OSE POD 0.5 miles



Stream River

0

0 Active

Pending

OSE District Boundary New Mexico State Trust Lands

Both Estates

Artesian Planning Area

0.17 0.35 0.7 mi 0 0.6 0.3 1.2 km 0

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



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

(A CLW##### in the POD suffix indicates the POD has been replaced	(R=POD h replaced, O=orphane	ed,		,				1							
& no longer serves a water right file.)	C=the file closed)	is		```					√ 2=NE est to la	(N 3=SW 4=S) rgest)	E) JAD83 UTM in n	neters)	(In fe	eet)	
	,	POD			-										
	~ .	Sub-	_		Q		~	_	_						ater
POD Number <u>C 02637</u>	Code	basin (CUB	County ED				Sec 24	Tws 22S	Rng 30E	X 608950	Y 3582377* 🦲	DistanceDep 1241	759	hWater Co	lumn
<u>C 02950 EXPL</u>		CUB	ED	4	2	4	23	22S	30E	608740	3582576* 🦲	1501	845		
<u>C 04773 POD1</u>		CUB	ED	4	4	4	24	228	30E	610415	3582262	1527	55		
<u>C 03561 POD2</u>		CUB	ED	3	2	3	36	22S	30E	609314	3579424 🔵	1768	25	0	25
<u>C 03561 POD3</u>		CUB	ED	3	2	3	36	22S	30E	609393	3579425 🌍	1769	25	0	25
<u>C 03561 POD4</u>		CUB	ED	3	2	3	36	22S	30E	609419	3579425 🌍	1770	25	0	25
<u>C 03561 POD5</u>		CUB	ED	3	2	3	36	22S	30E	609419	3579425 🌍	1770	20	0	20
<u>C 03561 POD1</u>		CUB	ED	3	2	3	36	22S	30E	609288	3579393 🌍	1800	30	0	30
C 03221 EXPLORE		CUB	ED	1	2	1	30	22S	31E	610995	3581935* 🌍	1828	651		
											Avera	ge Depth to Wat	er:	0 feet	t
												Minimum De	pth:	0 feet	t
												Maximum Dej	oth:	0 feet	t
<u>Record Count:</u> 9															
UTMNAD83 Radius	Search (in r	<u>meters):</u>													
Easting (X): 609	9324		North	ing	(Y)	:	3581	193			Radius: 2000				
*UTM location was derived	from PLSS - s	see Help													
The data is furnished by the N accuracy, completeness, reliab										derstanding th	nat the OSE/ISC ma	ke no warranties,	expressed or im	plied, concern	ing the

7/9/24 12:29 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer **Point of Diversion Summary**

			(quar	ters are	: 1=N	W 2=N	E 3=SV	V 4=SE)			
			(qua	rters a	e sma	allest to	largest)	(NAD83 1	JTM in meters)	
Well Tag	POE) Number	Q64	Q16	Q4	Sec	Tws	Rng	Х	Y	
NA	C 0	4773 POD1	4	4	4	24	22S	30E	610415	3582262 🌘	9
x Driller Lic	ense:	1833	Drille	r Con	npar	ıy:	VIS	SION R	ESOURCE	S, INC	
Driller Nai	me:	JASON MALEY									
Drill Start	Date:	12/15/2023	Drill I	Finish	n Dat	te:	1	2/15/20	023 P	lug Date:	12/21/2023
Log File D	ate:	01/12/2024	PCW	Rev I	Date	:			S	ource:	
Pump Type	e:		Pipe I	Discha	arge	Size:			Ε	stimated Yiel	d:
Casing Size	e:		Depth	Well	•		5	5 feet	D	epth Water:	

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7/9/24 12:59 PM

POINT OF DIVERSION SUMMARY

Registed by ACD: 7/15/2024 2:12:50 PM

get image list	WR File Number: Primary Purpose: Primary Status:	MON N	IONITOR ERMIT	Subbasin: ING WELL	CUB	Cross Rei	ference:	-	
	Total Acres: Total Diversion: Owner: Contact:	0 DEVON E DALE WO		Subfile: Cause/Cas RESOURCES	- e: -			Header: -	
43%	x s on File Trn # Doc File, 751177 EXPL 2023-		Status 1 2 MT APR	Transaction De C-4773 POD1	50.	From/ To T	Acres 0	Diversion 0	Consumptiv
POD N	x bints of Diversion Number Well 73 POD1 NA	Tag Sourc	-	Q4Sec Tws Rng 4 24 22S 30E	NAD83 UTM X 610415	1 in meters) Y 3582262	Other 1	Location Des	c

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7/9/24 1:01 PM

WATER RIGHT SUMMARY

Received by OCD: 7/15/2024 2:12:50 PM

New Mexico Office of the State Engineer Transaction Summary

		EXPL Permit To Explor	e	
saction Number:	751177	Transaction Desc: C-4773	POD1 File	Date: 09/15/2
Primary Status: Secondary Status: Person Assigned: Applicant: Contact:	*****	proved		
× Events				
$ \begin{array}{c} \text{Date} \\ \text{\hline \mathbb{O}} \\ \text{\underline{get}} \\ \text{\underline{images}} \\ \begin{array}{c} 09/15/202 \end{array} $	Туре 23 АРР	Description Application Received	Comment *	Processed By ******
09/15/202	23 TEC	Technical Report	*PLUG PLAN C- 4773	*****
09/19/202	23 FTN	Finalize non-published Trans.		****
10/26/202	23 QAT	Quality Assurance Completed	SQ2	*****
10/31/202	23 QAT	Quality Assurance Completed	IMAGE	****
@ <u>get</u> 01/12/202	24 LOG	Well Log Received	*POD1	*****
@ get 01/12/202	24 LGI	Well Log Image	*PLG RECORD	*****
01/23/202	24 DRY	Dry well log received		*****
04/18/202	24 QAT	Quality Assurance Completed	DATA	*****
04/29/202	24 QAT	Quality Assurance Completed	IMAGE	****
x Water Right Inform WR File Nbr	nation Acre	es Diversion Consump	tive Purpose of Use	
C 04773		0 0	MON MONITOR	ING WELL
** Point of Dive C 04773 POE		610415 3582262		

Conditions

- 1A Depth of the well shall not exceed the thickness of the valley fill.
- 4 No water shall be appropriated and beneficially used under this permit.
- B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.

Received by OCD: 7/15/2024 2:12:50 PM https://www.science.com/us/nmwrrs/ReportDispatcher?type=TRANSHTML&name=TransactionSummaryHTML.jrxml&basin=Carge=649f.400

- C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record. The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.
- 6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable
- 7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.
- 16 Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.
- P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.
- Q The State Engineer retains jurisdiction over this permit.
- R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

Action of the State Engineer

SHOULD THE PERMITTEE CHANGE THE PURPOSE OF USE TO OTHER THAN MONITORING PURPOSES, AN APPLICATION SHALL BE ACQUIRED FROM THE OFFICE OF THE STATE ENGINEER.

** See Image For Any Additional Conditions of Approval **

Approval Code:	A - Approved
Action Date:	09/19/2023
Log Due Date:	09/18/2024
State Engineer:	Mike A. Hamman,

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

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TRANSACTION SUMMARY



WELL RECORD & LOG Apache 24

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

WNER MAI Bender Ro LL TION I GPS) PTION REL NO. 1833 G STARTEI -15-23 TED WELL G FLUID:	LATITUDE LATITUDE LONGITUDE ATING WELL LOCATI D DRILLING ENE 12-15-23 LIS: ARTESIAN Centralizer J AIR D: T ROTARY	ENSED DRILLER DED DEPTH OF CC R*add I DRY HOI info below MUD HAMMER CAB	22 1 49 3 RESS AND COMMON LAN Jason Maley JASON Maley DMPLETED WELL (FT) 55' LE SHALLOW (U ADDITIVES -	BORE HOI NCONFINED)	DATUM REG SS (SECTION, TO LE DEPTH (FT) 55' STATIC	REQUIRED: ONE TEN QUIRED: WGS 84 WNSHJIP, RANGE) WI NAME OF WELL DF V DEPTH WATER FIF WATER LEVEL	HERE AVAILABLE RILLING COMPANY Vision Resources RST ENCOUNTEREI Dry DATE ST.	
Ander Ro LL TION I GPS) PTION REL PTION REL NO. 1833 G STARTEL -15-23 TED WELL G FLUID: G METHOD	oad # 105	32 -103 ON TO STREET ADDI ENSED DRILLER DED DEPTH OF CO R*add I DRY HOL info below MUD HAMMER CAB	22 1 49 3 RESS AND COMMON LAN Jason Maley JASON Maley DMPLETED WELL (FT) 55' LE SHALLOW (U ADDITIVES -	8.7752 N 4.7196 W NDMARKS – PLS BORE HOM NCONFINED)	Hobbs • ACCURACY • DATUM REG SS (SECTION, TO SS (SECT	QUIRED: WGS 84 WNSHJIP, RANGE) WI NAME OF WELL DF V DEPTH WATER FIF WATER LEVEL	NM 882 NTH OF A SECOND HERE AVAILABLE RILLING COMPANY /ision Resources RST ENCOUNTEREI Dry DATE ST.	40 7 2 (FT)
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NO. 1833 G STARTEI -15-23 TED WELL G FLUID: G METHOD	ATING WELL LOCATI	ON TO STREET ADD	RESS AND COMMON LAN Jason Maley MPLETED WELL (FT) 55' LE SHALLOW (U ADDITIVES -	BORE HOI	LE DEPTH (FT) 55' STATIC IN COM	NAME OF WELL DF V DEPTH WATER FIF WATER LEVEL	RILLING COMPANY Vision Resources RST ENCOUNTEREI Dry DATE ST.	D (FT)
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G FLUID: G METHOD	Centralizer	Info below MUD	ADDITIVES -		IN COM)my	ATIC MEASURE
G METHOD		HAMMER CAB		SPECIFY:				2-18-23
TH (feet by	gl) BORE HO			SPECIFY:		CHECHINSTA	CHERE IF PITLESS	ADAPTER IS
T	O DIAM (inches)	(include	MATERIAL AND/OR GRADE each casing string, and	CA	ASING NECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WA THICKNES (inches)	0.01
4:	5' 6"	note	sections of screen) " PVC SCH40		ling diameter) hread	2"	SCH40	N/A
55	5" 6"	2	" PVC SCH40	Т	hread	2"	SCH40	.05
						OSE OIT JI	N 12 2024 P	41:53
	DIAM (inc	LE	RANGE BY INT	TERVAL		AMOUNT		THOD OF
T		*(if using Cer			spacing below)	(cubic feet)		CEMENT
T	1	TO DIAM. (inc	I (feet bgl) BORE HOLE TO DIAM. (inches) *(if using Ce	I (feet bgl) BORE HOLE DIAM. (inches) RANGE BY INT *(if using Centralizers for Artesian we None Pulled and None Pulled and	I (feet bgl) BORE HOLE DIAM. (inches) *(if using Centralizers for Artesian wells- indicate the None Pulled and Plugged	TO DIAM. (inches) *(if using Centralizers for Artesian wells- indicate the spacing below) None Pulled and Plugged	I (feet bgl) BORE HOLE DIAM. (inches) RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below) AMOUNT (cubic feet) TO None Pulled and Plugged Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below) Image: Contralizer for Artesian wells- indicate the spacing below wells Image: Contralizer for Artesian wells- indicate the spacing b	If (feet bgl) BORE HOLE DIAM. (inches) RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below) AMOUNT (cubic feet) MET PLA TO None Pulled and Plugged

LOCATION

225. 30E. 24

444

WELL TAG ID NO.

NA

PAGE 1 OF 2

	DEPTH (feet bgl)	THEFATER	COLOR AND TYPE OF MATERIAL ENCOUNTERED -	WATER	ESTIMATED YIELD FOR
	FROM TO	THICKNESS (feet)	INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	BEARING? (YES / NO)	WATER- BEARING ZONES (gpm
t	0 20'	20'	Red sand with white caliche	Y VN	1
T	20' 30'	10'	Red fine sand with coarse rock	Y YN	1
T	30' 40'	10'	Brown soil with medium rock	Y VN	1
T	40' 55'	15'	Tan sand with small rock	Y Y	1
T				Y N	1
	· · · · ·			Y N	1
Ī				Y N	1
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Ser 1			OF WATER-BEARING STRATA: BAILER OTHER – SPECIFY:Dry	TOTAL ESTIMATE WELL YIELD (gpn	
	WELL TEST TES	T RESULTS - ATT. RT TIME, END TI	ACH A COPY OF DATA COLLECTED DURING WELL TESTING, INC ME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVE	LUDING DISCHARC R THE TESTING PE	GE METHOD, RIOD.
TOTA	MISCELLANEOUS	NFORMATION:	0:	SE DIT JAN 122	024 PM1:53
Ad TUG DIN ,					
S. I EST; KIG SUFEKVISI	PRINT NAME(S) OF	DRILL RIG SUPEF	VISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONS	TRUCTION OTHER	THAN LICENSE
	THE UNDERSIGNEI CORRECT RECORD AND THE PERMIT H) HEREBY CERTII	TIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELI DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL R TO DAYS AFTER COMPLETION OF WELL DRILLING:	EF. THE FOREGOD	IG IS A TRUE AN
	THE UNDERSIGNEI CORRECT RECORD AND THE PERMIT H	D HEREBY CERTIN OF THE ABOVE I HOLDER WITHIN 3 HOLDER WITHIN 3 ATURE OF DRILLE	TIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELI DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL R DO DAYS AFTER COMPLETION OF WELL DRILLING:	EF. THE FOREGOD	IG IS A TRUE AN STATE ENGINE 124

U.S. Fish and Wildlife Service

National Wetlands Inventory

Distance from Spill to Nearest Water Cours

Page 9 of 400



Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- **Freshwater Pond**

Lake Other Riverine 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.

U.S. Fish and Wildlife Service

National Wetlands Inventory

Distance from Spill to Nearest Lake 6570 ft

Page 10 of 400



January 31, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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- Freshwater Forested/Shrub Wetland

Freshwater Emergent 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.





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New Mexico Office of the State Engineer Active & Inactive Points of Diversion

(with Ownership Information)

						(R=POD has been replaced and no longer serves this file,	(quarte	rs are 1=N	W 2=	=NE 3=S	SW 4=SE)		
	(acre ft per a	nnum)				C=the file is closed)	(quarte	rs are sma	llest t	to largest	t) (N	AD83 UTM in meter	rs)
	Sub				Well			qqq					
WR File Nbr		sion Owner	•	POD Number	Tag	Code Grant	Source	64164			0	X Y	Distance
<u>C 04731</u>	CUB MON	0 ENSOLUM	ED	<u>C 04731 POD1</u>	NA			1 2 3	25	228 3	30E 60932	9 3581147 🥌	45
<u>C 02637</u>	CUB MON	0 U.S. DEPARTMENT OF ENERGY	ED	<u>C 02637</u>				1 3 3	24	228	30E 60895	0 3582377* 🥥	1241
<u>C 02950</u>	CUB EXP	0 US DEPT OF ENERGY CARLSBAD FIELD OFFICE, WIPP	ED	<u>C 02950 EXPL</u>			Shallow	424	23	228	30E 60874	0 3582576*	1501
<u>C 04773</u>	CUB MON	0 DEVON ENERGY RESOURCES	ED	<u>C 04773 POD1</u>	NA			4 4 4	24	228	30E 61041	5 3582262	1527
<u>C 03561</u>	CUB EXP	0 BOPCO, LP	ED	<u>C 03561 POD2</u>				3 2 3	36	228	30E 60931	4 3579424 🌍	1768
			ED	<u>C 03561 POD3</u>				3 2 3	36	228	30E 60939	2 3579425 🌍	1769
			ED	<u>C 03561 POD4</u>				3 2 3	36	228	30E 60941	8 3579425 🌍	1770
			ED	<u>C 03561 POD5</u>				3 2 3	36	228	30E 60941	8 3579425 🌍	1770
<u>C 04387</u>	CUB MON	0 LT ENVIRONMENTAL INC	ED	<u>C 04387 POD1</u>	NA			4 2 3	36	228	30E 60954	2 3579414 🌍	1791
<u>C 03561</u>	CUB EXP	0 BOPCO, LP	ED	<u>C 03561 POD1</u>				3 2 3	36	228	30E 60928	8 3579393 🌍	1800
<u>C 03221</u>	CUB MON	0 U.S. DEPART OF ENERGY	ED	C 03221 EXPLORE			Artesian	1 2 1	30	228	31E 61099	5 3581935* 🌍	1828
Record Count:	11												
UTMNAD83	<u>Radius Search (in m</u>	eters):											
Easting (X): 609324	Northing (Y): 3581193		Radius: 2000									
Sorted by: D	Distance												
*UTM location wa	as derived from PLSS -	see Help											
The data is furnish purpose of the data		and is accepted by the recipient with the expressed u	ınderstan	ding that the OSE/ISC make no	o warran	ties, expressed or implied, concern	ing the acc	curacy, con	nplet	eness, re	eliability, usability	, or suitability for a	ny particular

7/9/24 12:30 PM

ACTIVE & INACTIVE POINTS OF DIVERSION



New Mexico Office of the State Engineer Point of Diversion Summary

	(quarters are 1=NW 2=NE (quarters are smallest to 1	,	(NAD83 UTM in meters)		
Well Tag POD Number	Q64 Q16 Q4 Sec	Fws Rng	X Y		
C 02637	1 3 3 24	22S 30E	608950 3582377* 🌍		
x Driller License:	Driller Company:				
Driller Name:					
Drill Start Date: 10/04/1976	Drill Finish Date:	10/04/1976	Plug Date:		
Log File Date:	PCW Rcv Date:		Source:		
Pump Type:	Pipe Discharge Size:		Estimated Yield:		
Casing Size:		759 feet			

*UTM location was derived from PLSS - see Help

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7/9/24 12:50 PM

POINT OF DIVERSION SUMMARY

Received by ACD: 7/15/2024 2:12:50 PM us/nmwrrs/ReportDispatcher?type=WRHTML&name=WaterRightSummaryHTML.jrxml&basin=C&hge6263.9f.400

	WR File Number:	C 0263	7	Subbasin	CUB	Cross Re	ference	_	
	Primary Purpose:		-	ORING WELL	COD	C1033 RC	ici ciice.		
	Primary Status:	DCL		RATION					
	Total Acres:	0	2LCD	Subfile:	_			Header:	-
	Total Diversion:	0		Cause/Ca	se: -				
	Owner: Contact:		EPARTM ASABILV	ENT OF ENERGY AZO					
ocumen	nts on File		Statu	15		From/			
	Trn # Doc File	e/Act	1	2 Transaction De	esc.	То	Acres	Diversion	Consumptive
	<u>159309 DCL 1999-</u>	<u>01-12</u>	DCL I	PRC C 02637		Т	0	0	
	v								
urrent]	Points of Diversion		Q		(NAD83 U	TM in meters)			

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

7/9/24 12:51 PM

WATER RIGHT SUMMARY

U.S. Fish and Wildlife Service

National Wetlands Inventory

Distance from Spill to nearest Wetland 105

Page 16 of 400



Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

Released to Imaging: 7/31/2024 2:57:32 PM

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- **Freshwater Pond**

Lake Other Riverine 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.

Active Mines in New Mexico



BLM



Received by OCD: 7/15/2024 2:12:50 PM National Flood Hazard Layer FIRMette



Legend

Page 19 of 400



Basemap Imagery Source: USGS National Map 2023

JRUDI2 Nearest FloodZone A 24023ft ft

East of Release

Legend

0

- 32°21'43.6"N 103°50'16.4"W
- Distance form Spill to resident
- **JRU DI1**
- La Nortenita
 - Official Scenic Historic Marker Project Gnome

Page 20 of 400

- Residence
- WORK COMMUTE WIPP

Spill Release

Release Point

2 m •

Google Earth

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JRU DI1



United States Department of Agriculture

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

Custom Soil Resource Report for Eddy Area, New Mexico



Preface

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

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

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

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

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

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

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How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

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Custom Soil Resource Report

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

Soil Map

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

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Custom Soil Resource Report

	MAP LEGEND	MAP INFORMATION
Soils	I) Email Spoil Area nterest (AOI) Image: Stony Spot Image: Output Delygons Image: Stony Spot	The soil surveys that comprise your AOI were mapped at 1:20,000. Warning: Soil Map may not be valid at this scale.
🧫 Soil Map	Wet Spot Unit Lines Unit Points Special Line Features	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.
 ⊠ Borrow F ※ Clay Spo ◇ Closed I ※ Gravel P ∴ Gravelly 	Transportation ot +++ Rails Depression Interstate Highways tit US Routes	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)
 Landfill Lava Flo Marsh or Mine or Mineor 	r swamp Aerial Photography Quarry	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.
 Miscellar Perennia ✓ Rock Ou + Saline S Sandy S 	tcrop pot	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 19, Sep 7, 2023 Soil map units are labeled (as space allows) for map scales
 Severely Sinkhole Slide or Sodic Sp 	Slip	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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ВВ	Berino complex, 0 to 3 percent slopes, eroded	3.4	100.0%
Totals for Area of Interest		3.4	100.0%

Map Unit Descriptions

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

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

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

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

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

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

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

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

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

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

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

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

Eddy Area, New Mexico

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

Map Unit Setting

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

Map Unit Composition

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

Description of Berino

Setting

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

Typical profile

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

Properties and qualities

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

Interpretive groups

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

Description of Pajarito

Setting

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

Typical profile

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

Properties and qualities

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

Interpretive groups

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

Minor Components

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

Pajarito

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

Kermit

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

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References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ home/?cid=nrcs142p2 053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/ detail/national/landuse/rangepasture/?cid=stelprdb1043084
Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/? cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Conservation Service

USDA Natural Resources

Ecological site R070BD005NM Deep Sand

Accessed: 01/16/2024

General information

Provisional. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

Figure 1. Mapped extent

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occurs on terraces, Piedmonts, dunes fields, or upland plains. Parent material consists of eolian deposits and alluvium derived from sandstone. Slopes range from 0 to 15 percent, usually less than 5 percent. Low, stabilized hummocks or dunes frequently occur. Elevations range from 2,842 to 4,500 feet.

Table 2. Representative	e physiographic features
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Landforms	(1) Dune(2) Parna dune(3) Terrace
Flooding frequency	None
Ponding frequency	None
Elevation	2,842–4,500 ft
Slope	0–15%
Aspect	Aspect is not a significant factor

Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity – short duration thunderstorms.

Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes. The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.

The average frost-free season is 207 to 220 days. The last killing frost is in late March or early April, and the first killing frost is in late October or early November.

Both temperature and moisture favor warm season perennial plant growth. During years of abundant winter and early spring moisture, cool season growth and annual forbs, make up an important component of this site. Strong winds blow from the west from January through June, which accelerates soil drying during a critical period for cool

season plant growth.

Climate data was obtained from http://www.wrcc.sage.dri.edu/summary/climsmnm.html web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

Table 3. Representative climatic features

Frost-free period (average)	221 days
Freeze-free period (average)	240 days
Precipitation total (average)	13 in

Influencing water features

This site is not influenced from water from wetlands or streams.

Soil features

Soils are deep or very deep. Surface textures are sand loam, fine sand or loamy fine sand, Underlying material textures are loamy fine sand, fine sand, sand or fine sandy loam. Because of the coarse textures and rapid drying of the surface, the soil, if unprotected by plant cover and organic residue, becomes windblown and low hummocks or dunes are formed around shrubs.

Characteristic soils are: Anthony Aguena Kermit Likes Pintura Bluepoint

Table 4. Representative soil features

Surface texture	(1) Sand(2) Fine sand(3) Loamy fine sand
Family particle size	(1) Sandy
Drainage class	Well drained to excessively drained
Permeability class	Moderate to very rapid
Soil depth	60–72 in
Surface fragment cover <=3"	0–5%
Surface fragment cover >3"	0%
Available water capacity (0-40in)	3–5 in
Calcium carbonate equivalent (0-40in)	5–15%
Electrical conductivity (0-40in)	0–4 mmhos/cm
Sodium adsorption ratio (0-40in)	0–2
Soil reaction (1:1 water) (0-40in)	6.6–7.8

Subsurface fragment volume <=3" (Depth not specified)	5–10%
Subsurface fragment volume >3" (Depth not specified)	0%

Ecological dynamics

Overview

The Deep Sand site occurs adjacent to and/or intergraded with the Sandhills and Sandy sites (SD-3). The Deep Sand site can be distinguished by slopes less than eight percent (approximately five percent) and textural changes at depths greater than 40 inches. The Deep Sand site has well drained soils with a surface texture of sand or loamy fine sand. The Sandhills site has slopes greater than eight percent and textural depths greater than 60 inches. Conversely, the Sandy site has slopes less than five percent and depths to textural change commonly around 20 inches. The historic plant community of the Deep Sand site is dominated primarily by giant dropseed (*Sporobolus giganteus*) and other dropseeds (*S. flexuosus, S. contractus, S. cryptandrus*), with scattered shinnery oak (*Quercus havardii*) and soapweed yucca (*Yucca glauca*). Other herbaceous species include threeawns (Aristida spp.), bluestems (*Schizachyrium scoparium* and *Andropogon hallii*), and annual and perennial forbs distributed relative to precipitation occurrences. Bare ground and litter compose a significant proportion of ground cover while grasses are the remainder. Shinnery oak will increase with an associated decrease in dropseed and bluestem abundance possibly due to climatic change, fire suppression, interspecific competition, and excessive grazing. Continued grass cover loss may result in a transition to a shinnery oak dominated state with increases in sand sage (*Artemisia filifolia*) and honey mesquite (*Prosopis glandulosa*). However, brush management may restore the grassland component and reverse the shinnery oak state back toward the historic plant community.

State and transition model

Plant Communities and Transitional Pathways (diagram)

MLRA-42, SD-3, Deep Sand



1.a Climate, fire suppression, competition, over grazing

1.b Brush control, Prescribed grazing

State 1 Historic Climax Plant Community

Community 1.1 Historic Climax Plant Community

State Containing Historic Plant Community Grassland: The historic plant community is dominated by giant dropseed, other dropseeds, threeawns, and bluestems. Dominant woody plants include shinnery oak and soapweed yucca. Forb abundance and distribution varies and is dependent on annual rainfall. The Deep Sand site typically exists in sandy plains and dunes (Sosebee 1983). Grass dominance stabilizes the potentially erosive sandy soils. Historical fire suppression, however, may have contributed to increased woody plant abundance, which has reduced grass species. Further, drought conditions compounded with excessive grazing likely has driven most grass species out of competition with shrubs which has resulted in a shinnery oak dominated state with sand sage and mesquite (Young et al. 1948). Diagnosis: Grassland dominated by dropseeds, threeawns, and bluestems. Small shrubs, such as shinnery oak and soapweed yucca, and subshrubs are dispersed throughout the grassland. Other grasses that could appear on this site would include: flatsedge, almejita signalgrass, big bluestem, Indiangrass, fall witchgrass, hairy grama and red lovegrass Other shrubs include: fourwing saltbush, mesquite, ephedra and broom snakeweed. Other forbs include: wooly and scarlet gaura, wooly dalea, phlox heliotrope, scorpionweed, deerstongue, fleabane, nama, hoffmanseggia, lemon beebalm and stickleaf.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	396	858	1320
Shrub/Vine	108	234	360
Forb	96	208	320
Total	600	1300	2000

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	15-20%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	35-40%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	35-40%

Figure 5. Plant community growth curve (percent production by month). NM2805, HCPC. SD-3 Deep Sand - Warm season plant community .

Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	3	5	10	10	25	30	12	5	0	0

State 2 Shinnery Oak Dominated

Community 2.1 Shinnery Oak Dominated Shinnery oak-Dominated



Shinnery oak-Dominated



Shinnery oak-Dominated





 Shimsay out and dropsseds
Grass cover minimizes bars patches and aroston.

Schmery oak and sand sage
Large bare patches and soil
blowouts in adjacent sandhalls
Extensive mixmus reduce soil

 Send bluesten, threesens, giant caraton, spike dropseed, Hall's perioum, little bluestem

 Feather dales, mesquite, Shinnery oak, bush muhly, four-wing calibush, javelins

Roswell series

buch, and cand cage Pintura series logany fine cand

Shinnery Oak Dominated: This state is dominated by shinnery oak with subdominants of sand sage or mesquite. Bare ground is a significant component in this state as well. shinnery oak is characterized by dense stands in sandy soils; however, as clay percentage increases, shinnery oak decreases. Shinnery oak abundance and distribution increase with disturbances, such as excessive grazing and fire, due to an aggressive rhizome system. As shinnery oak abundance increases, an associated increase of mesquite, sand sage, and soapweed yucca also occurs. Shinnery oak's extensive root system allows the oak to competitively exclude grasses and forbs. Sand sage, however, stabilizes light sandy soils from wind erosion and can co-exist with herbaceous species by protecting them in heavily grazed conditions (Davis and Bonham 1979). Shinnery oak has been found primarily in very deep, excessively drained, and rapidly permeable soils. Shinnery oak is associated with landforms which are gently undulating to rolling uplands, very gently sloping to moderately steep slopes, and upland plains, alluvial fans and valley sideslopes. Shinnery oak and sand sage can be controlled with herbicide if applied in the spring with a subsequent rest from grazing (Herbel et al. 1979, Pettit 1986). In addition, repetitive seasons of goat browsing can also reduce shinnery oak abundance. Patches should be maintained during brush control, however, to prevent erosion and to provide wildlife cover and forage. Further, as shinnery oak and other shrubs increase, bare patches and erosion will increase due to a lack of herbaceous ground cover. Diagnosis: Shinnery oak dominated with subdominant sand sage, honey mesquite, and soapweed yucca with increasing frequency and size of bare patches. Transition to Shinnery oak dominated state (1a): The historic plant community begins to shift toward the shinnery oak dominated state as drivers such as climate change, fire suppression, interspecific competition, and excessive grazing contribute to alterations in soil properties and herbaceous cover. Cover loss and surface soil erosion are initial indicators of transition followed by an increase of shrub species abundance and bare patch expansion. Key indicators of approach to transition: • Loss of grass and forb cover • Surface soil erosion • Bare patch expansion • Increased shrub species abundance and composition Transition to Historic Plant Community (1b): The shinnery oak dominated state may transition back toward the historic plant community as new drivers are introduced such as prescribed grazing, brush control, and discontinued drought conditions.

Additional community tables

Table 7. Community 1.1 plant community composition

Group Common Name

Symbol Scientific Name

.

	s/Grasslike				
1	Warm Season	I		450–585	
	spike dropseed	SPCO4	Sporobolus contractus	450–585	
	sand dropseed	SPCR	Sporobolus cryptandrus	450–585	
	mesa dropseed	SPFL2	Sporobolus flexuosus	450–585	
	giant dropseed	SPGI	Sporobolus giganteus	450–585	
2	Warm Season	<u>.</u>		65–104	
	sand bluestem	ANHA	Andropogon hallii	65–104	
	little bluestem	SCSC	Schizachyrium scoparium	65–104	
3	Warm Season			39–91	
	threeawn	ARIST	Aristida	39–91	
4	Warm Season			13–39	
	thin paspalum	PASE5	Paspalum setaceum	13–39	
5	Warm Season		•	13–39	
	black grama	BOER4	Bouteloua eriopoda	13–39	
6	Warm Season	ł	•	13–39	
	mat sandbur	CELO3	Cenchrus longispinus	13–39	
7	Warm Season			13–39	
	Havard's panicgrass	PAHA2	Panicum havardii	13–39	
8	Warm Season			13–65	
	plains bristlegrass	SEVU2	Setaria vulpiseta	13–65	
9	Other Annual Grasses			13–65	
	Grass, annual	2GA	Grass, annual	13–65	
Shru	b/Vine		, , <u>,</u>		
10	Shrub			65–130	
	Havard oak	QUHA3	Quercus havardii	65–130	
11	Shrub			13–39	
	sand sagebrush	ARFI2	Artemisia filifolia	13–39	
12	Shrub			65–130	
	yucca	YUCCA	Уисса	65–130	
13	Shrub	1000/1	1000	13–39	
	rabbitbrush	CHRYS9	Chrysothamnus	13–39	
14	Other Shrubs	0111(109	omysounaminus	13–39	
14	Shrub (>.5m)		Shrub (>.5m)	13–39	
Forb	. ,	ZORKUD	Siliub (2.5ili)	13-39	
	Forb			39–91	
15		00070	Oraction		
	croton	CROTO	Croton	39–91	
4.0	Indian blanket	GAPU	Gaillardia pulchella	39–91	
16	Forb			39–91	
	aster	ASTER	Aster	39–91	
	whitest evening primrose	OEAL	Oenothera albicaulis	39–91	
	beardtongue	PENST	Penstemon	39–91	
17	Forb			39–91	

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	buckwheat	ERIOG	Eriogonum	39–91	-
	sunflower	HELIA3	Helianthus	39–91	-
	spiny false fiddleleaf	HYSP	Hydrolea spinosa	39–91	-
	threadleaf ragwort	SEFLF	Senecio flaccidus var. flaccidus	39–91	-
18	Other Forbs			13–65	
	Forb (herbaceous, not grass nor grass-like)	2FORB	Forb (herbaceous, not grass nor grass-like)	13–65	-

Animal community

This site provides habitat which supports a resident animal population characterized by pronghorn, antelope, blacktailed jackrabbit, spotted ground squirrel, Ord's kangaroo rat, northern grasshopper mouse, southern plains woodrat, badger, meadowlark, roadrunner, white-necked raven, cactus wren, lesser prairie chicken, morning dove, scaled quail, Harris hawk, side blotched lizard, marbled whiptail, Texas horned lizard, western diamondback rattlesnake and ornate box turtle. In the area called Mescalero Sands, there are white-tailed and mule deer.

Hydrological functions

The runoff curve numbers are determined by field investigations using hydraulic cover conditions and hydrologic soil groups.

Hydrologic Interpretations Soil Series Hydrologic Group Anthony B Bluepoint A Kermit A Aguena A Likes A Pintura A

Recreational uses

This site offers limited recreation potential for hiking, horseback riding, nature observation and photography; game bird, predator, antelope, and deer hunting.

Wood products

This site has no potential for wood products.

Other products

This site is suitable for grazing by all kinds and classes of livestock during all seasons of the year. Shinnery oak is toxic in the late bud or early leaf stage. Shinnery oak will increase, as will sand sagebrush following drought. Changes in the fire return interval have also favored an increase in shrub cover. The dropseeds and bluestem will decrease. This site responds very well to brush manangement and deferment. This site is well suited to a grazing system that rotates the season of use. Nesting habitat for lesser prairie chicken can be improved by providing residual cover that is at least 14 inches high.

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index Ac/AUM 100 - 76 2.0 - 3.8 75 - 51 3.0 - 6.0 50 - 26 5.0 - 10.0 25 - 0 10.1 +

Inventory data references

Other References:

Data collection for this site was done in conjunction with the progressive soil surveys within the Southern Desertic Basins, Plains and Mountains, Major Land Resource Areas of New Mexico. This site has been mapped and correlated with soils in the following soil surveys. Eddy County, Lea County, and Chaves County.

Other references

Literature Cited

Davis, Joseph H., III and Bonham, Charles D. 1979. Interference of sand sagebrush canopy with needleandthread. Journal of Range Management 32(5):384-386.

Herbel, C. H, Steger, R, Gould, W. L. 1974. Managing semidesert ranges of the Southwest. Circular 456. Las Cruces, NM: New Mexico State University, Cooperative Extension Service. 48 p.

Pettit, Russell D. 1986. Sand shinnery oak: control and management. Management Note 8. Lubbock, TX: Texas Tech University, College of Agricultural Sciences, Department of Range and Wildlife Management. 5 p.

Sosebee, Ronald E. 1983. Physiological, phenological, and environmental considerations in brush and weed control. In: McDaniel, Kirk C., ed. Proceedings--brush management symposium; 1983 February 16; Albuquerque, NM. Denver, CO: Society for Range Management: 27-43.

Young, Vernon A., Anderwald, Frank R.,McCully, Wayne G. 1948. Brush problems on Texas ranges. Miscellaneous Publication 21. College Station, TX: Texas Agricultural Experiment Station. 19 p.

Contributors

Don Sylvester Quinn Hodgson

Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	
Date	
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

1. Number and extent of rills:

- 2. Presence of water flow patterns:
- 3. Number and height of erosional pedestals or terracettes:
- 4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):
- 5. Number of gullies and erosion associated with gullies:
- 6. Extent of wind scoured, blowouts and/or depositional areas:
- 7. Amount of litter movement (describe size and distance expected to travel):
- 8. Soil surface (top few mm) resistance to erosion (stability values are averages most sites will show a range of values):
- 9. Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):
- 10. Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:
- 11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):
- 12. Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):

Dominant:

Sub-dominant:

Other:

Additional:

13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or

decadence):

- 14. Average percent litter cover (%) and depth (in):
- 15. Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annualproduction):
- 16. Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:
- 17. Perennial plant reproductive capability:

Conservation Service

USDA Natural Resources

Ecological site R070BD003NM Loamy Sand

Accessed: 01/31/2024

General information

Provisional. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

Figure 1. Mapped extent

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

Associated sites

R070BD004NM	Sandy Sandy
R070BD005NM	Deep Sand Deep Sand

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site is on uplands, plains, dunes, fan piedmonts and in inter dunal areas. The parent material consists of mixed alluvium and or eolian sands derived from sedimentary rock. Slope range on this site range from 0 to 9 percent with the average of 5 percent.

