956		mg/Kg		96	70 - 130	
Xylenes, Total	3.00	2.94		mg/Kg		98	70 - 130	

LCS LCS

%Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 92 39 - 146

Lab Sample ID: 885-2783-2 MS

Matrix: Solid

Analysis Batch: 3432

Client Sample ID:	BES24-07 1.5ft
Prep	Type: Total/NA

Prep Batch: 3240

Allalysis Batoli. 0402									1 ICP L	dton. oz-to
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		0.968	0.883		mg/Kg		91	70 - 130	
Ethylbenzene	ND		0.968	0.910		mg/Kg		94	70 - 130	
m,p-Xylene	ND		1.94	1.83		mg/Kg		94	70 - 130	
o-Xylene	ND		0.968	0.916		mg/Kg		95	70 - 130	
Toluene	ND		0.968	0.888		mg/Kg		92	70 - 130	
Xylenes, Total	ND		2.90	2.74		mg/Kg		94	70 - 130	

Prep Batch: 3240

Prep Type: Total/NA

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3301

Prep Batch: 3301

Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

Client: Vertex

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

Lab Sample ID: 885-2783-2 MS Client Sample ID: BES24-07 1.5ft **Matrix: Solid Prep Type: Total/NA**

Analysis Batch: 3432

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

Lab Sample ID: 885-2783-2 MSD Client Sample ID: BES24-07 1.5ft

Matrix: Solid

Analysis Batch: 3432									Prep	Batch:	3240
-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.963	0.872		mg/Kg		91	70 - 130	1	20
Ethylbenzene	ND		0.963	0.897		mg/Kg		93	70 - 130	1	20
m,p-Xylene	ND		1.93	1.80		mg/Kg		93	70 - 130	2	20
o-Xylene	ND		0.963	0.904		mg/Kg		94	70 - 130	1	20
Toluene	ND		0.963	0.880		mg/Kg		91	70 - 130	1	20
Xylenes, Total	ND		2.89	2.70		mg/Kg		93	70 - 130	2	20

MSD MSD

%Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 91 39 - 146

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

Lab Sample ID: MB 885-3301/1-A **Matrix: Solid**

Analysis Batch: 3332

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/15/24 13:24	04/15/24 18:02	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/15/24 13:24	04/15/24 18:02	1

MB MB

Surrogate %Recovery Qualifier Limits Prepared Dil Fac Analyzed 62 - 134 04/15/24 13:24 04/15/24 18:02 Di-n-octyl phthalate (Surr) 98

Lab Sample ID: LCS 885-3301/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 3332

,	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics	50.0	47.4		mg/Kg		95	60 - 135	

[C10-C28]

LCS LCS Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 101 62 - 134

Job ID: 885-2783-1

Prep Type: Soluble

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

% Doc

Client Sample ID: BES24-17 1ft

Client Sample ID: BES24-17 1ft

Client: Vertex Project/Site: JRU DI IA CTB

Project/Site: JRU DI IA CTB

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-78412/1-A

Matrix: Solid

Analysis Batch: 78530

MB MB

	1410	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/17/24 21:25	1

100 100

Lab Sample ID: LCS 880-78412/2-A

Matrix: Solid

Analysis Batch: 78530

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	Spike	LUS	LUJ				OILEC
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloride	250	256		mg/Kg		102	90 - 110

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Lab Sample ID: LCSD 880-78412/3-A

Matrix: Solid

Analysis Batch: 78530

	Spi	ce LCSD	LCSD				%Rec		RPD
Analyte	Add	ed Result	Qualifier	Unit	D ⁹	%Rec	Limits	RPD	Limit
Chloride	2	50 256		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 885-2783-4 MS

Matrix: Solid

Analysis Batch: 78530

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	770	F1	2530	3620	F1	mg/Kg		113	90 - 110	

Lab Sample ID: 885-2783-4 MSD

Matrix: Solid

Analysis Batch: 78530

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	770	F1	2530	3620	F1	mg/Kg		113	90 - 110	0	20

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QC Association Summary

Job ID: 885-2783-1 Client: Vertex

Project/Site: JRU DI IA CTB

GC VOA

Prep Batch: 3206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-3206/1-A	Method Blank	Total/NA	Solid	5030C	

Prep Batch: 3240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2783-1	WES24-09 2ft	Total/NA	Solid	5030C	
885-2783-2	BES24-07 1.5ft	Total/NA	Solid	5030C	
885-2783-3	BES24-16 1ft	Total/NA	Solid	5030C	
885-2783-4	BES24-17 1ft	Total/NA	Solid	5030C	
885-2783-5	WES24-10 0.5ft	Total/NA	Solid	5030C	
MB 885-3240/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3240/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3240/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-2783-1 MS	WES24-09 2ft	Total/NA	Solid	5030C	
885-2783-1 MSD	WES24-09 2ft	Total/NA	Solid	5030C	
885-2783-2 MS	BES24-07 1.5ft	Total/NA	Solid	5030C	
885-2783-2 MSD	BES24-07 1.5ft	Total/NA	Solid	5030C	

Analysis Batch: 3430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2783-1	WES24-09 2ft	Total/NA	Solid	8015D	3240
885-2783-2	BES24-07 1.5ft	Total/NA	Solid	8015D	3240
885-2783-3	BES24-16 1ft	Total/NA	Solid	8015D	3240
885-2783-4	BES24-17 1ft	Total/NA	Solid	8015D	3240
885-2783-5	WES24-10 0.5ft	Total/NA	Solid	8015D	3240
MB 885-3206/1-A	Method Blank	Total/NA	Solid	8015D	3206
MB 885-3240/1-A	Method Blank	Total/NA	Solid	8015D	3240
LCS 885-3240/2-A	Lab Control Sample	Total/NA	Solid	8015D	3240
885-2783-1 MS	WES24-09 2ft	Total/NA	Solid	8015D	3240
885-2783-1 MSD	WES24-09 2ft	Total/NA	Solid	8015D	3240

Analysis Batch: 3432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2783-1	WES24-09 2ft	Total/NA	Solid	8021B	3240
885-2783-2	BES24-07 1.5ft	Total/NA	Solid	8021B	3240
885-2783-3	BES24-16 1ft	Total/NA	Solid	8021B	3240
885-2783-4	BES24-17 1ft	Total/NA	Solid	8021B	3240
885-2783-5	WES24-10 0.5ft	Total/NA	Solid	8021B	3240
MB 885-3206/1-A	Method Blank	Total/NA	Solid	8021B	3206
MB 885-3240/1-A	Method Blank	Total/NA	Solid	8021B	3240
LCS 885-3240/3-A	Lab Control Sample	Total/NA	Solid	8021B	3240
885-2783-2 MS	BES24-07 1.5ft	Total/NA	Solid	8021B	3240
885-2783-2 MSD	BES24-07 1.5ft	Total/NA	Solid	8021B	3240

GC Semi VOA

Prep Batch: 3301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2783-1	WES24-09 2ft	Total/NA	Solid	SHAKE	
885-2783-2	BES24-07 1.5ft	Total/NA	Solid	SHAKE	
885-2783-3	BES24-16 1ft	Total/NA	Solid	SHAKE	
885-2783-4	BES24-17 1ft	Total/NA	Solid	SHAKE	

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QC Association Summary

Client: Vertex Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

GC Semi VOA (Continued)

Prep Batch: 3301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2783-5	WES24-10 0.5ft	Total/NA	Solid	SHAKE	
MB 885-3301/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3301/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 3332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2783-1	WES24-09 2ft	Total/NA	Solid	8015D	3301
885-2783-2	BES24-07 1.5ft	Total/NA	Solid	8015D	3301
885-2783-3	BES24-16 1ft	Total/NA	Solid	8015D	3301
885-2783-4	BES24-17 1ft	Total/NA	Solid	8015D	3301
885-2783-5	WES24-10 0.5ft	Total/NA	Solid	8015D	3301
MB 885-3301/1-A	Method Blank	Total/NA	Solid	8015D	3301
LCS 885-3301/2-A	Lab Control Sample	Total/NA	Solid	8015D	3301

HPLC/IC

Leach Batch: 78412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2783-1	WES24-09 2ft	Soluble	Solid	DI Leach	
885-2783-2	BES24-07 1.5ft	Soluble	Solid	DI Leach	
885-2783-3	BES24-16 1ft	Soluble	Solid	DI Leach	
885-2783-4	BES24-17 1ft	Soluble	Solid	DI Leach	
885-2783-5	WES24-10 0.5ft	Soluble	Solid	DI Leach	
MB 880-78412/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78412/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78412/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2783-4 MS	BES24-17 1ft	Soluble	Solid	DI Leach	
885-2783-4 MSD	BES24-17 1ft	Soluble	Solid	DI Leach	

Analysis Batch: 78530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2783-1	WES24-09 2ft	Soluble	Solid	300.0	78412
885-2783-2	BES24-07 1.5ft	Soluble	Solid	300.0	78412
885-2783-3	BES24-16 1ft	Soluble	Solid	300.0	78412
885-2783-4	BES24-17 1ft	Soluble	Solid	300.0	78412
885-2783-5	WES24-10 0.5ft	Soluble	Solid	300.0	78412
MB 880-78412/1-A	Method Blank	Soluble	Solid	300.0	78412
LCS 880-78412/2-A	Lab Control Sample	Soluble	Solid	300.0	78412
LCSD 880-78412/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78412
885-2783-4 MS	BES24-17 1ft	Soluble	Solid	300.0	78412
885-2783-4 MSD	BES24-17 1ft	Soluble	Solid	300.0	78412

Client: Vertex

Project/Site: JRU DI IA CTB

Client Sample ID: WES24-09 2ft

Date Collected: 04/08/24 10:00

Lab Sample ID: 885-2783-1

Matrix: Solid

Date Received: 04/12/24 07:50

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 21:28
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 21:28
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 19:17
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		10	78530	SMC	EET MID	04/17/24 22:33

Lab Sample ID: 885-2783-2 Client Sample ID: BES24-07 1.5ft

Date Collected: 04/09/24 10:00

Date Received: 04/12/24 07:50

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 22:35
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 22:35
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 19:29
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		10	78530	SMC	EET MID	04/17/24 22:38

Client Sample ID: BES24-16 1ft

Date Collected: 04/09/24 10:30

Date Received: 04/12/24 07:50

Lab Sample ID: 885-2783-3

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 23:42
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 23:42
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 19:41
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		20	78530	SMC	EET MID	04/17/24 22:43

Client Sample ID: BES24-17 1ft

Date Collected: 04/09/24 12:00

Date Received: 04/12/24 07:50

Lab Sample ID: 885-2783-4

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 00:04

Client: Vertex

Project/Site: JRU DI IA CTB

Client Sample ID: BES24-17 1ft

Date Collected: 04/09/24 12:00

Date Received: 04/12/24 07:50

Lab Sample ID: 885-2783-4

Matrix: Solid

Job ID: 885-2783-1

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 00:04
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 19:54
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		10	78530	SMC	EET MID	04/17/24 22:48

Client Sample ID: WES24-10 0.5ft

Date Collected: 04/09/24 12:30 Date Received: 04/12/24 07:50

Lab Sample ID: 885-2783-5

Matrix: Solid

Batch Batch Dilution Batch Prepared Method **Prep Type** Type Run **Factor** Number Analyst Lab or Analyzed Total/NA Prep 5030C 3240 JP **EET ALB** 04/12/24 17:15 Total/NA 8015D 04/17/24 00:26 Analysis 3430 RA **EET ALB** 1 Total/NA Prep 5030C 3240 JΡ **EET ALB** 04/12/24 17:15 3432 RA Total/NA 8021B Analysis 1 **EET ALB** 04/17/24 00:26 Total/NA SHAKE 3301 JU **EET ALB** 04/15/24 13:24 Prep 3332 JU Total/NA 8015D Analysis 1 **EET ALB** 04/15/24 20:06 Soluble Leach DI Leach 78412 SA EET MID 04/16/24 14:52 04/17/24 23:02 Soluble 300.0 5 78530 SMC **EET MID** Analysis