Low stabilized dunes may occur occasionally on this site. Elevations range from 2,800 to 5,000 feet.

Table 2. Representative physiographic features

Landforms	(1) Fan piedmont(2) Alluvial fan(3) Dune
Elevation	2,800–5,000 ft
Slope	0–9%
Aspect	Aspect is not a significant factor

Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity-short duration thunderstorms.

Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes.

The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.

The average frost-free season is 207 to 220 days. The last killing frost being late March or early April and the first killing frost being in later October or early November.

Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of this site. Strong winds blow from the southwest from January through June, which accelerates soil drying during a critical period for cool season plant growth.

Climate data was obtained from http://www.wrcc.sage.dri.edu/summary/climsmnm.html web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

Table 3. Representative climatic features

Frost-free period (average)	221 days
Freeze-free period (average)	240 days
Precipitation total (average)	13 in

Influencing water features

This site is not influenced from water from wetlands or streams.

Soil features

Soils are moderately deep or very deep. Surface textures are loamy fine sand, fine sandy loam, loamy very fine sand or gravelly sandy loam.

Subsurface is a loamy fine sand, coarse sandy loam, fine sandy loam or loam that averages less than 18 percent clay and less than 15 percent carbonates.

Substratum is a fine sandy loam or gravelly fine sandy loam with less than 15 percent gravel and with less than 40 percent calcium carbonate. Some layers high in lime or with caliche fragments may occur at depths of 20 to 30 inches.

These soils, if unprotected by plant cover and organic residue, become wind blown and low hummocks are formed.

Minimum and maximum values listed below represent the characteristic soils for this site.

Characteristic soils are: Maljamar Berino Parjarito Palomas Wink Pyote

Table 4. Representative soil features

Surface texture	(1) Fine sand(2) Fine sandy loam(3) Loamy fine sand
Family particle size	(1) Sandy
Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to moderately rapid

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Soil depth	40–72 in				
Surface fragment cover <=3"	0–10%				
Surface fragment cover >3"	0%				
Available water capacity (0-40in)	5–7 in				
Calcium carbonate equivalent (0-40in)	3–40%				
Electrical conductivity (0-40in)	2–4 mmhos/cm				
Sodium adsorption ratio (0-40in)	0–2				
Soil reaction (1:1 water) (0-40in)	6.6–8.4				
Subsurface fragment volume <=3" (Depth not specified)	4–12%				
Subsurface fragment volume >3" (Depth not specified)	0%				

Ecological dynamics

Overview

The Loamy Sand site intergrades with the Deep Sand and Sandy sites (SD-3). These sites can be differentiated by surface soil texture and depth to a textural change. Loamy Sand and Deep Sand sites have coarse textured (sands and loamy sand) surface soils while Sandy sites have moderately coarse textured (sandy loam and fine sandy loam) surfaces. Although Loamy Sand and Deep Sand sites have similar surface textures, the depth to a textural change is different—Loamy Sand sub-surface textures typically increase in clay at approximately 20 to 30 inches, and Deep Sand sites not until around 40 inches.

The historic plant community of Loamy Sand sites is dominated by black grama (*Bouteloua eriopoda*), dropseeds (*Sporobolus flexuosus, S. contractus, S. cryptandrus*), and bluestems (*Schizachyrium scoparium* and *Andropogon hallii*), with scattered shinnery oak (*Quercus havardii*) and sand sage (*Artemisia filifolia*). Perennial and annual forb abundance and distribution are dependent on precipitation. Litter and to a lesser extent, bare ground, are a significant proportion of ground cover while grasses compose the remainder. Decreases in black grama indicate a transition to either a grass/shrub or shrub-dominated state. The grass/shrub state is composed of grasses/honey mesquite (*Prosopis glandulosa*), grasses/broom snakeweed (*Gutierrezia sarothrae*), or grasses/sand sage. The shrub-dominated state occurs after a severe loss of grass cover and a prevalence of sand sage with secondary shinnery oak and mesquite. Heavy grazing intensity and/or drought are influential drivers in decreasing black grama and bluestems and subsequently increasing shrub cover, erosion, and bare patches. Historical fire suppression also encourages shrub pervasiveness and a competitive advantage over grass species (McPherson 1995). Brush and grazing management, however, may reverse grass/shrub and shrub-dominated states toward the grassland-dominated historic plant community.

State and transition model

Plant Communities and Transitional Pathways (diagram):

MLRA-42, SD-3, Loamy Sand



1a. Drought, over grazing, fire suppression.

1b. Brush control, prescribed grazing

Severe loss of grass cover, fire suppression, erosion.
Brush control, seeding, prescribed grazing.

3. Continued loss of grass cover, erosion.

State 1 Historic Climax Plant Community

Community 1.1 Historic Climax Plant Community

Grassland: The historic plant community is a uniformly distributed grassland dominated by black grama, dropseeds, and bluestems. Sand sage and shinnery oak are evenly dispersed throughout the grassland due to the coarse soil

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surface texture. Perennial and annual forbs are common but their abundance and distribution are reflective of precipitation. Bluestems initially, followed by black grama, decrease with drought and heavy grazing intensity. Historical fire frequency is unknown but likely occurred enough to remove small shrubs to the competitive advantage of grass species. Fire suppression, drought conditions, and excessive grazing drive most grass species out of competition with shrub species. Diagnosis: Grassland dominated by black grama, dropseeds, and bluestems. Shrubs, such as sand sage, shinnery oak, and mesquite are dispersed throughout the grassland. Forbs are present and populations fluctuate with precipitation variability.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	
Grass/Grasslike	442	833	1224
Forb	110	208	306
Shrub/Vine	98	184	270
Total	650	1225	1800

Table 6. Ground cover

Tree foliar cover	0%				
Shrub/vine/liana foliar cover					
Grass/grasslike foliar cover					
Forb foliar cover	0%				
Non-vascular plants	0%				
Biological crusts	0%				
Litter	50%				
Surface fragments >0.25" and <=3"	0%				
Surface fragments >3"	0%				
Bedrock	0%				
Water	0%				
Bare ground	22%				

Figure 5. Plant community growth curve (percent production by month). NM2803, R042XC003NM-Loamy Sand-HCPC. SD-3 Loamy Sand - Warm season plant community .

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	3	5	10	10	25	30	12	5	0	0

State 2 Grass/Shrub

Community 2.1 Grass/Shrub Grass/Shrub



 Black grame/Mesquite community, with some dropseeds, threesoms, and scattered and shimery oak
Oracs cover low to moderate

Grass/Shrub State: The grass/shrub state is dominated by communities of grasses/mesquite, grasses/snakeweed, or grasses/sand sage. Decreases in black grama and bluestem species lead to an increase in bare patches and mesquite which further competes with grass species. An increase of dropseeds and threeawns occurs. Grass distribution becomes more patchy with an absence or severe decrease in black grama and bluestems. Mesquite provides nitrogen and soil organic matter to co-dominant grasses (Ansley and Jacoby 1998, Ansley et al. 1998). Mesquite mortality when exposed to fire is low due to aggressive resprouting abilities. Herbicide application combined with subsequent prescribed fire may be more effective in mesquite reduction (Britton and Wright 1971). Diagnosis: This state is dominated by an increased abundance of communities including grass/mesquite, grass/snakeweed, or grass/sand sage. Dropseeds and threeawns have a patchy distribution. Transition to Grass/Shrub State (1a): The historic plant community begins to shift toward the grass/shrub state as drivers such as drought, fire suppression, interspecific competition, and excessive grazing contribute to alterations in soil properties and herbaceous cover. Cover loss and surface soil erosion are initial indicators of transition followed by a decrease in black grama with a subsequent increase of dropseeds, threeawns, mesquite, and snakeweed. Snakeweed has been documented to outcompete black grama especially under conditions of fire suppression and drought (McDaniel et al. 1984). Key indicators of approach to transition: • Loss of black grama cover • Surface soil erosion • Bare patch expansion • Increased dropseed/threeawn and mesquite, snakeweed, or sand sage abundances Transition to Historic Plant Community (1b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community.

State 3 Shrub Dominated

Community 3.1 Shrub Dominated

Shrub-Dominated State: The shrub-dominated state results from a severe loss of grass cover. This state's primary species is sand sage. Shinnery oak and mesquite also occur; however, grass cover is limited to intershrub distribution. Sand sage stabilizes light sandy soils from wind erosion, which enhances protected grass/forb cover (Davis and Bonham 1979). However, shinnery oak also responds to the sandy soils with dense stands due to an

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aggressive rhizome system. Shinnery oak's extensive root system promotes competitive exclusion of grasses and forbs. Sand sage, shinnery oak, and mesquite can be controlled with herbicide (Herbel et al. 1979, Pettit 1986). Transition to Shrub-Dominated (2a): Severe loss of grass species with increased erosion and fire suppression will result in a transition to a shrub-dominated state with sand sage, Shin oak, and honey mesquite directly from the grassland-dominated state. Key indicators of approach to transition: • Severe loss of grass species cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite abundance Transition to Historic Plant Community (2b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community. In addition, seeding with native grass species will augment the transition to a grassland-dominated state. Transition to Shrub-Dominated (3): If the grass/shrub site continues to lose grass cover with soil erosion, the site will transition to a shrub-dominated state with sand sage, shinnery oak, and honey mesquite. Key indicators of approach to transition: • Continual loss of dropseeds/threeawns cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite/snakeweed abundance

Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
Grass	/Grasslike				
1	Warm Season			61–123	
	little bluestem	SCSC	Schizachyrium scoparium	61–123	_
2	Warm Season			37–61	
	sand bluestem	ANHA	Andropogon hallii	37–61	_
3	Warm Season		·	37–61	
	cane bluestem	BOBA3	Bothriochloa barbinodis	37–61	_
	silver bluestem	BOSA	Bothriochloa saccharoides	37–61	_
4	Warm Season			123–184	
	black grama	BOER4	Bouteloua eriopoda	123–184	_
	bush muhly	MUPO2	Muhlenbergia porteri	123–184	_
5	Warm Season			123–184	
	thin paspalum	PASE5	Paspalum setaceum	123–184	_
	plains bristlegrass	SEVU2	Setaria vulpiseta	123–184	_
	fringed signalgrass	URCI	Urochloa ciliatissima	123–184	_
6	Warm Season			123–184	
	spike dropseed	SPCO4	Sporobolus contractus	123–184	_
	sand dropseed	SPCR	Sporobolus cryptandrus	123–184	_
	mesa dropseed	SPFL2	Sporobolus flexuosus	123–184	_
7	Warm Season			61–123	
	hooded windmill grass	CHCU2	Chloris cucullata	61–123	_
	Arizona cottontop	DICA8	Digitaria californica	61–123	_
9	Other Perennial Grasses			37–61	
	Grass, perennial	2GP	Grass, perennial	37–61	_
Shrub	/Vine				
8	Warm Season			37–61	
	New Mexico feathergrass	HENE5	Hesperostipa neomexicana	37–61	-
	giant dropseed	SPGI	Sporobolus giganteus	37–61	_
10	Shrub	•		61–123	
			· · · · · · · · · · · · · · · · · · ·		

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	sand sagebrush	ARFI2	Artemisia filifolia	61–123	_
	Havard oak	QUHA3	Quercus havardii	61–123	_
11	Shrub			34–61	
	fourwing saltbush	ATCA2	Atriplex canescens	37–61	-
	featherplume	DAFO	Dalea formosa	37–61	_
12	Shrub			37–61	
	jointfir	EPHED	Ephedra	37–61	_
	littleleaf ratany	KRER	Krameria erecta	37–61	_
13	Other Shrubs			37–61	
	Shrub (>.5m)	2SHRUB	Shrub (>.5m)	37–61	_
Forb					
14	Forb			61–123	
	leatherweed	CRPOP	Croton pottsii var. pottsii	61–123	_
	Indian blanket	GAPU	Gaillardia pulchella	61–123	_
	globemallow	SPHAE	Sphaeralcea	61–123	_
15	Forb			12–37	
	woolly groundsel	PACA15	Packera cana	12–37	_
16	Forb			61–123	
	touristplant	DIWI2	Dimorphocarpa wislizeni	61–123	_
	woolly plantain	PLPA2	Plantago patagonica	61–123	_
17	Other Forbs	-	·	37–61	
	Forb (herbaceous, not grass nor grass-like)	2FORB	Forb (herbaceous, not grass nor grass-like)	37–61	_

Animal community

This Ecological Site provides habitat which supports a resident animal community that is characterized by pronghorn antelope, desert cottontail, spotted ground squirrel, black-tailed prairie dog, yellow faced pocket gopher, Ord's kangaroo rat, northern grasshopper mouse, southern plains woodrat, badger, roadrunner, meadowlark, burrowing owl, white necked raven, lesser prairie chicken, morning dove, scaled quail, Harris hawk, side blotched lizard, marbled whiptail, Texas horned lizard, western diamondback rattlesnake, dusty hognose snake and ornate box turtle.

Where mesquite has invaded, most resident birds and scissor-tailed flycatcher, morning dove and Swainson's hawk, nest. Vesper and grasshopper sparrows utilize the site during migration.

Hydrological functions

The runoff curve numbers are determined by field investigations using hydraulic cover conditions and hydrologic soil groups. Hydrologic Interpretations Soil Series Hydrologic Group Berino B Kinco A Maljamar B Pajarito B Palomas B Wink B Pyote A

Recreational uses

This site offers recreation potential for hiking, borseback riding, nature observation, photography and hunting. During years of abundant spring moisture, this site displays a colorful array of wildflowers during May and June.

Wood products

This site has no potential for wood products.

Other products

This site is suitable for grazing by all kinds and classes of livestock at any time of year. In cases where this site has been invaded by brush species it is especially suited for goats. Mismanagement of this site will cause a decrease in species such as the bluestems, blsck grama, bush muhly, plains bristlegrass, New Mexico feathergrass, Arizona cottontop and fourwing saltbush. A corresponding increase in the dropseeds, windmill grass, fall witchgrass, silver bluestem, sand sagebrush, shinery oak and ephedra will occur. This will also cause an increase in bare ground which will increase soil erodibility. This site will respond well to a system of management that rotates the season of use.

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month Similarity Index Ac/AUM 100 - 76 2.3 - 3.575 - 51 3.0 - 4.550 - 26 4.6 - 9.025 - 0 9.1 +

Inventory data references

Data collection for this site was done in conjunction with the progressive soil surveys within the Southern Desertic Basins, Plains and Mountains, Major Land Resource Areas of New Mexico. This site has been mapped and correlated with soils in the following soil surveys. Eddy County, Lea County, and Chaves County.

Other references

Literature Cited:

Ansley, R. J.; Jacoby, P. W. 1998. Manipulation of fire intensity to achieve mesquite management goals in north Texas. In: Pruden, Teresa L.; Brennan, Leonard A., eds. Fire in ecosystem management: shifting the paradigm from suppression to prescription: Proceedings, Tall Timbers fire ecology conference; 1996 May 7-10; Boise, ID. No. 20. Tallahassee, FL: Tall Timbers Research Station: 195-204.

Ansley, R. J.; Jones, D. L.; Tunnell, T. R.; [and others]. 1998. Honey mesquite canopy responses to single winter fires: relation to herbaceous fuel, weather and fire temperature. International Journal of Wildland Fire 8(4):241-252.

Britton, Carlton M.; Wright, Henry A. 1971. Correlation of weather and fuel variables to mesquite damage by fire. Journal of Range Management 24:136-141.

Davis, Joseph H., III and Bonham, Charles D. 1979. Interference of sand sagebrush canopy with needleandthread. Journal of Range Management 32(5):384-386.

Herbel, C. H, Steger, R, Gould, W. L. 1974. Managing semidesert ranges of the Southwest Circular 456. Las Cruces, NM: New Mexico State University, Cooperative Extension Service. 48 p.

McDaniel, Kirk C.; Pieper, Rex D.; Loomis, Lyn E.; Osman, Abdelgader A. 1984. Taxonomy and ecology of perennial snakeweeds in New Mexico. Bulletin 711. Las Cruces, NM: New Mexico State University, Agricultural Experiment Station. 34 p. McPherson, Guy R. 1995. The role of fire in the desert grasslands. In: McClaran, Mitchel P.; Van Devender, Thomas R., eds. The desert grassland. Tucson, AZ: The University of Arizona Press: 130-151.

Pettit, Russell D. 1986. Sand shinnery oak: control and management. Management Note 8. Lubbock, TX: Texas Tech University, College of Agricultural Sciences, Department of Range and Wildlife Management. 5 p.

Contributors

Don Sylvester Quinn Hodgson

Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	
Date	
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

- 1. Number and extent of rills:
- 2. Presence of water flow patterns:
- 3. Number and height of erosional pedestals or terracettes:
- 4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):
- 5. Number of gullies and erosion associated with gullies:
- 6. Extent of wind scoured, blowouts and/or depositional areas:

- 7. Amount of litter movement (describe size and distance expected to travel):
- 8. Soil surface (top few mm) resistance to erosion (stability values are averages most sites will show a range of values):
- 9. Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):
- 10. Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:
- 11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):
- 12. Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):

Dominant:

Sub-dominant:

Other:

Additional:

- 13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):
- 14. Average percent litter cover (%) and depth (in):
- 15. Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annualproduction):
- 16. Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:

•

ArcGIS Web Map



1/01/2024, 4.10.021

Lithologic Units

- Playa—Alluvium and evaporite deposits (Holocene)
- Water—Perenial standing water
 - Qa—Alluvium (Holocene to upper Pleistocene)



Esri, NASA, NGA, USGS, NMBGMR, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS



Incident Number: nAPP2403353247

Release Assessment and Closure

James Ranch Unit DI 2 Battery Section 25, Township 22 South, Range 30 East County: Eddy Vertex File Number: 23E-06065

Prepared for: XTO Energy, Inc.

Prepared by: Vertex Resource Services Inc.

Date: July 2024 **XTO Energy, Inc.** James Ranch Unit DI 2 Battery

Release Assessment and Closure James Ranch Unit DI 2 Battery Section 25, Township 22 South, Range 30 East County: Eddy

Prepared for: **XTO Energy, Inc.** 3104 Greene Street Carlsbad, New Mexico 88220

New Mexico Oil Conservation Division – District 2 508 West Texas Avenue Artesia, New Mexico 88210

Prepared by: **Vertex Resource Services Inc.** 3101 Boyd Drive Carlsbad, New Mexico 88220

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Wyatt Wadleigh, B.Sc.

July 12, 2024

Date

Sally Carttar

PROJECT MANAGER, REPORT REVIEW

Sally Carttar, BA

July 12, 2024

Date

XTO Energy, Inc.	Release Assessment and Closure
James Ranch Unit DI 2 Battery	July 2024

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- Appendix D. Correspondence
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1.0 Introduction

XTO Energy, Inc. (XTO) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Closure for a produced water release that occurred on January 21, 2024, at James Ranch Unit DI 2 Battery (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 February 2, 2024. Incident ID number nAPP2403353247 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 have 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 January 21, 2024, due to corrosion on a flow line. The incident was reported on February 2, 2024, and involved the release of approximately 10.84 barrels (bbl) of produced water on the pad site. Approximately 7 bbl of free fluid was removed during initial clean-up. Additional details relevant to the release are presented in the C-141 Report.

3.0 Site Characteristics

The site is located approximately 16 miles northeast of Loving, New Mexico (Google Inc., 2024). The legal location for the site is Section 25, Township 22 South, and Range 30 East in Eddy County, New Mexico. The release area is located on Bureau of Land Management property. An aerial photograph and site schematic are presented on Figure 1.

The location is typical of oil and gas exploration and production sites in the Permian Basin, and is currently used for oil and gas production and storage. The following sections specifically describe the release area on or in proximity to the constructed pad (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 Qep - Eolian and piedmont deposits (New Mexico Bureau of Geology and Mineral Resources, 2024). The karst geology potential for the site is low (United States Department of the Interior, Bureau of Land Management, 2018). The surrounding landscape is associated with plains and fan piedmonts with elevations ranging between 2,000 and 5,700 feet. The climate is semiarid with average annual precipitation ranging between 5 and 15 inches. Predominant soil textures around the site are well-drained fine sands and fine sandy loams with low runoff potential (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Using information from the United States Department of Agriculture, the dominant vegetation was determined to be grasses interspersed with shrubs and half-shrubs (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Limited to no vegetation is allowed to grow on the compacted facility pad.

4.0 Closure Criteria Determination

The nearest active well to the site is a United States Department of Energy monitoring well 0.77 miles to the north. 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 an intermittent stream located approximately 5,105 feet north 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

The nearest depth to groundwater reference to the site is an exploratory borehole advanced 0.95 miles to the northeast on December 15, 2023. The borehole was terminated at 55 feet below ground surface (bgs) without encountering the water surface (New Mexico Office of the State Engineer, 2024). Information pertaining to the depth to ground water determination is included in Appendix B.

	e: James Ranch Unit DI 2 Battery rdinates: 32.36234,-103.83803	X: 609324	Y: 3581193
	ific Conditions	Value	Unit
-	Depth to Groundwater (nearest reference)	>55	feet
		5,010	feet
1	Distance between release and nearest DTGW reference	0.95	miles
	Date of nearest DTGW reference measurement	December 15, 2023	
2	Within 300 feet of any continuously flowing watercourse	F 10F	feet
2	or any other significant watercourse	5,105	
3	Within 200 feet of any lakebed, sinkhole or playa lake	6570 ft	feet
5	(measured from the ordinary high-water mark)	037011	Teet
4	Within 300 feet from an occupied residence, school,	12,098	feet
•	hospital, institution or church	12,000	
	i) Within 500 feet of a spring or a private, domestic fresh		
_	water well used by less than five households for		feet
5	domestic or stock watering purposes, or		
	ii) Within 1000 feet of any fresh water well or spring	4,071	feet
	Within incorporated municipal boundaries or within a		
	defined municipal fresh water field covered under a		
6	municipal ordinance adopted pursuant to Section 3-27-3	No	(Y/N)
	NMSA 1978 as amended, unless the municipality		
	specifically approves		
7	Within 300 feet of a wetland	10503 ft	feet
	Within the area overlying a subsurface mine	No	(Y/N)
8	Distance between release and nearest registered mine	14,251	feet
			Critical
	Within an unstable area (Karst Map)	Low	High
0			Medium
9			Low
	Distance between release and nearest unstable area	7,743	feet
	Within a 100-year Floodplain	>500	year
10	Distance between release and nearest FEMA Zone A (100-	-	
	year Floodplain)	24,023	feet
11	Soil Type	Fine sand, f	ine sandy loam
12	Ecological Classification	Range-Loamy Sand	
13	Geology	Eolian and piedmont deposits	
			<50'
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	51-100'
	. ,	1	>100'

VERSATILITY. EXPERTISE.

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The depth to groundwater reference exceeded 0.5 miles from the release area; therefore, the closure criteria for remediation and reclamation of the site was determined to be associated with the strictest constituent concentration limits as presented in Table 2.

Table 2. Closure Criteria for Soils Impacted by a Release DTGW <50 feet bgs						
Minimum depth below any point within the horizontal boundary of the release to groundwater less than						
10,000 mg/l TDS	Constituent	Limit				
	Chloride	600 mg/kg				
< 50 feet	TPH (GRO+DRO+MRO)	100 mg/kg				
	BTEX	50 mg/kg				
	Benzene	10 mg/kg				

 $\mathsf{DTGW}-\mathsf{depth}\ \mathsf{to}\ \mathsf{groundwater}$

TDS – total dissolved solids

TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics BTEX – benzene, toluene, ethylbenzene and xylenes

5.0 Remedial Actions Taken

Inspection and site characterization of the release around the infrastructure was completed by Vertex between March 1 and June 25, 2024, including vertical and horizontal delineation. The total impacted area was determined to be 3,161 square feet. The Daily Field Reports (DFRs) associated with the site visits are included in Appendix C. Characterization sample locations and approximate release areas are presented on Figure 1. Characterization field screening and laboratory results are summarized in Table 3.

Remediation efforts began on April 8, 2024, and were finalized on May 28, 2024. Vertex personnel supervised the excavation of impacted soils. Field screening was completed on a total of 37 sample points. It consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and Silver Nitrate Titration (chlorides). Field screening results were used to identify areas requiring further remediation. Soils were removed to a depth of 0.5 to 3.5 feet bgs. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility. Daily Field Reports documenting various phases of the remediation are presented in Appendix C.

XTO submitted extension requests to OCD on February 7 and April 18, 2024. Both extensions were approved and relevant correspondence is included in Appendix D.

Notifications that confirmatory samples were being collected was provided to the NMOCD on April 15, 18, and 25, 2024, and May 21, 2024, and are included in Appendix D. The notification for samples collected on April 30th was attached to incident nAPP2332135027 in error, also at the JRU DI 2. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. A total of 37 base and wall samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to the Hall Environmental Analysis Laboratory 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 the closure criteria for the site.

6.0 Closure/Deferral Request

Vertex recommends no additional reclamation or remediation actions to address the release at James Ranch Unit DI 2 Battery. The release area was fully delineated, remediated, and backfilled with local soils by June 17, 2024. Laboratory analyses of the characterization samples showed constituent of concern concentration levels below NMOCD closure criteria for areas where depth to groundwater is "under 50 feet to groundwater" as shown in Table 2. There are no anticipated risks to human, ecological or hydrological receptors associated with the release site.

On behalf of XTO Energy, Inc., Vertex requests that the incident (nAPP2403353247) be closed as all closure requirements set forth in Subsection E of 19.15.29.12 NMAC have been met. XTO certifies that all information in this report and the attachments is correct, and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain closure on the historical releases at the site.

Should you have any questions or concerns, please do not hesitate to contact Sally Carttar at 575.361.3561 or SCarttar@vertexresource.com.

5

7.0 References

Google Inc. (2024). Google Earth Pro (Version 7.3.3) [Software]. Retrieved from https://earth.google.com

- New Mexico Bureau of Geology and Mineral Resources. (2024). *Interactive Geologic Map*. Retrieved from https://maps.nmt.edu/
- New Mexico Office of the State Engineer. (2024). New Mexico Water Rights Reporting System. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/
- New Mexico Oil Conservation Division. (2018). *New Mexico Administrative Code Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.
- United States Department of Agriculture, Natural Resources Conservation Service. (2024). *Web Soil Survey*. Retrieved from https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
- United States Department of Homeland Security, Federal Emergency Management Agency. (2024). FEMA Flood Map Service: Search by Address. Retrieved from https://msc.fema.gov/portal/search?AddressQuery=malaga% 20new%20mexico#searchresultsanchor
- United States Department of the Interior, Bureau of Land Management. (2018). *New Mexico Cave/Karst*. Retrieved from https://www.nm.blm.gov/shapeFiles/cfo/carlsbad_spatial_data.html
- United States Fish and Wildlife Service. (2024). *National Wetland Inventory Surface Waters and Wetlands*. Retrieved from https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

8.0 Limitations

This report has been prepared for the sole benefit of XTO Energy, Inc. This document may not be used by any other person or entity, except the New Mexico Oil Conservation Division and the Bureau of Land Management, without the express written consent of Vertex Resource Services Inc. (Vertex) and XTO Energy, Inc. 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 following generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgment 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.

7
FIGURES



RU DI 2/



TABLES

Client Name: XTO Energy, Inc. Site Name: James Ranch Unit DI 2 CTB NMOCD Tracking #: nAPP2403353247 Project #: 23E-06065-02 Lab Reports: 885-1450-1, 885-1547-1, 885-1339-1, 885-1321-1, 885-1445-1, 885-2706-1, and 885-7006-1

	Table 3.	Initial Characterization	n Sample I	Field Scree	en and Lab	oratory Re	esults - De	pth to Gro	oundwate	r <50 feet	bgs	
Sample Description		Field Sc	reening				Laborate	ory Results				
							Petrole	eum Hydrod	carbons			Inorganic
Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Hydrocarbons (TPH)	Chloride Concentration
	0	Marsh 11, 2024	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH24-01	0	March 11, 2024	138	601	ND	ND	ND	ND	ND	ND	ND	680
	2	March 11, 2024	18	182	ND	ND	ND	ND	ND	ND	ND	92
BH24-02	0	March 11, 2024	-	1,080	-	-	-	-	-	-	-	-
	2	March 11, 2024		188		-		-	-	-	-	
BH24-03	2	March 11, 2024	-	2,205 150	-	-	-	-	-	-	-	-
		March 11, 2024						-				
BH24-04	0	March 11, 2024	134	430	ND	ND	ND	ND	ND	ND	ND	950
	2	March 11, 2024	28	128	ND	ND	ND	ND	ND	ND	ND	67
BH24-05	0	March 14, 2024	-	1,375	-	-	-	-	-	-	-	-
	2	March 14, 2024	-	575	-	-	-	-	-	-	-	-
BH24-06	0	March 14, 2024	-	2,623	-	-	-	-	-	-	-	-
	2	March 14, 2024	-	250	-	-	-	-	-	-	-	-
BH24-07	0	March 14, 2024	11	93	ND	ND	ND	ND	ND	ND	ND	ND
	2	March 14, 2024	10	105	ND	ND	ND	ND	ND	ND	ND	ND
BH24-08	0	March 14, 2024	28	115	ND	ND	ND	ND	ND	ND	ND	ND
	2	March 14, 2024	14	130	ND	ND	ND	ND	ND	ND	ND	ND
BH24-09	0	March 14, 2024	21	75	ND	ND	ND	ND	ND	ND	ND	ND
	2	March 14, 2024	26	68	ND	ND	ND	ND	ND	ND	ND	ND
BH24-10	0	March 14, 2024	110	520	ND	ND	ND	19	ND	19	19	710
	2	March 14, 2024	86	95	ND	ND	ND	ND	ND	ND	ND	ND
BH24-11	0	March 14, 2024	-	1,420	-	-	-	-	-	-	-	-
	2	March 14, 2024	-	138	-	-	-	-	-	-	-	-
BH24-12	0	March 15, 2024	66	420	ND	ND	ND	ND	ND	ND	ND	1000
	2	March 15, 2024	28	138	ND	ND	ND	ND	ND	ND	ND	190
	0	March 15, 2024	-	10,750	-	-	-	-	-	-	-	-
BH24-13	2	March 15, 2024	25	208	ND	ND	ND	ND	ND	ND	ND	240
	3.5	March 15, 2024	17	205	ND	ND	ND	ND	ND	ND	ND	280
	0	March 15, 2024	-	8,138	-	-	-	-	-	-	-	-
BH24-14	2	March 15, 2024	21	420	ND	ND	ND	ND	ND	ND	ND	170
	3	March 15, 2024	23	350	ND	ND	ND	ND	ND	ND	ND	740
DU 0	0	March 15, 2024	-	20,803	-	-	-	-	-	-	-	-
BH24-15	2	March 15, 2024	16	255	ND	ND	ND	ND	ND	ND	ND	350
	3	March 15, 2024	18	198	ND	ND	ND	ND	ND	ND	ND	230
BH24-16	0	March 15, 2024	62	223	ND	ND	ND	ND	ND	ND	ND	220
	2	March 15, 2024	47	155	ND	ND	ND	ND	ND	ND	ND	91
DU 24 47	0	March 18, 2024	-	10,820	-	-	-	-	-	-	-	-
BH24-17	2 4	March 18, 2024	24 22	270 225	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	160 310
	4	March 18, 2024	22	223	NU	ND	ND	ND	NU	ND	ND	510



Client Name: XTO Energy, Inc. Site Name: James Ranch Unit DI 2 CTB NMOCD Tracking #: nAPP2403353247 Project #: 23E-06065-02 Lab Reports: 885-1450-1, 885-1547-1, 885-1339-1, 885-1321-1, 885-1445-1, 885-2706-1, and 885-7006-1

	Table 3. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs											
	Sample Description		Field Sc	reening	Laboratory Results							
							Petrole	um Hydrod	arbons			Inorganic
Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(OYO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH24-18	0	March 19, 2024	163	208	-	-	-	-	-	-	-	-
DI124-10	2	March 19, 2024	28	165	-	-	-	-	-	-	-	-
BH24-19	0	March 19, 2024	ND	2,710	-	-	-	-	-	-	-	-
BH24-19	2	March 19, 2024	ND	270	-	-	-	-	-	-	-	-
BH24-20	0	March 19, 2024	202	2,454	-	-	-	-	-	-	-	-
B1124-20	2	March 19, 2024	ND	350	-	-	-	-	-	-	-	-
BH24-21	0	March 19, 2024	1	335	ND	ND	ND	ND	ND	ND	ND	750
DI124-21	2	March 19, 2024	ND	413	ND	ND	ND	ND	ND	ND	ND	370
BH24-22	0	April 8, 2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	61
DITZ4-22	2	April 8, 2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	120
BH24-23	0	April 8, 2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	110
	2	April 8, 2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2.25	April 30, 2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	410
BH24-27	0	June 25, 2024	24	216	ND	ND	ND	ND	ND	ND	ND	ND
вп24-27	1	June 25, 2024	20	170	ND	ND	ND	ND	ND	ND	ND	73

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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



Client Name: XTO Energy, Inc. Site Name: JRU DI 2 SW Release Phase 2 NMOCD Tracking #: nAPP2403353247 Project #: 23E-06065 Lab Reports: 885-3167-1, 885-3298-1, 885-3546-1, 885-3742-1, and 885-5292-1

Table 3. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs												
	Sample Description		Field Sc	reening			Petrole	um Hydrod	arbons			
					Vola	atile			Extractable	9		Inorganic
Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-02	1.5	April 19, 2024	23	208	ND	ND	ND	ND	ND	ND	ND	200
BES24-03	1.5	April 19, 2024	18	320	ND	ND	ND	ND	ND	ND	ND	210
BES24-04	1.5	May 28, 2024	34	110	ND	ND	ND	ND	ND	ND	ND	ND
BES24-05	1	April 18, 2024	-	286	ND	ND	ND	ND	ND	ND	ND	410
BES24-06	1	April 18, 2024	-	2	ND	ND	ND	ND	ND	ND	ND	230
BES24-07	1.5	April 19, 2024	32	ND	ND	ND	ND	ND	ND	ND	ND	77
BES24-08	1	April 18, 2024	-	ND	ND	ND	ND	ND	ND	ND	ND	180
BES24-09	1.5	April 19, 2024	22	103	ND	ND	ND	ND	ND	ND	ND	350
BES24-10	1	April 18, 2024	-	ND	ND	ND	ND	ND	ND	ND	ND	140
BES24-11	0.5	April 18, 2024	-	ND	ND	ND	ND	ND	ND	ND	ND	170
BES24-12	1.5	April 22, 2024	44	409	ND	ND	ND	ND	ND	ND	ND	390
BES24-13	1.5	April 22, 2024	35	366	ND	ND	ND	ND	ND	ND	ND	150
BES24-14	2.5	April 30, 2024	-	ND	ND	ND	ND	ND	ND	ND	ND	20
BES24-15	1.5	April 22, 2024	6	ND	ND	ND	ND	ND	ND	ND	ND	26
BES24-16	1.5	April 22, 2024	65	186	ND	ND	ND	ND	ND	ND	ND	260
BES24-17	1	April 18, 2024	-	226	ND	ND	ND	ND	ND	ND	ND	250
BES24-18	1.5	May 28, 2024	50	250	ND	ND	ND	ND	ND	ND	ND	ND
BES24-19	1.5	April 22, 2024	74	59	ND	ND	ND	ND	ND	ND	ND	63
BES24-20	1.5	May 28, 2024	55	315	ND	ND	ND	ND	ND	ND	ND	140
BES24-21	1	April 19, 2024	40	386	ND	ND	ND	ND	ND	ND	ND	540
BES24-22	1	April 19, 2024	65	408	ND	ND	ND	ND	ND	ND	ND	86
BES24-23	1	April 19, 2024	30	483	ND	ND	ND	ND	ND	ND	ND	540
BES24-24	1	April 19, 2024	24	334	ND	ND	ND	ND	ND	ND	ND	62
BES24-25	1	April 19, 2024	25	241	ND	ND	ND	ND	ND	ND	ND	150
BES24-26	1	April 19, 2024	40	334	ND	ND	ND	ND	ND	ND	ND	120
BES24-27	1	April 19, 2024	26	270	ND	ND	ND	ND	ND	ND	ND	86
BES24-28	1	April 19, 2024	89	335	ND	ND	ND	ND	ND	ND	ND	180
BES24-29	1	April 19, 2024	-	ND	ND	ND	ND	ND	ND	ND	ND	81
BES24-30	1	April 19, 2024	44	536	ND	ND	ND	25	ND	25	25	180
BES24-31	3.5	April 30, 2024	62	100	ND	ND	ND	ND	ND	ND	ND	24
WES24-01	2	April 30, 2024	47	457	ND	ND	ND	ND	ND	ND	ND	240
WES24-02	1	April 30, 2024	457	88	ND	ND	ND	ND	ND	ND	ND	170
WES24-03	2	April 30, 2024	95	200	ND	ND	ND	ND ND	ND	ND ND	ND	110
WES24-04 WES24-05	1	April 30, 2024 April 30, 2024	53 98	208 1380	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	29 74
WES24-05	2	May 28, 2024	78	520	ND	ND	ND	ND	ND	ND	ND	97
WES24-00	2.5	May 28, 2024 May 28, 2024	86	587	ND	ND	ND	ND	ND	ND	ND	510

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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



APPENDIX A - NMOCD C-141 Report

Location:	JRU DI 2 Battery				
Spill Date:	1/21/2024				
	Area 1				
Approximate Area = 2584.00 sq. ft.					
Average Saturation (or depth) of spill = 1.00 inche			inches		
			-		
Average Porosity Factor = 0.10					
VOLUME OF LEAK					
Total Crude Oil	=		bbls		
Total Produced Water = 10.84					

TOTAL VOLUME OF LEAK				
Total Crude Oil =		bbls		
Total Produced Water =	10.84	bbls		
TOTAL VOLUME RECOVERED				
Total Crude Oil =		bbls		
Total Produced Water =	7.00	bbls		

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

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Action 310952

QUESTIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	310952
	Action Type:
	[C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS Proroquisitos

Incident ID (n#)	nAPP2403353247		
Incident Name	NAPP2403353247 JRU DI 2 BATTERY @ 0		
Incident Type	Produced Water Release		
Incident Status	Initial C-141 Received		

Location of Release Source

Please answer all the questions in this group.			
Site Name	JRU DI 2 Battery		
Date Release Discovered	01/21/2024		
Surface Owner	Federal		

Incident Details

Please answer all the questions in this group.				
Incident Type	Produced Water Release			
Did this release result in a fire or is the result of a fire	No			
Did this release result in any injuries	No			
Has this release reached or does it have a reasonable probability of reaching a watercourse	No			
Has this release endangered or does it have a reasonable probability of endangering public health	No			
Has this release substantially damaged or will it substantially damage property or the environment	No			
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No			

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion Flow Line - Production Produced Water Released: 11 BBL Recovered: 7 BBL Lost: 4 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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

QUESTIONS (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	310952
	Action Type:
	[C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Initial Response

The source of the release has been stopped

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.			

	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.	
		ation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative o ed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of valuation in the follow-up C-141 submission.	

True

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

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: Garrett Green Title: SHE Coordinator
The obsy agree and eight on to the above statement	Email: garrett.green@exxonmobil.com
	Date: 02/02/2024

QUESTIONS, Page 2

Action 310952

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 (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	310952
	Action Type:
	[C-141] Initial C-141 (C-141-v-Initial)

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 Not answered. release in feet below ground surface (ft bgs)

What method was used to determine the depth to ground waterNot answered.Did this release impact groundwater or surface waterNot answered.A continuously flowing watercourse or any other significant water courseNot answered.A notcupied permanent residence, school, hospital, institution, or churchNot answered.An occupied permanent residence, school, hospital, institution, or churchNot answered.Any ther firsh water wall used by less than five householdsNot answered.Any other firsh water wall used by less than five householdsNot answered.Any other firsh water wall used by less than five householdsNot answered.Any other firsh water wall used by less than five householdsNot answered.Any other firsh water wall used by less than five householdsNot answered.Any other firsh water wall used by less than five householdsNot answered.Any other firsh water wall used by less than five householdsNot answered.Any other firsh water wall used by less than five house wallNot answered.Any other firsh water wall used by less than five house wallNot answered.Any other firsh water wall used by less than five house wallNot answered.A waterNot answered.A waterNot answered.A suburdace mainerNot answered.A use wallNot answered.A use wallNot answered.A totacy wall use house waterNot answered.A totacy wall use house house house house house house house house wall use house house house house house h	release in feet below ground surface (it bgs)		
What is the minimum distance, between the closest lateral extents of the release and the following surface areas: A continuously flowing watercourse or any other significant watercourse Not answered. Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) Not answered. An occupied permanent residence, school, hospital, institution, or church Not answered. A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes Not answered. Any other fresh water well or spring Not answered. Incorporated municipal boundaries or a defined municipal fresh water well field Not answered. A wetland Not answered. An (non-karst) unstable area Not answered. A not on-year floodplain Not answered. A too-spread Not answered.	What method was used to determine the depth to ground water	Not answered.	
A continuously flowing watercourse or any other significant watercourse Not answered. Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) Not answered. An occupied permanent residence, school, hospital, institution, or church Not answered. A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes Not answered. Any other fresh water well or spring Not answered. Incorporated municipal boundaries or a defined municipal fresh water well field Not answered. A subsurface mine Not answered. An (non-karst) unstable area Not answered. A 100-year floodplain Not answered. Did the release impact areas not on an exploration, development, production, or Not answered.	Did this release impact groundwater or surface water	Not answered.	
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) Not answered. An occupied permanent residence, school, hospital, institution, or church Not answered. A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes Not answered. Any other fresh water well or spring Not answered. Incorporated municipal boundaries or a defined municipal fresh water well field Not answered. A wetland Not answered. A subsurface mine Not answered. An (non-karst) unstable area Not answered. Categorize the risk of this well / site being in a karst geology Not answered. A 100-year floodplain Not answered. Did the release impact areas not on an exploration, development, production, or Not answered.	What is the minimum distance, between the closest lateral extents of the release a	nd the following surface areas:	
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An (non-karst) unstable area Not answered. Categorize the risk of this well / site being in a karst geology Not answered. A 100-year floodplain Not answered. Did the release impact areas not on an exploration, development, production, or Not answered.	A wetland	Not answered.	
Categorize the risk of this well / site being in a karst geology Not answered. A 100-year floodplain Not answered. Did the release impact areas not on an exploration, development, production, or Not answered.	A subsurface mine	Not answered.	
A 100-year floodplain Not answered. Did the release impact areas not on an exploration, development, production, or	An (non-karst) unstable area	Not answered.	
Did the release impact areas not on an exploration, development, production, or	Categorize the risk of this well / site being in a karst geology	Not answered.	
Not answered	A 100-year floodplain	Not answered.	
		Not answered.	

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission

No 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.

Action 310952

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CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	310952
	Action Type:
	[C-141] Initial C-141 (C-141-v-Initial)
CONDITIONS	

Created By Condition

scwells None CONDITIONS

Action 310952

Condition Date

2/2/2024

APPENDIX B – Closure Criteria Research Documentation

APPENDIX C – Daily Field Reports



Client:	XTO Energy Inc. (US)	Inspection Date:	3/5/2024
Site Location Name:	JRU DI 2	Report Run Date:	3/5/2024 9:51 PM
Client Contact Name:	Garrett Green	API #:	
Client Contact Phone #:	575-200-0729		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
	Summary of Times		
Arrived at Site	3/5/2024 8:10 AM		
Departed Site			
Field Notes			
8:52 Arrived on site filled out JSAs			

- 8:52 Marked areas for the line locator
- 9:35 Met with Manuel underground line locator and showed me areas that were marked and flagged and possible areas of underground lines
- 9:36 Southwest corner of 811 call area and pad has possibly old underground lines

Next Steps & Recommendations

1



Site Photos Viewing Direction: Northwest Viewing Direction: Northwest of the 811 cell area is marked and flagged for From the SE corner facing NW of the 811 call Berm has an underground line area is marked and flagged for underground lines Viewing Direction: Northeast Viewing Direction: South Possible old underground line 3-4ft deep in the Underground lines southwest corner of the pad





Southwest corner of 811 call and pad possible old underground lines that were signaled by Manuel with line locator

underground lines



Daily Site Visit Signature

Inspector: Wyatt Wadleigh

Signature:



Client:	XTO Energy Inc. (US)	Inspection Date:	3/11/2024	
Site Location Name:	JRU DI 2	Report Run Date:	3/11/2024 11:35 PM	
Client Contact Name:	Garrett Green	API #:		
Client Contact Phone #:	575-200-0729			
Unique Project ID		Project Owner:		
Project Reference #		Project Manager:		
Summary of Times				
Arrived at Site	3/11/2024 8:36 AM			
Departed Site				
Field Notes				

8:36 On site informed Amy with XTO that I'm site and filled out JSAs

9:45 Began delineation of the southwestern release

14:33 The berm on location possesses and underground line as well as lines east and west running north and south with the berm

14:38 Jarred samples BH24-01 and 04 at surface and 2ft

Next Steps & Recommendations

1



Site Photos Viewing Direction: South Viewing Direction: North BH24-01 reached a depth of 2 ft located BH24-02 samples to 2ft northern part of release area Viewing Direction: Northeast Viewing Direction: Northeast BH24-03 was sampled to a depth of 2ft BH24-04 was sampled to a depth of 2ft

Run on 3/11/2024 11:35 PM UTC











Daily Site Visit Signature

Inspector: Wyatt Wadleigh

Signature:

•



Client:	XTO Energy Inc. (US)	Inspection Date:	4/12/2024
Site Location Name:	JRU DI 2	Report Run Date:	4/15/2024 9:19 PM
Client Contact Name:	Amy Ruth	API #:	
Client Contact Phone #:	432-661-0571		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
Summary of Times			
Arrived at Site	4/12/2024 8:00 AM		
Departed Site	4/12/2024 5:10 PM		

Field Notes

17:11 Completed safety paperwork and safety meeting upon arrival. -Called Amy Ruth for the work authorization

-Because yesterday's overload of the CTB a XTO crew were working on site. Curtis Bizzell oriented us to not work on the east spill because it was inside of their work zone.

-Two crews worked separately on hand digging around machinery (north SW spill) and above spotted pipeline on the east side. The east side needs be stepped out and brought the excavation walls to its clean BH. The backhoe crew finalized the north side and halfway down south-east at 1' bgs.

Next Steps & Recommendations

1



Site Photos Viewing Direction: North Viewing Direction: North North part SW spill at 1.5', hand dug East part SW spill at 1', hand dug to expose the pipeline. Viewing Direction: North Viewing Direction: East 的过去式提出自己 pill at 1.5, A5, hand du North part SW spill at 1.5', Northeast part SW spill at 1.5' bottom and .5' top

Run on 4/15/2024 9:19 PM UTC





SE part SW spill at 1'.



Daily Site Visit Signature



•



Client	XTO Energy Inc. (US)	Inspection Date		
Site Location Name	JRU DI 2	API #		
Client Contact Name	Amy Ruth	Project Owner		
Client Contact Phone #	432-661-0571	Project Manager		
Project Reference #				
Unique Project ID				
Summary of Times				
		Summary of Times		
Arrived at Site		Summary of Times		
Arrived at Site Departed Site		Summary of Times		
	· · · · · · · · · · · · · · · · · · ·			
		Summary of Times Field Notes		

12:53 Samples collected BES24-04,18,20 and WES24-06,07 were all field screened via titration and TPH all were below criteria.

Next Steps & Recommendations

1



Site Photos Viewing Direction: West Viewing Direction: Northeast BES24-04 was excavated to 1.5ft bgs Liner with clean soils in the back ground Viewing Direction: Northwest Viewing Direction: North BES24-18 were sampled at 1.5 ft bgs Excavation to the north

Run on 5/28/2024 8:29 PM UTC





Excavation to the east

Run on 5/28/2024 8:29 PM UTC



Daily Site Visit Signature

Inspector: Wyatt Wadleigh

Signature:

•



Client:	XTO Energy Inc. (US)	Inspection Date:	6/17/2024
Site Location Name:	JRU DI 2	Report Run Date:	6/18/2024 12:22 AM
Client Contact Name:	Marshall Boles	API #:	
Client Contact Phone #:	(806) 367-2174		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
Summary of Times			
Arrived at Site	6/17/2024 2:29 PM		
Departed Site	6/17/2024 5:11 PM		
Field Notes			

14:32 Arrived at approximately 2:30 pm. On site to take photographs of excavation backfill.

Assessed site for hazards and filled out safety documentation.

16:53 PM also requested to mark border and submit one call of area south of the east excavation (east of containment)

17:04 Marked four corners of one call using stakes, flags and white paint.

Next Steps & Recommendations

1 Submit the 811 one call











of excavation facing east (area south of electrical shed)

Run on 6/18/2024 12:22 AM UTC




Daily Site Visit Report





Overall one call area

V

VERTEX

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Andrew Ludvik

Signature: Charles Signature

.

APPENDIX D – Correspondence

Searches	Operator Data	Hearing Fee Application

OCD Permitting

Home Operator Data Action Status Action Search Results Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information					
Submission ID:	333176	Districts:	Artesia		
Operator:	[<u>5380]</u> XTO ENERGY, INC	Counties:	Eddy		
Description:	XTO ENERGY, INC [5380] , JRU DI 2 Battery , nAPP2403353247				
Status:	APPROVED				
Status Date:	04/15/2024				
References (1):	nAPP2403353247				

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2403353247
Incident Name	NAPP2403353247 JRU DI 2 BATTERY @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	JRU DI 2 Battery
Date Release Discovered	01/21/2024
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	2,000
What is the estimated number of samples that will be gathered	10
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/18/2024
Time sampling will commence	08:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	SCarttar@vertex.ca
Please provide any information necessary for navigation to sampling site	K-25-22S-30E 32.36265,-103.83733

		Searches	Operator Data	Hearing Fee Application
Comments				
No comments found for th	is submission.			
Conditions				
Summary:	aromero (4/15/2024), Failure to notify the OCD of sampling events including any changes remediation closure samples not being accepted.	in date/time per the r	equirements of 19.15.29.1	2.D.(1).(a) NMAC, may result in the
Reasons				
No reasons found for this	submission.			
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Searches	Operator Data	Hearing Fee Application

OCD Permitting

Home Operator Data Action Status Action Search Results Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

	Submission Information			
	Submission ID:	333177	Districts:	Artesia
	Operator:	[5380] XTO ENERGY, INC	Counties:	Eddy
	Description:	XTO ENERGY, INC [5380] , JRU DI 2 Battery , nAPP2403353247		
	Status:	APPROVED		
	Status Date:	04/15/2024		
	References (1):	nAPP2403353247		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2403353247
Incident Name	NAPP2403353247 JRU DI 2 BATTERY @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	JRU DI 2 Battery
Date Release Discovered	01/21/2024
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	2,000
What is the estimated number of samples that will be gathered	10
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/19/2024
Time sampling will commence	08:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	SCarttar@vertex.ca
Please provide any information necessary for navigation to sampling site	K-25-22S-30E 32.36265,-103.83733

		Searches	Operator Data	Hearing Fee Application
Comments				
No comments found for th	is submission.			
Conditions				
Summary:	aromero (4/15/2024), Failure to notify the OCD of sampling events including any changes remediation closure samples not being accepted.	in date/time per the r	equirements of 19.15.29.1	2.D.(1).(a) NMAC, may result in the
Reasons				
No reasons found for this	submission.			
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Searches	Operator Data	Hearing Fee Application

OCD Permitting

Home Operator Data Action Status Action Search Results Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information			
Submission ID:	334895	Districts:	Artesia
Operator:	[<u>5380]</u> XTO ENERGY, INC	Counties:	Eddy
Description:	XTO ENERGY, INC [5380] , JRU DI 2 Battery , nAPP2403353247		
Status:	APPROVED		
Status Date:	04/18/2024		
References (1):	nAPP2403353247		

Forms

This application type does not have attachments.

Questions

Prerequisites

I	ncident ID (n#)	nAPP2403353247
I	ncident Name	NAPP2403353247 JRU DI 2 BATTERY @ 0
I	ncident Type	Produced Water Release
I	ncident Status	Initial C-141 Approved

Location of Release Source

Site Name	JRU DI 2 Battery
Date Release Discovered	01/21/2024
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	2,000
What is the estimated number of samples that will be gathered	10
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/22/2024
Time sampling will commence	09:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	SCarttar@vertex.ca
Please provide any information necessary for navigation to sampling site	K-25-22S-30E 32.36265,-103.83733

		Searches	Operator Data	Hearing Fee Application
Comments				
No comments found for thi	s submission.			
Conditions				
Summary:	aromero (4/18/2024), Failure to notify the OCD of sampling events including any changes remediation closure samples not being accepted.	in date/time per the r	equirements of 19.15.29.1	2.D.(1).(a) NMAC, may result in the
Reasons				
No reasons found for this s	submission.			
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OCD Permitting

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Searches Operator Data Hea

Hearing Fee Application

OCD Permitting

Home Operator Data Action Status Action Search Results Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information				
Submission ID:	337765	Districts:	Artesia	
Operator:	[5380] XTO ENERGY, INC	Counties:	Eddy	
Description:	XTO ENERGY, INC [5380] , JAMES RANCH UNIT DI 2 CTB , nAPP2332135027			
Status:	APPROVED			
Status Date:	04/25/2024			
References (1):	nAPP2332135027			

Forms

This application type does not have attachments.

Questions	
Prerequisites	
Incident ID (n#)	nAPP2332135027
Incident Name	NAPP2332135027 JAMES RANCH UNIT DI 2 CTB @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved
Location of Release Source	
Site Name	JAMES RANCH UNIT DI 2 CTB
Date Release Discovered	11/13/2023
Surface Owner	Federal
Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	2,000
What is the estimated number of samples that will be gathered	10
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of	04/30/2024
19.15.29.12 NMAC	
Time sampling will commence	08:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling	
Please provide any information necessary for observers to contact samplers	SCarttar@vertex.ca
Please provide any information necessary for navigation to sampling site	K-25-22S-30E 32.36265,-103.83733

		Searches	Operator Data	Hearing Fee Application
Comments				
No comments found	for this submission.			
Conditions				
Summary:	aromero (4/25/2024), Failure to notify the OCD of sampling events incl remediation closure samples not being accepted.	uding any changes in date/time per the r	equirements of 19.15.29.1	2.D.(1).(a) NMAC, may result in the
Reasons				
No reasons found for	this submission.			
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Searches Operator Data Heari

Hearing Fee Application

OCD Permitting

Home Operator Data Action Status Action Search Results Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information Submission ID: 346431 Districts: Artesia Operator: [5380] XTO ENERGY, INC Counties: Eddy Description: XTO ENERGY, INC [5380] , JRU DI 2 Battery , nAPP2403353247 Status: APPROVED 05/21/2024 Status Date: nAPP2403353247 References (1):

Forms

This application type does not have attachments.

Questions	
Prerequisites	
Incident ID (n#)	nAPP2403353247
Incident Name	NAPP2403353247 JRU DI 2 BATTERY @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Location of Release Source	
Site Name	JRU DI 2 Battery
Date Release Discovered	01/21/2024
Surface Owner	Federal
Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	1,000
What is the estimated number of samples that will be gathered	5
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/28/2024
Time sampling will commence	08:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling	
Please provide any information necessary for observers to contact samplers	SCarttar@vertexresource.com
Please provide any information necessary for navigation to sampling site	K-25-22S-30E 32.36265,-103.83733

		Searches	Operator Data	Hearing Fee Application
Comments				
No comments found for	this submission.			
Conditions				
Summary:	aromero (5/21/2024), Failure to notify the OCD of sampling events including any changes remediation closure samples not being accepted.	in date/time per the r	equirements of 19.15.29.	2.D.(1).(a) NMAC, may result in the
Reasons				
No reasons found for th	s submission.			
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APPENDIX E – Laboratory Data Reports and Chain of Custody Forms

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 3/28/2024 6:34:11 PM

JOB DESCRIPTION

JRU DI 2

JOB NUMBER

885-1321-1

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

Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com

Authorized for release by

(505)345-3975

Generated 3/28/2024 6:34:11 PM

3/28/2024 6:3

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Definitions/Glossary

Client: Vertex Project/Site: JRU DI 2 Job ID: 885-1321-1

Glossary		3
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	Δ
%R	Percent Recovery	
CFL	Contains Free Liquid	5
CFU	Colony Forming Unit	5
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)	8
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	9
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	

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

TEF

TEQ TNTC

Case Narrative

Client: Vertex Project: JRU DI 2

Job ID: 885-1321-1

Job ID: 885-1321-1

Eurofins Albuquerque

Job Narrative 885-1321-1

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

Method 8015D_DRO: The continuing calibration verification (CCV) associated with batch 885-2085 recovered outside acceptance criteria, low biased, for Di-n-octyl phthalate (Surr). Samples with high chloride may degrade the inlet liner, resulting in a low surrogate recovery. Samples with low surrogate will be re-ran; reporting all associated with passing surrogate. The following samples are associated BH24-01 0' (885-1321-1), BH24-01 2' (885-1321-2), BH24-04 0' (885-1321-3), BH24-04 2' (885-1321-4), (LCS 885-1959/2-A), (885-1321-A-1-D MS) and (885-1321-A-1-E MSD).

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 Project/Site: JRU DI 2

Client Sample ID: BH24-01 0' Date Collected: 03/11/24 10:00 Date Received: 03/15/24 07:40

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5

Lab Sample ID: 885-1321-1 Matrix: Solid

Method: SW846 8015D - Gasc	-	-		11		Dronered	Analyzed	
Analyte	ND	Qualifier		Unit	D	Prepared	Analyzed 03/20/24 22:02	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		03/18/24 11:35	03/20/24 22:02	I
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 244			03/18/24 11:35	03/20/24 22:02	1
		_						
Method: SW846 8021B - Volat				11	_	Duo u o uo d	A	
Analyte	ND	Qualifier		Unit	D	Prepared 03/18/24 11:35	Analyzed 03/20/24 22:02	Dil Fac
3enzene Ethylbenzene	ND		0.024	mg/Kg mg/Kg		03/18/24 11:35	03/20/24 22:02	
Toluene	ND		0.047	mg/Kg		03/18/24 11:35	03/20/24 22:02	
Xylenes, Total	ND		0.094	mg/Kg		03/18/24 11:35	03/20/24 22:02	
			0.001	119/19		00,10,2111.00	00/20/21 22:02	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			03/18/24 11:35	03/20/24 22:02	î
Method: SW846 8015D - Diese	el Range Or	nanice (D						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		03/19/24 15:38	03/20/24 18:07	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		03/19/24 15:38		
0 0 1 1				0 0				
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	100		62 - 134			03/19/24 15:38	03/20/24 18:07	1
Mathadi EDA 200 0 Aniana I		le avec a le c						
Method: EPA 300.0 - Anions, Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<u>680</u>	Quaimer	<u> </u>	mg/Kg		03/19/24 14:21	03/19/24 22:54	20
Chionde			00	iiig/itg		00/10/24 14.21	00/10/24 22:04	20
lient Sample ID: BH24-0	1 2'					Lab Samp	le ID: 885-1	321-2
ate Collected: 03/11/24 10:15							Matrix	: Solid
ate Received: 03/15/24 07:40								
Method: SW846 8015D - Gasc	U.S. Damas	Organics						
	nine Rande	U danica	(GRO) (GC)					
	-	Qualifier	(GRO) (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	-	-		Unit mg/Kg	<u>D</u>	Prepared 03/18/24 11:35	Analyzed 03/20/24 22:24	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]	Result ND	Qualifier	RL 4.8		<u>D</u>	03/18/24 11:35	03/20/24 22:24	1
Analyte Gasoline Range Organics [C6 - C10] Surrogate	Result ND %Recovery	Qualifier	RL 4.8 Limits		<u>D</u>	03/18/24 11:35 Prepared	03/20/24 22:24 Analyzed	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate	Result ND	Qualifier	RL 4.8		<u>D</u>	03/18/24 11:35	03/20/24 22:24	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr)	Result ND %Recovery 101	Qualifier Qualifier	RL 4.8 Limits 15 - 244		<u> </u>	03/18/24 11:35 Prepared	03/20/24 22:24 Analyzed	Dil Fa
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat	Result ND %Recovery 101 tile Organic	Qualifier Qualifier	RL 4.8 Limits 15 - 244		D	03/18/24 11:35 Prepared	03/20/24 22:24 Analyzed	Dil Fa
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte	Result ND %Recovery 101 tile Organic	Qualifier Qualifier Compoun	RL 4.8 Limits 15 - 244 ods (GC)	mg/Kg		03/18/24 11:35 Prepared 03/18/24 11:35	03/20/24 22:24 <u>Analyzed</u> 03/20/24 22:24	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene	Result ND %Recovery 101 tile Organic Result	Qualifier Qualifier Compoun	RL 4.8 Limits 15 - 244 ids (GC) RL	mg/Kg Unit		03/18/24 11:35 Prepared 03/18/24 11:35 Prepared	03/20/24 22:24 <u>Analyzed</u> 03/20/24 22:24 <u>Analyzed</u>	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene	Result ND %Recovery 101 tile Organic Result ND	Qualifier Qualifier Compoun	RL 4.8 Limits 15 - 244 ads (GC) RL 0.024	unit mg/Kg		03/18/24 11:35 Prepared 03/18/24 11:35 Prepared 03/18/24 11:35	03/20/24 22:24 Analyzed 03/20/24 22:24 Analyzed 03/20/24 22:24	1
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Foluene	Result ND %Recovery 101 tile Organic Result ND ND	Qualifier Qualifier Compoun	RL 4.8 Limits 15 - 244 ods (GC) RL 0.024 0.048	Unit mg/Kg mg/Kg mg/Kg		03/18/24 11:35 Prepared 03/18/24 11:35 Prepared 03/18/24 11:35 03/18/24 11:35	03/20/24 22:24 Analyzed 03/20/24 22:24 Analyzed 03/20/24 22:24 03/20/24 22:24	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total	Result ND %Recovery 101 tile Organic Result ND ND ND ND	Qualifier Qualifier Compoun Qualifier	RL 4.8 4.8 15 - 244 15 - 244 105 (GC) RL 0.024 0.048 0.048 0.097	Unit mg/Kg mg/Kg mg/Kg mg/Kg		03/18/24 11:35 Prepared 03/18/24 11:35 Prepared 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35	03/20/24 22:24 Analyzed 03/20/24 22:24 Analyzed 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate	Result ND %Recovery 101 tile Organic Result ND ND ND ND ND	Qualifier Qualifier Compoun Qualifier	RL 4.8 Limits 15 - 244 ids (GC) RL 0.024 0.024 0.048 0.048 0.097 Limits	Unit mg/Kg mg/Kg mg/Kg mg/Kg		03/18/24 11:35 Prepared 03/18/24 11:35 Prepared 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35 Prepared	03/20/24 22:24 Analyzed 03/20/24 22:24 Analyzed 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 Analyzed	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate	Result ND %Recovery 101 tile Organic Result ND ND ND ND	Qualifier Qualifier Compoun Qualifier	RL 4.8 4.8 15 - 244 15 - 244 105 (GC) RL 0.024 0.048 0.048 0.097	Unit mg/Kg mg/Kg mg/Kg mg/Kg		03/18/24 11:35 Prepared 03/18/24 11:35 Prepared 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35	03/20/24 22:24 Analyzed 03/20/24 22:24 Analyzed 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr)	Result ND %Recovery 101 tile Organic Result ND ND ND ND ND ND 90	Qualifier Qualifier Compoun Qualifier Qualifier	RL 4.8 Limits 15 - 244 ods (GC) RL 0.024 0.048 0.048 0.097 Limits 39 - 146	Unit mg/Kg mg/Kg mg/Kg mg/Kg		03/18/24 11:35 Prepared 03/18/24 11:35 Prepared 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35 Prepared	03/20/24 22:24 Analyzed 03/20/24 22:24 Analyzed 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 Analyzed	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte	Result ND %Recovery 101 tile Organic Result ND ND ND ND ND ND ND ND ND	Qualifier Qualifier Compoun Qualifier Qualifier	RL 4.8 Limits 15 - 244 ods (GC) RL 0.024 0.048 0.048 0.097 Limits 39 - 146	Unit mg/Kg mg/Kg mg/Kg mg/Kg		03/18/24 11:35 Prepared 03/18/24 11:35 Prepared 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35 Prepared 03/18/24 11:35 Prepared 03/18/24 11:35	03/20/24 22:24 Analyzed 03/20/24 22:24 Analyzed 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 03/20/24 22:24 Analyzed	Dil Fac

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	9.7	mg/Kg		03/19/24 15:38	03/20/24 18:40	1
Motor Oil Range Organics [C28-C40]	ND	49	mg/Kg		03/19/24 15:38	03/20/24 18:40	1

Eurofins Albuquerque

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	680		60	mg/Kg		03/19/24 14:21	03/19/24 22:54	20

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/18/24 11:35	03/20/24 22:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			03/18/24 11:35	03/20/24 22:24	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		03/18/24 11:35	03/20/24 22:24	1
Ethylbenzene	ND		0.048	mg/Kg		03/18/24 11:35	03/20/24 22:24	1
Toluene	ND		0.048	mg/Kg		03/18/24 11:35	03/20/24 22:24	1
Xylenes, Total	ND		0.097	mg/Kg		03/18/24 11:35	03/20/24 22:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			03/18/24 11:35	03/20/24 22:24	1

3/28/2024

Client Sample Results

Job ID: 885-1321-1

ient Sample ID: BH24-01 te Collected: 03/11/24 10:15	1 2'					Lab Samp	le ID: 885-1 Matrix	321-2 : Solid
te Received: 03/15/24 07:40								.: 50114
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	121		62 - 134			03/19/24 15:38	03/20/24 18:40	1
Method: EPA 300.0 - Anions, I	on Chroma	togranhy						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92		60	mg/Kg		03/19/24 14:21		20
Client Sample ID: BH24-04	4 0'					Lab Samp	le ID: 885-1	321-3
Pate Collected: 03/11/24 11:00 Pate Received: 03/15/24 07:40								: Solid
Method: SW846 8015D - Gaso	-							
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/18/24 11:35	03/20/24 23:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244			03/18/24 11:35		1
		•	. (00)					
Method: SW846 8021B - Volati Analyte		Qualifier	ds (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	Quanner	0.024	mg/Kg		03/18/24 11:35	03/20/24 23:07	
Ethylbenzene	ND		0.024	mg/Kg			03/20/24 23:07	1
Toluene	ND		0.048	mg/Kg			03/20/24 23:07	1
Xylenes, Total	ND		0.097	mg/Kg			03/20/24 23:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91	Qualinei						1
	σ.		59 - 170			00/10/27 11.00	00/20/27 20.07	
Method: SW846 8015D - Diese			(O) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg				1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		03/19/24 15:38	03/20/24 18:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94	<u></u>	62 - 134			03/19/24 15:38		1
	-							
Method: EPA 300.0 - Anions, I			ы	l lait	Б	Branarad	Amelyzed	Dil Eac
Analyte	950	Qualifier		Unit	<u>D</u>	Prepared 03/19/24 14:21	Analyzed 03/19/24 23:43	Dil Fac
	300		59	mg/Kg		03/19/24 14.21		
-								321-4
Client Sample ID: BH24-04						Lab Samp	le ID: 885-1	
Client Sample ID: BH24-04 Date Collected: 03/11/24 11:30						Lab Samp		: Solid
Date Collected: 03/11/24 11:30						Lab Samp		
Client Sample ID: BH24-04 Date Collected: 03/11/24 11:30 Date Received: 03/15/24 07:40	4 2'	Organics (GRO) (GC)			Lab Samp		
Client Sample ID: BH24-04 Date Collected: 03/11/24 11:30	4 2' line Range	Organics (Qualifier	(GRO) (GC) RL	Unit	D	Lab Samp		
- Client Sample ID: BH24-04 Date Collected: 03/11/24 11:30 Date Received: 03/15/24 07:40 - Method: SW846 8015D - Gaso	4 2' line Range			Unit mg/Kg	<u>D</u>		Matrix Analyzed	: Solid
Client Sample ID: BH24-04 Date Collected: 03/11/24 11:30 Date Received: 03/15/24 07:40 Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10]	4 2' Pline Range Result ND	Qualifier	RL 4.8		<u>D</u>	Prepared 03/18/24 11:35	Matrix Analyzed 03/20/24 23:29	Lil Fac
Client Sample ID: BH24-04 Date Collected: 03/11/24 11:30 Date Received: 03/15/24 07:40 Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate	4 2' line Range Result ND %Recovery	Qualifier Qualifier	RL 4.8		<u>D</u>	Prepared 03/18/24 11:35 Prepared	Matrix Analyzed 03/20/24 23:29 Analyzed	Dil Fac
Client Sample ID: BH24-04 Date Collected: 03/11/24 11:30 Date Received: 03/15/24 07:40 Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10]	4 2' Pline Range Result ND	Qualifier Qualifier	RL 4.8		D	Prepared 03/18/24 11:35	Matrix Analyzed 03/20/24 23:29 Analyzed	Lil Fac
Client Sample ID: BH24-04 Date Collected: 03/11/24 11:30 Date Received: 03/15/24 07:40 Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr)	4 2' line Range Result ND %Recovery 105	Qualifier Qualifier	RL 4.8 Limits 15 - 244		<u>D</u>	Prepared 03/18/24 11:35 Prepared	Matrix Analyzed 03/20/24 23:29 Analyzed	Dil Fac
Client Sample ID: BH24-04 Date Collected: 03/11/24 11:30 Date Received: 03/15/24 07:40 Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate	4 2' bline Range Result ND %Recovery 105 ile Organic	Qualifier Qualifier	RL 4.8 Limits 15 - 244		D	Prepared 03/18/24 11:35 Prepared 03/18/24 11:35 Prepared	Matrix Analyzed 03/20/24 23:29 Analyzed	Dil Fac

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Client Sample Results

Client: Vertex Project/Site: JRU DI 2 Job ID: 885-1321-1

Client Sample ID: BH24-04 2' Date Collected: 03/11/24 11:30 Date Received: 03/15/24 07:40

Lab	Sample	ID:	885-1321-4
			Matrix: Solid

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Ethylbenzene	ND		0.048	mg/Kg		03/18/24 11:35	03/20/24 23:29	1	
Toluene	ND		0.048	mg/Kg		03/18/24 11:35	03/20/24 23:29	1	
Xylenes, Total	ND		0.096	mg/Kg		03/18/24 11:35	03/20/24 23:29	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	93		39 - 146			03/18/24 11:35	03/20/24 23:29	1	
Method: SW846 8015D - Diese	el Range Or	ganics (DF	(U) (GC)						
		Qualifier	(O) (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac	
Analyte		- · · ·		Unit mg/Kg	D	Prepared 03/19/24 15:38	Analyzed 03/20/24 19:02	Dil Fac	
Analyte Diesel Range Organics [C10-C28]	Result	- · · ·	RL		<u>D</u>		03/20/24 19:02	Dil Fac	
	Result ND	Qualifier	RL 9.5	mg/Kg	<u>D</u>	03/19/24 15:38	03/20/24 19:02	Dil Fac 1 1 Dil Fac	
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	Result ND ND	Qualifier	RL 9.5 47	mg/Kg	<u>D</u>	03/19/24 15:38 03/19/24 15:38	03/20/24 19:02 03/20/24 19:02	1 1	
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	Result ND ND %Recovery 108	Qualifier Qualifier	RL 9.5 47 Limits	mg/Kg	D	03/19/24 15:38 03/19/24 15:38 Prepared	03/20/24 19:02 03/20/24 19:02 Analyzed	1 1	
Motor Oil Range Organics [C28-C40] Surrogate	Result ND ND %Recovery 108	Qualifier Qualifier	RL 9.5 47 Limits	mg/Kg	<u>D</u>	03/19/24 15:38 03/19/24 15:38 Prepared	03/20/24 19:02 03/20/24 19:02 Analyzed	1 1	

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QC Sample Results

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Job ID: 885-1321-1

Client: Vertex Project/Site: JRU DI 2

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

Resu	B MB Ilt Qualifie	r RL 5.0		Unit		_	Descend	Prep Type: T Prep Batc	
Resu N	It Qualifie			Unif		_	Duran and	Prep Batc	h: 1849
Resu N	It Qualifie			Unit		_	Duran and		
N N				Unit		-	Duananad		
N	D	F 0				D	Prepared	Analyzed	Dil Fa
		5.0		mg/K	g	_	03/18/24 11:35	03/20/24 17:19	
%Recove	IB MB								
	ry Qualifie	r Limits					Prepared	Analyzed	Dil Fa
:	98	15 - 244					03/18/24 11:35	03/20/24 17:19	
2-A					Cli	ent	Sample ID:		
		Spike	LCS	LCS				%Rec	
		Added	Result	Qualifier	Unit		D %Rec	Limits	
		25.0	26.0		mg/Kg		104	70 - 130	
LCS L	cs								
ecovery C	ualifier	Limits							
222		15_244							
rganic	Compo								
-A	oompo	unds (GC)					Client Samp	ole ID: Method Prep Type: T	otal/N/
		unds (GC)					Client Samp		otal/N/
M	B MB			Unit		D		Prep Type: T Prep Batc	otal/N/ h: 1849
N Resi	B MB	rRL		Unit ma/K	a	D	Prepared	Prep Type: T Prep Batc Analyzed	otal/N/
N Resi	B MB Ilt Qualifie	r RL 		mg/K	-	D	Prepared 03/18/24 11:35	Prep Type: T Prep Batc Analyzed 03/20/24 17:19	otal/N/ h: 1849 Dil Fa
N Resu	B MB Itt Qualifie D	r RL 0.025 0.050		mg/K mg/K	g	D	Prepared 03/18/24 11:35 03/18/24 11:35	Prep Type: T Prep Batc 03/20/24 17:19 03/20/24 17:19	otal/N/ h: 1849 Dil Fa
N Resi N N	B MB Ilt Qualifie	r RL 		mg/K mg/K mg/K	g g	<u>D</u>	Prepared 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35	Prep Type: T Prep Batc Analyzed 03/20/24 17:19	otal/N/ h: 1849 Dil Fa
N Resi N N N	B MB It Qualifie D D D D	r RL 0.025 0.050 0.050		mg/K mg/K	g g	<u>D</u>	Prepared 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35	Prep Type: T Prep Batc 03/20/24 17:19 03/20/24 17:19 03/20/24 17:19	otal/N/ h: 1849 Dil Fa
N Resi N N N	B MB It Qualifie D D D D B MB	r RL 0.025 0.050 0.050 0.10		mg/K mg/K mg/K	g g	<u>D</u>	Prepared 03/18/24 11:35 03/18/24 11:35 03/18/24 11:35	Prep Type: T Prep Batc 03/20/24 17:19 03/20/24 17:19 03/20/24 17:19	otal/N/ h: 1849 Dil Fa
e	LCS L ecovery Q 222	LCS LCS ecovery Qualifier 222	LCS LCS geovery Qualifier Limits	LCS LCS LCS Qualifier Limits	SpikeLCSLCSAddedResultQualifier25.026.026.0LCSLCSacoveryQualifierLimits	Spike LCS LCS Added Result Qualifier Unit 25.0 26.0 26.0 mg/Kg LCS LCS LCS accovery Qualifier Limits	Spike LCS LCS Added Result Qualifier Unit 25.0 26.0 26.0 mg/Kg	Spike LCS LCS Added Result Qualifier Unit D %Rec 25.0 26.0 26.0 mg/Kg D 104 LCS LCS secovery Qualifier Limits	Spike LCS LCS Unit Ø %Rec Added Result Qualifier Unit Ø %Rec Imits 25.0 26.0 26.0 mg/Kg Ø 104 70 - 130 LCS LCS LCS Limits Imits Imits Imits Imits