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex Job ID: 885-2783-1

Project/Site: JRU DI IA CTB

Laboratory: Eurofins Albuquerque

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

Authority	Progr	am	Identification Number	Identification Number Expiration Date		
New Mexico	State		NM9425, NM0901			
The following analyte	s are included in this repo	ort, but the laboratory is r	not certified by the governing author	ity. This list may include analytes		
for which the agency	does not offer certification	1.				
Analysis Method	Prep Method	Matrix	Analyte			
8015D	5030C	Solid	Gasoline Range Organic	s [C6 - C10]		
8015D	SHAKE	Solid	Diesel Range Organics [6	C10-C28]		
8015D	SHAKE	Solid	Motor Oil Range Organic	s [C28-C40]		
8021B	5030C	Solid	Benzene			
8021B	5030C	Solid	Ethylbenzene			
8021B	5030C	Solid	Toluene			
8021B	5030C	Solid	Xylenes, Total			
Oregon	NELA	D	NM100001	02-26-25		

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date	
Texas	NELAP	T104704400-23-26	06-30-24	

Eurofins Albuquerque

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HALL ENVIRONMENTAL

Turn-Around Time:

Chain-of-Custody Record

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Login Sample Receipt Checklist

Client: Vertex Job Number: 885-2783-1

Login Number: 2783 List Source: Eurofins Albuquerque

List Number: 1 Creator: Rojas, Juan

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: Vertex Job Number: 885-2783-1

Login Number: 2783 List Source: Eurofins Midland
List Number: 2 List Creation: 04/17/24 12:03 PM

Creator: Vasquez, Julisa

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/30/2024 9:20:34 PM

JOB DESCRIPTION

JRU DI 1

JOB NUMBER

885-3429-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

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 J

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Client: Vertex
Laboratory Job ID: 885-3429-1
Project/Site: JRU DI 1

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Definitions/Glossary

Client: Vertex Job ID: 885-3429-1

Project/Site: JRU DI 1

Qualifiers

GC Semi VOA

Qualifier Description

F2 MS/MSD RPD exceeds control limits

Glossary

CNF

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

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 Job ID: 885-3429-1 Project: JRU DI 1

Job ID: 885-3429-1 **Eurofins Albuquerque**

Job Narrative 885-3429-1

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

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

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

Receipt

The samples were received on 4/25/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C.

Receipt Exceptions

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): BES24-07 2.5ft (885-3429-1), BES24-16 2ft (885-3429-2) and BES24-17 2ft (885-3429-3). The container labels list 4/23/24, while the COC lists 4/19/2024. The client was contacted, and the lab was instructed to move forward with collection date of 4/23/2024

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 matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 885-3969 and analytical batch 885-4095 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample 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.

HPLC/IC

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

Date Received: 04/25/24 08:00

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Client Sample Results

Client: Vertex Job ID: 885-3429-1

Project/Site: JRU DI 1

Client Sample ID: BES24-07 2.5ft

Date Collected: 04/23/24 14:15

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/25/24 14:06	04/26/24 23:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			04/25/24 14:06	04/26/24 23:53	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/25/24 14:06	04/26/24 23:53	1
Ethylbenzene	ND		0.046	mg/Kg		04/25/24 14:06	04/26/24 23:53	1
Toluene	ND		0.046	mg/Kg		04/25/24 14:06	04/26/24 23:53	1
Xylenes, Total	ND		0.092	mg/Kg		04/25/24 14:06	04/26/24 23:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		39 - 146			04/25/24 14:06	04/26/24 23:53	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		04/26/24 13:39	04/29/24 21:22	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/26/24 13:39	04/29/24 21:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			04/26/24 13:39	04/29/24 21:22	1

Method: EPA 300.0 - Anions, I	lon Chromatog	graphy - So	luble					
Analyte	Result Qu	ualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2300		25	mg/Kg			04/30/24 15:09	5

Lab Sample ID: 885-3429-1

Job ID: 885-3429-1

Client: Vertex Project/Site: JRU DI 1

Chloride

Released to Imaging: 7/30/2024 4:05:46 PM

Client Sample ID: BES24-16 2ft Lab Sample ID: 885-3429-2

Matrix: Solid

Date Collected: 04/23/24 14:45 Date Received: 04/25/24 08:00

			Unit	D	Prepared	Analyzed	Dil Fac
ND		4.8	mg/Kg		04/25/24 14:06	04/27/24 01:04	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
96		15 - 244			04/25/24 14:06	04/27/24 01:04	1
le Organic	Compound	ds (GC)					
_	•	RL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.024	mg/Kg		04/25/24 14:06	04/27/24 01:04	1
ND		0.048	mg/Kg		04/25/24 14:06	04/27/24 01:04	1
ND		0.048	mg/Kg		04/25/24 14:06	04/27/24 01:04	1
ND		0.096	mg/Kg		04/25/24 14:06	04/27/24 01:04	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
94		39 - 146			04/25/24 14:06	04/27/24 01:04	1
Range Or	ganics (DR	(GC)					
	•	RL	Unit	D	Prepared	Analyzed	Dil Fac
ND		9.1	mg/Kg		04/26/24 13:39	04/29/24 21:33	1
ND		45	mg/Kg		04/26/24 13:39	04/29/24 21:33	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
84		62 - 134			04/26/24 13:39	04/29/24 21:33	1
	e Organic Result ND ND ND ND ND SRecovery 94 Range Org Result ND	Result Qualifier ND	Page Page	Page Page	Part	Prepared Prepared	Prepared Prepared

25

890

mg/Kg

04/30/24 15:16

5

4

6

8

10

Client: Vertex Job ID: 885-3429-1

Project/Site: JRU DI 1

Lab Sample ID: 885-3429-3 Client Sample ID: BES24-17 2ft

Date Collected: 04/23/24 12:30 **Matrix: Solid** Date Received: 04/25/24 08:00

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC) Analyte Result Qualifier Unit D Dil Fac Prepared Analyzed Gasoline Range Organics [C6 - C10] ND 4.6 04/25/24 14:06 04/27/24 02:14 mg/Kg

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 98 15 - 244 04/25/24 14:06 04/27/24 02:14

Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Benzene ND 0.023 mg/Kg 04/25/24 14:06 04/27/24 02:14 Ethylbenzene ND mg/Kg 04/25/24 14:06 04/27/24 02:14 0.046 Toluene ND 0.046 mg/Kg 04/25/24 14:06 04/27/24 02:14 ND 04/25/24 14:06 04/27/24 02:14 Xylenes, Total 0.092 mg/Kg

%Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 97 39 - 146 04/25/24 14:06 04/27/24 02:14 4-Bromofluorobenzene (Surr)

Method: SW846 8015D - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier Unit Prepared Dil Fac RL Analyzed Diesel Range Organics [C10-C28] ND F2 8.7 04/26/24 13:39 04/29/24 21:44 mg/Kg Motor Oil Range Organics [C28-C40] ND 44 mg/Kg 04/26/24 13:39 04/29/24 21:44

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 88 62 - 134 04/26/24 13:39 04/29/24 21:44

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac 04/30/24 15:22 **Chloride** 240 5.0 mg/Kg

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

%Rec

%Rec

%Rec

Prepared

101

105

96

%Rec

Limits

70 - 130

Client Sample ID: BES24-07 2.5ft

%Rec

Limits

70 - 130

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 3900

Prep Batch: 3900

Client: Vertex Job ID: 885-3429-1

Project/Site: JRU DI 1

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

Lab Sample ID: MB 885-3900/1-A

Matrix: Solid Analysis Batch: 4035

MB MB Result Qualifier RL Unit D Analyzed Dil Fac Analyte Prepared 5.0 04/25/24 14:06 04/26/24 23:29 Gasoline Range Organics [C6 - C10] ND mg/Kg

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 15 - 244 04/25/24 14:06 04/26/24 23:29 4-Bromofluorobenzene (Surr) 98

Spike

Added

25.0

Spike

Added

Limits

15 - 244

Spike

Added

23.1

23.2

LCS LCS

MS MS

MSD MSD

23.5

Result Qualifier

24.4

Result Qualifier

24.1

Result Qualifier

Unit

Unit

Unit

mg/Kg

mg/Kg

mg/Kg

Lab Sample ID: LCS 885-3900/2-A

Matrix: Solid

Analysis Batch: 4035

Analyte

Gasoline Range Organics [C6 -C10]

Surrogate

4-Bromofluorobenzene (Surr)

LCS LCS

Sample Sample

Result Qualifier

Limits %Recovery Qualifier 212 15 - 244

Lab Sample ID: 885-3429-1 MS

Matrix: Solid

Analysis Batch: 4035

Analyte Gasoline Range Organics [C6 -C10]

Surrogate 4-Bromofluorobenzene (Surr) MS MS

ND

%Recovery Qualifier 222

Lab Sample ID: 885-3429-1 MSD

Matrix: Solid Analysis Batch: 4035

Analyte Gasoline Range Organics [C6 -C10]

Surrogate

4-Bromofluorobenzene (Surr)

MSD MSD %Recovery Qualifier

Sample Sample

ND

219

Result Qualifier

Limits 15 - 244

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3900/1-A

Released to Imaging: 7/30/2024 4:05:46 PM

Matrix: Solid

Analysis Batch: 4036

MB MB Result Qualifier

Analyte RL 0.025 Benzene ND Ethylbenzene ND 0.050 Toluene ND 0.050

mg/Kg mg/Kg

Unit

mg/Kg

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Client Sample ID: BES24-07 2.5ft Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 3900

Prep Batch: 3900

%Rec **RPD** Limits RPD Limit

Prep Type: Total/NA Prep Batch: 3900

Dil Fac

4/30/2024

70 - 130

Client Sample ID: Method Blank

04/25/24 14:06 04/26/24 23:29

04/25/24 14:06 04/26/24 23:29

04/25/24 14:06 04/26/24 23:29

Analyzed

Job ID: 885-3429-1

Client: Vertex Project/Site: JRU DI 1

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

Lab Sample ID: MB 885-3900/1-A

Matrix: Solid

Analysis Batch: 4036

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3900

-	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		04/25/24 14:06	04/26/24 23:29	1

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 95 39 - 146 04/25/24 14:06 04/26/24 23:29

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 885-3900/3-A **Matrix: Solid**

Analysis Batch: 4036

Prep Type: Total/NA

Prep Batch: 3900

LCS LCS

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

Lab Sample ID: 885-3429-2 MS

Matrix: Solid

Analysis Batch: 4036

Client Sample ID: BES24-16 2ft

Prep Type: Total/NA

Prep Batch: 3900

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		0.957	0.890		mg/Kg		93	70 - 130	
Ethylbenzene	ND		0.957	0.876		mg/Kg		92	70 - 130	
m,p-Xylene	ND		1.91	1.77		mg/Kg		91	70 - 130	
o-Xylene	ND		0.957	0.863		mg/Kg		90	70 - 130	
Toluene	ND		0.957	0.855		mg/Kg		88	70 - 130	
Xylenes, Total	ND		2.87	2.63		mg/Kg		91	70 - 130	

MS MS

%Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 39 - 146 98

Lab Sample ID: 885-3429-2 MSD

Matrix: Solid

Analysis Batch: 4036

Client Sample ID: BES24-16 2ft

Prep Type: Total/NA

Prep Batch: 3900

П	Analysis Daton, 4000									пер	Dateii.	5500
		Sample	Sample	Spike	MSD	MSD				%Rec		RPD
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Benzene	ND		0.955	0.902		mg/Kg		94	70 - 130	1	20
	Ethylbenzene	ND		0.955	0.896		mg/Kg		94	70 - 130	2	20
	m,p-Xylene	ND		1.91	1.81		mg/Kg		93	70 - 130	2	20
İ	o-Xylene	ND		0.955	0.886		mg/Kg		93	70 - 130	3	20
	Toluene	ND		0.955	0.871		mg/Kg		90	70 - 130	2	20
	Xylenes, Total	ND		2.87	2.69		mg/Kg		93	70 - 130	2	20

Project/Site: JRU DI 1

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

Lab Sample ID: 885-3429-2 MSD

Matrix: Solid

Client: Vertex

Analysis Batch: 4036

Client Sample ID: BES24-16 2ft

Prep Type: Total/NA

Prep Batch: 3900

MSD MSD

%Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 95 39 - 146

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

Lab Sample ID: MB 885-3969/1-A

Matrix: Solid

Analysis Batch: 4095

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

Prep Batch: 3969

Dil Fac

MB MB Analyte Result Qualifier

Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] ND ND RL Unit 10 mg/Kg 50 mg/Kg

Prepared 04/26/24 13:39 04/29/24 17:38 04/26/24 13:39 04/29/24 17:38

Analyzed Dil Fac

MB MB %Recovery Qualifier Limits Surrogate Prepared Analyzed

Di-n-octyl phthalate (Surr) 62 - 134 82

04/26/24 13:39 04/29/24 17:38 Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 885-3969/2-A

Matrix: Solid

Analysis Batch: 4095

Prep Type: Total/NA Prep Batch: 3969

Spike LCS LCS %Rec Added Result Qualifier Limits Analyte Unit D %Rec Diesel Range Organics 50.0 47.6 mg/Kg 95 60 - 135

[C10-C28]

LCS LCS

Surrogate Di-n-octyl phthalate (Surr) %Recovery Qualifier Limits 79 62 - 134

Lab Sample ID: 885-3429-3 MS

Matrix: Solid

Analysis Batch: 4095

Client Sample ID: BES24-17 2ft

Prep Type: Total/NA Prep Batch: 3969

Sample Sample Spike MS MS Result Qualifier Added D %Rec Limits Analyte Result Qualifier Unit

Diesel Range Organics [C10-C28]

MS MS

ND F2

Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 117

%Rec

49.3 44 - 136 56.7 mg/Kg 115

Unit

mg/Kg

MSD MSD

40.5 F2

Result Qualifier

Lab Sample ID: 885-3429-3 MSD

Matrix: Solid

Analysis Batch: 4095

62 - 134

Spike

Added

44.2

Client Sample ID: BES24-17 2ft Prep Type: Total/NA Prep Batch: 3969

RPD %Rec %Rec Limits **RPD** Limit 92 44 - 136 33

Diesel Range Organics [C10-C28]

Analyte

MSD MSD

Sample Sample

ND F2

Result Qualifier

Surrogate %Recovery Qualifier Limits 62 - 134 Di-n-octyl phthalate (Surr) 84

QC Sample Results

Client: Vertex Job ID: 885-3429-1

Project/Site: JRU DI 1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-79603/1-A **Client Sample ID: Method Blank Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 79670

MB MB

Analyte Result Qualifier RL Unit Analyzed Dil Fac **Prepared** 04/30/24 13:43 Chloride 5.0 ND mg/Kg

Lab Sample ID: LCS 880-79603/2-A **Client Sample ID: Lab Control Sample Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 79670

LCS LCS Spike %Rec **Analyte** Added Result Qualifier Unit D %Rec Limits Chloride 250 250 100 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-79603/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 79670

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Limits RPD Limit Unit %Rec Chloride 250 250 100 90 - 110 20 mg/Kg

QC Association Summary

Client: Vertex Job ID: 885-3429-1
Project/Site: JRU DI 1

GC VOA

Prep Batch: 3900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3429-1	BES24-07 2.5ft	Total/NA	Solid	5030C	
885-3429-2	BES24-16 2ft	Total/NA	Solid	5030C	
885-3429-3	BES24-17 2ft	Total/NA	Solid	5030C	
MB 885-3900/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3900/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3900/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-3429-1 MS	BES24-07 2.5ft	Total/NA	Solid	5030C	
885-3429-1 MSD	BES24-07 2.5ft	Total/NA	Solid	5030C	
885-3429-2 MS	BES24-16 2ft	Total/NA	Solid	5030C	
885-3429-2 MSD	BES24-16 2ft	Total/NA	Solid	5030C	

Analysis Batch: 4035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3429-1	BES24-07 2.5ft	Total/NA	Solid	8015D	3900
885-3429-2	BES24-16 2ft	Total/NA	Solid	8015D	3900
885-3429-3	BES24-17 2ft	Total/NA	Solid	8015D	3900
MB 885-3900/1-A	Method Blank	Total/NA	Solid	8015D	3900
LCS 885-3900/2-A	Lab Control Sample	Total/NA	Solid	8015D	3900
885-3429-1 MS	BES24-07 2.5ft	Total/NA	Solid	8015D	3900
885-3429-1 MSD	BES24-07 2.5ft	Total/NA	Solid	8015D	3900

Analysis Batch: 4036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3429-1	BES24-07 2.5ft	Total/NA	Solid	8021B	3900
885-3429-2	BES24-16 2ft	Total/NA	Solid	8021B	3900
885-3429-3	BES24-17 2ft	Total/NA	Solid	8021B	3900
MB 885-3900/1-A	Method Blank	Total/NA	Solid	8021B	3900
LCS 885-3900/3-A	Lab Control Sample	Total/NA	Solid	8021B	3900
885-3429-2 MS	BES24-16 2ft	Total/NA	Solid	8021B	3900
885-3429-2 MSD	BES24-16 2ft	Total/NA	Solid	8021B	3900

GC Semi VOA

Prep Batch: 3969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3429-1	BES24-07 2.5ft	Total/NA	Solid	SHAKE	
885-3429-2	BES24-16 2ft	Total/NA	Solid	SHAKE	
885-3429-3	BES24-17 2ft	Total/NA	Solid	SHAKE	
MB 885-3969/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3969/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-3429-3 MS	BES24-17 2ft	Total/NA	Solid	SHAKE	
885-3429-3 MSD	BES24-17 2ft	Total/NA	Solid	SHAKE	

Analysis Batch: 4095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3429-1	BES24-07 2.5ft	Total/NA	Solid	8015D	3969
885-3429-2	BES24-16 2ft	Total/NA	Solid	8015D	3969
885-3429-3	BES24-17 2ft	Total/NA	Solid	8015D	3969
MB 885-3969/1-A	Method Blank	Total/NA	Solid	8015D	3969
LCS 885-3969/2-A	Lab Control Sample	Total/NA	Solid	8015D	3969
885-3429-3 MS	BES24-17 2ft	Total/NA	Solid	8015D	3969

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QC Association Summary

Client: Vertex Job ID: 885-3429-1

Project/Site: JRU DI 1

GC Semi VOA (Continued)

Analysis Batch: 4095 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3429-3 MSD	BES24-17 2ft	Total/NA	Solid	8015D	3969

HPLC/IC

Leach Batch: 79603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3429-1	BES24-07 2.5ft	Soluble	Solid	DI Leach	
885-3429-2	BES24-16 2ft	Soluble	Solid	DI Leach	
885-3429-3	BES24-17 2ft	Soluble	Solid	DI Leach	
MB 880-79603/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-79603/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-79603/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 79670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3429-1	BES24-07 2.5ft	Soluble	Solid	300.0	79603
885-3429-2	BES24-16 2ft	Soluble	Solid	300.0	79603
885-3429-3	BES24-17 2ft	Soluble	Solid	300.0	79603
MB 880-79603/1-A	Method Blank	Soluble	Solid	300.0	79603
LCS 880-79603/2-A	Lab Control Sample	Soluble	Solid	300.0	79603
LCSD 880-79603/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	79603

Job ID: 885-3429-1

Project/Site: JRU DI 1

Client: Vertex

Client Sample ID: BES24-07 2.5ft

Lab Sample ID: 885-3429-1 Date Collected: 04/23/24 14:15

Matrix: Solid

Date Received: 04/25/24 08:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3900	JR	EET ALB	04/25/24 14:06
Total/NA	Analysis	8015D		1	4035	JP	EET ALB	04/26/24 23:53
Total/NA	Prep	5030C			3900	JR	EET ALB	04/25/24 14:06
Total/NA	Analysis	8021B		1	4036	JP	EET ALB	04/26/24 23:53
Total/NA	Prep	SHAKE			3969	DH	EET ALB	04/26/24 13:39
Total/NA	Analysis	8015D		1	4095	JU	EET ALB	04/29/24 21:22
Soluble	Leach	DI Leach			79603	SA	EET MID	04/30/24 07:50
Soluble	Analysis	300.0		5	79670	SMC	EET MID	04/30/24 15:09

Lab Sample ID: 885-3429-2 Client Sample ID: BES24-16 2ft

Date Collected: 04/23/24 14:45

Date Received: 04/25/24 08:00

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3900	JR	EET ALB	04/25/24 14:06
Total/NA	Analysis	8015D		1	4035	JP	EET ALB	04/27/24 01:04
Total/NA	Prep	5030C			3900	JR	EET ALB	04/25/24 14:06
Total/NA	Analysis	8021B		1	4036	JP	EET ALB	04/27/24 01:04
Total/NA	Prep	SHAKE			3969	DH	EET ALB	04/26/24 13:39
Total/NA	Analysis	8015D		1	4095	JU	EET ALB	04/29/24 21:33
Soluble	Leach	DI Leach			79603	SA	EET MID	04/30/24 07:50
Soluble	Analysis	300.0		5	79670	SMC	EET MID	04/30/24 15:16

Client Sample ID: BES24-17 2ft

Date Collected: 04/23/24 12:30

Date Received: 04/25/24 08:00

Lab Sample ID:	885-3429-3
	Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3900	JR	EET ALB	04/25/24 14:06
Total/NA	Analysis	8015D		1	4035	JP	EET ALB	04/27/24 02:14
Total/NA	Prep	5030C			3900	JR	EET ALB	04/25/24 14:06
Total/NA	Analysis	8021B		1	4036	JP	EET ALB	04/27/24 02:14
Total/NA	Prep	SHAKE			3969	DH	EET ALB	04/26/24 13:39
Total/NA	Analysis	8015D		1	4095	JU	EET ALB	04/29/24 21:44
Soluble	Leach	DI Leach			79603	SA	EET MID	04/30/24 07:50
Soluble	Analysis	300.0		1	79670	SMC	EET MID	04/30/24 15:22

Laboratory References:

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

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex Job ID: 885-3429-1

Project/Site: JRU DI 1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte	
8015D	5030C	Solid	Gasoline Range Or	ganics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organ	nics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Or	ganics [C28-C40]
8021B	5030C	Solid	Benzene	
8021B	5030C	Solid	Ethylbenzene	
8021B	5030C	Solid	Toluene	
8021B	5030C	Solid	Xylenes, Total	
egon	NELA	P	NM100001	02-26-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Laboratory: Eurofins Midland

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELAF	D	T104704400-23-26	06-30-24
9 ,	•		not certified by the governing authori	ity. This list may include analytes
9 ,	s are included in this report does not offer certification		not certified by the governing authori	ity. This list may include analytes
9 ,	•		not certified by the governing authori Analyte	ity. This list may include analytes

Chain-of-Custody Record Turn-Around Time Turn		ORATODA		87109	_	885-3429 COC																		e analvtical report.
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4/30/2024

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-3429-1

List Source: Eurofins Albuquerque Login Number: 3429

List Number: 1

Creator: Casarrubias, Tracy

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.	False	Collection date discrepancies.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-3429-1

Login Number: 3429 **List Source: Eurofins Midland** List Number: 2 List Creation: 04/30/24 10:54 AM

Creator: Vasquez, Julisa

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/6/2024 11:22:40 AM

JOB DESCRIPTION

JRU DI 1

JOB NUMBER

885-3547-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization

Generated 5/6/2024 11:22:40 AM

Authorized for release by Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com (505)345-3975 Client: Vertex
Laboratory Job ID: 885-3547-1
Project/Site: JRU DI 1