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

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

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QC Sample Results

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5 6 7

Job ID: 885-1321-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: MB 885-195	9/1-A							•	Clie	nt Samp	ole ID: Metl	h <mark>od</mark> I	Blank
Matrix: Solid											Prep Type	: Tot	al/N/
Analysis Batch: 2084											Prep Ba	atch:	195
	N	IB MB											
Analyte	Res	ult Qualifier	RL		U	Init		D	Pr	repared	Analyzed		Dil Fa
Diesel Range Organics [C10-C28]		1D	10		m	ng/Kg		_	03/19	9/24 15:38	03/21/24 09:	:19	
Motor Oil Range Organics [C28-C40]		1D	50		m	ng/Kg			03/19	9/24 15:38	03/21/24 09:	:19	
	٨	IB MB											
Surrogate	%Recove	ry Qualifier	Limits						Pr	repared	Analyzed		Dil Fa
Di-n-octyl phthalate (Surr)		95	62 - 134						03/19	9/24 15:38	03/21/24 09.	:19	
Lab Sample ID: LCS 885-19	59/2-A						Clie	ent	San	nple ID:	Lab Contro	ol Sa	ample
Matrix: Solid											Prep Type		
Analysis Batch: 2085											Prep Ba		
·····,···			Spike	LCS	LCS						%Rec		
Analyte			Added	Result	Qualif	ier	Unit		D	%Rec	Limits		
Diesel Range Organics			50.0	48.7			mg/Kg		_	97	60 - 135		
[C10-C28]													
	LCS L	.CS											
Surrogate	%Recovery	Qualifier	Limits										
Di-n-octyl phthalate (Surr)	97		62 - 134										
Lab Sample ID: 885-1321-1	MS								C	Client Sa	ample ID: E	3H24	-01 0
Matrix: Solid											Prep Type	: Tot	al/N/
Analysis Batch: 2085											Prep Ba	atch:	1959
	Sample S	ample	Spike	MS	MS						%Rec		
Analyte	Result C	Qualifier	Added	Result	Qualif	ier	Unit		D	%Rec	Limits		
Diesel Range Organics [C10-C28]	ND		48.9	45.4			mg/Kg		_	93	44 - 136		
	MS N	//S											
Surrogate	%Recovery 0		Limits										
Di-n-octyl phthalate (Surr)	103		62 - 134										
Lab Sample ID: 885-1321-1	MSD								0	Client Sa	ample ID: E	3H24	-01 0
Matrix: Solid											Prep Type		
Analysis Batch: 2085											Prep Ba		
	Sample S	ample	Spike	MSD	MSD						%Rec		RPD
Analyte	Result C	•	Added		Qualif	ier	Unit		D	%Rec		RPD	Limi
Diesel Range Organics [C10-C28]	ND		49.1	50.4			mg/Kg		-	103	44 - 136	10	32
	MSD N												
	%Recovery	Qualifier	Limits										
Di-n-octyl phthalate (Surr)	115		62 - 134										

Lab Sample ID: MB 885-1949/1-A Matrix: Solid Analysis Batch: 2271	МВ	МВ					le ID: Method Prep Type: To Prep Batch	otal/NA
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	1

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lient: Vertex								
roject/Site: JRU DI 2							Job ID: 885-1321-1	
lethod: 300.0 - Anions, Ion Chrom	atography (Con	ntinued)						
Lab Sample ID: LCS 885-1949/2-A Matrix: Solid				Clien	t Sai	mple ID	: Lab Control Sample Prep Type: Total/NA	
Analysis Batch: 2271 Analyte	Spike Added		LCS Qualifier	Unit	D	%Rec	Prep Batch: 1949 %Rec Limits	5
Chloride	30.0	29.1		mg/Kg		97	90 - 110	6
								7
								8
								9

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QC Association Summary

Client: Vertex Project/Site: JRU DI 2

GC VOA

Prep Batch: 1849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1321-1	BH24-01 0'	Total/NA	Solid	5030C	
885-1321-2	BH24-01 2'	Total/NA	Solid	5030C	
885-1321-3	BH24-04 0'	Total/NA	Solid	5030C	
885-1321-4	BH24-04 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	

Analysis Batch: 2109

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-1321-1	BH24-01 0'	Total/NA	Solid	8015D	1849
885-1321-2	BH24-01 2'	Total/NA	Solid	8015D	1849
885-1321-3	BH24-04 0'	Total/NA	Solid	8015D	1849
885-1321-4	BH24-04 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

Analysis Batch: 2114

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-1321-1	BH24-01 0'	Total/NA	Solid	8021B	1849
885-1321-2	BH24-01 2'	Total/NA	Solid	8021B	1849
885-1321-3	BH24-04 0'	Total/NA	Solid	8021B	1849
885-1321-4	BH24-04 2'	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

GC Semi VOA

Prep Batch: 1959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1321-1	BH24-01 0'	Total/NA	Solid	SHAKE	
885-1321-2	BH24-01 2'	Total/NA	Solid	SHAKE	
885-1321-3	BH24-04 0'	Total/NA	Solid	SHAKE	
885-1321-4	BH24-04 2'	Total/NA	Solid	SHAKE	
MB 885-1959/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-1959/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-1321-1 MS	BH24-01 0'	Total/NA	Solid	SHAKE	
885-1321-1 MSD	BH24-01 0'	Total/NA	Solid	SHAKE	

Analysis Batch: 2084

Lab Sample ID	Client Sample ID	Prep Туре	Matrix	Method	Prep Batch
MB 885-1959/1-A	Method Blank	Total/NA	Solid	8015D	1959

Analysis Batch: 2085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1321-1	BH24-01 0'	Total/NA	Solid	8015D	1959
885-1321-2	BH24-01 2'	Total/NA	Solid	8015D	1959
885-1321-3	BH24-04 0'	Total/NA	Solid	8015D	1959
885-1321-4	BH24-04 2'	Total/NA	Solid	8015D	1959
LCS 885-1959/2-A	Lab Control Sample	Total/NA	Solid	8015D	1959
885-1321-1 MS	BH24-01 0'	Total/NA	Solid	8015D	1959

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Job ID: 885-1321-1

QC Association Summary

Client: Vertex Project/Site: JRU DI 2

GC Semi VOA (Continued)

Analysis Batch: 2085 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1321-1 MSD	BH24-01 0'	Total/NA	Solid	8015D	1959

HPLC/IC

Prep Batch: 1949

ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
85-1321-1	BH24-01 0'	Total/NA	Solid	300_Prep	_
85-1321-2	BH24-01 2'	Total/NA	Solid	300_Prep	
5-1321-3	BH24-04 0'	Total/NA	Solid	300_Prep	
5-1321-4	BH24-04 2'	Total/NA	Solid	300_Prep	
B 885-1949/1-A	Method Blank	Total/NA	Solid	300_Prep	
CS 885-1949/2-A	Lab Control Sample	Total/NA	Solid	300 Prep	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1321-1	BH24-01 0'	Total/NA	Solid	300.0	1949
885-1321-2	BH24-01 2'	Total/NA	Solid	300.0	1949
885-1321-3	BH24-04 0'	Total/NA	Solid	300.0	1949
885-1321-4	BH24-04 2'	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

3/28/2024

5

Job ID: 885-1321-1

Client Sample ID: BH24-01 0'

Batch

Туре

Prep

Prep

Prep

Prep

Analysis

Analysis

Analysis

Analysis

Batch

Method

5030C

8015D

5030C

8021B

SHAKE

8015D

300.0

300 Prep

Date Collected: 03/11/24 10:00

Date Received: 03/15/24 07:40

Client: Vertex

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Project/Site: JRU DI 2

Dilution

Factor

1

1

1

20

Batch

1849

Number Analyst

2109 RA

1849 IMR

2114 RA

1959 SB

2085 PD

1949 JT

2271 RC

IMR

Lab

EET ALB

Job ID: 885-1321-1

Matrix: Solid

Lab Sample ID: 885-1321-1

Prepared

or Analyzed

03/18/24 11:35

03/20/24 22:02

03/18/24 11:35

03/20/24 22:02

03/19/24 15:38

03/20/24 18:07

03/19/24 14:21

03/19/24 22:54

Lab Sample ID: 885-1321-3

Lab Sample ID: 885-1321-4

8

Lab Sample ID: 885-1321-2 Matrix: Solid

Matrix: Solid

Client Sample ID: BH24-01 2'

Run

Date Collected: 03/11/24 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	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8015D		1	2109	RA	EET ALB	03/20/24 22:24
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 22:24
Total/NA	Prep	SHAKE			1959	SB	EET ALB	03/19/24 15:38
Total/NA	Analysis	8015D		1	2085	PD	EET ALB	03/20/24 18:40
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 23:31

Client Sample ID: BH24-04 0'

Date Collected: 03/11/24 11:00 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	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8015D		1	2109	RA	EET ALB	03/20/24 23:07
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 23:07
Total/NA	Prep	SHAKE			1959	SB	EET ALB	03/19/24 15:38
Total/NA	Analysis	8015D		1	2085	PD	EET ALB	03/20/24 18:51
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 23:43

Client Sample ID: BH24-04 2' Date Collected: 03/11/24 11:30 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	5030C			1849	IMR	EET ALB	03/18/24 11:35
Total/NA	Analysis	8015D		1	2109	RA	EET ALB	03/20/24 23:29

Eurofins Albuquerque

Matrix: Solid

Job ID: 885-1321-1

Project/Site: JRU DI 2 Client Sample ID: BH24-04 2'

Client: Vertex

Date Collected: 03/11/24 11:30 Date Received: 03/15/24 07:40

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	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	8021B		1	2114	RA	EET ALB	03/20/24 23:29
Total/NA	Prep	SHAKE			1959	SB	EET ALB	03/19/24 15:38
Total/NA	Analysis	8015D		1	2085	PD	EET ALB	03/20/24 19:02
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 23:55

Laboratory References:

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

Eurofins Albuquerque

Lab Sample ID: 885-1321-4 Matrix: Solid

5 6

Accreditation/Certification Summary

Client: Vertex Project/Site: JRU DI 2 Job ID: 885-1321-1

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		am	Identification Number	Expiration Date		
lew Mexico	State		NM9425, NM0901	02-26-25		
for which the agency	does not offer certification	ı.	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 [C10-C28]			
8015D	SHAKE	Solid	Motor Oil Range Organic	s [C28-C40]		
8021B	5030C	Solid	Benzene			
		Solid	Ethylbenzene			
8021B	5030C	Oolid				
8021B 8021B	5030C 5030C	Solid	Toluene			

Eurofins Albuquerque

Method Summary

Client: Vertex Project/Site: JRU DI 2

Method

8015D

8021B 8015D

300.0

5030C

SHAKE

300_Prep

Job ID: 885-1321-1

	Page	<i>139</i>	of	400
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10

RU DI 2		1D. 000-1021-1	2
Method Description	Protocol	Laboratory	
Gasoline Range Organics (GRO) (GC)	SW846	EET ALB	Λ
Volatile Organic Compounds (GC)	SW846	EET ALB	4
Diesel Range Organics (DRO) (GC)	SW846	EET ALB	E
Anions, Ion Chromatography	EPA	EET ALB	J
Anions, Ion Chromatography, 10% Wt/Vol	EPA	EET ALB	
Purge and Trap	SW846	EET ALB	0
Preparation, Shake Jar	TestAmerica SOP	EETALB	7
rences:			
nvironmental Protection Agency			8

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

Released to Imaging: 7/31/2024 2:57:32 PM

HALL ENVIRONME ANALYSIS LABOR www.hallenvironmental.com kins NE - Albuquerque_NM 87109 345-3975 Fax 505-345-4107 Analysis Request	RCRA 8 Metals €) F, Br, NO ₃ , NO ₂ , PO₄, SO₄ 8260 (VOA) 8270 (Semi-VOA) Total Coliform (Present/Absent)	
HALL ANAL www.ha 4901 Hawkins NE Tel. 505-345-3975	BTEX / MTBE / TMB's (8021) TPH 8015D(GRO / DRO / MRO) 8081 Pesticides/8082 PCB's EDB (Method 504.1) PAHs by 8310 or 8270SIMS	
Turn-Around Time: ア Project Name: JR U OJ 2 Project #: 23E - 06065	Project Manager: Sa /19 Carttar Scatttaraulerrex, Ca Sampler: want wale; sl On Ice: VYes DNO mov44 # of Coolers: I Cooler Templinations cr): 0.1 +0.1=0.2 (°C) Container Preservative HEAL No. Type and # Type	Date Time Date Time Date Time Date Time Date Time Date Time
Client: $X T_O$ Mailing Address: $0, f_i 1 \varepsilon$ Phone #:	email or Fax#: U QA/QC Package QA/QC Package Call Standard Level 4 (Full Validation) Accreditation Az Compliance Include Other Include Other Include Matrix Sample Name	1 10'00 So. 1 10'15 So. 1 11'30 1 11'50 1 11

Released to Imaging: 7/31/2024 2:57:32 PM

Login Sample Receipt Checklist

Client: Vertex

<6mm (1/4").

Login Number: 1321 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	N/A	

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List Source: Eurofins Albuquerque

Job Number: 885-1321-1

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 3/30/2024 8:53:29 PM

JOB DESCRIPTION

JRU DI 2

JOB NUMBER

885-1339-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

See page two for job notos and contact information



Eurofins Albuquerque

Job Notes

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

Authorization

Authorized for release by

(505)345-3975

Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com

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Definitions/Glossary

Client: Vertex Project/Site: JRU DI 2

PRES

QC

RER

RL RPD

TEF

TEQ TNTC Presumptive

Quality Control

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

Reporting Limit or Requested Limit (Radiochemistry)

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

Job ID: 885-1339-1

Glossary		3
Abbreviation	These commonly used abbreviations may or may not be present in this report.	` 3
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	Λ
%R	Percent Recovery	
CFL	Contains Free Liquid	5
CFU	Colony Forming Unit	3
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)	8
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	9
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	

Job ID: 885-1339-1

Client: Vertex

Project: JRU DI 2

Eurofins Albuquerque

Job ID: 885-1339-1

Job Narrative

885-1339-1

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 0.1°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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 BH24-07 0' (885-1339-1), BH24-07 2' (885-1339-2), BH24-08 0' (885-1339-3), BH24-08 2' (885-1339-4), BH24-09 0' (885-1339-5), BH24-09 2' (885-1339-6), BH24-10 0' (885-1339-7), BH24-10 2' (885-1339-8), (CCV 885-2016/28), (CCV 885-2016/42), (LCS 885-1985/2-A), (MB 885-1985/1-A), (885-1341-A-6-C), (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

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

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BH24-07 0' Date Collected: 03/14/24 10:00 Date Reseived: 02/16/24 08:05

Job ID: 885-1339-1

Lab Sample ID: 885-1339-1

Matrix: Solid

5

Method: SW846 8015D - Gasc		-				_		
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		03/19/24 11:34	03/23/24 02:39	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	100		15 - 244			03/19/24 11:34	03/23/24 02:39	
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.025	mg/Kg		03/19/24 11:34	03/23/24 02:39	
Ethylbenzene	ND		0.050	mg/Kg		03/19/24 11:34	03/23/24 02:39	
Toluene	ND		0.050	mg/Kg		03/19/24 11:34	03/23/24 02:39	
Xylenes, Total	ND		0.099	mg/Kg		03/19/24 11:34	03/23/24 02:39	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	90		39 - 146			03/19/24 11:34	03/23/24 02:39	
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		03/20/24 08:58	03/20/24 17:26	
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		03/20/24 08:58	03/20/24 17:26	
						_ /	A	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	DIIFa
Di-n-octyl phthalate (Surr)	64		Limits 62 - 134			03/20/24 08:58	03/20/24 17:26	
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte	64 on Chroma Result		62 - 134 RL	Unit	D	03/20/24 08:58 Prepared	03/20/24 17:26 Analyzed	Dil Fa
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte	64 on Chroma	tography	62 - 134	Unit mg/Kg	D	03/20/24 08:58 Prepared	03/20/24 17:26	Dil Fa
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Analyte Chloride ilient Sample ID: BH24-0	on Chroma Result	tography	62 - 134 RL		D	03/20/24 08:58 Prepared 03/19/24 13:43	03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1	Dil Fa 2 339-2
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride Client Sample ID: BH24-0 ate Collected: 03/14/24 10:15	on Chroma Result	tography	62 - 134 RL		D	03/20/24 08:58 Prepared 03/19/24 13:43	03/20/24 17:26 Analyzed 03/19/24 20:54	
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride lient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05	64 Ion Chroma Result ND 7 2'	tography Qualifier	62 - 134 RL 60		D	03/20/24 08:58 Prepared 03/19/24 13:43	03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1	Dil Fa 2 339-2
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride lient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc	64 Ion Chroma Result ND 7 2'	tography Qualifier	62 - 134 RL 60		D	03/20/24 08:58 Prepared 03/19/24 13:43	03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1 Matrix	Dil Fa 2 339-/ :: Solie
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride lient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc Analyte	64 Ion Chroma Result ND 7 2'	tography Qualifier Organics (62 - 134 <u>RL</u> 60 (GRO) (GC)	mg/Kg		03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp	03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1	Dil Fa 2 339-2 2: Solid Dil Fa
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride lient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc Analyte Gasoline Range Organics [C6 - C10]	64 64 64 64 64 7 8 8 8 8 8 8 8 8 8 8 8 8 8	tography Qualifier Organics (Qualifier	62 - 134 RL 60 (GRO) (GC) RL 4.3	mg/Kg		03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp Prepared 03/19/24 11:34	Analyzed 03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1 Matrix Analyzed 03/23/24 03:00	Dil Fa 2 339-/ c: Solic Dil Fa
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride Chloride Client Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc Analyte Gasoline Range Organics [C6 - C10] Surrogate	64 64 64 64 64 7 8 8 8 8 8 8 8 8 8 8 8 8 8	tography Qualifier Organics (Qualifier	62 - 134 RL 60 (GRO) (GC) RL 4.3 Limits	mg/Kg		03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp Prepared 03/19/24 11:34 Prepared	Analyzed 03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1 Matrix Analyzed 03/23/24 03:00 Analyzed	Dil Fa 2 339-2 339-2 C: Solic Dil Fa Dil Fa
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride lient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr)	64 64 64 64 64 7 7 7 7 7 7 7 7 7 7 7 7 7	tography Qualifier Organics (Qualifier Qualifier	62 - 134 RL 60 (GRO) (GC) RL 4.3 Limits 15 - 244	mg/Kg		03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp Prepared 03/19/24 11:34 Prepared	Analyzed 03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1 Matrix Analyzed 03/23/24 03:00	Dil Fa 2 339-/ c: Soli Dil Fa Dil Fa
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride lient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat	64 64 64 64 64 7 8 8 8 8 8 8 8 8 8 8 8 8 8	tography Qualifier Organics (Qualifier Qualifier Compound	62 - 134 RL 60 60 RL 60 RL 4.3 Limits 15 - 244 ds (GC)	Unit mg/Kg	<u>D</u>	03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp Prepared 03/19/24 11:34 Prepared 03/19/24 11:34	Analyzed 03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1 Matrix Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00	Dil Fa 2 339-2 C: Solic Dil Fa Dil Fa
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride lient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte	64 64 64 64 64 7 7 7 7 7 7 7 7 7 7 7 7 7	tography Qualifier Organics (Qualifier Qualifier	62 - 134 RL 60 60 RL 4.3 Limits 15 - 244 ds (GC) RL	Unit mg/Kg		03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34	Analyzed 03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1 Matrix Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00	Dil Fa 339-2 :: Solic Dil Fa Dil Fa
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Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride lient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc Analyte Gasoline Range Organics [C6 - C10] Surrogate I-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Genzene Ethylbenzene	64 on Chroma Result ND 7 2' 0line Range Result ND <u>%Recovery</u> 100 ile Organic Result ND ND ND	tography Qualifier Organics (Qualifier Qualifier Compound	62 - 134 RL 60 60 RL 4.3 Limits 15 - 244 ds (GC) RL 0.021 0.043	Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp 9 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34	Analyzed 03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1 Matrix Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00	Dil Fa 2 339- 339- C: Soli Dil Fa Dil Fa
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride lient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Foluene	64 Ion Chromation Result ND 7 2' 7 2' 0 line Range Result ND %Recovery 100 ile Organic Result ND ND ND ND	tography Qualifier Organics (Qualifier Qualifier Compound	62 - 134 RL 60 60 RL 4.3 Limits 15 - 244 ds (GC) RL 0.021 0.043	Unit mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp 9769ared 03/19/24 11:34 Prepared 03/19/24 11:34 9769ared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34	Analyzed 03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1 Matrix Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00	Dil Fa 2 339- 339- C: Soli Dil Fa Dil Fa
Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride lient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene	64 on Chroma Result ND 7 2' 0line Range Result ND <u>%Recovery</u> 100 ile Organic Result ND ND ND	tography Qualifier Organics (Qualifier Qualifier Compound	62 - 134 RL 60 60 RL 4.3 Limits 15 - 244 ds (GC) RL 0.021 0.043	Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp 9769ared 03/19/24 11:34 Prepared 03/19/24 11:34 9769ared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34	Analyzed 03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1 Matrix Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00	Dil Fa 2 339-2 :: Solid Dil Fa Dil Fa
Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride Slient Sample ID: BH24-0 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05 Method: SW846 8015D - Gasc Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr)	64 Ion Chromation Result ND 7 2' 7 2' 0 line Range Result ND %Recovery 100 ile Organic Result ND ND ND ND	tography Qualifier Organics (Qualifier Qualifier Compound Qualifier	62 - 134 RL 60 60 RL 4.3 Limits 15 - 244 ds (GC) RL 0.021 0.043	Unit mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp 9769ared 03/19/24 11:34 Prepared 03/19/24 11:34 9769ared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34	Analyzed 03/20/24 17:26 Analyzed 03/19/24 20:54 le ID: 885-1 Matrix Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00 Analyzed 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00 03/23/24 03:00	Dil Fa 2 339-2

Method: SW846 8015D - Diese	el Range Organics	(DRO) (GC)					
Analyte	Result Qualifie	er RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	9.9	mg/Kg		03/20/24 08:58	03/20/24 17:38	1
Motor Oil Range Organics [C28-C40]	ND	49	mg/Kg		03/20/24 08:58	03/20/24 17:38	1

Eurofins Albuquerque

Released to Imaging: 7/31/2024 2:57:32 PM

Client: Vertex

Client Sample Results

Job ID: 885-1339-1

lient Sample ID: BH24-07 ate Collected: 03/14/24 10:15 ate Received: 03/16/24 08:05	7 2'					Lab Samp	le ID: 885-1 Matrix	339-2 : Solid
	0/ D-201/07/	Que l'fier	1 ::			Destroyed	Archined	D# 500
Surrogate Di-n-octyl phthalate (Surr)	%Recovery 67	Qualifier	Limits 62 - 134			Prepared 03/20/24 08:58	Analyzed 03/20/24 17:38	Dil Fac
	07		02 - 134			03/20/27 00.00	03/20/27 11.00	,
Method: EPA 300.0 - Anions, lo	on Chromat	ography						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59	mg/Kg		03/19/24 13:43	03/19/24 21:07	20
Client Sample ID: BH24-08 ate Collected: 03/14/24 10:30 ate Received: 03/16/24 08:05	3 0'					Lab Samp	le ID: 885-1 Matrix	339-3 :: Solid
Method: SW846 8015D - Gaso	line Range	Organics ((GRO) (GC)					
Analyte		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 03:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100	Qualitier	15 - 244			03/19/24 11:34		<u></u>
						00, 10, 21, 111	00,20,2	
Method: SW846 8021B - Volati								
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/19/24 11:34	03/23/24 03:22	1
Ethylbenzene	ND		0.048	mg/Kg		03/19/24 11:34	03/23/24 03:22	1
	ND		0.048	mg/Kg		03/19/24 11:34	03/23/24 03:22	1
Xylenes, Total	ND		0.096	mg/Kg		03/19/24 11:34	03/23/24 03:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			03/19/24 11:34	03/23/24 03:22	1
Method: SW846 8015D - Diese		nanice (DE						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		03/20/24 08:58		1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		03/20/24 08:58		1
				0 0				
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			03/20/24 08:58	03/25/24 21:15	1
Method: EPA 300.0 - Anions, I	on Chromat	ography						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg			03/19/24 21:19	20
lient Sample ID: BH24-08			00	ing/rtg			le ID: 885-1	
ate Collected: 03/14/24 10:45								: Solid
ate Received: 03/16/24 08:05								
Method: SW846 8015D - Gaso				1124	~	Descent	A	
Analyte Gasoline Range Organics [C6 - C10]	Result	Qualifier		Unit	D	Prepared 03/19/24 11:34	Analyzed 03/23/24 03:44	Dil Fac
Gasoline Range Organics [Co - C10]	טא		4.0	mg/Kg		03/19/24 11:34	03/23/24 03:44	I
	%Recoverv	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Surrogate	<i>/////////////////////////////////////</i>							
Surrogate 4-Bromofluorobenzene (Surr)	97		15 - 244			03/19/24 11:34	03/23/24 03:44	1
4-Bromofluorobenzene (Surr)	97					03/19/24 11:34	03/23/24 03:44	1
-	97 ile Organic	Compound Qualifier		Unit	D	03/19/24 11:34 Prepared	03/23/24 03:44 Analyzed	ז Dil Fac

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BH24-08 2' Date Collected: 03/14/24 10:45

Date Received: 03/16/24 08:05

Method: SW846 8021B - Volat Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Ethylbenzene	ND		0.046	mg/Kg		03/19/24 11:34	03/23/24 03:44	
Toluene	ND		0.046	mg/Kg		03/19/24 11:34	03/23/24 03:44	
Xylenes, Total	ND		0.093	mg/Kg		03/19/24 11:34	03/23/24 03:44	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	88		39 - 146			03/19/24 11:34	03/23/24 03:44	
Method: SW846 8015D - Diese	al Range Or	nanics (DE	20) (60)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]		duumor	9.0	<u>mg/Kg</u>		03/20/24 08:58	03/20/24 18:03	
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg			03/20/24 18:03	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
Di-n-octyl phthalate (Surr)	66	quamer	62 - 134			03/20/24 08:58	03/20/24 18:03	
Method: EPA 300.0 - Anions, I Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil F
Chloride	ND		60	mg/Kg		<u> </u>	03/19/24 21:31	
lient Sample ID: BH24-09							le ID: 885-1	000
Method: SW846 8015D - Gaso		-		11.24	_	Durana	Angland	
Method: SW846 8015D - Gaso Analyte	Result	Organics (Qualifier		Unit	<u>D</u>	Prepared	Analyzed	Dil F
ate Received: 03/16/24 08:05 Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10]		-		Unit mg/Kg	<u>D</u>	Prepared 03/19/24 11:34	Analyzed 03/23/24 04:06	Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10]	Result	Qualifier	RL		D	·		
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate	Result ND	Qualifier	RL 4.8		<u>D</u>	03/19/24 11:34	03/23/24 04:06	
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr)	Result ND %Recovery 102	Qualifier Qualifier	RL 4.8 Limits 15 - 244		<u>D</u>	03/19/24 11:34 Prepared	03/23/24 04:06 Analyzed	
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat	Result ND %Recovery 102 ile Organic	Qualifier Qualifier	RL 4.8 Limits 15 - 244		D D	03/19/24 11:34 Prepared	03/23/24 04:06 Analyzed	Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte	Result ND %Recovery 102 ile Organic	Qualifier Qualifier Compound	RL 4.8 Limits 15-244 ds (GC)	mg/Kg		03/19/24 11:34 Prepared 03/19/24 11:34	03/23/24 04:06 <u>Analyzed</u> 03/23/24 04:06	Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene	Result ND %Recovery 102 tile Organic Result	Qualifier Qualifier Compound	RL 4.8 Limits 15 - 244 ds (GC) RL	mg/Kg Unit		03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34	03/23/24 04:06 <u>Analyzed</u> 03/23/24 04:06 <u>Analyzed</u>	Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene	Result ND %Recovery 102 tile Organic Result ND	Qualifier Qualifier Compound	RL 4.8	mg/Kg		03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34	03/23/24 04:06 Analyzed 03/23/24 04:06 Analyzed 03/23/24 04:06	Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene	Result ND %Recovery 102 tile Organic Result ND ND	Qualifier Qualifier Compound	RL 4.8 Limits 15 - 244 ds (GC) RL 0.024 0.048	Unit mg/Kg mg/Kg mg/Kg		03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34	03/23/24 04:06 Analyzed 03/23/24 04:06 Analyzed 03/23/24 04:06 03/23/24 04:06	Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Kylenes, Total	Result ND %Recovery 102 ile Organic Result ND ND ND	Qualifier Qualifier Compound Qualifier	RL 4.8 15-244 ds (GC) RL 0.024 0.048 0.048	Unit mg/Kg mg/Kg mg/Kg mg/Kg		03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34	03/23/24 04:06 Analyzed 03/23/24 04:06 Analyzed 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06	Dil F
Method: SW846 8015D - Gaso Analyte	Result ND %Recovery 102 ile Organic Result ND ND ND ND	Qualifier Qualifier Compound Qualifier	RL 4.8 Limits 15-244 ds (GC) RL 0.024 0.048 0.048 0.097	Unit mg/Kg mg/Kg mg/Kg mg/Kg		03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared	03/23/24 04:06 Analyzed 03/23/24 04:06 Analyzed 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06	Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr)	Result ND %Recovery 102 ile Organic Result ND ND ND ND ND ND 92	Qualifier Qualifier Compound Qualifier Qualifier	RL 4.8 15-244 ds (GC) RL 0.024 0.048 0.048 0.097 Limits 39-146	Unit mg/Kg mg/Kg mg/Kg mg/Kg		03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared	03/23/24 04:06 Analyzed 03/23/24 04:06 Analyzed 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 Analyzed	Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Kylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese	Result ND %Recovery 102 ile Organic Result ND ND ND ND ND ND SRecovery 92 el Range Org	Qualifier Qualifier Compound Qualifier Qualifier	RL 4.8 15-244 ds (GC) RL 0.024 0.048 0.048 0.097 Limits 39-146	Unit mg/Kg mg/Kg mg/Kg mg/Kg		03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared	03/23/24 04:06 Analyzed 03/23/24 04:06 Analyzed 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 Analyzed	Dil F Dil F Dil F Dil F
Method: SW846 8015D - Gaso Analyte Basoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Foluene Kylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte	Result ND %Recovery 102 ile Organic Result ND ND ND ND ND ND 22 %Recovery 92	Qualifier Qualifier Compound Qualifier Qualifier ganics (DF	RL 4.8 4.8 15 - 244 ds (GC) RL 0.024 0.048 0.048 0.097 Limits 39 - 146 RO) (GC)	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	D	03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34	O3/23/24 04:06 Analyzed 03/23/24 04:06 O3/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06	Dil F Dil F Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28]	Result ND %Recovery 102 iile Organic Result ND ND ND ND ND ND ND ND ND ND ND ND ND	Qualifier Qualifier Compound Qualifier Qualifier ganics (DF	RL 4.8 4.8 15 - 244 ds (GC) RL 0.024 0.048 0.048 0.097 Limits 39 - 146 RO) (GC) RL	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	D	03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34	03/23/24 04:06 Analyzed 03/23/24 04:06 Analyzed 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 Analyzed 03/23/24 04:06 Analyzed	Dil F Dil F Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Kylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	Result ND %Recovery 102 iile Organic Result ND ND ND ND ND ND ND ND ND ND ND ND ND	Qualifier Qualifier Compound Qualifier Qualifier ganics (DF Qualifier	RL 4.8 4.8 15 - 244 ds (GC) RL 0.024 0.048 0.097 Limits 39 - 146 RL 9.3	Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	D	03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34	O3/23/24 04:06 Analyzed 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06	Dil F Dil F Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	Result ND %Recovery 102 ile Organic Result ND ND ND ND ND ND ND S Recovery 92 el Range Org Result ND ND	Qualifier Qualifier Compound Qualifier Qualifier ganics (DF Qualifier	RL 4.8 4.8 15 - 244 ds (GC) RL 0.024 0.048 0.097 Limits 39 - 146 RL 9.3 47	Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	D	03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/20/24 08:58 03/20/24 08:58	03/23/24 04:06 Analyzed 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 Analyzed 03/20/24 18:15 03/20/24 18:15 03/20/24 18:15	Dil F Dil F Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	Result ND %Recovery 102 ile Organic Result ND ND ND %Recovery 92 el Range Or Result ND ND ND SO Result ND ND SO Result	Qualifier Qualifier Compound Qualifier Qualifier ganics (DF Qualifier Qualifier	RL 4.8 4.8 15 - 244 ds (GC) RL 0.024 0.048 0.097 Limits 39 - 146 RO) (GC) RL 9.3 47 Limits	Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	D	03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/20/24 08:58 03/20/24 08:58 Prepared	03/23/24 04:06 Analyzed 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 Analyzed 03/20/24 18:15 03/20/24 18:15 03/20/24 18:15	Dil F Dil F Dil F
Method: SW846 8015D - Gaso Analyte Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8021B - Volat Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	Result ND %Recovery 102 ile Organic Result ND ND ND %Recovery 92 el Range Or Result ND ND ND SO Recovery 67	Qualifier Qualifier Compound Qualifier Qualifier ganics (DF Qualifier Qualifier	RL 4.8 4.8 15 - 244 ds (GC) RL 0.024 0.048 0.097 Limits 39 - 146 RO) (GC) RL 9.3 47 Limits	Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	D	03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/20/24 08:58 03/20/24 08:58 Prepared	03/23/24 04:06 Analyzed 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 03/23/24 04:06 Analyzed 03/20/24 18:15 03/20/24 18:15 03/20/24 18:15	Dil F Dil F Dil F

Job ID: 885-1339-1

Lab Sample ID: 885-1339-4 Matrix: Solid

5

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Released to Imaging: 7/31/2024 2:57:32 PM

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BH24-09 2' Date Collected: 03/14/24 11:15 Date Received: 03/16/24 08:05

Job ID: 885-1339-1

Lab Sample ID: 885-1339-6

Matrix: Solid

5

Analyte	line Range 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 04:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			03/19/24 11:34	03/23/24 04:28	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		03/19/24 11:34	03/23/24 04:28	1
Ethylbenzene	ND		0.048	mg/Kg		03/19/24 11:34	03/23/24 04:28	1
Toluene	ND		0.048	mg/Kg		03/19/24 11:34	03/23/24 04:28	1
Xylenes, Total	ND		0.096	mg/Kg		03/19/24 11:34	03/23/24 04:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	92		39 - 146			03/19/24 11:34	03/23/24 04:28	1
5 5 []			9.5	mg/Kg				
Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	ND <u>%Recovery</u> 69	Qualifier	48 <u>Limits</u> 62 - 134	mg/Kg		03/20/24 08:58 Prepared 03/20/24 08:58	03/20/24 18:27 <u>Analyzed</u> 03/20/24 18:27	Dil Fa
Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I	%Recovery 69		48 <i>Limits</i>		D	Prepared	Analyzed	Dil Fa
Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte	%Recovery 69	tography	48 <u>Limits</u> 62 - 134	mg/Kg	D	Prepared 03/20/24 08:58 Prepared	Analyzed 03/20/24 18:27	Dil Fac
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride Client Sample ID: BH24-10 ate Collected: 03/14/24 11:30 ate Received: 03/16/24 08:05	<u>%Recovery</u> 69 on Chromat Result ND	tography	48 <u>Limits</u> 62 - 134 RL	mg/Kg	<u>D</u>	Prepared 03/20/24 08:58 Prepared 03/19/24 13:43	Analyzed 03/20/24 18:27 Analyzed 03/19/24 21:56 Ie ID: 885-1	Dil Fa Dil Fa 20 339-7
Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride Client Sample ID: BH24-10 ate Collected: 03/14/24 11:30	<u>%Recovery</u> 69 Ion Chromat Result ND 0 0'	tography Qualifier	48 <u>Limits</u> 62 - 134 <u>RL</u> 60	mg/Kg	D	Prepared 03/20/24 08:58 Prepared 03/19/24 13:43	Analyzed 03/20/24 18:27 Analyzed 03/19/24 21:56 Ie ID: 885-1	Dil Fac Dil Fac 20 339-7 :: Solic
Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride	<u>%Recovery</u> 69 Ion Chromat Result ND 0 0'	tography Qualifier Organics (48 <u>Limits</u> <u>62 - 134</u> <u>RL</u> <u>60</u> <u>GRO) (GC)</u>	mg/Kg		Prepared 03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp	Analyzed 03/20/24 18:27 Analyzed 03/19/24 21:56 Ie ID: 885-1 Matrix	Dil Fac Dil Fac 20 339-7 c: Solic
Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte Chloride	<u>%Recovery</u> 69 on Chromat Result ND 0 0'	tography Qualifier Organics (Qualifier	48 <u>Limits</u> 62 - 134 <u>RL</u> 60 <u>GRO) (GC)</u> <u>RL</u>	mg/Kg		Prepared 03/20/24 08:58 Prepared 03/19/24 13:43 Lab Samp Prepared	Analyzed 03/20/24 18:27 Analyzed 03/19/24 21:56 Ie ID: 885-1 Matrix Analyzed	Dil Fac Dil Fac 20 339-7 :: Solic