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Definitions/Glossary

Client: Vertex Job ID: 885-3547-1

Project/Site: JRU DI 1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)

DLO	Bedision Level Conformation (Madieonomistry)	
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

Released to Imaging: 7/30/2024 4:05:46 PM

Case Narrative

Client: Vertex

Job ID: 885-3547-1

Project: JRU DI 1

Job ID: 885-3547-1 Eurofins Albuquerque

Job Narrative 885-3547-1

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 sample was received on 4/27/2024 7:35 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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

HPLC/IC

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

Eurofins Albuquerque

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Client: Vertex Job ID: 885-3547-1

Project/Site: JRU DI 1

Lab Sample ID: 885-3547-1 Client Sample ID: WES24-14 2ft

Date Collected: 04/24/24 10:00 **Matrix: Solid** Date Received: 04/27/24 07:35

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/29/24 13:29	04/30/24 22:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			04/29/24 13:29	04/30/24 22:17	1
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/29/24 13:29	04/30/24 22:17	1
Ethylbenzene	ND		0.047	mg/Kg		04/29/24 13:29	04/30/24 22:17	1
Toluene	ND		0.047	mg/Kg		04/29/24 13:29	04/30/24 22:17	1
Xylenes, Total	ND		0.095	mg/Kg		04/29/24 13:29	04/30/24 22:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)						04/29/24 13:29	04/30/24 22:17	1
Method: SW846 8015D - Diese	el Range Org	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/29/24 14:22	04/29/24 17:04	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/29/24 14:22	04/29/24 17:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			04/29/24 14:22	04/29/24 17:04	•
Method: EPA 300.0 - Anions,	lon Chromat	tography						
	Danult	Qualifier	RL	Unit	D	Prepared	Anglyzed	Dil Fac
Analyte	Result	Qualifier	KL	Offic	U	Prepareu	Analyzed	DII Fa

Client: Vertex Job ID: 885-3547-1

Project/Site: JRU DI 1

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

Lab Sample ID: MB 885-4053/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid Analysis Batch: 4241

MB MB Result Qualifier RL Unit Analyzed Dil Fac Analyte Prepared 04/29/24 13:26 04/30/24 14:41 Gasoline Range Organics [C6 - C10] ND 5.0 mg/Kg

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 15 - 244 04/29/24 13:26 04/30/24 14:41 4-Bromofluorobenzene (Surr) 100

Lab Sample ID: LCS 885-4053/3-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 4241

Prep Type: Total/NA

Prep Batch: 4053

Prep Batch: 4053

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics [C6 -25.0 27.4 mg/Kg 110 70 - 130

C10]

LCS LCS

Limits Surrogate %Recovery Qualifier 4-Bromofluorobenzene (Surr) 223 15 - 244

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-4053/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 4242

Prep Type: Total/NA

Prep Batch: 4053

MB MB Analyte Result Qualifier Unit Prepared RL Analyzed Dil Fac Benzene ND 0.025 04/29/24 13:26 04/30/24 14:41 mg/Kg Ethylbenzene ND 0.050 mg/Kg 04/29/24 13:26 04/30/24 14:41 Toluene ND 0.050 mg/Kg 04/29/24 13:26 04/30/24 14:41 04/29/24 13:26 04/30/24 14:41 Xylenes, Total ND 0.10 mg/Kg MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 04/29/24 13:26 04/30/24 14:41

Lab Sample ID: LCS 885-4053/4-A

Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 4242** Prep Batch: 4053

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	1.00	0.957		mg/Kg		96	70 - 130	
Ethylbenzene	1.00	0.954		mg/Kg		95	70 - 130	
m,p-Xylene	2.00	1.91		mg/Kg		95	70 - 130	
o-Xylene	1.00	0.958		mg/Kg		96	70 - 130	
Toluene	1.00	0.947		ma/Ka		95	70 - 130	

Prep Batch: 4051

90 - 110

98

QC Sample Results

Client: Vertex Job ID: 885-3547-1

Project/Site: JRU DI 1

Chloride

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-4051/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 4079

 Analyte
 Result Chloride
 Qualifier ND
 RL ND
 Unit mg/Kg
 D 04/29/24 13:18
 Prepared O4/29/24 13:18
 Analyzed O4/29/24 16:52
 D 1.5

Lab Sample ID: LCS 885-4051/2-A

Matrix: Solid

Analysis Batch: 4079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4051

Spike LCS LCS %Rec
Analyte Added Result Qualifier Unit D %Rec Limits

: Lab Sample ID: MRL 885-4079/10 Client Sample ID: Lab Control Sample

14.7

mg/Kg

Matrix: Solid
Analysis Batch: 4079
Prep Type: Total/NA

15.0

 Analyte
 Added Chloride
 Result One of the characters
 Qualifier of the characters
 Unit of the characters
 D MRC MRC Sector
 Weec Limits

 0.500
 0.576
 mg/L
 115
 50 - 150

Client: Vertex Job ID: 885-3547-1 Project/Site: JRU DI 1

GC VOA

Prep Batch: 4053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3547-1	WES24-14 2ft	Total/NA	Solid	5030C	
MB 885-4053/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-4053/3-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-4053/4-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 4241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3547-1	WES24-14 2ft	Total/NA	Solid	8015D	4053
MB 885-4053/1-A	Method Blank	Total/NA	Solid	8015D	4053
LCS 885-4053/3-A	Lab Control Sample	Total/NA	Solid	8015D	4053

Analysis Batch: 4242

Lab Sample ID 885-3547-1	Client Sample ID WES24-14 2ft	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 4053
MB 885-4053/1-A	Method Blank	Total/NA	Solid	8021B	4053
LCS 885-4053/4-A	Lab Control Sample	Total/NA	Solid	8021B	4053

GC Semi VOA

Prep Batch: 4023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3547-1	WES24-14 2ft	Total/NA	Solid	SHAKE	

Analysis Batch: 4042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3547-1	WES24-14 2ft	Total/NA	Solid	8015D	4023

HPLC/IC

Prep Batch: 4051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3547-1	WES24-14 2ft	Total/NA	Solid	300_Prep	
MB 885-4051/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-4051/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 4079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3547-1	WES24-14 2ft	Total/NA	Solid	300.0	4051
MB 885-4051/1-A	Method Blank	Total/NA	Solid	300.0	4051
LCS 885-4051/2-A	Lab Control Sample	Total/NA	Solid	300.0	4051
MRL 885-4079/10	Lab Control Sample	Total/NA	Solid	300.0	

Client: Vertex Job ID: 885-3547-1

Project/Site: JRU DI 1

Client Sample ID: WES24-14 2ft Lab Sample ID: 885-3547-1

Date Collected: 04/24/24 10:00 Matrix: Solid

Date Received: 04/27/24 07:35

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:29
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 22:17
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:29
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 22:17
Total/NA	Prep	SHAKE			4023	JU	EET ALB	04/29/24 14:22
Total/NA	Analysis	8015D		1	4042	JU	EET ALB	04/29/24 17:04
Total/NA	Prep	300_Prep			4051	KB	EET ALB	04/29/24 14:34
Total/NA	Analysis	300.0		20	4079	RC	EET ALB	04/29/24 20:35

Laboratory References:

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

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Accreditation/Certification Summary

Client: Vertex Job ID: 885-3547-1

Project/Site: JRU DI 1

Laboratory: Eurofins Albuquerque

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

Authority	Progr	am	Identification Number	Expiration Date
New Mexico	State		NM9425, NM0901	02-26-25
	s are included in this repo	•	not certified by the governing authori	ity. This list may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
300.0	300_Prep	Solid	Chloride	
8015D	5030C	Solid	Gasoline Range Organics	s [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [0	C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organic	s [C28-C40]
8021B	5030C	Solid	Benzene	
8021B	5030C	Solid	Ethylbenzene	
8021B	5030C	Solid	Toluene	
8021B	5030C	Solid	Xylenes, Total	
Oregon	NELA	Р	NM100001	02-26-25

Eurofins Albuquerque

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				Cooler Temp	Temp(including CF):	9:5=1.0=50											
)ate	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	/ X3T8 08 H9T	P6 1808	EDB (N	PAHs b	<u>С</u>), F, Е	v) 0528	8) 0728 Total C				
04/24/24	10 00	Soll	WES24-14 2 ft	1, 4oz jar				┼	┺-		+	4		_			
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Login Sample Receipt Checklist

Client: Vertex Job Number: 885-3547-1

Login Number: 3547 List Source: Eurofins Albuquerque

List Number: 1 Creator: Rojas, Juan

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/24/2024 11:10:13 AM

JOB DESCRIPTION

JRU DI 1A CTB

JOB NUMBER

885-4276-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization

Generated 5/24/2024 11:10:13 AM

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

Client: Vertex
Laboratory Job ID: 885-4276-1
Project/Site: JRU DI 1A CTB

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Definitions/Glossary

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Qualifiers

GC VOA

Qualifier **Qualifier Description**

S1+ Surrogate recovery exceeds control limits, high biased.

Glossary

LOQ

MCL

MDA

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)

MDC Minimum Detectable Concentration (Radiochemistry) MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Activity (Radiochemistry)

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)

Too Numerous To Count **TNTC**

Case Narrative

Client: Vertex Job ID: 885-4276-1

Project: JRU DI 1A CTB

Job ID: 885-4276-1 Eurofins Albuquerque

Job Narrative 885-4276-1

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

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

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

Receipt

The samples were received on 5/10/2024 9:10 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 0.4°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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

HPLC/IC

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

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Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Client Sample ID: BES24-07 3'

Lab Sample ID: 885-4276-1 Date Collected: 05/08/24 11:05

Matrix: Solid

Date Received: 05/10/24 09:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.8	mg/Kg		05/10/24 15:30	05/11/24 16:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		35 - 166			05/10/24 15:30	05/11/24 16:09	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019	mg/Kg		05/10/24 15:30	05/11/24 16:09	1
Ethylbenzene	ND		0.038	mg/Kg		05/10/24 15:30	05/11/24 16:09	1
Toluene	ND		0.038	mg/Kg		05/10/24 15:30	05/11/24 16:09	1
Xylenes, Total	ND		0.075	mg/Kg		05/10/24 15:30	05/11/24 16:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		48 - 145			05/10/24 15:30	05/11/24 16:09	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.7	mg/Kg		05/10/24 12:47	05/10/24 18:30	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		05/10/24 12:47	05/10/24 18:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87	- 	62 - 134			05/10/24 12:47	05/10/24 18:30	1

Method: EPA 300.0 - Anions, Ion C	hromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160	60	mg/Kg		05/10/24 12:53	05/11/24 16:02	20

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Client Sample ID: BES24-16 2.5'

Lab Sample ID: 885-4276-2 Date Collected: 05/08/24 14:00

Matrix: Solid

Date Received: 05/10/24 09:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.4	mg/Kg		05/10/24 15:30	05/11/24 16:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			05/10/24 15:30	05/11/24 16:33	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.017	mg/Kg		05/10/24 15:30	05/11/24 16:33	1
Ethylbenzene	ND		0.034	mg/Kg		05/10/24 15:30	05/11/24 16:33	1
Toluene	ND		0.034	mg/Kg		05/10/24 15:30	05/11/24 16:33	1
Xylenes, Total	ND		0.068	mg/Kg		05/10/24 15:30	05/11/24 16:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		48 - 145			05/10/24 15:30	05/11/24 16:33	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		05/10/24 12:47	05/10/24 18:43	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		05/10/24 12:47	05/10/24 18:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			05/10/24 12:47	05/10/24 18:43	1

Method: EPA 300.0 - Anions, Ion C	hromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND —	60	mg/Kg		05/10/24 12:53	05/11/24 16:17	20

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Client Sample ID: BES24-21 2.5'

Date Collected: 05/08/24 14:10 Date Received: 05/10/24 09:10 Lab Sample ID: 885-4276-3

Matrix: Solid

Method: SW846 8015D - Gasoline	e Range Orgar	nics (GRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.7	mg/Kg		05/10/24 15:30	05/11/24 16:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		35 - 166			05/10/24 15:30	05/11/24 16:56	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019	mg/Kg		05/10/24 15:30	05/11/24 16:56	1
Ethylbenzene	ND		0.037	mg/Kg		05/10/24 15:30	05/11/24 16:56	1
Toluene	ND		0.037	mg/Kg		05/10/24 15:30	05/11/24 16:56	1
Xylenes, Total	ND		0.075	mg/Kg		05/10/24 15:30	05/11/24 16:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		48 - 145			05/10/24 15:30	05/11/24 16:56	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		05/10/24 12:47	05/10/24 18:55	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/10/24 12:47	05/10/24 18:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			05/10/24 12:47	05/10/24 18:55	1

Method: EPA 300.0 - Anions, ion C	nromatograpny						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND —	60	mg/Kg		05/10/24 12:53	05/11/24 16:32	20

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Date Received: 05/10/24 09:10

4-Bromofluorobenzene (Surr)

Client Sample ID: WES24-15 0-2'

Lab Sample ID: 885-4276-4 Date Collected: 05/08/24 10:15

Matrix: Solid

05/10/24 15:30

05/11/24 17:19

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.5	mg/Kg		05/10/24 15:30	05/11/24 17:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			05/10/24 15:30	05/11/24 17:19	1
Method: SW846 8021B - Volatile	•	. ,		I lmi4	Б	Drawavad	Analysis	Dil Fac
	•	ounds (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	•	. ,		Unit mg/Kg	<u>D</u>	Prepared 05/10/24 15:30	Analyzed 05/11/24 17:19	Dil Fac
	Result	. ,	RL		<u>D</u>			Dil Fac
Analyte Benzene	Result ND	. ,	RL	mg/Kg	<u>D</u>	05/10/24 15:30	05/11/24 17:19	Dil Fac 1 1 1
Analyte Benzene Ethylbenzene	Result ND ND	. ,	0.018 0.035	mg/Kg mg/Kg	<u>D</u>	05/10/24 15:30 05/10/24 15:30	05/11/24 17:19 05/11/24 17:19	Dil Fac 1 1 1 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		05/10/24 12:47	05/10/24 19:08	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/10/24 12:47	05/10/24 19:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			05/10/24 12:47	05/10/24 19:08	1

48 - 145

Method: EPA 300.0 - Allions, lon C	iiroillatograpiiy						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND —	60	mg/Kg		05/10/24 12:53	05/11/24 16:47	20

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Client Sample ID: WES24-16 0-0.5'

Date Collected: 05/08/24 10:25 Date Received: 05/10/24 09:10 Lab Sample ID: 885-4276-5

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.6	mg/Kg		05/10/24 15:30	05/11/24 17:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			05/10/24 15:30	05/11/24 17:43	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.018	mg/Kg		05/10/24 15:30	05/11/24 17:43	1
Ethylbenzene	ND		0.036	mg/Kg		05/10/24 15:30	05/11/24 17:43	1
Toluene	ND		0.036	mg/Kg		05/10/24 15:30	05/11/24 17:43	1
Xylenes, Total	ND		0.072	mg/Kg		05/10/24 15:30	05/11/24 17:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145			05/10/24 15:30	05/11/24 17:43	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		05/10/24 12:47	05/10/24 19:20	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/10/24 12:47	05/10/24 19:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			05/10/24 12:47	05/10/24 19:20	1

Method: EPA 300.0 - Anions, Ion C	hromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND	60	mg/Kg		05/10/24 12:53	05/11/24 17:33	20

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Date Received: 05/10/24 09:10

Toluene

Xylenes, Total

Client Sample ID: WES24-17 0-3'

Date Collected: 05/08/24 10:35

ND

ND

Lab Sample ID: 885-4276-6

05/11/24 18:06

05/11/24 18:06

Matrix: Solid

Method: SW846 8015D - Gasoline	Range Organ	ics (GRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.8	mg/Kg		05/10/24 15:30	05/11/24 18:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

4-Bromofluorobenzene (Surr) 98 35 - 166 05/11/24 18:06 05/10/24 15:30 Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RLUnit Prepared Analyzed Dil Fac Benzene ND 0.019 mg/Kg 05/10/24 15:30 05/11/24 18:06 ND Ethylbenzene 0.038 mg/Kg 05/10/24 15:30 05/11/24 18:06

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		48 - 145	05/10/24 15:30	05/11/24 18:06	1

0.038

0.075

mg/Kg

mg/Kg

05/10/24 15:30

05/10/24 15:30

Analyte	Pocult	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Allalyte	Result	Quanner	RL	- Jill		riepareu	Allalyzeu	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		05/10/24 12:47	05/10/24 19:32	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		05/10/24 12:47	05/10/24 19:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl ohthalate (Surr)			62 134			05/10/24 12:47	05/10/24 19:32	

Method: EPA 300.0 - Anions, Ion C	hromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND ND	60	mg/Kg		05/10/24 12:53	05/11/24 17:48	20

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Client Sample ID: WES24-18 0-2.5'

Date Collected: 05/08/24 14:20 Date Received: 05/10/24 09:10 Lab Sample ID: 885-4276-7

Matrix: Solid

Method: SW846 8015D - Gasoline	e Range Organ	ics (GRO) ((GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.5	mg/Kg		05/10/24 15:30	05/11/24 18:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		35 - 166			05/10/24 15:30	05/11/24 18:30	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.017	mg/Kg		05/10/24 15:30	05/11/24 18:30	1
Ethylbenzene	ND		0.035	mg/Kg		05/10/24 15:30	05/11/24 18:30	1
Toluene	ND		0.035	mg/Kg		05/10/24 15:30	05/11/24 18:30	1
Xylenes, Total	ND		0.069	mg/Kg		05/10/24 15:30	05/11/24 18:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		48 - 145			05/10/24 15:30	05/11/24 18:30	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		05/10/24 12:47	05/10/24 19:44	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/10/24 12:47	05/10/24 19:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	72		62 - 134			05/10/24 12:47	05/10/24 19:44	1

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	ND ND	60	mg/Kg		05/10/24 12:53	05/11/24 18:03	20		

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

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

Lab Sample ID: MB 885-4780/1-A **Matrix: Solid**

Analysis Batch: 4841

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4780

Analyte Result Qualifier RLUnit D Prepared Analyzed Dil Fac Gasoline Range Organics [C6 - C10] ND 5.0 mg/Kg 05/10/24 15:29 05/11/24 09:06

MB MB

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 98 35 - 166 05/10/24 15:29 05/11/24 09:06

Lab Sample ID: LCS 885-4780/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 4841

Prep Type: Total/NA

Prep Batch: 4780

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits 25.0 22.1 88 mg/Kg 70 - 130Gasoline Range Organics [C6 -

C10]

LCS LCS

%Recovery Qualifier Limits Surrogate 202 S1+ 35 - 166 4-Bromofluorobenzene (Surr)

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-4780/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 4843

Prep Batch: 4780

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac ND 0.025 05/10/24 15:29 05/11/24 09:06 Benzene mg/Kg Ethylbenzene ND 0.050 mg/Kg 05/10/24 15:29 05/11/24 09:06 Toluene NΠ 0.050 05/10/24 15:29 05/11/24 09:06 mg/Kg Xylenes, Total ND 0.10 mg/Kg 05/10/24 15:29 05/11/24 09:06

MB MB

Surrogate %Recovery Qualifier Limits Dil Fac Prepared Analyzed 05/10/24 15:29 4-Bromofluorobenzene (Surr) 48 - 145 05/11/24 09:06 95

Lab Sample ID: LCS 885-4780/3-A

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 4843**

Spike LCS LCS %Rec Result Qualifier Analyte Added Unit D %Rec Limits 1.00 0.931 Benzene mg/Kg 93 70 - 130 Ethylbenzene 1.00 0.885 mg/Kg 88 70 - 130 2.00 89 1.78 mg/Kg 70 - 130 m,p-Xylene 0.883 70 - 130 o-Xylene 1.00 mg/Kg 88 0.880 1 00 88 70 - 130 Toluene mg/Kg

LCS LCS

Qualifier Limits Surrogate %Recovery 48 - 145 4-Bromofluorobenzene (Surr) 98

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Client Sample ID: Lab Control Sample

Prep Batch: 4780

Job ID: 885-4276-1 Client: Vertex

Project/Site: JRU DI 1A CTB

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

MB MB

Lab Sample ID: MB 885-4753/1-A

Lab Sample ID: LCS 885-4753/2-A

Matrix: Solid Analysis Batch: 4758

Di-n-octyl phthalate (Surr)

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

Prep Batch: 4753

Analyte Result Qualifier RLUnit D Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] ND 10 mg/Kg 05/10/24 12:47 05/10/24 18:06 Motor Oil Range Organics [C28-C40] ND 50 mg/Kg 05/10/24 12:47 05/10/24 18:06

MB MB Qualifier Limits Dil Fac %Recovery Prepared Analyzed 101 62 - 134 05/10/24 12:47 05/10/24 18:06

mg/Kg

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4753

Prep Type: Total/NA

Prep Type: Total/NA

Analysis Batch: 4758 Spike LCS LCS Analyte Added Result Qualifier Unit D %Rec Limits 50.0 44.0 88 60 - 135

[C10-C28]

Surrogate

Matrix: Solid

Diesel Range Organics

LCS LCS Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 123 62 - 134

Lab Sample ID: 885-4276-7 MS Client Sample ID: WES24-18 0-2.5'

Analysis Batch: 4758 MS MS Sample Sample Spike

Prep Batch: 4753 %Rec Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits 45.0 85 **Diesel Range Organics** ND 38.4 mg/Kg 44 - 136

[C10-C28]

Matrix: Solid

MS MS %Recovery Qualifier Limits Surrogate Di-n-octyl phthalate (Surr) 62 - 134 91

Lab Sample ID: 885-4276-7 MSD Client Sample ID: WES24-18 0-2.5'

Matrix: Solid

Analysis Batch: 4758

Prep Batch: 4753 RPD MSD MSD Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit **Diesel Range Organics** ND 46.9 42.0 90 44 - 136 mg/Kg

[C10-C28]

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-4756/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 4805

мв мв Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride ND 3.0 mg/Kg 05/10/24 12:53 05/11/24 11:12

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Prep Batch: 4756

Released to Imaging: 7/30/2024 4:05:46 PM

Lab Sample ID: LCS 885-4756/2-A

QC Sample Results

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Method: 300.0 - Anions, Ion Chromatography (Continued)

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 4805

Prep Batch: 4756

Spike LCS LCS Result Qualifier Added Analyte Unit %Rec Limits Chloride 30.0 28.2 mg/Kg 94 90 - 110

QC Association Summary

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

GC VOA

Prep Batch: 4780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-4276-1	BES24-07 3'	Total/NA	Solid	5030C	
885-4276-2	BES24-16 2.5'	Total/NA	Solid	5030C	
885-4276-3	BES24-21 2.5'	Total/NA	Solid	5030C	
885-4276-4	WES24-15 0-2'	Total/NA	Solid	5030C	
885-4276-5	WES24-16 0-0.5'	Total/NA	Solid	5030C	
885-4276-6	WES24-17 0-3'	Total/NA	Solid	5030C	
885-4276-7	WES24-18 0-2.5'	Total/NA	Solid	5030C	
MB 885-4780/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-4780/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-4780/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 4841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-4276-1	BES24-07 3'	Total/NA	Solid	8015D	4780
885-4276-2	BES24-16 2.5'	Total/NA	Solid	8015D	4780
885-4276-3	BES24-21 2.5'	Total/NA	Solid	8015D	4780
885-4276-4	WES24-15 0-2'	Total/NA	Solid	8015D	4780
885-4276-5	WES24-16 0-0.5'	Total/NA	Solid	8015D	4780
885-4276-6	WES24-17 0-3'	Total/NA	Solid	8015D	4780
885-4276-7	WES24-18 0-2.5'	Total/NA	Solid	8015D	4780
MB 885-4780/1-A	Method Blank	Total/NA	Solid	8015D	4780
LCS 885-4780/2-A	Lab Control Sample	Total/NA	Solid	8015D	4780