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	0.023	mg/Kg		03/19/24 11:34	03/23/24 05:12	1
Ethylbenzene	ND	0.046	mg/Kg		03/19/24 11:34	03/23/24 05:12	1
Toluene	ND	0.046	mg/Kg		03/19/24 11:34	03/23/24 05:12	1
Xylenes, Total	ND	0.092	mg/Kg		03/19/24 11:34	03/23/24 05:12	1
Surrogate	%Recovery Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		39 - 146			03/19/24 11:34	03/23/24 05:12	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	19	9.6	mg/Kg		03/20/24 08:58	03/20/24 18:40	1
Motor Oil Range Organics [C28-C40]	ND	48	mg/Kg		03/20/24 08:58	03/20/24 18:40	1

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Client: Vertex

Client Sample Results

Job ID: 885-1339-1

lient Sample ID: BH24-10 ate Collected: 03/14/24 11:30) 0'					Lab Samp	le ID: 885-1 Matrix	339-7 : Solid
ate Received: 03/16/24 08:05								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	71		62 - 134			03/20/24 08:58	03/20/24 18:40	1
Method: EPA 300.0 - Anions, I	on Chroma	tography						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	710		60	mg/Kg		<u> </u>	03/19/24 22:08	20
lient Sample ID: BH24-10	0.2'					I ah Samp	le ID: 885-1	339-8
ate Collected: 03/14/24 11:45						Euro Comp		: Solid
ate Received: 03/16/24 08:05								
Method: SW846 8015D - Gaso Analyte		Qualifier	(GRO) (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND	Quanter	4.7	mg/Kg		03/19/24 11:34	03/23/24 05:34	1 Dii Fac
				····g· - 5		00/10/21	00/20/21	·
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			03/19/24 11:34	03/23/24 05:34	1
Method: SW846 8021B - Volati	ile Organic	Compound	de (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	ND						-	
Benzene	ND		0.024	mg/Kg		03/19/24 11:34	03/23/24 05:34	1
Benzene Ethylbenzene	ND		0.024 0.047	mg/Kg mg/Kg		03/19/24 11:34 03/19/24 11:34	03/23/24 05:34 03/23/24 05:34	1 1
								-
Ethylbenzene	ND		0.047	mg/Kg		03/19/24 11:34 03/19/24 11:34	03/23/24 05:34	1
Ethylbenzene Toluene Xylenes, Total	ND ND ND	Qualifier	0.047 0.047	mg/Kg mg/Kg		03/19/24 11:34 03/19/24 11:34	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34	1 1 1
Ethylbenzene Toluene	ND ND	Qualifier	0.047 0.047 0.095	mg/Kg mg/Kg		03/19/24 11:34 03/19/24 11:34 03/19/24 11:34	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34 Analyzed	1
Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr)	ND ND %Recovery 91		0.047 0.047 0.095 <u>Limits</u> 39 - 146	mg/Kg mg/Kg		03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34 <i>Analyzed</i>	1 1 1 Dil Fac
Ethylbenzene Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Method: SW846 8015D - Diese	ND ND <u>%Recovery</u> 91 el Range Org	ganics (DR	0.047 0.047 0.095 <u>Limits</u> 39 - 146	mg/Kg mg/Kg mg/Kg		03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34 Analyzed 03/23/24 05:34	1 1 1 Dil Fac 1
Ethylbenzene Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Method: SW846 8015D - Diese Analyte	ND ND %Recovery 91 el Range Org Result		0.047 0.047 0.095 <u>Limits</u> 39 - 146 RO) (GC) RL	mg/Kg mg/Kg mg/Kg Unit	D	03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34 Analyzed 03/23/24 05:34 Analyzed	1 1 <i>Dil Fac</i> 1 Dil Fac
Ethylbenzene Toluene Xylenes, Total 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28]	ND ND %Recovery 91 el Range Org Result ND	ganics (DR	0.047 0.047 0.095 <u>Limits</u> 39 - 146 RO) (GC) <u>RL</u> 10	mg/Kg mg/Kg mg/Kg Unit mg/Kg	<u>D</u>	03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/20/24 08:58	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34 <u>Analyzed</u> 03/23/24 05:34 <u>Analyzed</u> 03/20/24 18:52	1 1 1 <i>Dil Fac</i> 1 Dil Fac
Ethylbenzene Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Method: SW846 8015D - Diese Analyte	ND ND %Recovery 91 el Range Org Result	ganics (DR	0.047 0.047 0.095 <u>Limits</u> 39 - 146 RO) (GC) RL	mg/Kg mg/Kg mg/Kg Unit	<u>D</u>	03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/20/24 08:58	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34 Analyzed 03/23/24 05:34 Analyzed	1 1 <i>Dil Fac</i> 1 Dil Fac
Ethylbenzene Toluene Xylenes, Total 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28]	ND ND %Recovery 91 el Range Org Result ND	ganics (DR Qualifier	0.047 0.047 0.095 <u>Limits</u> 39 - 146 RO) (GC) <u>RL</u> 10	mg/Kg mg/Kg mg/Kg Unit mg/Kg	<u>D</u>	03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 Prepared 03/19/24 11:34 Prepared 03/20/24 08:58	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34 <u>Analyzed</u> 03/23/24 05:34 <u>Analyzed</u> 03/20/24 18:52	1 1 1 1 1 1 1 1 1 1
Ethylbenzene Toluene Xylenes, Total <i>Surrogate</i> 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	ND ND %Recovery 91 el Range Org <u>Result</u> ND ND	ganics (DR Qualifier	0.047 0.047 0.095 <u>Limits</u> 39 - 146 RO) (GC) <u>RL</u> 10 50	mg/Kg mg/Kg mg/Kg Unit mg/Kg	<u>D</u>	03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 <u>Prepared</u> 03/19/24 11:34 <u>Prepared</u> 03/20/24 08:58 03/20/24 08:58	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34 <u>Analyzed</u> 03/23/24 05:34 <u>Analyzed</u> 03/20/24 18:52 03/20/24 18:52 <u>Analyzed</u>	1 1 1 <i>Dil Fac</i> 1 1
Ethylbenzene Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] <i>Surrogate</i> <i>Di-n-octyl phthalate (Surr)</i>	ND ND %Recovery 91 el Range Org Result ND ND %Recovery 66	ganics (DR Qualifier Qualifier	0.047 0.047 0.095 <u>Limits</u> 39 - 146 RO) (GC) <u>RL</u> 10 50 <u>Limits</u>	mg/Kg mg/Kg mg/Kg Unit mg/Kg	<u>D</u>	03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 <u>Prepared</u> 03/19/24 11:34 <u>Prepared</u> 03/20/24 08:58 03/20/24 08:58 <u>Prepared</u>	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34 <u>Analyzed</u> 03/23/24 05:34 <u>Analyzed</u> 03/20/24 18:52 03/20/24 18:52 <u>Analyzed</u>	1 1 Dil Fac 1 Dil Fac 1 Dil Fac
Ethylbenzene Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] <i>Surrogate</i>	ND ND %Recovery 91 el Range Org Result ND ND %Recovery 66	ganics (DR Qualifier Qualifier	0.047 0.047 0.095 <u>Limits</u> 39 - 146 RO) (GC) <u>RL</u> 10 50 <u>Limits</u>	mg/Kg mg/Kg mg/Kg Unit mg/Kg	<u>D</u>	03/19/24 11:34 03/19/24 11:34 03/19/24 11:34 <u>Prepared</u> 03/19/24 11:34 <u>Prepared</u> 03/20/24 08:58 03/20/24 08:58 <u>Prepared</u>	03/23/24 05:34 03/23/24 05:34 03/23/24 05:34 <u>Analyzed</u> 03/23/24 05:34 <u>Analyzed</u> 03/20/24 18:52 03/20/24 18:52 <u>Analyzed</u>	1 1 Dil Fac 1 Dil Fac 1 Dil Fac

Job ID: 885-1339-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: MB 885-19 Matrix: Solid	929/1-A								le ID: Method Prep Type: T	
Analysis Batch: 2216									Prep Batc	
Analysis Datch. 2210	MB	мв							Flep Date	11. 1923
Analyte		Qualifier	RL		Unit	1	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C1		quamer	5.0		mg/Kg		_	· · · · · · · · · · · · · · · · · · ·	03/22/24 12:30	1
			0.0		mg/rtg			00/10/24 10:24	00/22/24 12:00	
	MB	MB								
Surrogate	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244					03/19/24 10:24	03/22/24 12:30	1
Lab Sample ID: MB 885-19)38/1-A							Client Samp	le ID: Method	d Blank
Matrix: Solid									Prep Type: Te	otal/NA
Analysis Batch: 2216									Prep Batc	h: 1 <mark>9</mark> 38
	MB	MB								
Analyte	Result	Qualifier	RL		Unit	I	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C1	0] ND		5.0		mg/Kg			03/19/24 11:34	03/22/24 23:22	1
	МВ	МВ								
Surrogate	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244					03/19/24 11:34	03/22/24 23:22	1
Lab Sample ID: LCS 885-1 Matrix: Solid	938/2-A					Clie	nt		Lab Control S Prep Type: T	
Analysis Batch: 2216			Spike	LCS	LCS				Prep Batc %Rec	h: 1938
			Opike	LOO	200					
Analyte			Added	Result	Qualifier	Unit		D %Rec	Limits	
Analyte Gasoline Range Organics [C6 -			Added	Result 23.0	Qualifier	Unit mg/Kg			Limits 70 - 130	
					Qualifier					
Gasoline Range Organics [C6 - C10]	LCS LCS		25.0		Qualifier					
Gasoline Range Organics [C6 - C10] <i>Surrogate</i>	%Recovery Qua		25.0		Qualifier					
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr)	206 Qua	lifier	25.0 Limits 15 - 244		Qualifier					
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil	%Recovery Qua 206 le Organic Co	lifier	25.0 Limits 15 - 244		Qualifier			92	70 - 130	
Gasoline Range Organics [C6 - C10] <i>Surrogate</i> 4-Bromofluorobenzene (Surr) 1ethod: 8021B - Volatil Lab Sample ID: MB 885-19	%Recovery Qua 206 le Organic Co	lifier	25.0 Limits 15 - 244		Qualifier			92 Olient Samp	70 - 130	
Gasoline Range Organics [C6 - C10] <i>Surrogate</i> 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid	%Recovery Qua 206 le Organic Co	lifier	25.0 Limits 15 - 244		Qualifier			92 Olient Samp	70 - 130 ole ID: Methoo Prep Type: T	otal/NA
Gasoline Range Organics [C6 - C10] <i>Surrogate</i> 4-Bromofluorobenzene (Surr) 1ethod: 8021B - Volatil Lab Sample ID: MB 885-19	%Recovery Qua 206 le Organic Co 29/1-A	ompoui	25.0 Limits 15 - 244		Qualifier			92 Olient Samp	70 - 130	otal/NA
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224	%Recovery Qua 206 le Organic Co 229/1-A MB	ompoui MB	25.0 Limits 15-244 nds (GC)			mg/Kg		Olient Samp	70 - 130 ole ID: Method Prep Type: T Prep Batc	otal/NA h: 1929
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte	%Recovery Qua 206 le Organic Co 29/1-A MB Result	ompoui	25.0 Limits 15-244 nds (GC)		Unit	mg/Kg		<u>92</u> Client Samp Prepared	70 - 130 ole ID: Method Prep Type: T Prep Batc Analyzed	otal/NA h: 1929 Dil Fac
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene	%Recovery 206 206 209/1-A MB Result ND	ompoui MB	25.0 <u>Limits</u> 15 - 244 nds (GC) RL 0.025		Unit mg/Kg	mg/Kg	D	92 Client Samp Prepared 03/19/24 10:24	70 - 130 ble ID: Method Prep Type: T Prep Batc <u>Analyzed</u> 03/22/24 12:30	otal/NA h: 1929 Dil Fac
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene	%Recovery 206 206 29/1-A MB Result ND ND	ompoui MB	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050		Unit mg/Kg mg/Kg	mg/Kg	D	92 Client Samp Prepared 03/19/24 10:24 03/19/24 10:24	70 - 130 Prep Type: To Prep Batc 03/22/24 12:30 03/22/24 12:30	otal/NA h: 1929 Dil Fac
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene Toluene	%Recovery Qua 206 Qua le Organic Co Qua 029/1-A MB Result ND ND ND	ompoui MB	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050 0.050		Unit mg/Kg mg/Kg mg/Kg	mg/Kg	D	92 Client Samp Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24	70 - 130 Pie ID: Method Prep Type: Tr Prep Batc 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30	otal/NA h: 1929 Dil Fac
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene	%Recovery 206 206 29/1-A MB Result ND ND	ompoui MB	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050		Unit mg/Kg mg/Kg	mg/Kg	D	92 Client Samp Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24	70 - 130 Prep Type: To Prep Batc 03/22/24 12:30 03/22/24 12:30	otal/NA h: 1929 Dil Fac
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene Toluene	%Recovery 206 206 29/1-A MB Result ND ND ND ND	ompoui MB	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050 0.050		Unit mg/Kg mg/Kg mg/Kg	mg/Kg	D	92 Client Samp Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24	70 - 130 Pie ID: Method Prep Type: Tr Prep Batc 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30	otal/NA h: 1929 Dil Fac
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene Toluene	%Recovery 206 206 29/1-A MB Result ND ND ND ND	MB Qualifier MB	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050 0.050		Unit mg/Kg mg/Kg mg/Kg	mg/Kg	D	92 Client Samp Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24	70 - 130 Pie ID: Method Prep Type: Tr Prep Batc 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30	otal/NA h: 1929 Dil Fac 1 1 1 1
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene Toluene Xylenes, Total	%Recovery 206 206 29/1-A MB Result ND ND ND ND ND ND	MB Qualifier MB	25.0 Limits 15 - 244 nds (GC)		Unit mg/Kg mg/Kg mg/Kg	mg/Kg	D	92 Client Samp Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 Prepared	70 - 130 Prep Type: Tr Prep Batc 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30	otal/NA h: 1929 Dil Fac
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr)	%Recovery Quality 206 Quality 206 Quality 1e Organic College Quality 029/1-A MB Result ND ND ND ND ND ND ND MB %Recovery 89	MB Qualifier MB	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050 0.050 0.050 0.10 Limits		Unit mg/Kg mg/Kg mg/Kg	mg/Kg	<u>D</u>	92 Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 Prepared 03/19/24 10:24	70 - 130 Prep Type: To Prep Batc 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 Analyzed 03/22/24 12:30	otal/NA h: 1929 Dil Fac
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: MB 885-19	%Recovery Quality 206 Quality 206 Quality 1e Organic College Quality 029/1-A MB Result ND ND ND ND ND ND ND MB %Recovery 89	MB Qualifier MB	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050 0.050 0.050 0.10 Limits		Unit mg/Kg mg/Kg mg/Kg	mg/Kg	<u>D</u>	92 Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 Prepared 03/19/24 10:24 Client Samp	70 - 130 Prep Type: Trep Batc Prep Batc 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 Analyzed 03/22/24 12:30 Control 10: Method	otal/NA h: 1929
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: MB 885-19 Matrix: Solid	%Recovery Quality 206 Quality 206 Quality 1e Organic College Quality 029/1-A MB Result ND ND ND ND ND ND ND MB %Recovery 89	MB Qualifier MB	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050 0.050 0.050 0.10 Limits		Unit mg/Kg mg/Kg mg/Kg	mg/Kg	<u>D</u>	92 Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 Prepared 03/19/24 10:24 Client Samp	70 - 130 Prep Type: To Prep Type: To Prep Batc 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 Dia ID: Methoo Prep Type: To	otal/NA h: 1929 Dil Fac Dil Fac Dil Fac Dil Fac
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: MB 885-19	%Recovery Qua 206 Qua 206 Qua 1e Organic Co Qua 029/1-A MB Result ND ND ND ND ND MB %Recovery 89 Qual	MB Qualifier MB	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050 0.050 0.050 0.10 Limits		Unit mg/Kg mg/Kg mg/Kg	mg/Kg	<u>D</u>	92 Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 Prepared 03/19/24 10:24 Client Samp	70 - 130 Prep Type: Trep Batc Prep Batc 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 Analyzed 03/22/24 12:30 Control 10: Method	otal/NA h: 1929
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224	%Recovery Qua 206 Qua 206 Qua 1e Organic Co Qua 029/1-A MB Result ND ND ND ND ND MB %Recovery 89 Qual Qual Qual MB MB	MB Qualifier MB Qualifier	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050 0.050 0.050 0.10 Limits 39 - 146		Unit mg/Kg mg/Kg mg/Kg	mg/Kg	<u>D</u>	92 Client Samp Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 Prepared 03/19/24 10:24 Client Samp	70 - 130 Prep Type: To Prep Batc 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 Prep Type: To Prep Type: To Prep Batc	otal/NA h: 1929
Gasoline Range Organics [C6 - C10] Surrogate 4-Bromofluorobenzene (Surr) Iethod: 8021B - Volatil Lab Sample ID: MB 885-19 Matrix: Solid Analysis Batch: 2224 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: MB 885-19 Matrix: Solid	%Recovery Qua 206 Qua 206 Qua 1e Organic Co Qua 029/1-A MB Result ND ND ND ND ND MB %Recovery 89 Qual Qual Qual MB MB	MB Qualifier MB Qualifier	25.0 Limits 15 - 244 nds (GC) RL 0.025 0.050 0.050 0.050 0.10 Limits		Unit mg/Kg mg/Kg mg/Kg	mg/Kg	<u>D</u>	92 Prepared 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 03/19/24 10:24 Prepared 03/19/24 10:24 Client Samp	70 - 130 Prep Type: To Prep Type: To Prep Batc 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 03/22/24 12:30 Dia ID: Methoo Prep Type: To	otal/NA h: 1929 Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

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5 6 7

Job ID: 885-1339-1

Client: Vertex Project/Site: JRU DI 2

Method: 8021B - Volatile	Organia Compounda	(CC) (Continued)
$Me(000^{\circ} 007) = volatile$	Uroanic Componings	((46))((50))((10))(40)

Analysis Batch: 2224										Prep Type: To Prep Batc	
	МВ	MB									
Analyte	Result	Qualifier	RL		Un	it	D	Pr	epared	Analyzed	Dil Fa
Toluene	ND		0.050	·	mg	J/Kg		03/19	9/24 11:34	03/22/24 23:22	
Xylenes, Total	ND		0.10		mg	J/Kg		03/19	9/24 11:34	03/22/24 23:22	
	MB	MB									
Surrogate	%Recovery	Qualifier	Limits					Pr	repared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	91		39 - 146					03/1	9/24 11:34	03/22/24 23:22	
Lab Sample ID: LCS 885-	-1938/3-A					С	lien	t San	nple ID:	Lab Control S	Sample
Matrix: Solid										Prep Type: To	
Analysis Batch: 2224										Prep Batc	
			Spike	LCS	LCS					%Rec	
Analyte			Added	Result	Qualifie	er Unit		D	%Rec	Limits	
Benzene			1.00	0.874		mg/K	g		87	70 - 130	
Ethylbenzene			1.00	0.890		mg/K	g		89	70 - 130	
m,p-Xylene			2.00	1.78		mg/K	g		89	70 - 130	
o-Xylene			1.00	0.892		mg/K	g		89	70 - 130	
Toluene			1.00	0.883		mg/K	g		88	70 - 130	
Xylenes, Total			3.00	2.67		mg/K	g		89	70 - 130	
	LCS LC	s									
Surrogate	%Recovery Qu	alifier	Limits								
4-Bromofluorobenzene (Surr)	91		39 - 146								
lethod: 8015D - Diese	el Range Org	anics (D	DRO) (GC)								
Lab Sample ID: MB 885-1	985/1-4							Clie	nt Samr	ole ID: Method	1 Blan
Matrix: Solid									in ourin	Prep Type: To	
Analysis Batch: 2016										Prep Batc	
-	МВ	MB									

Analysis Batch: 2016							Prep Batc	h: 1985
-	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		03/20/24 08:58	03/20/24 14:47	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		03/20/24 08:58	03/20/24 14:47	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery 0	Qualifier Lin	nits	Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	89	62 .	. 134	03/20/24 08:58	03/20/24 14:47	1	
Lab Sample ID: LCS 885-1985/	2-A			Client Sample ID:	Lab Control S	ample	

Matrix: Solid Analysis Batch: 2016

Analysis Batch: 2016						Prep Batch: 198			
	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics [C10-C28]	50.0	44.5		mg/Kg		89	60 - 135		

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

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Prep Type: Total/NA

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QC Sample Results

Job ID: 885-1339-1

Client: Vertex Project/Site: JRU DI 2

Lab Sample ID: MB 88	85-1946/1-A					Client Samp	le ID: Method	Blank
Matrix: Solid							Prep Type: To	otal/NA
Analysis Batch: 2019							Prep Batch	1: 1946
	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		03/19/24 13:43	03/19/24 16:35	1

				•					
Matrix: Solid							Prep Type: Total	/NA	
Analysis Batch: 2019							Prep Batch: 1	946	
	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	30.0	28.8		mg/Kg		96	90 - 110		

Client: Vertex Project/Site: JRU DI 2 Job ID: 885-1339-1

GC VOA

Prep Batch: 1929

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
MB 885-1929/1-A	Method Blank	Total/NA	Solid	5030C	
ep Batch: 1938					
ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
385-1339-1	BH24-07 0'	Total/NA	Solid	5030C	
85-1339-2	BH24-07 2'	Total/NA	Solid	5030C	
85-1339-3	BH24-08 0'	Total/NA	Solid	5030C	
385-1339-4	BH24-08 2'	Total/NA	Solid	5030C	
385-1339-5	BH24-09 0'	Total/NA	Solid	5030C	
385-1339-6	BH24-09 2'	Total/NA	Solid	5030C	
385-1339-7	BH24-10 0'	Total/NA	Solid	5030C	
385-1339-8	BH24-10 2'	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
885-1339-1	BH24-07 0'	Total/NA	Solid	8015D	1938
885-1339-2	BH24-07 2'	Total/NA	Solid	8015D	1938
885-1339-3	BH24-08 0'	Total/NA	Solid	8015D	1938
885-1339-4	BH24-08 2'	Total/NA	Solid	8015D	1938
885-1339-5	BH24-09 0'	Total/NA	Solid	8015D	1938
885-1339-6	BH24-09 2'	Total/NA	Solid	8015D	1938
885-1339-7	BH24-10 0'	Total/NA	Solid	8015D	1938
885-1339-8	BH24-10 2'	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
885-1339-1	BH24-07 0'	Total/NA	Solid	8021B	1938
885-1339-2	BH24-07 2'	Total/NA	Solid	8021B	1938
885-1339-3	BH24-08 0'	Total/NA	Solid	8021B	1938
885-1339-4	BH24-08 2'	Total/NA	Solid	8021B	1938
885-1339-5	BH24-09 0'	Total/NA	Solid	8021B	1938
885-1339-6	BH24-09 2'	Total/NA	Solid	8021B	1938
885-1339-7	BH24-10 0'	Total/NA	Solid	8021B	1938
885-1339-8	BH24-10 2'	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 885-1339-1	Client Sample ID BH24-07 0'	Prep Type Total/NA	Matrix Solid	Method SHAKE	Prep Batch
885-1339-2	BH24-07 2'	Total/NA	Solid	SHAKE	
885-1339-3	BH24-08 0'	Total/NA	Solid	SHAKE	

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Client: Vertex Project/Site: JRU DI 2

GC Semi VOA (Continued)

Prep Batch: 1985 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1339-4	BH24-08 2'	Total/NA	Solid	SHAKE	
885-1339-5	BH24-09 0'	Total/NA	Solid	SHAKE	
885-1339-6	BH24-09 2'	Total/NA	Solid	SHAKE	
885-1339-7	BH24-10 0'	Total/NA	Solid	SHAKE	
885-1339-8	BH24-10 2'	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	

Analysis Batch: 2016

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-1339-1	BH24-07 0'	Total/NA	Solid	8015D	1985
885-1339-2	BH24-07 2'	Total/NA	Solid	8015D	1985
885-1339-4	BH24-08 2'	Total/NA	Solid	8015D	1985
885-1339-5	BH24-09 0'	Total/NA	Solid	8015D	1985
885-1339-6	BH24-09 2'	Total/NA	Solid	8015D	1985
885-1339-7	BH24-10 0'	Total/NA	Solid	8015D	1985
885-1339-8	BH24-10 2'	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
Analysis Batch: 228	39				

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1339-3	BH24-08 0'	Total/NA	Solid	8015D	1985

HPLC/IC

Prep Batch: 1946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1339-1	BH24-07 0'	Total/NA	Solid	300_Prep	
885-1339-2	BH24-07 2'	Total/NA	Solid	300_Prep	
885-1339-3	BH24-08 0'	Total/NA	Solid	300_Prep	
885-1339-4	BH24-08 2'	Total/NA	Solid	300_Prep	
885-1339-5	BH24-09 0'	Total/NA	Solid	300_Prep	
885-1339-6	BH24-09 2'	Total/NA	Solid	300_Prep	
885-1339-7	BH24-10 0'	Total/NA	Solid	300_Prep	
885-1339-8	BH24-10 2'	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	

Analysis Batch: 2019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1339-1	BH24-07 0'	Total/NA	Solid	300.0	1946
885-1339-2	BH24-07 2'	Total/NA	Solid	300.0	1946
885-1339-3	BH24-08 0'	Total/NA	Solid	300.0	1946
885-1339-4	BH24-08 2'	Total/NA	Solid	300.0	1946
885-1339-5	BH24-09 0'	Total/NA	Solid	300.0	1946
885-1339-6	BH24-09 2'	Total/NA	Solid	300.0	1946
885-1339-7	BH24-10 0'	Total/NA	Solid	300.0	1946
885-1339-8	BH24-10 2'	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

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Job ID: 885-1339-1

Client: Vertex

Project/Site: JRU DI 2

Job ID: 885-1339-1

Lab Sample ID: 885-1339-1

Lab Sample ID: 885-1339-3

Lab Sample ID: 885-1339-4

Client Sample ID: BH24-07 0' Date Collected: 03/14/24 10:00 Date Received: 03/16/24 08:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	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 02:39
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 02:39
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 17:26
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 20:54

Lab Sample ID: 885-1339-2

Matrix: Solid

Matrix: Solid

Client Sample ID: BH24-07 2' Date Collected: 03/14/24 10:15

Date Received: 03/16/24 08:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	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 03:00
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 03:00
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 17:38
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 21:07

Client Sample ID: BH24-08 0'

Date Collected: 03/14/24 10:30 Date Received: 03/16/24 08:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	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 03:22
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 03:22
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 21:15
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 21:19

Client Sample ID: BH24-08 2' Date Collected: 03/14/24 10:45 Date Received: 03/16/24 08:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	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 03:44

Eurofins Albuquerque

Matrix: Solid

Matrix: Solid

Client Sample ID: BH24-08 2'

Batch

Туре

Prep

Prep

Prep

Analysis

Analysis

Analysis

Batch

Method

5030C

8021B

SHAKE

8015D

300.0

300 Prep

Date Collected: 03/14/24 10:45

Date Received: 03/16/24 08:05

Client: Vertex

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Project/Site: JRU DI 2

Batch

1938 IMR

Number Analyst

2224 RA

1985 SB

2016 JU

1946 JT

2019 KB

Lab

EET ALB

EET ALB

EET ALB

EET ALB

EET ALB

EET ALB

Dilution

Run

Factor

1

1

20

Page 158 of 400

Job ID: 885-1339-1

Lab Sample ID: 885-1339-4

Prepared

or Analyzed

03/19/24 11:34

03/23/24 03:44

03/20/24 08:58 03/20/24 18:03

03/19/24 13:43

03/19/24 21:31

Lab Sample ID: 885-1339-5

Matrix: Solid

Matrix: Solid

Client Sample ID: BH24-09 0' Date Collected: 03/14/24 11:00 Date Received: 03/16/24 08:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Туре	Туре	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 04:06
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 04:06
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 18:15
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 21:44

Client Sample ID: BH24-09 2' Date Collected: 03/14/24 11:15 Date Received: 03/16/24 08:05

Lab Sample ID: 885-1339-6

Lab Sample ID: 885-1339-7

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	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 04:28
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 04:28
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 18:27
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 21:56

Client Sample ID: BH24-10 0' Date Collected: 03/14/24 11:30 Date Received: 03/16/24 08:05

	Batch	Batch	Dura	Dilution	Batch	A	1	Prepared
Prep Type	e 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 05:12
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 05:12

Lab Chronicle

Job ID: 885-1339-1

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BH24-10 0' Date Collected: 03/14/24 11:30 Date Received: 03/16/24 08:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
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 18:40
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 22:08

Client Sample ID: BH24-10 2' Date Collected: 03/14/24 11:45 Date Received: 03/16/24 08:05

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	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 05:34
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 05:34
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 18:52
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 22:45

Laboratory References:

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

Lab Sample ID: 885-1339-7 Matrix: Solid

Lab Sample ID: 885-1339-8

Matrix: Solid

8

Accreditation/Certification Summary

Client: Vertex Project/Site: JRU DI 2 Job ID: 885-1339-1

Laboratory: Eurofins Albuquerque

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

uthority	Progr	am	Identification Number	Expiration Date		
lew Mexico	State		NM9425, NM0901 02-26-25			
0,	are included in this repo does not offer certificatior	,	not certified by the governing authori	ty. 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			
Dregon	NELA	-	NM100001	02-26-25		

Eurofins Albuquerque

Chain-of-Custody Record	Turn-Around Time:						<u>1501</u> 2		Neceiveu D
Client	Rush_	5 DAA		ANAL	LYSI	ANALYSIS LABOR		885-1339 COC	y oc
	Project Name: 5 TR W 01	<u>ا</u>		www.	nallenviron	www.hallenvironmental.com) r	8	D . 7
Mailing Address: On +, IC			4901 Ha	4901 Hawkins NE -		Albuquerque, NM 87109	37109		11314
	Project #: 23 E - 06065		Tel. 505	505-345-3975		Fax 505-345-4107	07		2027
Phone #: $o \circ f() C$					Mal	Analysis Request			2.1
email or Fax#: のっ チ;)の	Project Manager. Salls Cartfort		(0		ک ر	(Ju			2.5
QA/QC Package	Scorttat Quertex Ca			SWIS	S '*O	i92dA			
		s'8	5 6	_		дuе			
Ë	Sampler: What 1 Wadlersh		808		ON				
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a Bate Time Matrix Sample Name	Container Preservative Type and # Type	HEAL No. EX	98.H9T 9 1808	PARs PAHs (I	8260 (2), F, 20, F,) 0728 Total O			
50,1	0	/	>						
		2							<u></u>
		3							r
BH24-08		4							<u> </u>
8424-09		5		 					<u> </u>
	9	6							
1130 81124-10 0'									[
V 1145 N 8424-10 2'	8	J.	}		``				
L L L L L L L L L L L L L L L L L L L		Data Time							<u> </u>
lime Keinquisned by Contractor.	Via A.A.C.		Kemarks:						1 450
Time Relinquished by	Received by: Via V. D	-							. 10.
23 Hay 19w Culuurur	Em com Slibler	0805							1 0] 4
If necessary samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility Anvious and the servet of the serv	ocontracted to other accredited laboratories. This	s serves as notice of this possil	10	Intracted d	ata wili ha riaa	Intracted date will be clearly notated on the C		2	1

11

Job Number: 885-1339-1

List Source: Eurofins Albuquerque

Login Sample Receipt Checklist

Client: Vertex

<6mm (1/4").

Login Number: 1339 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	True	

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 3/26/2024 5:53:29 PM

JOB DESCRIPTION

JRU DI2

JOB NUMBER

885-1445-1

EOL

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

andy.freeman@et.eurofinsus.com

Authorized for release by

(505)345-3975

Generated 3/26/2024 5:53:29 PM

Andy Freeman, Business Unit Manager

Laboratory Job ID: 885-1445-1

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	Definitions/Glossary		
Client: Vertex Project/Site:		Job ID: 885-1445-1	2
Qualifiers			
			3
GC Semi VO			
Qualifier *1	Qualifier Description		
S1+	LCS/LCSD RPD exceeds control limits.		
	Surrogate recovery exceeds control limits, high biased.		5
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.		8
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis		0
%R	Percent Recovery		0
CFL	Contains Free Liquid		3
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		

Eurofins Albuquerque

Quality Control

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

Reporting Limit or Requested Limit (Radiochemistry)

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

QC

RER

RL RPD

TEF

TEQ TNTC

Case Narrative

Client: Vertex

Project: JRU DI2

Eurofins Albuquerque

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El

Job Narrative 885-1445-1

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 3/20/2024 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 0.3°C.

GC VOA

Method 8021B: The method blank for preparation batch 880-76266 and analytical batch 880-76263 contained Benzene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-76213 and analytical batch 880-76256 was outside the upper control limits.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-76213 and analytical batch 880-76256 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-76153 and analytical batch 880-76212 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.