Analysis Batch: 4843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-4276-1	BES24-07 3'	Total/NA	Solid	8021B	4780
885-4276-2	BES24-16 2.5'	Total/NA	Solid	8021B	4780
885-4276-3	BES24-21 2.5'	Total/NA	Solid	8021B	4780
885-4276-4	WES24-15 0-2'	Total/NA	Solid	8021B	4780
885-4276-5	WES24-16 0-0.5'	Total/NA	Solid	8021B	4780
885-4276-6	WES24-17 0-3'	Total/NA	Solid	8021B	4780
885-4276-7	WES24-18 0-2.5'	Total/NA	Solid	8021B	4780
MB 885-4780/1-A	Method Blank	Total/NA	Solid	8021B	4780
LCS 885-4780/3-A	Lab Control Sample	Total/NA	Solid	8021B	4780

GC Semi VOA

Prep Batch: 4753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
885-4276-1	BES24-07 3'	Total/NA	Solid	SHAKE	
885-4276-2	BES24-16 2.5'	Total/NA	Solid	SHAKE	
885-4276-3	BES24-21 2.5'	Total/NA	Solid	SHAKE	
885-4276-4	WES24-15 0-2'	Total/NA	Solid	SHAKE	
885-4276-5	WES24-16 0-0.5'	Total/NA	Solid	SHAKE	
885-4276-6	WES24-17 0-3'	Total/NA	Solid	SHAKE	
885-4276-7	WES24-18 0-2.5'	Total/NA	Solid	SHAKE	
MB 885-4753/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-4753/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-4276-7 MS	WES24-18 0-2.5'	Total/NA	Solid	SHAKE	
885-4276-7 MSD	WES24-18 0-2.5'	Total/NA	Solid	SHAKE	

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QC Association Summary

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

GC Semi VOA

Analysis Batch: 4758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-4276-1	BES24-07 3'	Total/NA	Solid	8015D	4753
885-4276-2	BES24-16 2.5'	Total/NA	Solid	8015D	4753
885-4276-3	BES24-21 2.5'	Total/NA	Solid	8015D	4753
885-4276-4	WES24-15 0-2'	Total/NA	Solid	8015D	4753
885-4276-5	WES24-16 0-0.5'	Total/NA	Solid	8015D	4753
885-4276-6	WES24-17 0-3'	Total/NA	Solid	8015D	4753
885-4276-7	WES24-18 0-2.5'	Total/NA	Solid	8015D	4753
MB 885-4753/1-A	Method Blank	Total/NA	Solid	8015D	4753
LCS 885-4753/2-A	Lab Control Sample	Total/NA	Solid	8015D	4753
885-4276-7 MS	WES24-18 0-2.5'	Total/NA	Solid	8015D	4753
885-4276-7 MSD	WES24-18 0-2.5'	Total/NA	Solid	8015D	4753

HPLC/IC

Prep Batch: 4756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-4276-1	BES24-07 3'	Total/NA	Solid	300_Prep	
885-4276-2	BES24-16 2.5'	Total/NA	Solid	300_Prep	
885-4276-3	BES24-21 2.5'	Total/NA	Solid	300_Prep	
885-4276-4	WES24-15 0-2'	Total/NA	Solid	300_Prep	
885-4276-5	WES24-16 0-0.5'	Total/NA	Solid	300_Prep	
885-4276-6	WES24-17 0-3'	Total/NA	Solid	300_Prep	
885-4276-7	WES24-18 0-2.5'	Total/NA	Solid	300_Prep	
MB 885-4756/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-4756/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 4805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-4276-1	BES24-07 3'	Total/NA	Solid	300.0	4756
885-4276-2	BES24-16 2.5'	Total/NA	Solid	300.0	4756
885-4276-3	BES24-21 2.5'	Total/NA	Solid	300.0	4756
885-4276-4	WES24-15 0-2'	Total/NA	Solid	300.0	4756
885-4276-5	WES24-16 0-0.5'	Total/NA	Solid	300.0	4756
885-4276-6	WES24-17 0-3'	Total/NA	Solid	300.0	4756
885-4276-7	WES24-18 0-2.5'	Total/NA	Solid	300.0	4756
MB 885-4756/1-A	Method Blank	Total/NA	Solid	300.0	4756
LCS 885-4756/2-A	Lab Control Sample	Total/NA	Solid	300.0	4756

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Client Sample ID: BES24-07 3'

Lab Sample ID: 885-4276-1

Matrix: Solid

Date Collected: 05/08/24 11:05 Date Received: 05/10/24 09:10

Project/Site: JRU DI 1A CTB

Client: Vertex

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8015D		1	4841	JP	EET ALB	05/11/24 16:09
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8021B		1	4843	JP	EET ALB	05/11/24 16:09
Total/NA	Prep	SHAKE			4753	JU	EET ALB	05/10/24 12:47
Total/NA	Analysis	8015D		1	4758	JU	EET ALB	05/10/24 18:30
Total/NA	Prep	300_Prep			4756	JT	EET ALB	05/10/24 12:53
Total/NA	Analysis	300.0		20	4805	JT	EET ALB	05/11/24 16:02

Client Sample ID: BES24-16 2.5'

Date Collected: 05/08/24 14:00

Date Received: 05/10/24 09:10

Lab Sample ID: 885-4276-2

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C	 -		4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8015D		1	4841	JP	EET ALB	05/11/24 16:33
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8021B		1	4843	JP	EET ALB	05/11/24 16:33
Total/NA	Prep	SHAKE			4753	JU	EET ALB	05/10/24 12:47
Total/NA	Analysis	8015D		1	4758	JU	EET ALB	05/10/24 18:43
Total/NA	Prep	300_Prep			4756	JT	EET ALB	05/10/24 12:53
Total/NA	Analysis	300.0		20	4805	JT	EET ALB	05/11/24 16:17

Client Sample ID: BES24-21 2.5'

Date Collected: 05/08/24 14:10

Date Received: 05/10/24 09:10

Lab	Sam	ple I	D: 88	85-427	76-3

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8015D		1	4841	JP	EET ALB	05/11/24 16:56
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8021B		1	4843	JP	EET ALB	05/11/24 16:56
Total/NA	Prep	SHAKE			4753	JU	EET ALB	05/10/24 12:47
Total/NA	Analysis	8015D		1	4758	JU	EET ALB	05/10/24 18:55
Total/NA	Prep	300_Prep			4756	JT	EET ALB	05/10/24 12:53
Total/NA	Analysis	300.0		20	4805	JT	EET ALB	05/11/24 16:32

Client Sample ID: WES24-15 0-2'

Date Collected: 05/08/24 10:15

Date Received: 05/10/24 09:10

ab Sam	ple ID:	885-4276-4	
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Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8015D		1	4841	JP	EET ALB	05/11/24 17:19

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Client: Vertex

Client Sample ID: WES24-15 0-2'

Date Collected: 05/08/24 10:15 Date Received: 05/10/24 09:10

Lab Sample ID: 885-4276-4

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8021B		1	4843	JP	EET ALB	05/11/24 17:19
Total/NA	Prep	SHAKE			4753	JU	EET ALB	05/10/24 12:47
Total/NA	Analysis	8015D		1	4758	JU	EET ALB	05/10/24 19:08
Total/NA	Prep	300_Prep			4756	JT	EET ALB	05/10/24 12:53
Total/NA	Analysis	300.0		20	4805	JT	EET ALB	05/11/24 16:47

Client Sample ID: WES24-16 0-0.5'

Date Collected: 05/08/24 10:25 Date Received: 05/10/24 09:10

Lab Sample ID: 885-4276-5

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8015D		1	4841	JP	EET ALB	05/11/24 17:43
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8021B		1	4843	JP	EET ALB	05/11/24 17:43
Total/NA	Prep	SHAKE			4753	JU	EET ALB	05/10/24 12:47
Total/NA	Analysis	8015D		1	4758	JU	EET ALB	05/10/24 19:20
Total/NA	Prep	300_Prep			4756	JT	EET ALB	05/10/24 12:53
Total/NA	Analysis	300.0		20	4805	JT	EET ALB	05/11/24 17:33

Client Sample ID: WES24-17 0-3'

Date Collected: 05/08/24 10:35 Date Received: 05/10/24 09:10 Lab Sample ID: 885-4276-6

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8015D		1	4841	JP	EET ALB	05/11/24 18:06
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8021B		1	4843	JP	EET ALB	05/11/24 18:06
Total/NA	Prep	SHAKE			4753	JU	EET ALB	05/10/24 12:47
Total/NA	Analysis	8015D		1	4758	JU	EET ALB	05/10/24 19:32
Total/NA	Prep	300_Prep			4756	JT	EET ALB	05/10/24 12:53
Total/NA	Analysis	300.0		20	4805	JT	EET ALB	05/11/24 17:48

Client Sample ID: WES24-18 0-2.5'

Date Collected: 05/08/24 14:20

Date Received: 05/10/24 09:10

Lab Sample	ID: 885-4276-7
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Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8015D		1	4841	JP	EET ALB	05/11/24 18:30
Total/NA	Prep	5030C			4780	JP	EET ALB	05/10/24 15:30
Total/NA	Analysis	8021B		1	4843	JP	EET ALB	05/11/24 18:30

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Lab Chronicle

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Client Sample ID: WES24-18 0-2.5'

Lab Sample ID: 885-4276-7

Date Collected: 05/08/24 14:20 Matrix: Solid

Date Collected: 05/08/24 14:20 Matrix: Solid
Date Received: 05/10/24 09:10

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	SHAKE			4753	JU	EET ALB	05/10/24 12:47
Total/NA	Analysis	8015D		1	4758	JU	EET ALB	05/10/24 19:44
Total/NA	Prep	300_Prep			4756	JT	EET ALB	05/10/24 12:53
Total/NA	Analysis	300.0		20	4805	JT	EET ALB	05/11/24 18:03

Laboratory References:

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

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Accreditation/Certification Summary

Client: Vertex Job ID: 885-4276-1

Project/Site: JRU DI 1A CTB

Laboratory: Eurofins Albuquerque

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

Authority	Progr	am	Identification Number	Expiration Date 02-26-25	
New Mexico	State		NM9425, NM0901		
• •	are included in this report, but ness not offer certification.	ut the laboratory is not certif	ied by the governing authority. This I	ist may include analytes	
Analysis Method	Prep Method	Matrix	Analyte		
300.0	300_Prep	Solid	Chloride		
8015D	5030C	Solid	Gasoline Range Organic	s [C6 - C10]	
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]	
8015D	SHAKE	Solid	Motor Oil Range Organic	s [C28-C40]	
8021B	5030C	Solid	Benzene		
8021B	5030C	Solid	Ethylbenzene		
8021B	5030C	Solid	Toluene		
8021B	5030C	Solid	Xylenes, Total		
regon	NELA	P	NM100001	02-26-25	

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Login Sample Receipt Checklist

Client: Vertex Job Number: 885-4276-1

Login Number: 4276 List Source: Eurofins Albuquerque

List Number: 1

Creator: Alderette, Joseph

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	

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/7/2024 4:00:24 PM

JOB DESCRIPTION

JRU DI 1A CTB

JOB NUMBER

885-5373-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

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

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Client: Vertex Laboratory Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

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Definitions/Glossary

Client: Vertex Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

Qualifiers

GC VOA

Qualifier **Qualifier Description**

S1+ Surrogate recovery exceeds control limits, high biased.