BH24-12 0' (885-1445-1), BH24-12 2' (885-1445-2), BH24-13 2' (885-1445-3), BH24-13 3.5' (885-1445-4), BH24-14 2' (885-1445-5), BH24-14 3' (885-1445-6), BH24-15 2' (885-1445-7), BH24-15 3' (885-1445-8), BH24-16 0' (885-1445-9), BH24-16 2' (885-1445-10), (885-1445-A-1-B MS) and (885-1445-A-1-C MSD)

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

Client: Vertex Project/Site: JRU DI2

Client Sample ID: BH24-12 0' Date Collected: 03/15/24 10:00 Date Received: 03/20/24 08:00

Job ID: 885-1445-1

Lab Sample ID: 885-1445-1 Matrix: Solid

Lab Sample ID: 885-1445-2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/22/24 22:36	1	
Toluene	ND		0.0020	mg/Kg		03/21/24 16:32	03/22/24 22:36	1	
Ethylbenzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/22/24 22:36	1	
Xylenes, Total	ND		0.0040	mg/Kg		03/21/24 16:32	03/22/24 22:36	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	Ĩ
4-Bromofluorobenzene (Surr)	78		70 - 130			03/21/24 16:32	03/22/24 22:36	1	
1,4-Difluorobenzene (Surr)	98		70 - 130			03/21/24 16:32	03/22/24 22:36	1	
Method: SW846 8015B NM - E	Diesel Range	• Organics	(DRO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND	*1	50	mg/Kg		03/21/24 13:43	03/22/24 20:59	1	
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/21/24 13:43	03/22/24 20:59	1	
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/21/24 13:43	03/22/24 20:59	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane	88		70 - 130			03/21/24 13:43	03/22/24 20:59	1	
o-Terphenyl	85		70 - 130			03/21/24 13:43	03/22/24 20:59	1	
Method: EPA 300.0 - Anions,	Ion Chroma	tography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	

Client Sample ID: BH24-12 2'

Date Collected: 03/15/24 10:15 Date Received: 03/20/24 08:0

Date Collected: 03/15/24 10:1	15						Matrix	: Solid
Date Received: 03/20/24 08:0	0							
Method: SW846 8021B - Vo	latile Organic (Compound	s (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/22/24 22:56	1

1,4-Difluorobenzene (Surr)	90	70 - 130		03/21/24 16:32	03/22/24 22:56	1
4-Bromofluorobenzene (Surr)	88	70 - 130		03/21/24 16:32	03/22/24 22:56	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
Xylenes, Total	ND	0.0040	mg/Kg	03/21/24 16:32	03/22/24 22:56	1
Ethylbenzene	ND	0.0020	mg/Kg	03/21/24 16:32	03/22/24 22:56	1
Toluene	ND	0.0020	mg/Kg	03/21/24 16:32	03/22/24 22:56	1
Benzene	ND	0.0020	mg/Kg	03/21/24 16:32	03/22/24 22:50	I

Method: SW846 8015B NM - Dies	sel Range Organics (I	JRO) (GC)	
Analyte	Result Qualifier	RL	Un

Analyte	Result	Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND	*1	50	mg/Kg	03/21/24 13:4	3 03/22/24 21:21	1
(GRO)-C6-C10							
Diesel Range Organics (Over	ND		50	mg/Kg	03/21/24 13:4	3 03/22/24 21:21	1
C10-C28)							
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg	03/21/24 13:4	3 03/22/24 21:21	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130		03/21/24 13:4	3 03/22/24 21:21	1
o-Terphenyl	84		70 - 130		03/21/24 13:4	3 03/22/24 21:21	1
1-Chlorooctane	88	Qualifier	70 - 130		03/21/24 13:4	3 03/22/24 21:21	Dil Fac 1 1

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ent: Vertex			Sample Re				Job ID: 885-	1445-1
oject/Site: JRU DI2								
lient Sample ID: BH24-12 ate Collected: 03/15/24 10:15 ate Received: 03/20/24 08:00	2'					Lab Samp	le ID: 885-1 Matrix	445-2 :: Solid
Method: EPA 300.0 - Anions, I Analyte		t <mark>ography</mark> - Qualifier	Soluble RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		5.0	mg/Kg			03/21/24 14:21	1
						1 1 0		145.0
Client Sample ID: BH24-13 ate Collected: 03/15/24 10:45 ate Received: 03/20/24 08:00							le ID: 885-1 Matrix	445-3 :: Solid
Method: SW846 8021B - Volati			ds (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg			03/22/24 23:17	1
Toluene	ND		0.0020	mg/Kg			03/22/24 23:17	1
Ethylbenzene	ND		0.0020	mg/Kg			03/22/24 23:17	1
Xylenes, Total	ND		0.0040	mg/Kg		03/21/24 16:32	03/22/24 23:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130				03/22/24 23:17	1
1,4-Difluorobenzene (Surr)	94		70 - 130			03/21/24 16:32	03/22/24 23:17	1
		0						
Method: SW846 8015B NM - D Analyte		Qualifier	(DRO) (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		<u> </u>	mg/Kg			03/22/24 21:41	1
(GRO)-C6-C10		•	00	ing/itg		00/21/21 10:10	00,22,2121.11	•
Diesel Range Organics (Over	ND		50	mg/Kg		03/21/24 13:43	03/22/24 21:41	1
C10-C28)			50	···· ·· // ···		00/04/04 40:40	02/02/04 04:44	4
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/21/24 13:43	03/22/24 21:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130			03/21/24 13:43	03/22/24 21:41	1
o-Terphenyl	90		70 - 130			03/21/24 13:43	03/22/24 21:41	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	240		5.0	mg/Kg		··	03/21/24 14:26	1
lient Sample ID: BH24-13	2 5'					Lah Samn	le ID: 885-1	115_1
ate Collected: 03/15/24 11:00 ate Received: 03/20/24 08:00								: Solid
Method: SW846 8021B - Volati				11.74	_	Deserved	A start start	D'I 5
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene Toluene	ND ND		0.0020 0.0020	mg/Kg mg/Kg			03/22/24 23:37 03/22/24 23:37	1
Ethylbenzene	ND		0.0020	mg/Kg mg/Kg			03/22/24 23:37	1
zuryidenzene Xylenes, Total	ND		0.0020	mg/Kg			03/22/24 23:37	1
,,								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130				03/22/24 23:37	1
1,4-Difluorobenzene (Surr)	89		70 - 130			03/21/24 16:32	03/22/24 23:37	1
	incol Bong	Organics	(DRO) (GC)					
Method: SW846 8015B NM - D	leser Range	, organios						
Method: SW846 8015B NM - D Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

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Client: Vertex Project/Site: JRU DI2

Analyte

Client Sample ID: BH24-13 3.5' Date Collected: 03/15/24 11:00 Date Received: 03/20/24 08:00

Method: SW846 8015B NM - Diesel Range Orga

Range Organics (D)RO) (GC) (C	ontinued)
Result Qualifier	RL	Unit

Diesel Range Organics (Over	ND		50	mg/Kg	03/21/24 13:43	03/22/24 22:02
C10-C28)						
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg	03/21/24 13:43	03/22/24 22:02
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed
Surrogate 1-Chlorooctane	%Recovery 98	Qualifier	Limits 70 - 130			Analyzed 03/22/24 22:02
		Qualifier			03/21/24 13:43	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL					
Chloride	280		5.0					

Client Sample ID: BH24-14 2'

Date Collected: 03/15/24 11:15

Date	Received	: 03/20/24	08:00

Method: SW846 8021B - Vo	latile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/22/24 23:58	1
Toluene	ND		0.0020	mg/Kg		03/21/24 16:32	03/22/24 23:58	1
Ethylbenzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/22/24 23:58	1
Xylenes, Total	ND		0.0040	mg/Kg		03/21/24 16:32	03/22/24 23:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130			03/21/24 16:32	03/22/24 23:58	1
1,4-Difluorobenzene (Surr)	94		70 - 130			03/21/24 16:32	03/22/24 23:58	1

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

Analyte	Result	Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND	*1	50	mg/Kg	03/21/24 13:43	03/22/24 22:28	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg	03/21/24 13:43	03/22/24 22:28	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg	03/21/24 13:43	03/22/24 22:28	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130		03/21/24 13:43	03/22/24 22:28	1
o-Terphenyl	93		70 - 130		03/21/24 13:43	03/22/24 22:28	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Analyte RL Unit D Prepared Analyzed Dil Fac 5.0 Chloride 170 mg/Kg 03/21/24 14:36 1

Client Sample ID: BH24-14 3' Date Collected: 03/15/24 11:30 Date Received: 03/20/24 08:00

Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte **Result Qualifier** RL Unit D Prepared Dil Fac Analyzed Benzene ND 0.0020 mg/Kg 03/21/24 16:32 03/23/24 00:18 1 ND Toluene 0.0020 03/21/24 16:32 03/23/24 00:18 mg/Kg 1 Ethylbenzene ND 0.0020 mg/Kg 03/21/24 16:32 03/23/24 00:18 1 Xylenes, Total ND 0.0040 03/21/24 16:32 03/23/24 00:18 mg/Kg 1

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Job ID: 885-1445-1

Matrix: Solid

Dil Fac

Dil Fac

Dil Fac

Matrix: Solid

1

1

Lab Sample ID: 885-1445-4

Analyzed

Analyzed

03/21/24 14:31

Lab Sample ID: 885-1445-5

D

D

Unit

mg/Kg

Prepared

Prepared

Lab Sample ID: 885-1445-6 Matrix: Solid

Limits

Client: Vertex Project/Site: JRU DI2

Surrogate

Date Received: 03/20/24 08:00

	A . A	A	01	

%Recovery Qualifier

Dil Fac

Matrix: Solid

Job ID: 885-1445-1

Lab Sample ID: 885-1445-6 Matrix: Solid

Analyzed

Prepared

	,,								
4-Bromofluorobenzene (Surr)	83		70 - 130			03/21/24 16:32	03/23/24 00:18	1	ວ
1,4-Difluorobenzene (Surr)	80		70 - 130			03/21/24 16:32	03/23/24 00:18	1	
		<u> </u>							
Method: SW846 8015B NM - D	liesel Range	e Organics	s (DRO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics	ND	*1	50	mg/Kg		03/21/24 13:43	03/22/24 22:49	1	
(GRO)-C6-C10									8
Diesel Range Organics (Over	ND		50	mg/Kg		03/21/24 13:43	03/22/24 22:49	1	
C10-C28)									
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/21/24 13:43	03/22/24 22:49	1	9
	2 / D	0	1 1			D	A	D// 5	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane	117		70 - 130			03/21/24 13:43	03/22/24 22:49	1	
o-Terphenyl	120		70 - 130			03/21/24 13:43	03/22/24 22:49	1	
Method: EPA 300.0 - Anions,	on Chroma	tography -	Soluble						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
						Tepaleu			
Chloride	740		5.0	mg/Kg			03/21/24 14:50	1	
Client Sample ID: BH24-1	5 2'					Lab Samp	le ID: 885-1	445-7	

Client Sample ID: BH24 Date Collected: 03/15/24 12:00

Date Received: 03/20/24 08:00

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/23/24 00:38	1
Toluene	ND		0.0020	mg/Kg		03/21/24 16:32	03/23/24 00:38	1
Ethylbenzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/23/24 00:38	1
Xylenes, Total	ND		0.0040	mg/Kg		03/21/24 16:32	03/23/24 00:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			03/21/24 16:32	03/23/24 00:38	1
			/				~~ ~~ ~~ ~~ ~~ ~~	
1,4-Difluorobenzene (Surr) Method: SW846 8015B NM - E		-			_	03/21/24 16:32		1
1,4-Difluorobenzene (Surr)	88		70 - 130			03/21/24 16:32	03/23/24 00:38	1
Method: SW846 8015B NM - E Analyte	Diesel Range Result	Qualifier	(DRO) (GC) RL	Unit	D	Prepared	Analyzed	1 Dil Fac
Method: SW846 8015B NM - E Analyte Gasoline Range Organics	Diesel Range	-	(DRO) (GC)	Unit mg/Kg	D		Analyzed	
Method: SW846 8015B NM - E Analyte Gasoline Range Organics (GRO)-C6-C10	Diesel Range Result ND	Qualifier	(DRO) (GC) <u>RL</u> 50	mg/Kg	D	Prepared 03/21/24 13:43	Analyzed 03/22/24 23:10	
Method: SW846 8015B NM - E Analyte Gasoline Range Organics	Diesel Range Result	Qualifier	(DRO) (GC) RL		<u>D</u>	Prepared	Analyzed 03/22/24 23:10	
Method: SW846 8015B NM - E Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Diesel Range Result ND	Qualifier	(DRO) (GC) <u>RL</u> 50	mg/Kg	<u>D</u>	Prepared 03/21/24 13:43 03/21/24 13:43	Analyzed 03/22/24 23:10	
Method: SW846 8015B NM - E Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Diesel Range Result ND ND	Qualifier *1	6 (DRO) (GC) RL 50 50	mg/Kg mg/Kg	D	Prepared 03/21/24 13:43 03/21/24 13:43	Analyzed 03/22/24 23:10 03/22/24 23:10	
Method: SW846 8015B NM - E Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Diesel Range Result ND ND ND	Qualifier *1	6 (DRO) (GC) RL 50 50 50	mg/Kg mg/Kg	<u>D</u>	Prepared 03/21/24 13:43 03/21/24 13:43 03/21/24 13:43	Analyzed 03/22/24 23:10 03/22/24 23:10 03/22/24 23:10 03/22/24 23:10 Analyzed	Dil Fac 1 1

Client: Vertex Project/Site: JRU DI2

Client Sample ID: BH24-15 3' Date Collected: 03/15/24 12:15 Date Received: 03/20/24 08:00

Job ID: 885-1445-1

Lab Sample ID: 885-1445-8

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	5
Benzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/23/24 00:59	1	
Toluene	ND		0.0020	mg/Kg		03/21/24 16:32	03/23/24 00:59	1	
Ethylbenzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/23/24 00:59	1	
Xylenes, Total	ND		0.0040	mg/Kg		03/21/24 16:32	03/23/24 00:59	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	0
4-Bromofluorobenzene (Surr)	88		70 - 130			03/21/24 16:32	03/23/24 00:59	1	0
1,4-Difluorobenzene (Surr)	81		70 - 130			03/21/24 16:32	03/23/24 00:59	1	9
	Diesel Range	• Organics	(DRO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND	*1	50	mg/Kg		03/21/24 13:43	03/22/24 19:57	1	
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/21/24 13:43	03/22/24 19:57	1	
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/21/24 13:43	03/22/24 19:57	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
	84		70 - 130			03/21/24 13:43	03/22/24 19:57	1	
1-Chlorooctane	04								
1-Chlorooctane o-Terphenyl —	83		70 - 130			03/21/24 13:43	03/22/24 19:57	1	
	83	tography -				03/21/24 13:43	03/22/24 19:57	1	

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230	5.0	mg/Kg			03/21/24 15:00	1

Client Sample ID: BH24-16 0'

Date Collected: 03/15/24 12:30

Lab Sample ID: 885-1445-9 Matrix: Solid

Date Received: 03/20/24 08:00

Method: SW846 8021B - Vo	latile Organic Compoun	ds (GC)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	0.0020	mg/Kg		03/21/24 16:32	03/23/24 01:19	1
Toluene	ND	0.0020	mg/Kg		03/21/24 16:32	03/23/24 01:19	1
Ethylbenzene	ND	0.0020	mg/Kg		03/21/24 16:32	03/23/24 01:19	1
Xylenes, Total	ND	0.0040	mg/Kg		03/21/24 16:32	03/23/24 01:19	1
Surrogate	%Recovery Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82	70 - 130			03/21/24 16:32	03/23/24 01:19	1
1,4-Difluorobenzene (Surr)	95	70 - 130			03/21/24 16:32	03/23/24 01:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND	*1	50	mg/Kg		03/21/24 13:43	03/22/24 23:32	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/21/24 13:43	03/22/24 23:32	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/21/24 13:43	03/22/24 23:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130			03/21/24 13:43	03/22/24 23:32	1
o-Terphenyl	91		70 - 130			03/21/24 13:43	03/22/24 23:32	1

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oject/Site: JRU DI2								
lient Sample ID: BH24-16 ate Collected: 03/15/24 12:30	3 0'					Lab Samp	le ID: 885-1 Matrix	445-9 : Solid
ate Received: 03/20/24 08:00								
Method: EPA 300.0 - Anions, I								
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		5.0	mg/Kg			03/21/24 15:04	1
lient Sample ID: BH24-16	ô 2'				L	.ab Sample	e ID: 885-14	45-10
ate Collected: 03/15/24 12:45						-	Matrix	: Solid
ate Received: 03/20/24 08:00								
		0						
Method: SW846 8021B - Volati Analyte		Qualifier	as (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg				
Toluene	ND ND		0.0020				03/23/24 03:02	1
				mg/Kg				1
Ethylbenzene	ND		0.0020	mg/Kg			03/23/24 03:02	[.]
Xylenes, Total	ND		0.0040	mg/Kg		03/21/24 16:32	03/23/24 03:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130			03/21/24 16:32	03/23/24 03:02	1
1,4-Difluorobenzene (Surr)	99		70 - 130			03/21/24 16:32	03/23/24 03:02	1
Method: SW846 8015B NM - D	iesel Rang							
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/21/24 13:43		1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/21/24 13:43	03/22/24 23:53	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/21/24 13:43	03/22/24 23:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			03/21/24 13:43	03/22/24 23:53	1
o-Terphenyl	76		70 - 130			03/21/24 13:43	03/22/24 23:53	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Method. El A 300.0 - Allons, I								
Analyte	Result	Qualifier		Unit	D	Prepared	Analyzed	Dil Fac

Job ID: 885-1445-1

Prep Type: Total/NA Prep Batch: 76244

Prep Type: Total/NA

Client Sample ID: Method Blank

03/21/24 16:32 03/22/24 22:14

Client Sample ID: Lab Control Sample

Client: Vertex Project/Site: JRU DI2

Method: 8021B - Volatile Organic Compounds (GC)

97

Lab Sample ID: MB 880-76244/5-A Matrix: Solid

Analysis Batch: 76263

	МВ	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/22/24 22:14	1
Toluene	ND		0.0020	mg/Kg		03/21/24 16:32	03/22/24 22:14	1
Ethylbenzene	ND		0.0020	mg/Kg		03/21/24 16:32	03/22/24 22:14	1
Xylenes, Total	ND		0.0040	mg/Kg		03/21/24 16:32	03/22/24 22:14	1
	MB	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130			03/21/24 16:32	03/22/24 22:14	1

70 - 130

1,4-Difluorobenzene (Surr)

Lab Sample ID: LCS 880-76244/1-A Matrix: Solid Analysis Batch: 76263

Analysis Batch: 76263							Prep Batch: 7	6244
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.0910		mg/Kg		91	70 - 130	
Toluene	0.100	0.0936		mg/Kg		94	70 - 130	
Ethylbenzene	0.100	0.105		mg/Kg		105	70 - 130	
m-Xylene & p-Xylene	0.200	0.207		mg/Kg		104	70 - 130	
o-Xylene	0.100	0.102		mg/Kg		102	70 - 130	

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

Lab Sample ID: LCSD 880-76244/2-A Matrix: Solid Analysis Batch: 76263

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 76244

	Spike	LCSD L	CSD		%Rec		RPD
Analyte	Added	Result Q	ualifier Unit	D %Rec	Limits	RPD	Limit
Benzene	0.100	0.0943	mg/Kg	94	70 - 130	4	35
Toluene	0.100	0.0945	mg/Kg	95	70 - 130	1	35
Ethylbenzene	0.100	0.106	mg/Kg	106	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.214	mg/Kg	107	70_130	3	35
o-Xylene	0.100	0.106	mg/Kg	106	70 - 130	3	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: 885-1445-1 MS Matrix: Solid Analysis Batch: 76263

Analysis Batch: 76263									Prep I	Batch: 76244
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		0.0996	0.0830		mg/Kg		82	70 - 130	
Toluene	ND		0.0996	0.0763		mg/Kg		77	70 - 130	
Ethylbenzene	ND		0.0996	0.0853		mg/Kg		86	70 - 130	
m-Xylene & p-Xylene	ND		0.199	0.163		mg/Kg		82	70 - 130	

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Prep Type: Total/NA

Client Sample ID: BH24-12 0'

1

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Job ID: 885-1445-1

Client: Vertex Project/Site: JRU DI2

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

Lab Sample ID: 885-1445- Matrix: Solid	1 MS									ample ID: BH Prep Type: `	Fotal/N
Analysis Batch: 76263										Prep Batcl	ו: <mark>7624</mark>
	Sample		•	Spike	MS	MS				%Rec	
Analyte	Result	Qua	lifier	Added		Qualifier	Unit		D %Rec	Limits	
p-Xylene	ND			0.0996	0.0895		mg/Kg		90	70 - 130	
	MS	мs									
Surrogate	%Recovery	Qua	lifier	Limits							
4-Bromofluorobenzene (Surr)	111			70 - 130							
1,4-Difluorobenzene (Surr)	107			70 - 130							
Lab Sample ID: 885-1445-	1 MSD								Client Sa	ample ID: BH	24-12
Matrix: Solid										Prep Type:	
Analysis Batch: 76263										Prep Batcl	
	Sample	Sam	nple	Spike	MSD	MSD				%Rec	RP
Analyte	Result		-	Added	-	Qualifier	Unit		D %Rec	Limits RF	
Benzene	ND			0.100	0.0861		mg/Kg		85	70 - 130	4 3
Foluene	ND			0.100	0.0818		mg/Kg		82	70 - 130	7 3
Ethylbenzene	ND			0.100	0.0942		mg/Kg		94		10 3
n-Xylene & p-Xylene	ND			0.200	0.179		mg/Kg		89	70 - 130	9 3
p-Xylene	ND			0.100	0.0950		mg/Kg		95	70 - 130	6 3
	MSD	MSL	2								
Surrogate	%Recovery	Qua	lifier	Limits							
4-Bromofluorobenzene (Surr)	110			70 - 130							
1,4-Difluorobenzene (Surr)	96			70 - 130							
Lab Sample ID: MB 880-76	6266/5-A								Client Same	ole ID: Metho	d Blan
Matrix: Solid										Prep Type:	
Analysis Batch: 76263										Prep Batcl	
·····,		ΜВ	МВ								
Analyte	Re	sult	Qualifier	RL		Unit		D	Prepared	Analyzed	Dil Fa
Benzene		ND		0.0020	<u> </u>	mg/K	g	_	03/22/24 09:04	03/22/24 11:39	
Toluene		ND		0.0020)	mg/K	g		03/22/24 09:04	03/22/24 11:39	1
Ethylbenzene		ND		0.0020)	mg/K	g		03/22/24 09:04	03/22/24 11:39)
Kylenes, Total		ND		0.0040)	mg/K			03/22/24 09:04	03/22/24 11:39	
		ΜВ	МВ								
Surrogate	%Recov	very	Qualifier	Limits					Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)		71		70 - 130	-				03/22/24 09:04	03/22/24 11:39)
1,4-Difluorobenzene (Surr)		100		70 - 130					03/22/24 09:04	03/22/24 11:39)

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 76213

	MB	МВ					-	
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/21/24 13:42	03/22/24 18:53	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/21/24 13:42	03/22/24 18:53	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/21/24 13:42	03/22/24 18:53	1

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Matrix: Solid

Analysis Batch: 76256

Dil Fac

1

1

Job ID: 885-1445-1

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 76213

Client Sample ID: Method Blank

03/21/24 13:42 03/22/24 18:53

03/21/24 13:42 03/22/24 18:53

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: BH24-15 3'

Prep Type: Total/NA

Analyzed

Prepared

Client: Vertex Project/Site: JRU DI2

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

Lab Sample ID: MB 880-76213/1-A	
Matrix: Solid	

Analysis Batch: 76256

	MB	MB	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	161	S1+	70 - 130
o-Terphenyl	171	S1+	70 - 130

Lab Sample ID: LCS 880-76213/2-A Matrix: Solid Analysis Batch: 76256

Analysis Batch: 76256							Prep E	Batch: 76213
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	 1000	1220		mg/Kg		122	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1010		mg/Kg		101	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	122		70 - 130

Lab Sample ID: LCSD 880-76213/3-A Matrix: Solid

Matrix: Solid Analysis Batch: 76256					÷.		Prep Ty Prep E	pe: Tot Batch: 7	
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	926	*1	mg/Kg		93	70 - 130	27	20
Diesel Range Organics (Over C10-C28)	1000	900		mg/Kg		90	70 - 130	12	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 885-1445-8 MS Matrix: Solid Analysis Batch: 76256

Analysis Batch: 76256									Prep B	atch: 76213
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	ND	*1	1000	861		mg/Kg		83	70 - 130	
Diesel Range Organics (Over C10-C28)	ND		1000	773		mg/Kg		75	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	90		70 - 130							

1 Onioi oootane	50	10-100
o-Terphenyl	80	70 - 130

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5 6 7

Job ID: 885-1445-1

Client: Vertex Project/Site: JRU DI2

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

Lab Sample ID: 885-1445	-8 MSD							Client S	Sample ID	: BH24	-15 3'
Matrix: Solid									Prep Ty	pe: Tot	al/NA
Analysis Batch: 76256									Prep E	atch: 7	76213
-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	ND	*1	1000	1030		mg/Kg		100	70 - 130	18	20
Diesel Range Organics (Over C10-C28)	ND		1000	853		mg/Kg		83	70 - 130	10	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	88		70 - 130								

Lab Sample ID: MB 880-76153/1-/ Matrix: Solid	A						CI	ient Sa	mple ID: M Prep Ty		
Analysis Batch: 76212											
		MB MB					_	_			
Analyte		ult Qualifier			Unit		<u>D</u>	Prepared			Dil Fac
Chloride		ND		5.0	mg/K	g			03/21/24	13:52	1
Lab Sample ID: LCS 880-76153/2	-A					Cli	ent S	ample I	D: Lab Cor	ntrol S	ample
Matrix: Solid									Prep Ty		
Analysis Batch: 76212											
			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit) %Rec	Limits		
Chloride			250	239		mg/Kg		95	90 - 110		
Lab Sample ID: LCSD 880-76153/ Matrix: Solid Analysis Batch: 76212									ab Control Prep Ty		
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	[) %Rec	Limits	RPD	Limit
Chloride			250	238		mg/Kg		95	90 - 110	0	20
Lab Sample ID: 885-1445-1 MS								Client	Sample ID	· BU2/	1-12 0'
Matrix: Solid								Chem	Prep Ty		
Analysis Batch: 76212									Thep 1	pe. o	oluble
	mple	Sample	Spike	MS	MS				%Rec		
	•	Qualifier	Added	Result	Qualifier	Unit) %Rec	Limits		
Chloride	1000	F1	1250	2690	F1	mg/Kg		134	90 - 110		
Lab Sample ID: 885-1445-1 MSD								Client	Sample ID		1 42 01
Matrix: Solid								Chefit	Prep Ty		
Analysis Batch: 76212									Fieh I	he. o	oiubie
			.						0/ D		
Sa	mple	Sample	Spike	MSD	MSD				%Rec		RPD
	mple esult	Sample Qualifier	Spike Added		MSD Qualifier	Unit	[) %Rec		RPD	RPD Limit

Client: Vertex Project/Site: JRU DI2

GC VOA

Prep Batch: 76244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1445-1	BH24-12 0'	Total/NA	Solid	5035	
885-1445-2	BH24-12 2'	Total/NA	Solid	5035	
885-1445-3	BH24-13 2'	Total/NA	Solid	5035	
885-1445-4	BH24-13 3.5'	Total/NA	Solid	5035	
885-1445-5	BH24-14 2'	Total/NA	Solid	5035	
885-1445-6	BH24-14 3'	Total/NA	Solid	5035	
885-1445-7	BH24-15 2'	Total/NA	Solid	5035	
885-1445-8	BH24-15 3'	Total/NA	Solid	5035	
885-1445-9	BH24-16 0'	Total/NA	Solid	5035	
885-1445-10	BH24-16 2'	Total/NA	Solid	5035	
MB 880-76244/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-76244/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-76244/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
885-1445-1 MS	BH24-12 0'	Total/NA	Solid	5035	
885-1445-1 MSD	BH24-12 0'	Total/NA	Solid	5035	

Analysis Batch: 76263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1445-1	BH24-12 0'	Total/NA	Solid	8021B	76244
885-1445-2	BH24-12 2'	Total/NA	Solid	8021B	76244
885-1445-3	BH24-13 2'	Total/NA	Solid	8021B	76244
885-1445-4	BH24-13 3.5'	Total/NA	Solid	8021B	76244
885-1445-5	BH24-14 2'	Total/NA	Solid	8021B	76244
885-1445-6	BH24-14 3'	Total/NA	Solid	8021B	76244
885-1445-7	BH24-15 2'	Total/NA	Solid	8021B	76244
885-1445-8	BH24-15 3'	Total/NA	Solid	8021B	76244
885-1445-9	BH24-16 0'	Total/NA	Solid	8021B	76244
885-1445-10	BH24-16 2'	Total/NA	Solid	8021B	76244
MB 880-76244/5-A	Method Blank	Total/NA	Solid	8021B	76244
MB 880-76266/5-A	Method Blank	Total/NA	Solid	8021B	76266
LCS 880-76244/1-A	Lab Control Sample	Total/NA	Solid	8021B	76244
LCSD 880-76244/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	76244
885-1445-1 MS	BH24-12 0'	Total/NA	Solid	8021B	76244
885-1445-1 MSD	BH24-12 0'	Total/NA	Solid	8021B	76244

Prep Batch: 76266

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
MB 880-76266/5-A	Method Blank	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 76213

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-1445-1	BH24-12 0'	Total/NA	Solid	8015NM Prep	
885-1445-2	BH24-12 2'	Total/NA	Solid	8015NM Prep	
885-1445-3	BH24-13 2'	Total/NA	Solid	8015NM Prep	
885-1445-4	BH24-13 3.5'	Total/NA	Solid	8015NM Prep	
885-1445-5	BH24-14 2'	Total/NA	Solid	8015NM Prep	
885-1445-6	BH24-14 3'	Total/NA	Solid	8015NM Prep	
885-1445-7	BH24-15 2'	Total/NA	Solid	8015NM Prep	
885-1445-8	BH24-15 3'	Total/NA	Solid	8015NM Prep	

Eurofins Albuquerque

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Job ID: 885-1445-1

Client: Vertex Project/Site: JRU DI2

GC Semi VOA (Continued)

Prep Batch: 76213 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1445-9	BH24-16 0'	Total/NA	Solid	8015NM Prep	
885-1445-10	BH24-16 2'	Total/NA	Solid	8015NM Prep	
MB 880-76213/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-76213/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-76213/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
885-1445-8 MS	BH24-15 3'	Total/NA	Solid	8015NM Prep	
885-1445-8 MSD	BH24-15 3'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 76256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1445-1	BH24-12 0'	Total/NA	Solid	8015B NM	76213
885-1445-2	BH24-12 2'	Total/NA	Solid	8015B NM	76213
885-1445-3	BH24-13 2'	Total/NA	Solid	8015B NM	76213
885-1445-4	BH24-13 3.5'	Total/NA	Solid	8015B NM	76213
885-1445-5	BH24-14 2'	Total/NA	Solid	8015B NM	76213
885-1445-6	BH24-14 3'	Total/NA	Solid	8015B NM	76213
885-1445-7	BH24-15 2'	Total/NA	Solid	8015B NM	76213
885-1445-8	BH24-15 3'	Total/NA	Solid	8015B NM	76213
885-1445-9	BH24-16 0'	Total/NA	Solid	8015B NM	76213
885-1445-10	BH24-16 2'	Total/NA	Solid	8015B NM	76213
MB 880-76213/1-A	Method Blank	Total/NA	Solid	8015B NM	76213
LCS 880-76213/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	76213
LCSD 880-76213/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	76213
885-1445-8 MS	BH24-15 3'	Total/NA	Solid	8015B NM	76213
885-1445-8 MSD	BH24-15 3'	Total/NA	Solid	8015B NM	76213

HPLC/IC

Leach Batch: 76153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1445-1	BH24-12 0'	Soluble	Solid	DI Leach	
885-1445-2	BH24-12 2'	Soluble	Solid	DI Leach	
885-1445-3	BH24-13 2'	Soluble	Solid	DI Leach	
885-1445-4	BH24-13 3.5'	Soluble	Solid	DI Leach	
885-1445-5	BH24-14 2'	Soluble	Solid	DI Leach	
885-1445-6	BH24-14 3'	Soluble	Solid	DI Leach	
885-1445-7	BH24-15 2'	Soluble	Solid	DI Leach	
885-1445-8	BH24-15 3'	Soluble	Solid	DI Leach	
885-1445-9	BH24-16 0'	Soluble	Solid	DI Leach	
885-1445-10	BH24-16 2'	Soluble	Solid	DI Leach	
MB 880-76153/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-76153/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-76153/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-1445-1 MS	BH24-12 0'	Soluble	Solid	DI Leach	
885-1445-1 MSD	BH24-12 0'	Soluble	Solid	DI Leach	

Analysis Batch: 76212

Lab Sample ID 885-1445-1	Client Sample ID BH24-12 0'	Prep Type Soluble	Matrix Solid	Method 300.0	Prep Batch 76153
885-1445-2	BH24-12 2'	Soluble	Solid	300.0	76153
885-1445-3	BH24-13 2'	Soluble	Solid	300.0	76153

Eurofins Albuquerque

Job ID: 885-1445-1

Client: Vertex Project/Site: JRU DI2

HPLC/IC (Continued)

Analysis Batch: 76212 (Continued)

_ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
385-1445-4	BH24-13 3.5'	Soluble	Solid	300.0	76153	
385-1445-5	BH24-14 2'	Soluble	Solid	300.0	76153	5
385-1445-6	BH24-14 3'	Soluble	Solid	300.0	76153	
385-1445-7	BH24-15 2'	Soluble	Solid	300.0	76153	
385-1445-8	BH24-15 3'	Soluble	Solid	300.0	76153	-
85-1445-9	BH24-16 0'	Soluble	Solid	300.0	76153	7
85-1445-10	BH24-16 2'	Soluble	Solid	300.0	76153	
/IB 880-76153/1-A	Method Blank	Soluble	Solid	300.0	76153	8
.CS 880-76153/2-A	Lab Control Sample	Soluble	Solid	300.0	76153	
.CSD 880-76153/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	76153	9
85-1445-1 MS	BH24-12 0'	Soluble	Solid	300.0	76153	
385-1445-1 MSD	BH24-12 0'	Soluble	Solid	300.0	76153	

Job ID: 885-1445-1
Client: Vertex

Project/Site: JRU DI2

Lab Sample ID: 885-1445-1

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

Lab Sample ID: 885-1445-3

Lab Sample ID: 885-1445-4

Client Sample ID: BH24-12 0' Date Collected: 03/15/24 10:00 Date Received: 03/20/24 08:00

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76244	MNR	EET MID	03/21/24 16:32
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/22/24 22:36
Total/NA	Prep	8015NM Prep			76213	EL	EET MID	03/21/24 13:43
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 20:59
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27
Soluble	Analysis	300.0		5	76212	SMC	EET MID	03/21/24 14:07

Client Sample ID: BH24-12 2' Date Collected: 03/15/24 10:15 Date Received: 03/20/24 08:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76244	MNR	EET MID	03/21/24 16:32
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/22/24 22:56
Total/NA	Prep	8015NM Prep			76213	EL	EET MID	03/21/24 13:43
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 21:21
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27
Soluble	Analysis	300.0		1	76212	SMC	EET MID	03/21/24 14:21

Client Sample ID: BH24-13 2' Date Collected: 03/15/24 10:45 Date Received: 03/20/24 08:00

	Batch	Batch		Dilution	Batch			Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed		
Total/NA	Prep	5035			76244	MNR	EET MID	03/21/24 16:32		
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/22/24 23:17		
Total/NA	Prep	8015NM Prep			76213	EL	EET MID	03/21/24 13:43		
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 21:41		
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27		
Soluble	Analysis	300.0		1	76212	SMC	EET MID	03/21/24 14:26		

Client Sample ID: BH24-13 3.5' Date Collected: 03/15/24 11:00 Date Received: 03/20/24 08:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76244	MNR	EET MID	03/21/24 16:32
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/22/24 23:37
Total/NA	Prep	8015NM Prep			76213	EL	EET MID	03/21/24 13:43
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 22:02
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27
Soluble	Analysis	300.0		1	76212	SMC	EET MID	03/21/24 14:31

Client Sample ID: BH24-14 2'

Batch

Туре

Prep

Prep

Analysis

Analysis

Analysis

Leach

Batch

5035

8021B

8015NM Prep

8015B NM

DI Leach

300.0

Method

Date Collected: 03/15/24 11:15

Date Received: 03/20/24 08:00

Client: Vertex

Ргер Туре

Total/NA

Total/NA

Total/NA

Total/NA

Soluble

Soluble

Project/Site: JRU DI2

Batch

Number Analyst

76244 MNR

76263 MNR

76213 EL

76256 SM

76153 SA

76212 SMC

Lab

EET MID

EET MID

EET MID

EET MID

EET MID

EET MID

Dilution

Run

Factor

1

1

1

Lab Sample ID: 885-1445-5

Prepared

or Analyzed

03/21/24 16:32

03/22/24 23:58

03/21/24 13:43

03/22/24 22:28

03/21/24 08:27

03/21/24 14:36

Lab Sample ID: 885-1445-6

Matrix: Solid

Matrix: Solid

Client Sample ID: BH24-14 3' Date Collected: 03/15/24 11:30 Date Received: 03/20/24 08:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76244	MNR	EET MID	03/21/24 16:32
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/23/24 00:18
Total/NA	Prep	8015NM Prep			76213	EL	EET MID	03/21/24 13:43
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 22:49
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27
Soluble	Analysis	300.0		1	76212	SMC	EET MID	03/21/24 14:50

Client Sample ID: BH24-15 2' Date Collected: 03/15/24 12:00 Date Received: 03/20/24 08:00

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76244	MNR	EET MID	03/21/24 16:32
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/23/24 00:38
Total/NA	Prep	8015NM Prep			76213	EL	EET MID	03/21/24 13:43
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 23:10
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27
Soluble	Analysis	300.0		1	76212	SMC	EET MID	03/21/24 14:55

Client Sample ID: BH24-15 3' Date Collected: 03/15/24 12:15 Date Received: 03/20/24 08:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76244	MNR	EET MID	03/21/24 16:32
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/23/24 00:59
Total/NA	Prep	8015NM Prep			76213	EL	EET MID	03/21/24 13:43
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 19:57
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27
Soluble	Analysis	300.0		1	76212	SMC	EET MID	03/21/24 15:00

Lab Sample ID: 885-1445-7 Matrix: Solid

Lab Sample ID: 885-1445-8

Matrix: Solid

Eurofins Albuquerque

Released to Imaging: 7/31/2024 2:57:32 PM

Matrix: Solid

Job ID: 885-1445-1

Client: Vertex Project/Site: JRU DI2

Client Sample ID: BH24-16 0' Date Collected: 03/15/24 12:30 Date Received: 03/20/24 08:00

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76244	MNR	EET MID	03/21/24 16:32
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/23/24 01:19
Total/NA	Prep	8015NM Prep			76213	EL	EET MID	03/21/24 13:43
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 23:32
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27
Soluble	Analysis	300.0		1	76212	SMC	EET MID	03/21/24 15:04

Client Sample ID: BH24-16 2' Date Collected: 03/15/24 12:45 Date Received: 03/20/24 08:00

Lab Sample ID: 885-1445-10 Matrix: Solid

Lab Sample ID: 885-1445-9

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8

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76244	MNR	EET MID	03/21/24 16:32
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/23/24 03:02
Total/NA	Prep	8015NM Prep			76213	EL	EET MID	03/21/24 13:43
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 23:53
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27
Soluble	Analysis	300.0		1	76212	SMC	EET MID	03/21/24 15:09

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Accreditation/Certification Summary

Client: Vertex Project/Site: JRU DI2

Laboratory: Eurofins Midland

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

Authority
TexasProgram
NELAPIdentification Number
T104704400-23-26Expiration Date
06-30-2446789

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Job ID: 885-1445-1

Method Summary

Client: Vertex Project/Site: JRU DI2

Job ID: 885-1445-1

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Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID
Protocol Ref	erences:		
ASTM = A	STM International		
EPA = US	Environmental Protection Agency		
SW846 =	"Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Th	ird Edition, November 1986 And Its Update	÷S.

ENVTRONMENTAI			37109	885-1445 COC			∋sdA\l	uəsi				S) 071														1024 Cruter # 1083351001		analidinal ranad
		www.hallenvironmental.com	4901 Hawkins NE - Albuquerg	Tel. 505-345-3975 Fax 50	Analysis Request	(0)	SO4, 5 SMIS SMS SMS SMS SMS S SMS S S S S S S	סצמ 1 280 1)	V () 504. 5180 5180 5180 5180 5180 5180 5180 5180	иО ³ эtаl3 310 210 (СЕ	15D etho y 83 8 Me 7 Me	08:H9 99 180 (M) 80 (M) 80 (M) 80 8 (M) 80 8 (M) 80 (V) 080	11P 80 80 82											Remarks: Report to Sear Atai a Nortex, Ca	cc. www.adle,sh a vertex .ca	Direct Rin XTD rost		. oossibi
Time:	Z Rush 5 DAM	JRN OI 2		ε ² οω 65	Cest Center H [08225100]	Project Manager. Sa 115 Carittai	lettex.ca	att Undleich	On loe: Mr Yes DNo	1 ton	Cooler Temp(including cF): ひ、3 ィウ こつ、3 、 (⁶ C)	Preservative HEAL No.	Type		-1 -1	- 3	۲ ۱	- 5	٩	۲	-8	- 9	-10	Via Date Time	3/19/24	Date Time	1eu 0500	ccredited laboratories This serves as notice of this possibi
Turn-Around T	Z Standard	Project Name:		Project #: 23 ξ 2060 b 5	Cost center	Project Mana			On Ice:	# of Coolers:	Cooler Temp(Container	#	40252									7	Received by	CMMMMM -	Received by	Cm C	subcontracted to other ac
Chain-of-Custody Record	x cXto)		Ontile			7							Matrix Sample Name	501) BH24-12 0'	1 BH24-12 2'	8#24-13 2'	BH 24-13 3.5'	2 \$1-17-18 BA245	BH24-14 3'	3H24-15 2'	BH24-15 3'	(BH24-16 0'	1 8424-16 2'	 Relinquished by <i>נאנול נט</i> ו		Relinquished by	alumen)	if necessary samples submitted to Hall Environmental may be subcontracted to other accredited laboratories
Chain-	Client: UCT+CX		Mailing Address: Onfile		Phone #:	email or Fax#.	QA/QC Package			ype)			Time	10 00	S [26	10.45	[1:00	51.13	/ //:30	12;00	12,15	12:30	A BEAS	Date, Time I	Sola/24 930	Time		i neesees j

Login Sample Receipt Checklist

Client: Vertex

<6mm (1/4").

Login Number: 1445 List Number: 1 Creator: Proctor, Nancy

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

12

Job Number: 885-1445-1

List Source: Eurofins Albuquerque

Job Number: 885-1445-1

List Source: Eurofins Midland

List Creation: 03/21/24 10:45 AM

Login Sample Receipt Checklist

Client: Vertex

<6mm (1/4").

Login Number: 1445 List Number: 2 Creator: Rodriguez, Leticia

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	N/A	

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 3/26/2024 6:00:06 PM

JOB DESCRIPTION

JRU DI2

JOB NUMBER

885-1450-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

See page two for job notos and contact information

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 3/26/2024 6:00:06 PM

Authorized for release by Andy Freeman, Business Unit Manager

andy.freeman@et.eurofinsus.com

(505)345-3975

Laboratory Job ID: 885-1450-1

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Lab Chronicle	13
Certification Summary	14
Method Summary	15
Chain of Custody	16
Receipt Checklists	17

RL

RPD

TEF

TEQ

TNTC

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	Dominione, crocoary		
Client: Vertex Project/Site:		Job ID: 885-1450-1	2
Qualifiers			2
GC Semi VO	Δ		3
Qualifier	Qualifier Description		
S1+	Surrogate recovery exceeds control limits, high biased.		
Glossary			5
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		0
CNF	Contains No Free Liquid		Ō
DER	Duplicate Error Ratio (normalized absolute difference)		
Dil Fac	Dilution Factor		9
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)		
D 1			

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Reporting Limit or Requested Limit (Radiochemistry)

Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

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

Case Narrative

Client: Vertex Project: JRU DI2

Job ID: 885-1450-1

Eurofins Albuquerque

Job ID: 885-1450-1

Job Narrative 885-1450-1

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 3/20/2024 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 0.3°C.

GC VOA

Method 8021B: The method blank for preparation batch 880-76266 and analytical batch 880-76263 contained Benzene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-76189 and analytical batch 880-76256 was outside the upper control limits.

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

HPLC/IC

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

Client Sample Results

RL

0.0020

0.0020

0.0020

0.0040

Limits

70 - 130

70 - 130

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

D

Prepared

Prepared

03/22/24 09:04 03/22/24 14:03

03/22/24 09:04 03/22/24 14:03

03/22/24 09:04 03/22/24 14:03

03/22/24 09:04 03/22/24 14:03

03/22/24 09:04 03/22/24 14:03

03/22/24 09:04 03/22/24 14:03

Client: Vertex Project/Site: JRU DI2

Analyte

Benzene

Toluene

Ethylbenzene

Xylenes, Total

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Surrogate

Client Sample ID: BH24-17 2' Date Collected: 03/18/24 10:00 Date Received: 03/20/24 08:00

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Job ID: 885-1450-1

Lab Sample ID: 885-1450-1 Matrix: Solid

Analyzed

Analyzed

Dil Fac	5
1	
1	
1	
1	
Dil Fac 1	8
1	9
Dil Fac	
1	
1	

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

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

Result Qualifier

ND

ND

ND

ND

%Recovery Qualifier

86

89

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		50	mg/Kg		03/21/24 10:51	03/22/24 17:29	1
(GRO)-C6-C10								
Diesel Range Organics (Over	ND		50	mg/Kg		03/21/24 10:51	03/22/24 17:29	1
C10-C28)								
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/21/24 10:51	03/22/24 17:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			03/21/24 10:51	03/22/24 17:29	1
o-Terphenyl	100		70 - 130			03/21/24 10:51	03/22/24 17:29	1
Surrogate 1-Chlorooctane	%Recovery 101	Qualifier	Limits 70 - 130			Prepared 03/21/24 10:51	Analyzed 03/22/24 17:29	Dil Fac 1 1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride 160 5.0 mg/Kg 03/21/24 15:14

Client Sample ID: BH24-17 4'

Date Collected: 03/18/24 10:15

Date Received: 03/20/24 08:00

Lab Sample ID: 885-1450-2 Matrix: Solid

Method: SW846 8021B - Vo	latile Organic Compo	unds (GC)					
Analyte	Result Qualifier	r RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	0.0020	mg/Kg		03/22/24 09:04	03/22/24 14:24	1
Toluene	ND	0.0020	mg/Kg		03/22/24 09:04	03/22/24 14:24	1
Ethylbenzene	ND	0.0020	mg/Kg		03/22/24 09:04	03/22/24 14:24	1
Xylenes, Total	ND	0.0040	mg/Kg		03/22/24 09:04	03/22/24 14:24	1
Surrogate	%Recovery Qualified	r Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90	70 - 130			03/22/24 09:04	03/22/24 14:24	1
1,4-Difluorobenzene (Surr)	89	70 - 130			03/22/24 09:04	03/22/24 14:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/21/24 10:51	03/22/24 17:51	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/21/24 10:51	03/22/24 17:51	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/21/24 10:51	03/22/24 17:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			03/21/24 10:51	03/22/24 17:51	1
o-Terphenyl	89		70 - 130			03/21/24 10:51	03/22/24 17:51	1

Client Sample Results

Job ID: 885-1450-1

Matrix: Solid

5

Lab Sample ID: 885-1450-2

Project/Site: JRU DI2 Client Sample ID: BH24-17 4' Date Collected: 03/18/24 10:15 Date Received: 03/20/24 08:00

Client: Vertex

Date Received: 05/20/24 00.0								
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	310	5.0	mg/Kg			03/21/24 15:29	1	

Job ID: 885-1450-1

Prep Type: Total/NA

Prep Type: Total/NA Prep Batch: 76266

Client Sample ID: Method Blank

03/22/24 09:04 03/22/24 11:39

Client Sample ID: Lab Control Sample

Client: Vertex Project/Site: JRU DI2

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-76266/5-A
Matrix: Solid

Analysis Batch: 76263

Analysis Batch: 76263							Prep Batch	76266
-	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		03/22/24 09:04	03/22/24 11:39	1
Toluene	ND		0.0020	mg/Kg		03/22/24 09:04	03/22/24 11:39	1
Ethylbenzene	ND		0.0020	mg/Kg		03/22/24 09:04	03/22/24 11:39	1
Xylenes, Total	ND		0.0040	mg/Kg		03/22/24 09:04	03/22/24 11:39	1
	MB	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130			03/22/24 09:04	03/22/24 11:39	1

70 - 130

4-Bromofluorobenzene (Surr)	71
1,4-Difluorobenzene (Surr)	100
-	

Lab Sample ID: LCS 880-76266/1-A Matrix: Solid Analysis Batch: 76263

· ···· ·	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.0917		mg/Kg		92	70 - 130	
Toluene	0.100	0.0974		mg/Kg		97	70 - 130	
Ethylbenzene	0.100	0.109		mg/Kg		109	70 - 130	
m-Xylene & p-Xylene	0.200	0.224		mg/Kg		112	70 - 130	
o-Xylene	0.100	0.109		mg/Kg		109	70 - 130	

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

Lab Sample ID: LCSD 880-76266/2-A Matrix: Solid Analysis Batch: 76263

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 76266

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.0899		mg/Kg		90	70 - 130	2	35
Toluene	0.100	0.0918		mg/Kg		92	70 - 130	6	35
Ethylbenzene	0.100	0.101		mg/Kg		101	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.206		mg/Kg		103	70 - 130	9	35
o-Xylene	0.100	0.100		mg/Kg		100	70 - 130	8	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

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

Lab Sample ID: MB 880-76189 Matrix: Solid Analysis Batch: 76256	/1 -A						le ID: Method Prep Type: To Prep Batch:	otal/NA
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/21/24 10:51	03/22/24 07:39	1

Eurofins Albuquerque

1

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Job ID: 885-1450-1

Client: Vertex Project/Site: JRU DI2

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

			. , ,								
Lab Sample ID: MB 880-761 Matrix: Solid	189/1-A							Client Sam			
									Prep Type		
Analysis Batch: 76256		3 MB							Prep Bat	ich:	1010
Analyta		t Qualifier	RL		Unit		_	Prepared	Apolyzor	4	
Analyte			KL 50			~	D		Analyzed		Dil Fa
Diesel Range Organics (Over C10-C28)	N)	50		mg/K	g		03/21/24 10:51	03/22/24 07	.39	
Oll Range Organics (Over C28-C36)) NE)	50		mg/K	a		03/21/24 10:51	03/22/24 07	':39	
					0	5					
	M										
Surrogate		Qualifier						Prepared	Analyzeo		Dil Fa
-Chlorooctane		5 S1+	70 - 130					03/21/24 10:51			
p-Terphenyl	18	8 S1+	70 - 130					03/21/24 10:51	03/22/24 07	:39	
ab Sample ID: I CS 880 76	490/2 4					CIL		Sample ID	Lob Contr		
Lab Sample ID: LCS 880-76	109/2-A					CIII	ent	Sample ID:			
Matrix: Solid									Prep Type		
Analysis Batch: 76256			Calles	1.00	1.00				Prep Bat	tcn:	/010
			Spike		LCS				%Rec		
Analyte			Added		Qualifier	Unit		<u>D</u> <u>%Rec</u>	Limits		
Gasoline Range Organics GRO)-C6-C10			1000	1080		mg/Kg		108	70 - 130		
Diesel Range Organics (Over			1000	1010		mg/Kg		101	70 - 130		
C10-C28)			1000	1010		iiig/itg		101	70-100		
	LCS LC										
Surrogate	%Recovery Qu	alifier	Limits								
1-Chlorooctane	112		70 - 130								
p-Terphenyl	127		70 - 130								
Lab Sample ID: LCSD 880-7	76180/2_4					liont S	211	ple ID: Lab	Control St	ampl	• D u
Matrix: Solid	0103/3-A					Shent S	an		Prep Type	_	
									Prep Bat		
Analysis Batch: 76256			Spike		LCSD				%Rec	icn.	RP
Analyte			Added		Qualifier	Unit		D %Rec		RPD	Lim
Gasoline Range Organics			1000	1160	Quaimer	mg/Kg		$-\frac{D}{-116}$	70 - 130	8	2
GRO)-C6-C10			1000	1100		mg/ng		110	70-130	0	2
Diesel Range Organics (Over			1000	1020		mg/Kg		102	70 - 130	1	2
C10-C28)						0 0					
	LCSD LC	הפי									
Surrogate	%Recovery Q		Limits								
1-Chlorooctane	110		70 - 130								
p-Terphenyl	124		70 - 130 70 - 130								
- respirenzi	127		10-150								
ethod: 300.0 - Anions,	Ion Chron	natogra	phy								
Lab Sample ID: MB 880-761	53/1-A							Client Sam	ole ID: Met	hod	Blan
Matrix: Solid									Prep Typ		
Analysis Batch: 76212									···/		
	ME	3 MB									
Analyte		t Qualifier	RL		Unit		D	Prepared	Analyzed	d	Dil Fa
							_	Tiepaieu	Analyzet	<u> </u>	5

03/21/24 13:52

Chloride

5.0

mg/Kg

ND

1

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5

6

Job ID: 885-1450-1

Client: Vertex Project/Site: JRU DI2

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS Matrix: Solid Analysis Batch: 7621						Clier	it Sai	npie iL): Lab Cor Prep Ty		
Analysis Datch. 7021	2		Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			250	239		mg/Kg		95	90 - 110		
Lab Sample ID: LCSI Matrix: Solid					C	Client Sa	mple	ID: Lal	b Control S Prep Ty		
Analysis Batch: 7621	2		0	1.000					0/ D		
Analysia			Spike Added	-	LCSD Qualifier	11	D	%Rec	%Rec Limits	RPD	RP
Analyte Chloride				238	Qualifier	Unit mg/Kg		% кес 95	90 - 110	0	Limi 2
Lab Sample ID: 885-1 Matrix: Solid Analysis Batch: 7621								Client	Sample ID Prep Ty		
		Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	160		252	434		mg/Kg		108	90 - 110		
Lab Sample ID: 885-1	450-1 MSD							Client	Sample ID	: BH24	-17 2
Matrix: Solid									Prep Ty	/pe: Sc	Jubl
Analysis Batch: 7621	2										
	Sample	Sample	Spike	MSD	MSD				%Rec		RP
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Lim
Chloride	160		252	433		mg/Kg		108	90 - 110	0	2

QC Association Summary

Client: Vertex Project/Site: JRU DI2

GC VOA

Analysis Batch: 76263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1450-1	BH24-17 2'	Total/NA	Solid	8021B	76266
885-1450-2	BH24-17 4'	Total/NA	Solid	8021B	76266
MB 880-76266/5-A	Method Blank	Total/NA	Solid	8021B	76266
LCS 880-76266/1-A	Lab Control Sample	Total/NA	Solid	8021B	76266
LCSD 880-76266/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	76266
Prep Batch: 76266	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-1450-1	BH24-17 2'	Total/NA	Solid	5035	
885-1450-2	BH24-17 4'	Total/NA	Solid	5035	
MB 880-76266/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-76266/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-76266/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 76189

Lab Sample ID 885-1450-1	Client Sample ID BH24-17 2'	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
885-1450-2	BH24-17 4'	Total/NA	Solid	8015NM Prep	
MB 880-76189/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-76189/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-76189/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 76256

Lab Sample ID 885-1450-1	Client Sample ID BH24-17 2'	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 76189
885-1450-2	BH24-17 4'	Total/NA	Solid	8015B NM	76189
MB 880-76189/1-A	Method Blank	Total/NA	Solid	8015B NM	76189
LCS 880-76189/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	76189
LCSD 880-76189/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	76189

HPLC/IC

Leach Batch: 76153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1450-1	BH24-17 2'	Soluble	Solid	DI Leach	
885-1450-2	BH24-17 4'	Soluble	Solid	DI Leach	
MB 880-76153/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-76153/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-76153/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-1450-1 MS	BH24-17 2'	Soluble	Solid	DI Leach	
885-1450-1 MSD	BH24-17 2'	Soluble	Solid	DI Leach	

Analysis Batch: 76212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1450-1	BH24-17 2'	Soluble	Solid	300.0	76153
885-1450-2	BH24-17 4'	Soluble	Solid	300.0	76153
MB 880-76153/1-A	Method Blank	Soluble	Solid	300.0	76153
LCS 880-76153/2-A	Lab Control Sample	Soluble	Solid	300.0	76153
LCSD 880-76153/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	76153
885-1450-1 MS	BH24-17 2'	Soluble	Solid	300.0	76153

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Job ID: 885-1450-1

QC Association Summary

	QU AS	sociation Summa	ar y			
Client: Vertex Project/Site: JRU DI2	2			Job	ID: 885-1450-1	
HPLC/IC (Contin	nued)				3	
Analysis Batch: 762	212 (Continued)					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
885-1450-1 MSD	BH24-17 2'	Soluble	Solid	300.0	76153 5	
					7	
					8	
					9	
						D
						2

Job ID: 885-1450-1

Client: Vertex Project/Site: JRU DI2

Client Sample ID: BH24-17 2' Date Collected: 03/18/24 10:00 Date Received: 03/20/24 08:00

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76266	MNR	EET MID	03/22/24 09:04
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/22/24 14:03
Total/NA	Prep	8015NM Prep			76189	ТКС	EET MID	03/21/24 10:51
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 17:29
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27
Soluble	Analysis	300.0		1	76212	SMC	EET MID	03/21/24 15:14

Client Sample ID: BH24-17 4' Date Collected: 03/18/24 10:15 Date Received: 03/20/24 08:00

Lab Sample ID:	885-1450-2
	Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76266	MNR	EET MID	03/22/24 09:04
Total/NA	Analysis	8021B		1	76263	MNR	EET MID	03/22/24 14:24
Total/NA	Prep	8015NM Prep			76189	ТКС	EET MID	03/21/24 10:51
Total/NA	Analysis	8015B NM		1	76256	SM	EET MID	03/22/24 17:51
Soluble	Leach	DI Leach			76153	SA	EET MID	03/21/24 08:27
Soluble	Analysis	300.0		1	76212	SMC	EET MID	03/21/24 15:29

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Lab Sample ID: 885-1450-1 Matrix: Solid **Accreditation/Certification Summary**

Client: Vertex Project/Site: JRU DI2

Laboratory: Eurofins Midland

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

AuthorityProgramIdentification NumberExpiration DateTexasNELAPT104704400-23-2606-30-24

Method Summary

Client: Vertex . מום נוסו Job ID: 885-1450-1

Page	203	of 400

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID
Protocol Ref			
	STM International		
	Environmental Protection Agency		
500846 =	"Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edi	tion, November 1986 And its Update	35.
Laboratory F	References:		
EET MID	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440		

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Received by OCD: 7/15/2024 2:12:50 PM

Login Sample Receipt Checklist

Client: Vertex

<6mm (1/4").

Login Number: 1450 List Number: 1 Creator: Proctor, Nancy

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

12

Job Number: 885-1450-1

List Source: Eurofins Albuquerque

Job Number: 885-1450-1

List Source: Eurofins Midland

List Creation: 03/21/24 10:45 AM

Login Sample Receipt Checklist

Client: Vertex

<6mm (1/4").

Login Number: 1450 List Number: 2 Creator: Rodriguez, Leticia

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	N/A	

12

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 3/26/2024 2:39:26 PM

JOB DESCRIPTION

JRU DI 2

JOB NUMBER

885-1547-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

See page two for job notos and contact information



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5 6

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

andy.freeman@et.eurofinsus.com

Authorized for release by

(505)345-3975

Generated 3/26/2024 2:39:26 PM

Andy Freeman, Business Unit Manager

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Chain of Custody	16
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Definitions/Glossary

Client: Vertex Project/Site: JRU DI 2 Job ID: 885-1547-1

Project/Site:	JRU DI 2	
Qualifiers		3
GC VOA Qualifier	Qualifier Description	1
S1-	Surrogate recovery exceeds control limits, low biased.	
GC Semi VO		5
Qualifier	Qualifier Description	
S1+	Surrogate recovery exceeds control limits, high biased.	6
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	8
%R	Percent Recovery	U
CFL	Contains Free Liquid	Q
CFU	Colony Forming Unit	3
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)	
TEO		

Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

TEQ

TNTC

Case Narrative

Client: Vertex Project: JRU DI 2

Job ID: 885-1547-1

Eurofins Albuquerque

Job ID: 885-1547-1

Job Narrative 885-1547-1

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 3/21/2024 8:50 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 1.0°C.

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-76480 and analytical batch 880-76413 was outside the control limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-76284 and analytical batch 880-76378 was outside the upper control limits.

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

HPLC/IC

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

Client Sample Results

RL

0.0020

0.0020

0.0020

0.0040

0.0020

0.0040

Limits

70 - 130

70 - 130

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

D

Prepared

Prepared

03/25/24 12:10 03/25/24 12:37

03/25/24 12:10 03/25/24 12:37

03/25/24 12:10 03/25/24 12:37

03/25/24 12:10 03/25/24 12:37

03/25/24 12:10 03/25/24 12:37

03/25/24 12:10 03/25/24 12:37

03/25/24 12:10 03/25/24 12:37

03/25/24 12:10 03/25/24 12:37

Client: Vertex Project/Site: JRU DI 2

Analyte

Benzene

Toluene

o-Xylene

Surrogate

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Client Sample ID: BH24-21 0' Date Collected: 03/19/24 10:00 Date Received: 03/21/24 08:50

	10	005	

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Dil Fac

1

1

1

1

1

1

1

1

Dil Fac

Job ID: 885-1547-1

Lab Sample ID: 885-1547-1 Matrix: Solid

Analyzed

Analyzed

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

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

Result Qualifier

ND

ND

ND

ND

ND

ND

%Recovery Qualifier

87

85

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/22/24 10:57	03/24/24 03:03	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/22/24 10:57	03/24/24 03:03	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/22/24 10:57	03/24/24 03:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			03/22/24 10:57	03/24/24 03:03	1
o-Terphenyl	88		70 - 130			03/22/24 10:57	03/24/24 03:03	1

Method: EPA 300.0 - Anions, Id	on Chromat	ography -	Soluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	750		5.0	mg/Kg			03/22/24 22:53	1

Client Sample ID: BH24-21 2' Date Collected: 03/19/24 10:15 Date Received: 03/21/24 08:50

Mathedu CM/04C 0004D Malatile Ormania C

Lab Sample ID: 885-1547-2 Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		03/25/24 12:10	03/25/24 13:04	1
Toluene	ND		0.0020	mg/Kg		03/25/24 12:10	03/25/24 13:04	1
Ethylbenzene	ND		0.0020	mg/Kg		03/25/24 12:10	03/25/24 13:04	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		03/25/24 12:10	03/25/24 13:04	1
o-Xylene	ND		0.0020	mg/Kg		03/25/24 12:10	03/25/24 13:04	1
Xylenes, Total	ND		0.0040	mg/Kg		03/25/24 12:10	03/25/24 13:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130			03/25/24 12:10	03/25/24 13:04	1
1,4-Difluorobenzene (Surr)	89		70 - 130			03/25/24 12:10	03/25/24 13:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/22/24 10:57	03/24/24 03:24	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/22/24 10:57	03/24/24 03:24	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/22/24 10:57	03/24/24 03:24	1

5

Client Sample Results

Client: Vertex Project/Site: JRU DI 2 Job ID: 885-1547-1

Client Sample ID: BH24-21 2' Lab Sample ID: 885-1547-2 Date Collected: 03/19/24 10:15 Matrix: Solid Date Received: 03/21/24 08:50 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 105 70 - 130 03/22/24 10:57 03/24/24 03:24 1 o-Terphenyl 95 70 - 130 03/22/24 10:57 03/24/24 03:24 1 Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Analyte Unit RL D Prepared Analyzed Dil Fac 5.0 Chloride 370 mg/Kg 03/22/24 22:58 1

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 76480

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client: Vertex Project/Site: JRU DI 2

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-76480/5-A **Matrix: Solid**

Analysis Batch: 76413

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		03/25/24 08:00	03/25/24 11:58	1
Toluene	ND		0.0020	mg/Kg		03/25/24 08:00	03/25/24 11:58	1
Ethylbenzene	ND		0.0020	mg/Kg		03/25/24 08:00	03/25/24 11:58	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		03/25/24 08:00	03/25/24 11:58	1
o-Xylene	ND		0.0020	mg/Kg		03/25/24 08:00	03/25/24 11:58	1
Xylenes, Total	ND		0.0040	mg/Kg		03/25/24 08:00	03/25/24 11:58	1
	MB	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	54	S1-	70 - 130			03/25/24 08:00	03/25/24 11:58	1
1,4-Difluorobenzene (Surr)	88		70 - 130			03/25/24 08:00	03/25/24 11:58	1

Lab Sample ID: LCS 880-76480/1-A Matrix: Solid Analysis Batch: 76413

Analysis Batch: 76413							Prep Batch: 76480
	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.105		mg/Kg		105	70 - 130
Toluene	0.100	0.113		mg/Kg		113	70 - 130
Ethylbenzene	0.100	0.106		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.213		mg/Kg		107	70 - 130
o-Xylene	0.100	0.106		mg/Kg		106	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-76480/2-A Matrix: Solid

Analysis Batch: 76413

Analysis Batch: 76413							Prep E	-	
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.103		mg/Kg		103	70 - 130	2	35
Toluene	0.100	0.114		mg/Kg		114	70 - 130	1	35
Ethylbenzene	0.100	0.107		mg/Kg		107	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.217		mg/Kg		109	70 - 130	2	35
o-Xylene	0.100	0.108		mg/Kg		108	70 - 130	2	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 885-1547-1 MS Matrix: Solid

Analysis Batch: 76413

Analysis Batch: 76413									Prep I	Batch: 76480
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		0.100	0.0999		mg/Kg		99	70 - 130	
Toluene	ND		0.100	0.109		mg/Kg		107	70 - 130	

Eurofins Albuquerque

Prep Type: Total/NA

Client Sample ID: BH24-21 0'

Released to Imaging: 7/31/2024 2:57:32 PM

Job ID: 885-1547-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: 885-1547 Matrix: Solid	′-1 MS						(Client S	Sample ID Prep Ty		
Analysis Batch: 76413	Sample	Sample	Spike	MS	MS				Prep E %Rec	Batch: 7	7 6 480
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Ethylbenzene	ND		0.100	0.107		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene	ND		0.200	0.217		mg/Kg		108	70 - 130		
o-Xylene	ND		0.100	0.106		mg/Kg		106	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	89		70 - 130								
1,4-Difluorobenzene (Surr)	98		70 - 130								
	-1 MSD						•	Client S	Sample ID Prep Ty		
Lab Sample ID: 885-1547 Matrix: Solid Analysis Batch: 76413	′-1 MSD							Client S	Prep Ty		al/NA
Matrix: Solid		Sample	Spike	MSD	MSD			Client S	Prep Ty	pe: Tot	al/NA 76480
Matrix: Solid Analysis Batch: 76413	Sample	Sample Qualifier	Spike Added	-	MSD Qualifier	Unit	D	Client S	Prep Ty Prep E	pe: Tot	al/NA 76480 RPD
Matrix: Solid Analysis Batch: 76413 Analyte	Sample	•	•	-	-	Unit mg/Kg			Prep Ty Prep E %Rec	pe: Tot Batch: 7	al/NA
Matrix: Solid Analysis Batch: 76413 Analyte Benzene	Sample Result	•	Added	Result	-			%Rec	Prep Ty Prep B %Rec Limits	pe: Tot Batch: 7 	tal/NA 76480 RPD Limit 35
Matrix: Solid Analysis Batch: 76413 Analyte Benzene Toluene	Sample ND	•	Added	Result 0.104	-	mg/Kg		%Rec 103	Prep Ty Prep E %Rec Limits 70 - 130	pe: Tot Batch: 7 RPD 4	al/NA 76480 RPD Limit 35 35
Matrix: Solid Analysis Batch: 76413 Analyte Benzene Toluene Ethylbenzene	Sample Result ND ND	•	Added	Result 0.104 0.118	-	mg/Kg mg/Kg		%Rec 103 116	Prep Ty Prep E %Rec Limits 70 - 130 70 - 130	pe: Tot Batch: 7 RPD 4 8	tal/NA 76480 RPD Limit 35 35
Matrix: Solid	Sample Result ND ND ND	•	Added 0.100 0.100 0.100 0.100	Result 0.104 0.118 0.114	-	mg/Kg mg/Kg mg/Kg		%Rec 103 116 114	Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130	pe: Tot Batch: 7 RPD 4 8 7	al/NA 76480 RPD Limit 35 35 35 35
Matrix: Solid Analysis Batch: 76413 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	Sample Result ND ND ND ND	Qualifier	Added 0.100 0.100 0.100 0.200	Result 0.104 0.118 0.114 0.233	-	mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 103 116 114 117	Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	pe: Tot Batch: 7 4 8 7 7	al/NA 76480 RPD Limit
Matrix: Solid Analysis Batch: 76413 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	Sample Result ND ND ND ND ND	Qualifier MSD	Added 0.100 0.100 0.100 0.200	Result 0.104 0.118 0.114 0.233	-	mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 103 116 114 117	Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	pe: Tot Batch: 7 4 8 7 7	al/NA 76480 RPD Limit 35 35 35 35
Matrix: Solid Analysis Batch: 76413 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene	Sample Result ND ND ND ND ND ND	Qualifier	Added 0.100 0.100 0.100 0.200 0.100	Result 0.104 0.118 0.114 0.233	-	mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 103 116 114 117	Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	pe: Tot Batch: 7 4 8 7 7	al/NA 76480 RPD Limit 35 35 35 35

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

Lab Sample ID: MB 880-76284/1-A Matrix: Solid Analysis Batch: 76378

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		03/22/24 10:57	03/23/24 19:37	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		03/22/24 10:57	03/23/24 19:37	1
Oll Range Organics (Over C28-C36)	ND		50	mg/Kg		03/22/24 10:57	03/23/24 19:37	1
	MB	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	152	S1+	70 - 130			03/22/24 10:57	03/23/24 19:37	1
o Torphonyl	110	C1+	70 120			02/22/24 10.57	02/22/24 10.27	1

5		-	
1-Chlorooctane	152	S1+	70 - 130
o-Terphenyl	142	S1+	70 - 130

Lab Sample ID: LCS 880-76284/2-A Matrix: Solid Analysia Potaby 76279

Analysis Batch: 76378							Prep E	Batch: 76284
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1060		mg/Kg		106	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	937		mg/Kg		94	70 - 130	
C10-C28)								

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Prep Type: Total/NA

Client Sample ID: Method Blank

03/22/24 10:57 03/23/24 19:37

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 76284

1

Job ID: 885-1547-1

Prep Type: Total/NA Prep Batch: 76284

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: LCS 880-76284/2-A
Matrix: Solid
Analysis Batch: 76378

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: LCSD 880-76284/3-A Matrix: Solid

Matrix: Solid Analysis Batch: 76378							÷.		Prep Ty Prep E	pe: Tot Batch: 7	
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1090		mg/Kg		109	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	992		mg/Kg		99	70 - 130	6	20
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	87		70 - 130								
o-Terphenyl	89		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-76321/1-A Matrix: Solid Analysis Batch: 76356								Clie	ent Sam	ple ID: M Prep Ty		
	MB	MB										
Analyte	Result	Qualifier		RL		Unit		D P	repared	Analyz	zed	Dil Fac
Chloride	ND			5.0		mg/K	g			03/22/24	20:43	1
Lab Sample ID: LCS 880-76321/2-/ Matrix: Solid Analysis Batch: 76356							Clie	ent Sa	mple ID	: Lab Cor Prep Ty		
			Spike		LCS	LCS				%Rec		
Analyte			Added		Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			250		235		mg/Kg		94	90 - 110		
Lab Sample ID: LCSD 880-76321/3 Matrix: Solid Analysis Batch: 76356	-A					C	Client S	ample	ID: Lab	Control Prep Ty		
····· , ··· ····			Spike		LCSD	LCSD				%Rec		RPD
Analyte			Added		Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250		236		mg/Kg		94	90 - 110	0	20
QC Association Summary

Client: Vertex Project/Site: JRU DI 2

GC VOA

Analysis Batch: 76413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1547-1	BH24-21 0'	Total/NA	Solid	8021B	76480
885-1547-2	BH24-21 2'	Total/NA	Solid	8021B	76480
MB 880-76480/5-A	Method Blank	Total/NA	Solid	8021B	76480
LCS 880-76480/1-A	Lab Control Sample	Total/NA	Solid	8021B	76480
LCSD 880-76480/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	76480
885-1547-1 MS	BH24-21 0'	Total/NA	Solid	8021B	76480
885-1547-1 MSD	BH24-21 0'	Total/NA	Solid	8021B	76480

Prep Batch: 76480

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-1547-1	BH24-21 0'	Total/NA	Solid	5035	
885-1547-2	BH24-21 2'	Total/NA	Solid	5035	
MB 880-76480/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-76480/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-76480/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
885-1547-1 MS	BH24-21 0'	Total/NA	Solid	5035	
885-1547-1 MSD	BH24-21 0'	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 76284

Lab Sample ID 885-1547-1	Client Sample ID BH24-21 0'	Prep Type Total/NA	Matrix Solid	Method Prep 8015NM Prep	Batch
885-1547-2	BH24-21 2'	Total/NA	Solid	8015NM Prep	
MB 880-76284/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-76284/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-76284/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 76378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-1547-1	BH24-21 0'	Total/NA	Solid	8015B NM	76284
885-1547-2	BH24-21 2'	Total/NA	Solid	8015B NM	76284
MB 880-76284/1-A	Method Blank	Total/NA	Solid	8015B NM	76284
LCS 880-76284/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	76284
LCSD 880-76284/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	76284

HPLC/IC

Leach Batch: 76321

Lab Sample ID 885-1547-1	Client Sample ID BH24-21 0'	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
885-1547-2	BH24-21 2'	Soluble	Solid	DI Leach	
MB 880-76321/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-76321/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-76321/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 76356

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-1547-1	BH24-21 0'	Soluble	Solid	300.0	76321
885-1547-2	BH24-21 2'	Soluble	Solid	300.0	76321
MB 880-76321/1-A	Method Blank	Soluble	Solid	300.0	76321
LCS 880-76321/2-A	Lab Control Sample	Soluble	Solid	300.0	76321

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Job ID: 885-1547-1

QC Association Summary

Job ID: 885-1547-1

Client: Vertex Project/Site: JRU DI 2

HPLC/IC (Continued)

Analysis Batch: 76356 (Continued)

Analysis Batch: 763	56 (Continued)					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
LCSD 880-76321/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	76321	5
						7
						8
						9

Eurofins Albuquerque

Matrix: Solid

Project/Site: JRU DI 2

Client: Vertex

Client Sample ID: BH24-21 0' Date Collected: 03/19/24 10:00 Date Received: 03/21/24 08:50

	Batch	Batch		Dilution	Batch			Prepared
Prep Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76480	MNR	EET MID	03/25/24 12:10
Total/NA	Analysis	8021B		1	76413	MNR	EET MID	03/25/24 12:37
Total/NA	Prep	8015NM Prep			76284	EL	EET MID	03/22/24 10:57
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/24/24 03:03
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 22:53

Client Sample ID: BH24-21 2' Date Collected: 03/19/24 10:15 Date Received: 03/21/24 08:50

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5035			76480	MNR	EET MID	03/25/24 12:10
Total/NA	Analysis	8021B		1	76413	MNR	EET MID	03/25/24 13:04
Total/NA	Prep	8015NM Prep			76284	EL	EET MID	03/22/24 10:57
Total/NA	Analysis	8015B NM		1	76378	SM	EET MID	03/24/24 03:24
Soluble	Leach	DI Leach			76321	SMC	EET MID	03/22/24 13:07
Soluble	Analysis	300.0		1	76356	SMC	EET MID	03/22/24 22:58

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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		Dilution	Batch			Prepared	
I	Run	Factor	Number	Analyst	Lab	or Analyzed	
			76480	MNR	EET MID	03/25/24 12:10	
		1	76413	MNR	EET MID	03/25/24 12:37	
/I Prep			76284	EL	EET MID	03/22/24 10:57	
M		1	76378	SM	EET MID	03/24/24 03:03	
h			76321	SMC	EET MID	03/22/24 13:07	
		1	76356	SMC	EET MID	03/22/24 22:53	
-							

Lab Sample ID: 885-1547-2 Matrix: Solid

Lab Sample ID: 885-1547-1

5

Accreditation/Certification Summary

Client: Vertex Project/Site: JRU DI 2

Laboratory: Eurofins Midland

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

AuthorityProgramIdentification NumberExpiration DateTexasNELAPT104704400-23-2606-30-24

Method Summary

Client: Vertex Project/Site: JRU DI 2 Page 221 of 400

lethod	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
0.00	Anions, Ion Chromatography	EPA	EET MID
6035	Closed System Purge and Trap	SW846	EET MID
015NM Prep	Microextraction	SW846	EET MID
01 Leach	Deionized Water Leaching Procedure	ASTM	EET MID
EPA = US	STM International Environmental Protection Agency 'Test Methods For Evaluating Solid Waste, Physical/Chemical Methods'	', Third Edition, November 1986 And Its Updat	es.
Laboratory F	References:		
EET MID :	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)	704-5440	

Eurofins Albuquerque

	hain	-of-C	Chain-of-Custody Record	ord	Turn-Around Time:	Time:					1	1	1			i		
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Received by OCD: 7/15/2024 2:12:50 PM

4901 Hawkins NE Albuquerque NM 87109 Phone 505-345-3975 Fax 505-345-4107	0	Chain of Custody Record	Custo	dy Re	cord											euro	🔅 eurofins		nviron	nent 1	Environment Testing	QD.
Client Information (Sub Contract Lab)	Sampler [.]			Lab PM Freema	Lab PM Freeman Andy					Carrier Tracking No(s)	racking	No(s)			88 C 0 280 0 280	COC No: 885-179 1	-					
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Company Eurofins Environment Testing South Centr				ZA	Accreditations Required (See note NELAP - Oregon NELAP -	Required	l (See no VELAP	.e) - Texas	State	State - New Mexico	Mexic	ö			Job #:	Job #: 885-1547-1	7					
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Phone 432-704-5440(Tel)	PO #				грн		_									MeOH Amchlor	Ť.		Na2S2O3 H2SO4 TSP Dode	Na2S2O3 H2SO4 FSP Dodecahydrate	drate	
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Project Name: JRU DI 2	Project # [.] 88501279			(Yes	599197551409									ainer		EDTA EDA		v ≺ ≶	pH 4-5 Trizma	, , ,		
Site:	SSOW#			ample							<u> </u>			Con	Other-	er:						
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Sample Identification - Client ID (Lab ID)	Sample Date	Sample () Time ()		(W=water S=solid O=waste/oil, BT=TIssue, A=Air)	Perform I 8015MOD_	8021B/503								Total Nurr		S	Special Instructions/Note	nstru	lction	s/Note	•	
	X		Preservation Code:	Code:	X							2				\mathbb{N}		$\ \ $	A	$\ $		and a
BH24-21 0' (885-1547-1)	3/19/24	Mountain		Solid	×	××													1		1	
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Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody if the laboratory does not currently maintain accreditation in the State of Origin listed abore for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC attention immediately if analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC attention immediately if all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC attention immediately if all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC attention immediately if all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC	t Testing South Centra ove for analysis/tests/ ntral LLC attention im	al LLC places the matrix being anal mediately If all r	ownership of m yzed the sample equested accred	nethod, analyte es must be sh ditations are cu	& accrediti pped back irrent to dat	ation corr to the Eu e return	pliance u rofins Env the signe	pon our s rironmen d Chain c	ubcontra t Testing if Custod	ict labon South C y attesti	atories. entral ng to sa	This s LLC lab id com	ample : oratory pliance	hipme or oth to Eur	nt is fo er instr ofins E	rwarde 'uctions nvironn	d under will be hent Tes	· chain⊣ provide sting Sc	of-custo ad Any outh Ce	idy Ifti change ntral LL	C to	
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3/26/2024

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Eurofins Albuquerque

11

Login Sample Receipt Checklist

Client: Vertex

<6mm (1/4").