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) Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

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 **Quality Control** QC

RER Relative Error Ratio (Radiochemistry)

RLReporting 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)

Too Numerous To Count **TNTC**

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Case Narrative

Client: Vertex Job ID: 885-5373-1

Project: JRU DI 1A CTB

Job ID: 885-5373-1 Eurofins Albuquerque

Job Narrative 885-5373-1

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

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

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

Receipt

The samples were received on 5/31/2024 7:45 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 3.6°C.

Diesel Range Organics

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

HPLC/IC

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

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Client Sample Results

Client: Vertex Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

Xylenes, Total

4-Bromofluorobenzene (Surr)

Released to Imaging: 7/30/2024 4:05:46 PM

Surrogate

Client Sample ID: WES24-25 0-0.5'

Date Collected: 05/28/24 12:15 Date Received: 05/31/24 07:45

Lab Sample ID: 885-5373-1

05/31/24 10:35 06/06/24 15:48

05/31/24 10:35 06/06/24 15:48

Analyzed

Prepared

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		05/31/24 10:35	06/06/24 15:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		35 - 166			05/31/24 10:35	06/06/24 15:48	1
Method: SW846 8021B - Vo	latile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/31/24 10:35	06/06/24 15:48	1
Ethylbenzene	ND		0.047	mg/Kg		05/31/24 10:35	06/06/24 15:48	1
Toluene	ND		0.047	mg/Kg		05/31/24 10:35	06/06/24 15:48	1

0.094

Limits

48 - 145

ND

%Recovery Qualifier

97

Analyte	Result (Qualifier	// RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		05/31/24 15:14	06/04/24 15:38	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/31/24 15:14	06/04/24 15:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	(100)	> -	62 - 134			05/31/24 15:14	06/04/24 15:38	1

Analyte	Resul		RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	NI	<u> </u>	59	mg/Kg		06/01/24 06:49	06/01/24 14:20	20

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Dil Fac

mg/Kg

Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

Client: Vertex

Client Sample ID: BES24-20 2'

Lab Sample ID: 885-5373-2

Date Collected: 05/28/24 13:30 **Matrix: Solid**

Date Received: 05/31/24 07:45

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		05/31/24 10:35	06/06/24 16:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		35 - 166			05/31/24 10:35	06/06/24 16:11	1
Method: SW846 8021B - Vo	olatile Organic	Compound	ds (GC)					
	_	Compound Qualifier	ds (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
	_	•		Unit mg/Kg	// _ <u>D</u>	Prepared 05/31/24 10:35	Analyzed 06/06/24 16:11	Dil Fac
Analyte	Result	•	RL		<u>D</u>			Dil Fac
	Result ND	•	RL 0.023	mg/Kg	_ <u>D</u>	05/31/24 10:35	06/06/24 16:11	Dil Fac 1 1 1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		48 - 145	05/31/24 10:35	06/06/24 16:11	1

Method: SW846 8015M/D - Did	esel Range (Organics (DRO) (GC)					
Analyte	Result	Qualifier	(RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2 8.7	mg/Kg		05/31/24 15:14	06/04/24 15:51	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		05/31/24 15:14	06/04/24 15:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94	××××××××××××××××××××××××××××××××××××××	62 - 134			05/31/24 15:14	06/04/24 15:51	1

Method: EPA 300.0 - Anions, Ion Chromatography								
Analyte		Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride		ND	60	mg/Kg		06/01/24 06:49	06/01/24 14:33	20

Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

Client: Vertex

Client Sample ID: BES24-19 2'

Lab Sample ID: 885-5373-3 Date Collected: 05/28/24 14:00

Matrix: Solid

Date Received: 05/31/24 07:45

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		05/31/24 10:35	06/06/24 16:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		35 - 166			05/31/24 10:35	06/06/24 16:35	1

Analyte	Result Qua	alifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	0.024	mg/Kg		05/31/24 10:35	06/06/24 16:35	1
Ethylbenzene	ND	0.048	mg/Kg		05/31/24 10:35	06/06/24 16:35	1
Toluene	ND	0.048	mg/Kg		05/31/24 10:35	06/06/24 16:35	1
Xylenes, Total	ND	0.097	mg/Kg		05/31/24 10:35	06/06/24 16:35	1
Surrogate	%Recovery Qua	alifier Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97	48-145			05/31/24 10:35	06/06/24 16:35	1

Analyte	Result	Qualifier	(RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.5	mg/Kg		05/31/24 15:14	06/04/24 16:03	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		05/31/24 15:14	06/04/24 16:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	(100		62 - 134			05/31/24 15:14	06/04/24 16:03	1

Method: EPA 300.0 - Anions, for Chromatography										
Analyte		Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride		ND		60	mg/Kg	7	06/01/24 06:49	06/01/24 14:45	20	

Client: Vertex Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

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

Lab Sample ID: MB 885-5942/1-A

Matrix: Solid

Analysis Batch: 6304

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5942

MB MB Result Qualifier RL Unit Analyzed Dil Fac Analyte **Prepared** 5.0 05/31/24 10:35 06/06/24 15:00 Gasoline Range Organics ND mg/Kg

(GRO)-C6-C10

MB MB

Qualifier Limits Surrogate %Recovery 4-Bromofluorobenzene (Surr) 35 - 166 101

Dil Fac Prepared Analyzed 05/31/24 10:35 06/06/24 15:00

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 885-5942/2-A

Matrix: Solid

Analysis Batch: 6304

Prep Type: Total/NA Prep Batch: 5942 LCS LCS

%Rec

Added Result Qualifier Analyte Unit D %Rec Limits Gasoline Range Organics 25.0 24.1 mg/Kg 96 70 - 130

Spike

(GRO)-C6-C10

LCS LCS

%Recovery Qualifier Limits Surrogate 35 - 166 213 S1+ 4-Bromofluorobenzene (Surr)

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-5942/1-A

Matrix: Solid

Analysis Batch: 6306

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 5942

_	/MB M	/IB						
Analyte	Result Q	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/31/24 10:35	06/06/24 15:00	1
Ethylbenzene	ND		0.050	mg/Kg		05/31/24 10:35	06/06/24 15:00	1
Toluene	ND		0.050	mg/Kg		05/31/24 10:35	06/06/24 15:00	1
Xylenes, Total	ND		0.10	mg/Kg		05/31/24 10:35	06/06/24 15:00	1

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 48 - 145 05/31/24 10:35 06/06/24 15:00 4-Bromofluorobenzene (Surr) 96

Lab Sample ID: LCS 885-5942/3-A

Matrix: Solid

Analysis Batch: 6306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 5942

	Spike	LCS	LCS		%Rec	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
Benzene	1.00	0.942	mg/Kg	94	70 - 130	
Ethylbenzene	1.00	0.897	mg/Kg	90	70 - 130	
m-Xylene & p-Xylene	2.00	1.81	mg/Kg	91	70 - 130	
o-Xylene	1.00	0.887	mg/Kg	89	70 - 130	
Toluene	1.00	0.900	mg/Kg	90	70 - 130	

LCS LCS

%Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 101 48 - 145

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Client: Vertex Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

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

Lab Sample ID: MB 885-5961/1-A

Matrix: Solid

Analysis Batch: 6126 MB MB

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

Prep Batch: 5961

Result Qualifier RL Unit D Analyzed Dil Fac Analyte **Prepared** 05/31/24 15:13 06/04/24 11:16 Diesel Range Organics [C10-C28] ND 10 mg/Kg Motor Oil Range Organics [C28-C40] ND 50 mg/Kg 05/31/24 15:13 06/04/24 11:16

MB MB

Surrogate %Recovery Qualifier I imite Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 121 62 - 134 05/31/24 15:13 06/04/24 11:16

Lab Sample ID: LCS 885-5961/2-A

Matrix: Solid

Analysis Batch: 6126

Client Sample ID: Lab Control Sample Prep Type: Total/NA Spike LCS LCS %Rec

Prep Batch: 5961

Added Result Qualifier Limits Unit %Rec Analyte D 50.0 60 - 135 **Diesel Range Organics** 44.9 mg/Kg 90

[C10-C28]

LCS LCS

Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 101 62 - 134

Lab Sample ID: 885-5373-3 MS

Matrix: Solid

Analysis Batch: 6126

Client Sample ID: BES24-19 2'

Prep Type: Total/NA Prep Batch: 5961

%Rec

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit Limits D %Rec Diesel Range Organics ND 47.4 46.1 97 44 - 136 mg/Kg

[C10-C28]

MS MS

Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 62 - 134 96

Lab Sample ID: 885-5373-3 MSD Client Sample ID: BES24-19 2'

Matrix: Solid

Analysis Batch: 6126

Prep Type: Total/NA

MSD MSD

%Rec Limits **RPD** Limit

Sample Sample Result Qualifier Analyte Added Result Qualifier Unit %Rec ND $4\overline{4.5}$ Diesel Range Organics 45.2 mg/Kg 102 44 - 136 [C10-C28]

Spike

MSD MSD

Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 62 - 134 105

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-5975/1-A **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 5986

Released to Imaging: 7/30/2024 4:05:46 PM

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride ND 3.0 mg/Kg 06/01/24 06:49 06/01/24 08:10

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Prep Batch: 5975

Prep Batch: 5961 **RPD**

QC Sample Results

Spike

Added

30.0

Client: Vertex Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-5975/2-A

Matrix: Solid

Analyte

Chloride

Analysis Batch: 5986

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	P	
Prep	Batch:	5975
%Rec		

	%Rec	
Rec	Limits	

90 - 110

92

LCS LCS

27.6

Result Qualifier

Unit

mg/Kg

QC Association Summary

Client: Vertex Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

GC VOA

Prep Batch: 5942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5373-1	WES24-25 0-0.5'	Total/NA	Solid	5030C	
885-5373-2	BES24-20 2'	Total/NA	Solid	5030C	
885-5373-3	BES24-19 2'	Total/NA	Solid	5030C	
MB 885-5942/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-5942/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-5942/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 6304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5373-1	WES24-25 0-0.5'	Total/NA	Solid	8015M/D	5942
885-5373-2	BES24-20 2'	Total/NA	Solid	8015M/D	5942
885-5373-3	BES24-19 2'	Total/NA	Solid	8015M/D	5942
MB 885-5942/1-A	Method Blank	Total/NA	Solid	8015M/D	5942
LCS 885-5942/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5942

Analysis Batch: 6306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5373-1	WES24-25 0-0.5'	Total/NA	Solid	8021B	5942
885-5373-2	BES24-20 2'	Total/NA	Solid	8021B	5942
885-5373-3	BES24-19 2'	Total/NA	Solid	8021B	5942
MB 885-5942/1-A	Method Blank	 Total/NA	Solid	8021B	5942
LCS 885-5942/3-A	Lab Control Sample	Total/NA	Solid	8021B	5942

GC Semi VOA

Prep Batch: 5961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5373-1	WES24-25 0-0.5'	Total/NA	Solid	SHAKE	
885-5373-2	BE\$24-20 2'	Total/NA	Solid	SHAKE	
885-5373-3	BES24-19 2'	Total/NA	Solid	SHAKE	
MB 885-5961/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-5961/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-5373-3 MS	BES24-19 2'	Total/NA	Solid	SHAKE	
885-5373-3 MSD	BES24-19 2'	Total/NA	Solid	SHAKE	

Analysis Batch: 6126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5373-1	WES24-25 0-0.5'	Total/NA	Solid	8015M/D	5961
885-5373-2	BES24-20 2'	Total/NA	Solid	8015M/D	5961
885-5373-3	BES24-19 2'	Total/NA	Solid	8015M/D	5961
MB 885-5961/1-A	Method Blank	Total/NA	Solid	8015M/D	5961
LCS 885-5961/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5961
885-5373-3 MS	BES24-19 2'	Total/NA	Solid	8015M/D	5961
885-5373-3 MSD	BES24-19 2'	Total/NA	Solid	8015M/D	5961

HPLC/IC

Prep Batch: 5975

	Sample ID	Client Sample ID WES24-25 0-0.5'	Prep Type Total/NA	Matrix Solid	Method 300 Prep	Prep Batch
	5373-2	BES24-20 2'	Total/NA	Solid	300_Prep	
885-5	373-3	BES24-19 2'	Total/NA	Solid	300_Prep	

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6/7/2024

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QC Association Summary

Client: Vertex Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

HPLC/IC (Continued)

Prep Batch: 5975 (Continued)

Lab Samp	le ID Client Sample ID	Ргер Тур	oe Matrix	Method	Prep Batch
MB 885-59	975/1-A Method Blank	Total/NA	Solid	300_Prep	
LCS 885-5	975/2-A Lab Control Samp	le Total/NA	Solid	300_Prep	

Analysis Batch: 5986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5373-1	WES24-25 0-0.5'	Total/NA	Solid	300.0	5975
885-5373-2	BES24-20 2'	Total/NA	Solid	300.0	5975
885-5373-3	BES24-19 2'	Total/NA	Solid	300.0	5975
MB 885-5975/1-A	Method Blank	Total/NA	Solid	300.0	5975
LCS 885-5975/2-A	Lab Control Sample	Total/NA	Solid	300.0	5975

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Client Sample ID: WES24-25 0-0.5'

Date Collected: 05/28/24 12:15

Lab Sample ID: 885-5373-1

Matrix: Solid

Date Received: 05/31/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			5942	AT	EET ALB	05/31/24 10:35
Total/NA	Analysis	8015M/D		1	6304	JP	EET ALB	06/06/24 15:48
Total/NA	Prep	5030C			5942	AT	EET ALB	05/31/24 10:35
Total/NA	Analysis	8021B		1	6306	JP	EET ALB	06/06/24 15:48
Total/NA	Prep	SHAKE			5961	DH 💥	EET ALB	05/31/24 15:14
Total/NA	Analysis	8015M/D		1	6126	JU	EET ALB	06/04/24 15:38
Total/NA	Prep	300_Prep			5975	JŦ	EET ALB	06/01/24 06:49
Total/NA	Analysis	300.0		20	5986	J1	EET ALB	06/01/24 14:20

Lab Sample ID: 885-5373-2

Matrix: Solid

Client Sample ID: BES24-20 2' Date Collected: 05/28/24 13:30

Date Received: 05/31/24 07:45

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			5942	AT	EET ALB	05/31/24 10:35
Total/NA	Analysis	8015M/D		1	6304	JP	EET ALB	06/06/24 16:11
Total/NA	Prep	5030C			5942	AT	EET ALB	05/31/24 10:35
Total/NA	Analysis	8021B		1	6306	JP	EET ALB	06/06/24 16:11
Total/NA	Prep	SHAKE			5961	DH	EET ALB	05/31/24 15:14
Total/NA	Analysis	8015M/D		1	6126	JU	EET ALB	06/04/24 15:51
Total/NA	Prep	300_Prep			5975	JT	EET ALB	06/01/24 06:49
Total/NA	Analysis	300.0		20	5986	JT	EET ALB	06/01/24 14:33

Client Sample ID: BES24-19 2'

Date Collected: 05/28/24 14:00

Date Received: 05/31/24 07:45

Lab Sample II	D: 885-5373-3
	Matrix: Solid

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			5942	AT	EET ALB	05/31/24 10:35
Total/NA	Analysis	8015M/D		1	6304	JP	EET ALB	06/06/24 16:35
Total/NA	Prep	5030C			5942	AT	EET ALB	05/31/24 10:35
Total/NA	Analysis	8021B		1	6306	JP	EET ALB	06/06/24 16:35
Total/NA	Prep	SHAKE			5961	DH	EET ALB	05/31/24 15:14
Total/NA	Analysis	8015M/D		1	6126	JU	EET ALB	06/04/24 16:03
Total/NA	Prep	300_Prep			5975	JT	EET ALB	06/01/24 06:49
Total/NA	Analysis	300.0		20	5986	JT	EET ALB	06/01/24 14:45

Laboratory References:

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

Released to Imaging: 7/30/2024 4:05:46 PM

Accreditation/Certification Summary

Client: Vertex Job ID: 885-5373-1

Project/Site: JRU DI 1A CTB

Laboratory: Eurofins Albuquerque

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

Authority	Progr	am	Identification Number	Expiration Date
New Mexico	State		NM9425, NM0901	02-26-25
,	s are included in this repo does not offer certification	•	not certified by the governing author	rity. This list may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
300.0	300_Prep	Solid	Chloride	
8015M/D	5030C	Solid	Gasoline Range Organic	s (GRO)-C6-C10
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]	
8015M/D	SHAKE	Solid	Motor Oil Range Organic	cs [C28-C40]
8021B	5030C	Solid	Benzene	
8021B	5030C	Solid	Ethylbenzene	
8021B	5030C	Solid	Toluene	
8021B	5030C	Solid	Xylenes, Total	
Dregon	NELA	Р	NM100001	02-26-25

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1

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-5373-1

List Source: Eurofins Albuquerque Login Number: 5373

List Number: 1

Creator: Casarrubias, Tracy

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

Eurofins Albuquerque

From: <u>Chance Dixon</u>
To: <u>Wells, Shelly, EMNRD</u>

Subject: [EXTERNAL] RE: NAPP2331041267 JAMES RANCH UNIT DI 1A TANK BATTERY

Date: Tuesday, July 30, 2024 3:46:01 PM

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

Shelly,

My apologies for these errors. This was a complex excavation with lines everywhere underneath so it that took a lot of data organizing. It appears that I did not have it organized quite enough. As for BES24-19 and BES24-20, these samples were clean at 0.5' bgs. However, we noticed that there was a very slight exceedance at 2' in this area during delineation while remedial activities were taking place. So, we decided to take it down to 2' in excavation to make sure our bases were covered. Due to safety concerns with the pipelines under the release, all exceedances found at 2' during delineation were excavated in the direct vicinity of them and we scraped at 0.5' everywhere in between to see if clean.

Corrections to the samples you have listed are below. In short, everything in the table is correct and the errors are only in the figure.

BES24-01 was excavated to 2'. The figure was supposed to have a polygon labeled as 2' around it.

BES24-18 was excavated to 0.5". Table is correct and the blue polygon for 2' was supposed to only go around BES24-19 and BES24-20.

BES24-08 was excavated to 2'. Table is correct and the pink square polygon around it in the figure was supposed to be labeled as 2'.

I hope this clears it up. Again, I do apologize for this sloppiness. Please let me know if there are any more concerns.

Thank you,

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Sent: Tuesday, July 30, 2024 3:20 PM

To: Chance Dixon <cdixon@vertexresource.com>

Subject: NAPP2331041267 JAMES RANCH UNIT DI 1A TANK BATTERY

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Good afternoon Chance,

I am reviewing the submitted remediation closure report for NAPP2331041267 JAMES RANCH UNIT DI 1A TANK BATTERY and have a few questions for you. First of all, in the remediation summary it does not explain why samples at BES24-19 and BES24-20 were recollected at 2' on 5/28/24 after being clean at .5' on 3/12/24? Also, there are discrepancies between Figure 1 and Table 3:

BES24-01.5' excavation in Figure 1 but 2' in Table 3 BES24-18 2' excavation in Figure 1 but .5' in Table 3 BES24-08.5' excavation in Figure 1 but 2' in Table 3

Please let me know what is correct so I can make my determination regarding this release. I look forward to hearing what you have to say.

Kind regards,

Shelly

Shelly Wells * Environmental Specialist-Advanced Environmental Bureau

EMNRD-Oil Conservation Division

1220 S. St. Francis Drive|Santa Fe, NM 87505

(505)469-7520|Shelly.Wells@emnrd.nm.gov

http://www.emnrd.state.nm.us/OCD/

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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 367504

QUESTIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	367504
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites				
Incident ID (n#)	nAPP2331041267			
Incident Name	NAPP2331041267 JAMES RANCH UNIT DI 1A TANK BATTERY @ 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 TANK BATTERY	
Date Release Discovered	10/26/2023	
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 t	or 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: 9 BBL Recovered: 7 BBL Lost: 2 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 8" CS main PW line to release fluids to pad. A vac truck recovered all free fluids. A third-party contractor has been retained for remediation purposes.	

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QUESTIONS, Page 2

Action 367504

QUEST	IONS (continued)
Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380 Action Number: 367504 Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)
QUESTIONS	, , , , , , , , , , , , , , , , , , , ,
Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.	e. gas only) are to be submitted on the C-129 form.
Initial Response	
The responsible party must undertake the following actions immediately unless they could create a	safety hazard that would result in injury
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
	Liation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of ted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of evaluation in the follow-up C-141 submission.
to report and/or file certain release notifications and perform corrective actions for rele	knowledge and understand that pursuant to OCD rules and regulations all operators are required ases which may endanger public health or the environment. The acceptance of a C-141 report by 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: Alan Romero

Title: Regulatory Analyst

Email: alan.romero1@exxonmobil.com

Date: 04/29/2024

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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, Page 3

Action 367504

QUESTIONS (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	367504
	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 ar	nd the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)	
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 500 and 1000 (ft.)	
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 ½ and 1 (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	Low	
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	I. 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 th	is submission	Yes
Attach a comprehensive report demonstrating the lateral a	nd 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 contamina	ation been fully delineated	Yes
Was this release entirely contained within a line	d containment area	No
Soil Contamination Sampling: (Provide the highes	t observable value for each, in mi	lligrams per kilograms.)
Chloride (EPA 300.0 or	SM4500 CI B)	12700
TPH (GRO+DRO+MRO) (EPA SW-846 M	ethod 8015M)	1250
GRO+DRO (EPA SW-846	Method 8015M)	1250
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 cha which includes the anticipated timelines for beginning and		d efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,
On what estimated date will the remediation cor	nmence	03/08/2024
On what date will (or did) the final sampling or li	ner inspection occur	04/24/2024
On what date will (or was) the remediation comp	olete(d)	04/24/2024
What is the estimated surface area (in square fe	et) that will be reclaimed	4200
What is the estimated volume (in cubic yards) th	at will be reclaimed	120
What is the estimated surface area (in square fe	et) that will be remediated	4200
What is the estimated volume (in cubic yards) th	at will be remediated	300
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 a	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.

District I

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

QUESTIONS, Page 4

Action 367504

QUESTIONS (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	367504
	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	No	
OR is the off-site disposal site, to be used, an NMED facility	No	
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No	
(In Situ) Soil Vapor Extraction	No	
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No	
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No	
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No	
Ground Water Abatement pursuant to 19.15.30 NMAC	No	
OTHER (Non-listed remedial process)	No	

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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

I hereby agree and sign off to the above statement

Name: Amv Ruth

Title: Coordinator SSHE Environmental

Email: amy.ruth@exxonmobil.com

Date: 07/25/2024

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5

Action 367504

QUESTIONS (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	367504
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

OUESTIONS

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.		the following items must be confirmed as part of any request for deferral of remediation.
	Requesting a deferral of the remediation closure due date with the approval of this submission	No

District I

1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 **District II**

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1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170 **District IV** 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462 State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 6

Action 367504

QUESTIONS (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	367504
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	346916
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/28/2024
What was the (estimated) number of samples that were to be gathered	4
What was the sampling surface area in square feet	800

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	4760			
What was the total volume (cubic yards) remediated	190			
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	12943			
What was the total volume (in cubic yards) reclaimed	300			
Summarize any additional remediation activities not included by answers (above)	Site was excavated to NMOCD's strictest closure 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.

Name: Amy Ruth
Title: Coordinator SSHE Environmental
Email: amy.ruth@exxonmobil.com
Date: 07/25/2024

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QUESTIONS, Page 7

Action 367504

QUESTIONS	(continued)
QUESTIONS:	COHUHUCU <i>i</i>

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	367504
	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

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

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CONDITIONS

Action 367504

CONDITIONS

	Loopin
Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	367504
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created B	y Condition	Condition Date
scwells	None	7/30/2024