Login Number: 1547 List Number: 1 Creator: Lowman, Nick

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

12

Job Number: 885-1547-1

List Source: Eurofins Albuquerque

Job Number: 885-1547-1

List Source: Eurofins Midland

List Creation: 03/22/24 10:45 AM

Login Sample Receipt Checklist

Client: Vertex

<6mm (1/4").

Login Number: 1547 List Number: 2 Creator: Kramer, Jessica

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

Eurofins Albuquerque Released to Imaging: 7/31/2024 2:57:32 PM

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 4/16/2024 4:07:45 PM

JOB DESCRIPTION

JRU DI 2

JOB NUMBER

885-2708-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

See page two for job notos and contact information

Eurofins Albuquerque

Job Notes

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

Authorization

Authorized for release by

(505)345-3975

Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com

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Definitions/Glossary

Client: Vertex

Job ID: 885-2708-1

Project/Site:		
Qualifiers		3
GC VOA Qualifier	Qualifier Description	
S1+	Surrogate recovery exceeds control limits, high biased.	
GC Semi VO	Δ	5
Qualifier	Qualifier Description	
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a	. 6
	dilution may be flagged with a D.	
S1-	Surrogate recovery exceeds control limits, low biased.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	5
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	c
%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 NC	Method Quantitation Limit Not Calculated	
ND		
NEG	Not Detected at the reporting limit (or MDL or EDL if shown) Negative / Absent	
POS	Positive / Present	
PQL	Proctical 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: 885-2708-1

Job ID: 885-2708-1

Eurofins Albuquerque

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Job Narrative 885-2708-1

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

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

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

Receipt

The samples were received on 4/11/2024 7:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C.

Gasoline Range Organics

Method 8015D_GRO: Internal standard responses were outside of acceptance limits for the following sample: BH24-12 2' (885-2708-2). The sample(s) shows evidence of matrix interference.

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

GC VOA

Method 8021B: Internal standard responses were outside of acceptance limits for the following sample: BH24-12 2' (885-2708-2). The sample(s) shows evidence of matrix interference.

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

Diesel Range Organics

Method 8015D_DRO: The following sample was diluted due to 1/20th, the nature of the sample matrix OR abundance of target analytes OR abundance of non-target analytes: BH24-12 2' (885-2708-2). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

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

HPLC/IC

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

Eurofins Albuquerque

Client Sample Results

Analyte

Benzene

Toluene

Ethylbenzene

Xylenes, Total

Surrogate

Client Sample ID: BH24-1 Date Collected: 04/09/24 15:00 Date Received: 04/11/24 07:50

4-Bromofluorobenzene (Surr)

Released to Imaging: 7/31/2024 2:57:32 PM	Page 6 of 14
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Client: Vertex Project/Site: JRU DI 2							Job ID: 885-	-2708-1	2
Client Sample ID: BH24-12	2 0'					Lab Samp	le ID: 885-2		3
Date Collected: 04/09/24 15:00							Matrix	x: Solid	
Date Received: 04/11/24 07:50									4
Method: SW846 8015D - Gaso	oline Range	Organics ((GRO) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	5
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/11/24 13:02	04/12/24 23:14	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	6
4-Bromofluorobenzene (Surr)	101		15 - 244			04/11/24 13:02	04/12/24 23:14	1	7
	ile Organic	Compound	ds (GC)						

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

D

Prepared

Prepared

04/11/24 13:02 04/12/24 23:14

04/11/24 13:02 04/12/24 23:14

04/11/24 13:02 04/12/24 23:14

04/11/24 13:02 04/12/24 23:14

04/11/24 13:02 04/12/24 23:14

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		04/11/24 14:31	04/12/24 19:36	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/11/24 14:31	04/12/24 19:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	120		62 - 134			04/11/24 14:31	04/12/24 19:36	1

RL

0.023

0.046

0.046

0.092

Limits

39 - 146

Result Qualifier

ND

ND

ND

ND

%Recovery Qualifier

86

Analyte	Result Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
Chloride	ND	60	mg/Kg	04/12/24 07:53	04/12/24 15:07	20

Dil Fac

1

1

1

1

1

Dil Fac

Analyzed

Analyzed

Client Sample Results

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BH24-12 2' Date Collected: 04/09/24 15:10

Method: SW846 8015D - Gaso	line Range	Organics ((GRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	200		4.8	mg/Kg		04/11/24 13:02	04/12/24 23:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	1851	S1+	15 - 244			04/11/24 13:02	04/12/24 23:37	1
	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/11/24 13:02	04/12/24 23:37	1
Ethylbenzene	0.74		0.048	mg/Kg		04/11/24 13:02	04/12/24 23:37	1
Toluene	ND		0.048	mg/Kg		04/11/24 13:02	04/12/24 23:37	1
Xylenes, Total	7.1		0.096	mg/Kg		04/11/24 13:02	04/12/24 23:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	222	S1+	39 - 146			04/11/24 13:02	04/12/24 23:37	1
	I Range Or	ganics (DF	RO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	10000		190	mg/Kg		04/11/24 14:31	04/12/24 15:10	20
Motor Oil Range Organics [C28-C40]	3500		940	mg/Kg		04/11/24 14:31	04/12/24 15:10	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	0	S1- D	62 - 134			04/11/24 14:31	04/12/24 15:10	20
	on Chroma	tography						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte								

Job ID: 885-2708-1

Matrix: Solid

Lab Sample ID: 885-2708-2

QC Sample Results

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5 6 7

Job ID: 885-2708-1

Client: Vertex Project/Site: JRU DI 2

Mothod: 8015D Gasolino Pango Organics (GPO) (GC)

Lab Sample ID: MB 885-31	24/1-A							Client Samp	le ID: Method	d Blank
Matrix: Solid									Prep Type: To	
Analysis Batch: 3291									Prep Batc	
	м	в мв								
Analyte	Resu	It Qualifier	RL		Unit		D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C1	0] N	D	5.0		mg/K	g	_	04/11/24 13:02	04/12/24 15:25	1
Surrogate	M %Recove		Limits					Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			<u></u>						04/12/24 15:25	
		0	10-211					04/1//21 10:02	0 11 12/2 1 10:20	,
Lab Sample ID: LCS 885-3	124/2-A					Cli	ent	Sample ID:	Lab Control	Sample
Matrix: Solid									Prep Type: To	otal/NA
Analysis Batch: 3291									Prep Batc	h: <mark>312</mark> 4
			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit		D %Rec	Limits	
Gasoline Range Organics [C6 -			25.0	25.5		mg/Kg		102	70 - 130	
C10]										
	LCS L	cs								
Surrogate	%Recovery Q	ualifier	Limits							
1 Day 10 1										
lethod: 8021B - Volati		Compou	¹⁵ -244 nds (GC)					Client Samp	ole ID: Method	d Blank
Aethod: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid	le Organic	Compou						Client Samp	Prep Type: To	otal/NA
Aethod: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid	le Organic 24/1-A	Compou в мв						Client Samp		otal/NA
Method: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292	le Organic (24/1-A M				Unit		D	Client Samp	Prep Type: To	otal/NA h: 3124
Iethod: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte	le Organic (24/1-A M	B MB It Qualifier	nds (GC)		Unit mg/K	9	D	Prepared	Prep Type: To Prep Batc	otal/NA h: 3124 Dil Fac
Method: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene	le Organic 24/1-A M Resu	B MB It Qualifier	nds (GC)			-	D	Prepared 04/11/24 13:02	Prep Type: To Prep Batc	otal/NA h: 3124 Dil Fac
Aethod: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene	le Organic (24/1-A M Resu	B MB It Qualifier	nds (GC) 		mg/K	g	<u>D</u>	Prepared 04/11/24 13:02 04/11/24 13:02	Prep Type: To Prep Batch Analyzed 04/12/24 15:25	otal/NA h: 3124 Dil Fac
Aethod: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene	le Organic (24/1-A M Resu	B MB It Qualifier D D	nds (GC) 		mg/K mg/K	g	<u>D</u>	Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02	Prep Type: To Prep Batc 04/12/24 15:25 04/12/24 15:25	otal/NA h: 3124 Dil Fac 1 1
Aethod: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene	le Organic (24/1-A M Resu N N N N N	B MB It Qualifier D D	nds (GC) 		mg/K mg/K mg/K	g	<u>D</u>	Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02	Analyzed 04/12/24 15:25 04/12/24 15:25	otal/NA h: 3124 Dil Fac 1 1 1
4-Bromofluorobenzene (Surr) Aethod: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate	le Organic (24/1-A 	B MB Lt Qualifier D D D D B MB	nds (GC) 		mg/K mg/K mg/K	g	<u>D</u>	Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02	Analyzed 04/12/24 15:25 04/12/24 15:25	otal/NA
Aethod: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate	le Organic (24/1-A M Resu N N N N N N N N N N N N N N N N N	B MB It Qualifier D D D	nds (GC) 		mg/K mg/K mg/K	g	<u>D</u>	Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 Prepared	Prep Type: To Prep Batc 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25	otal/NA h: 3124 Dil Fac 1 1 1 1 2 Dil Fac
Aethod: 8021B - Volatii Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr)	le Organic (24/1-A 	B MB It Qualifier D D D B MB Y Qualifier	nds (GC) <u> RL</u> 0.025 0.050 0.050 0.10 Limits		mg/K mg/K mg/K	g g		Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 Prepared 04/11/24 13:02	Analyzed 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25	0tal/NA h: 3124 <u>Dil Fac</u> 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Aethod: 8021B - Volatii Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885-3	le Organic (24/1-A 	B MB It Qualifier D D D B MB Y Qualifier	nds (GC) <u> RL</u> 0.025 0.050 0.050 0.10 Limits		mg/K mg/K mg/K	g g		Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 Prepared 04/11/24 13:02	Analyzed 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 Lab Control \$ 15:25	otal/NA h: 3124 <u>Dil Fac</u> 1 1 1 1 1 <i>Dil Fac</i> 7 Sample
Aethod: 8021B - Volatii Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885-3 Matrix: Solid	le Organic (24/1-A 	B MB It Qualifier D D D B MB Y Qualifier	nds (GC) <u> RL</u> 0.025 0.050 0.050 0.10 Limits		mg/K mg/K mg/K	g g		Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 Prepared 04/11/24 13:02	Analyzed 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25	otal/NA h: 3124
Aethod: 8021B - Volati Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene Xylenes, Total	le Organic (24/1-A 	B MB It Qualifier D D D B MB Y Qualifier	nds (GC) <u>RL</u> 0.025 0.050 0.050 0.10 <u>Limits</u> 39 - 146		mg/K mg/K mg/K	g g		Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 Prepared 04/11/24 13:02	Analyzed 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 Lab Control S Prep Type: To Prep Batc Prep Batc	otal/NA h: 3124 <u>Dil Fac</u> 1 1 1 1 1 1 1 1 1 1 5 3 5 3 5 3 1 5 3 1 1 1 1
Aethod: 8021B - Volatii Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885-3 Matrix: Solid Analysis Batch: 3292	le Organic (24/1-A 	B MB It Qualifier D D D B MB Y Qualifier	nds (GC) RL 0.025 0.050 0.050 0.10 Limits 39 - 146 Spike		mg/K mg/K mg/K	g g Cli		Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 Prepared 04/11/24 13:02 Sample ID:	Analyzed 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 Lab Control S Prep Type: To Prep Batcl %Rec	otal/NA h: 3124 Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 2 1 5 3 5 3 5 3 5 3 1 1 1 1 1 1 1 1 1 1 1
Aethod: 8021B - Volatii Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885-3 Matrix: Solid Analysis Batch: 3292 Analyte	le Organic (24/1-A 	B MB It Qualifier D D D B MB Y Qualifier	nds (GC) 	Result	mg/K mg/K mg/K	g g Cli		Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 Prepared 04/11/24 13:02 Sample ID: D %Rec	Analyzed 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 Lab Control S Prep Type: To Prep Batcl %Rec Limits	otal/NA h: 3124 Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 2 1 5 3 5 3 5 3 5 3 1 1 1 1 1 1 1 1 1 1 1
Aethod: 8021B - Volatii Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885-3 Matrix: Solid Analysis Batch: 3292 Analyte Benzene	le Organic (24/1-A 	B MB It Qualifier D D D B MB Y Qualifier	nds (GC) RL 0.025 0.050 0.10 <u>Limits</u> 39 - 146 Spike Added 1.00	Result 0.805	mg/K mg/K mg/K LCS Qualifier	g g Cli <u>Unit</u> mg/Kg		Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 Sample ID: D %Rec 80	Analyzed 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 Lab Control S Prep Type: To Prep Batc %Rec Limits 70 - 130	otal/NA h: 3124 Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 2 1 5 3 5 3 5 3 5 3 1 1 1 1 1 1 1 1 1 1 1
Aethod: 8021B - Volatii Lab Sample ID: MB 885-31 Matrix: Solid Analysis Batch: 3292 Analyte Benzene Ethylbenzene Toluene Xylenes, Total Surrogate 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885-3 Matrix: Solid	le Organic (24/1-A 	B MB It Qualifier D D D B MB Y Qualifier	nds (GC) 	Result	mg/K mg/K mg/K LCS Qualifier	g g Cli		Prepared 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 04/11/24 13:02 Prepared 04/11/24 13:02 Sample ID: D %Rec	Analyzed 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 04/12/24 15:25 Lab Control S Prep Type: To Prep Batcl %Rec Limits	otal/NA h: 3124 Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 7 Sample otal/NA

82	70 - 130
82	70 - 130
84	70 - 130

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

o-Xylene

Toluene

Xylenes, Total

1.00

1.00

3.00

0.825

0.816

2.51

mg/Kg

mg/Kg

mg/Kg

QC Sample Results

Job ID: 885-2708-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: MB 885-314	0/1-A										Client Sam	ple ID: Metho	
Matrix: Solid												Prep Type:	
Analysis Batch: 3263												Prep Bate	ch: 314
			MB										
Analyte	Re		Qualifier		RL			Jnit		D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]		ND			10		r	ng/Kg			04/11/24 14:3	1 04/12/24 11:10)
Motor Oil Range Organics [C28-C40]	ND			50		r	ng/Kg			04/11/24 14:37	1 04/12/24 11:10)
		MВ	МВ										
Surrogate	%Reco	very	Qualifier	Limit	ts						Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)		121		62 - 1	34						04/11/24 14:3	1 04/12/24 11:10)
Lab Sample ID: LCS 885-31	40/2-4								Cli	ont	Sample ID	: Lab Control	Sampl
Matrix: Solid												Prep Type:	
Analysis Batch: 3263												Prep Bate	
Analysis Daten. 5205				Spike		LCS	LCS					%Rec	
Analyte				Added		Result		fier	Unit		D %Rec	Limits	
Diesel Range Organics				50.0		52.3	quui	-	mg/Kg			60 - 135	
[C10-C28]				00.0		02.0			iiig/itg		100	001100	
	LCS	LCS	;										
Surrogate	%Recovery	Qua	lifier	Limits									
Di-n-octyl phthalate (Surr)	102			62 - 134									
lethod: 300.0 - Anions,	Ion Chro	oma	atograp	ohy									
Lab Sample ID: MB 885-315	9/1 - Δ										Client Sam	ple ID: Metho	d Blan
Matrix: Solid											onone oum	Prep Type:	
Analysis Batch: 3227												Prep Bate	
Analysis Daton. 0221		MR	мв									T TOP Date	
Analyte	Re		Qualifier		RL		ι	Jnit		D	Prepared	Analyzed	Dil Fa
Chloride		ND			3.0			ng/Kg		-	-	3 04/12/24 09:03	
Lab Sample ID: LCS 885-31	59/2-4								Cliv	ant		: Lab Control	Sampl
Matrix: Solid	00/2-M											Prep Type:	
Analysia Datahy 2007												Prep Type.	

Analysis Batch: 3227							Prep	Batch: 3159
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	30.0	28.1		mg/Kg		94	90 - 110	

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QC Association Summary

Client: Vertex Project/Site: JRU DI 2

GC VOA

Prep Batch: 3124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2708-1	BH24-12 0'	Total/NA	Solid	5030C	
885-2708-2	BH24-12 2'	Total/NA	Solid	5030C	
MB 885-3124/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3124/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3124/3-A	Lab Control Sample	Total/NA	Solid	5030C	
Analysis Batch: 329	91				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2708-1	BH24-12 0'	Total/NA	Solid	8015D	3124
885-2708-2	BH24-12 2'	Total/NA	Solid	8015D	3124
MB 885-3124/1-A	Method Blank	Total/NA	Solid	8015D	3124
LCS 885-3124/2-A	Lab Control Sample	Total/NA	Solid	8015D	3124
Analysis Batch: 329	92				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2708-1	BH24-12 0'	Total/NA	Solid	8021B	3124
885-2708-2	BH24-12 2'	Total/NA	Solid	8021B	3124
MB 885-3124/1-A	Method Blank	Total/NA	Solid	8021B	3124
LCS 885-3124/3-A	Lab Control Sample	Total/NA	Solid	8021B	3124
GC Semi VOA					

Prep Batch: 3140

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-2708-1	BH24-12 0'	Total/NA	Solid	SHAKE	
885-2708-2	BH24-12 2'	Total/NA	Solid	SHAKE	
MB 885-3140/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3140/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 3263

Lab Sample ID 885-2708-1	Client Sample ID BH24-12 0'	Prep Type Total/NA	Matrix Solid	Method 8015D	Prep Batch 3140
885-2708-2	BH24-12 2'	Total/NA	Solid	8015D	3140
MB 885-3140/1-A	Method Blank	Total/NA	Solid	8015D	3140
LCS 885-3140/2-A	Lab Control Sample	Total/NA	Solid	8015D	3140

HPLC/IC

Prep Batch: 3159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
885-2708-1	BH24-12 0'	Total/NA	Solid	300_Prep
885-2708-2	BH24-12 2'	Total/NA	Solid	300_Prep
MB 885-3159/1-A	Method Blank	Total/NA	Solid	300_Prep
LCS 885-3159/2-A	Lab Control Sample	Total/NA	Solid	300_Prep

Analysis Batch: 3227

Lab Sample ID 885-2708-1	Client Sample ID BH24-12 0'	Prep Type Total/NA	Matrix Solid	Method 300.0	Prep Batch 3159
885-2708-2	BH24-12 2'	Total/NA	Solid	300.0	3159
MB 885-3159/1-A	Method Blank	Total/NA	Solid	300.0	3159
LCS 885-3159/2-A	Lab Control Sample	Total/NA	Solid	300.0	3159

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Job ID: 885-2708-1

Job ID: 885-2708-1

Lab Sample ID: 885-2708-1 Matrix: Solid

Lab Sample ID: 885-2708-2

Matrix: Solid

Date Collected: 04/09/24 15:00 Date Received: 04/11/24 07:50

Client Sample ID: BH24-12 0'

Client: Vertex

Project/Site: JRU DI 2

	Batch	Batch		Dilution	Batch			Prepared	
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed	
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02	
Total/NA	Analysis	8015D		1	3291	JP	EET ALB	04/12/24 23:14	
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02	
Total/NA	Analysis	8021B		1	3292	JP	EET ALB	04/12/24 23:14	
Total/NA	Prep	SHAKE			3140	JU	EET ALB	04/11/24 14:31	
Total/NA	Analysis	8015D		1	3263	JU	EET ALB	04/12/24 19:36	
Total/NA	Prep	300_Prep			3159	JT	EET ALB	04/12/24 07:53	
Total/NA	Analysis	300.0		20	3227	RC	EET ALB	04/12/24 15:07	

Client Sample ID: BH24-12 2' Date Collected: 04/09/24 15:10

Date Received: 04/11/24 07:50

Γ	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02
Total/NA	Analysis	8015D		1	3291	JP	EET ALB	04/12/24 23:37
Total/NA	Prep	5030C			3124	JP	EET ALB	04/11/24 13:02
Total/NA	Analysis	8021B		1	3292	JP	EET ALB	04/12/24 23:37
Total/NA	Prep	SHAKE			3140	JU	EET ALB	04/11/24 14:31
Total/NA	Analysis	8015D		20	3263	JU	EET ALB	04/12/24 15:10
Total/NA	Prep	300_Prep			3159	JT	EET ALB	04/12/24 07:53
Total/NA	Analysis	300.0		20	3227	RC	EET ALB	04/12/24 15:22

Laboratory References:

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

5 6 7

Accreditation/Certification Summary

Client: Vertex Proje

Job ID: 885-2708-1

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Project/Site: JRU DI 2									
aboratory: Eurofi	ns Albuquerqu	e							
Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.									
Authority	Prog	gram	Identification Number	Expiration Date					
New Mexico	Stat	е	NM9425, NM0901	02-26-25					
Analysis Method	Prep Method	Matrix	Analyte						
e ,	does not offer certificati Prep Method		Analvte						
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						

NM100001

02-26-25

NELAP

Oregon

Eurofins Albuquerque

Released to Imaging: 7/31/2024 2:57:32 PM

Received by OCD: 7/15/2024 2:12:50 PM

Job Number: 885-2708-1

List Source: Eurofins Albuquerque

SDG Number:

Login Sample Receipt Checklist

Client: Vertex

Login Number: 2708 List Number: 1 Creator: Proctor, Nancy

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

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 7/10/2024 11:14:56 AM

JOB DESCRIPTION

JRU D12

JOB NUMBER

885-7006-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

See page two for job notos and contact information

Eurofins Albuquerque

Job Notes

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

Authorization

Authorized for release by

(505)345-3975

Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com

Generated 7/10/2024 11:14:56 AM

Laboratory Job ID: 885-7006-1

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QC Sample Results	8
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Certification Summary	13
Chain of Custody	14
Receipt Checklists	15

	Definitions/Glossary	
Client: Vertex Project/Site: J	Job ID: 885-7006-1 RU D12	2
Qualifiers		3
GC VOA Qualifier	Qualifier Description	4
S1+	Surrogate recovery exceeds control limits, high biased.	5
Glossary		C
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	2
CNF	Contains No Free Liquid	0
DER	Duplicate Error Ratio (normalized absolute difference)	0
Dil Fac	Dilution Factor	9
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"

MDAMinimum Detectable Activity (Radiochemistry)MDCMinimum 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
- POS
 Positive / Present

 PQL
 Practical Quantitation Limit
- PRES Presumptive
- QC Quality Control RER Relative Error Ratio (Radiochemistry)
- RL Reporting Limit or Requested Limit (Radiochemistry)
- RPD Relative Percent Difference, a measure of the relative difference between two points
- TEF Toxicity Equivalent Factor (Dioxin)
- TEQ Toxicity Equivalent Quotient (Dioxin)
- TNTC Too Numerous To Count

Case Narrative

Client: Vertex Project: JRU D12

Job ID: 885-7006-1

Job ID: 885-7006-1

Eurofins Albuquerque

Job Narrative 885-7006-1

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 6/27/2024 7:30 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 0.3°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 guality 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.

Received by OCD: 7/15/2024 2:12:50 PM

Client: Vertex

Client Sample Results

Job ID: 885-7006-1

lient Sample ID: BH24-27 0	.0'					Lab San	nple ID: 885-7	7006-1
te Collected: 06/25/24 09:30							Matri	ix: Solid
ate Received: 06/27/24 07:30								
Method: SW846 8015M/D - Gasol	line Range Org	anics (GRC)) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		06/27/24 13:48	07/04/24 08:10	1
Method: SW846 8015M/D - Gasol	ine Range Org	janics (GRC) (GC)					
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		35 - 166			06/27/24 13:48	07/04/24 08:10	1
Method: SW846 8021B - Volatile			·	,	-			
Analyte Benzene	_ Result ND	Qualifier	RL	Unit	D	Prepared	Analyzed 07/05/24 10:12	Dil Fac
Benzene Ethylbenzene	ND ND		0.024 0.048	mg/Kg mg/Kg		06/27/24 13:48 06/27/24 13:48	07/05/24 10:12 07/05/24 10:12	1
Toluene	ND		0.048	mg/Kg mg/Kg		06/27/24 13:48	07/05/24 10:12	1
Xylenes, Total	ND		0.048	mg/Kg		06/27/24 13:48	07/05/24 10:12	
Method: SW846 8021B - Volatile		ounde (GC)				00/21/21 13:12	01100/21 10:12	-
			1					
Surrogate	%Recovery		Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		48 - 145			06/27/24 13:48	07/05/24 10:12	1
Method: SW846 8015M/D - Diese	Range Organ	ics (DRO) (GC)					
Analyte	•••	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		07/01/24 08:38	07/01/24 12:01	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		07/01/24 08:38	07/01/24 12:01	1
Method: SW846 8015M/D - Diese	I Range Organ	ics (DRO) (GC)					
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			07/01/24 08:38	07/01/24 12:01	1
Method: EPA 300.0 - Anions, Ion	Chromatogra	ohy						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		06/28/24 09:56	06/28/24 21:09	20

Received by OCD: 7/15/2024 2:12:50 PM

Client: Vertex

Client Sample Results

Job ID: 885-7006-1

lient Sample ID: BH24-27 1.	.0'					Lab San	mple ID: 885-7	7006-2
te Collected: 06/25/24 10:30							Matri	ix: Solid
ate Received: 06/27/24 07:30								
Method: SW846 8015M/D - Gasoli	ine Range Orc	nanics (GRC)) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		06/27/24 13:48	07/04/24 08:34	1
Method: SW846 8015M/D - Gasoli	ine Range Org	janics (GRC	ر) (GC)					
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		35 - 166			06/27/24 13:48	07/04/24 08:34	1
Method: SW846 8021B - Volatile (·	1114		Descended	A	
Analyte Benzene	_ ResultND	Qualifier	RL 0.025	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Benzene Ethylbenzene	ND ND		0.025	mg/Kg mg/Kg		06/27/24 13:48 06/27/24 13:48	07/05/24 10:35 07/05/24 10:35	1
Toluene	ND		0.050	mg/Kg mg/Kg		06/27/24 13:48	07/05/24 10:35	، 1
Xylenes, Total	ND		0.030	mg/Kg		06/27/24 13:48	07/05/24 10:35	1
Method: SW846 8021B - Volatile (00,2,121	01,00,_1	
Surrogate	%Recovery		, Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		48 - 145			06/27/24 13:48	07/05/24 10:35	1
Method: SW846 8015M/D - Diesel				,	_			
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		07/01/24 08:38	07/01/24 12:14	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		07/01/24 08:38	07/01/24 12:14	1
Method: SW846 8015M/D - Diesel	Range Organ	ics (DRO) (C	GC)					
Surrogate	%Recovery		Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101	_	62 - 134			07/01/24 08:38	07/01/24 12:14	1
_ Method: EPA 300.0 - Anions, Ion	Chromatogra	ohv						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
······································								

QC Sample Results

5 6

Job ID: 885-7006-1

Client: Vertex Project/Site: JRU D12

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

Lab Sample ID: MB 885-7510/1-/	A								Clie	ent Sa	mple ID: Metho	d Blank
Matrix: Solid											Prep Type: 1	otal/NA
Analysis Batch: 7896											Prep Bato	h: 7510
-		МВ М	ИВ									
Analyte	Re	esult (Qualifier	RL		Unit		D	Prepa	ared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10		ND		5.0		mg/l	≺g	_	06/27/24	13:48	07/04/24 02:42	1
		мв і	ИВ									
Surrogate	%Reco	very (Qualifier	Limits					Prepa	ared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		95		35 - 166					06/27/24	13:48	07/04/24 02:42	1
Lab Sample ID: LCS 885-7510/2	-A							c	lient Sa	mple I	D: Lab Control	Sample
Matrix: Solid										÷	Prep Type: 1	
Analysis Batch: 7896											Prep Bato	
				Spike	LCS	LCS					• %Rec	
Analyte				Added	Result	Qualifier	Unit		D %I	Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10				25.0	24.6		mg/Kg			98	70 - 130	
	LCS	LCS										
Surrogate	%Recovery	Qualif	ïer	Limits								
4-Bromofluorobenzene (Surr)	207	S1+		35 - 166								
lethod: 8021B - Volatile Or	ganic Con	ηροι	unds (O	GC)								
Lab Sample ID: MB 885-7510/1-,	۸								Clie	ont Sa	mple ID: Metho	d Blank
Matrix: Solid										ent oa	Prep Type: 1	
Analysis Batch: 7897											Prep Bate	
Analysis Daton. 1001		мв м	ИВ								i iep Date	
Analyte	Re		Qualifier	RL		Unit		D	Prepa	ared	Analyzed	Dil Fac
Benzene		ND		0.025		mg/l	≺g	-	06/27/24	13:48	07/04/24 02:42	1
F (1) (1)							-					

Surrogate	%Recovery	Qualifier Limits		Prepared	Analyzed	Dil Fac
	МВ	МВ				
Xylenes, Total	ND	0.10	mg/Kg	06/27/24 13:48	07/04/24 02:42	1
Toluene	ND	0.050	mg/Kg	06/27/24 13:48	07/04/24 02:42	1
Ethylbenzene	ND	0.050	mg/Kg	06/27/24 13:48	07/04/24 02:42	1
Benzene	ND	0.025	mg/Kg	06/27/24 13:48	07/04/24 02:42	1

%Recovery	Qualifier	Limits
87		48 - 145
	87	87 Quaimer

Lab Sample ID: LCS 885-7510/3-A Matrix: Solid

Analysis Batch: 7897

Analysis Batch: 7897									Prep	Batch: 7510
			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene			1.00	0.872		mg/Kg		87	70 - 130	
Ethylbenzene			1.00	0.837		mg/Kg		84	70 - 130	
m-Xylene & p-Xylene			2.00	1.69		mg/Kg		84	70 - 130	
o-Xylene			1.00	0.825		mg/Kg		83	70 - 130	
Toluene			1.00	0.817		mg/Kg		82	70 - 130	
Xylenes, Total			3.00	2.51		mg/Kg		84	70 - 130	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							

4-Bromofluorobenzene (Surr) 91

48 - 145

Eurofins Albuquerque

06/27/24 13:48 07/04/24 02:42

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

QC Sample Results

5 6 7

Job ID: 885-7006-1

Client: Vertex Project/Site: JRU D12

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

Lab Sample ID: MB 885-7664/1-	Α										Client Sa	mple ID: Metho	d Blank
Matrix: Solid												Prep Type: 1	Fotal/N/
Analysis Batch: 7694												Prep Bate	ch: 7664
		MB	MB										
Analyte	R	esult	Qualifier	R	L		Unit		D	P	repared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]		ND		1	0		mg/Kg	1		07/0	1/24 08:38	07/01/24 10:07	
Motor Oil Range Organics [C28-C40]		ND		5	0		mg/Kg	1		07/0	01/24 08:38	07/01/24 10:07	
		MB	MB										
Surrogate	%Reco	overy	Qualifier	Limits						P	Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)		100		62 - 134	_					07/0	01/24 08:38	07/01/24 10:07	
Lab Sample ID: LCS 885-7664/2	- A								С	lient	t Sample	ID: Lab Control	Sample
Matrix: Solid												Prep Type: 1	Fotal/N/
Analysis Batch: 7694												Prep Bate	ch: 766
				Spike	LCS	6 L(cs					%Rec	
Analyte				Added	Resul	t Q	ualifier	Unit		D	%Rec	Limits	
Diesel Range Organics				50.0	54.9)		mg/Kg			110	60 - 135	_
[C10-C28]													
	LCS	LCS											
Surrogate	%Recovery	Qua	lifier	Limits									
Di-n-octyl phthalate (Surr)	113			62 - 134									
lethod: 300.0 - Anions, Ion	Chromat	ogr	aphy										
Lab Sample ID: MB 885-7593/1-	Α										Client Sa	mple ID: Metho	d Blan
Matrix: Solid												Prep Type: 1	
Analysis Batch: 7597												Prep Bate	ch: 759
-		МВ	МВ										
Analyte	R	esult	Qualifier	R	L		Unit		D	Ρ	repared	Analyzed	Dil Fa
Chloride		ND		3.	0		mg/Kg	1		06/2	28/24 09:56	06/28/24 16:59	
Lab Sample ID: LCS 885-7593/2	-								0	liont	Sample	ID: Lab Control	Sample

					Uncint	Campic		ond of oumpic	
Matrix: Solid							Prep [·]	Type: Total/NA	
Analysis Batch: 7597							Pre	p Batch: 7593	
	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	30.0	27.9		mg/Kg		93	90 - 110		

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Received by OCD: 7/15/2024 2:12:50 PM

QC Association Summary

Client: Vertex Project/Site: JRU D12

GC VOA

Prep Batch: 7510

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-7006-1	BH24-27 0.0'	Total/NA	Solid	5030C	
885-7006-2	BH24-27 1.0'	Total/NA	Solid	5030C	
MB 885-7510/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-7510/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-7510/3-A	Lab Control Sample	Total/NA	Solid	5030C	
Analysis Batch: 7896					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7006-1	BH24-27 0.0'	Total/NA	Solid	8015M/D	7510
885-7006-2	BH24-27 1.0'	Total/NA	Solid	8015M/D	7510
MB 885-7510/1-A	Method Blank	Total/NA	Solid	8015M/D	7510
LCS 885-7510/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	7510
Analysis Batch: 7897					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
MB 885-7510/1-A	Method Blank	Total/NA	Solid	8021B	7510
LCS 885-7510/3-A	Lab Control Sample	Total/NA	Solid	8021B	7510

Analysis Batch: 7946

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-7006-1	BH24-27 0.0'	Total/NA	Solid	8021B	7510
885-7006-2	BH24-27 1.0'	Total/NA	Solid	8021B	7510

GC Semi VOA

Prep Batch: 7664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
885-7006-1	BH24-27 0.0'	Total/NA	Solid	SHAKE
885-7006-2	BH24-27 1.0'	Total/NA	Solid	SHAKE
MB 885-7664/1-A	Method Blank	Total/NA	Solid	SHAKE
LCS 885-7664/2-A	Lab Control Sample	Total/NA	Solid	SHAKE

Analysis Batch: 7694

Lab S	ample ID 006-1	Client Sample ID BH24-27 0.0'	Prep Type Total/NA	Matrix Solid	Method 8015M/D	Prep Batch 7664
885-7	006-2	BH24-27 1.0'	Total/NA	Solid	8015M/D	7664
MB 88	35-7664/1-A	Method Blank	Total/NA	Solid	8015M/D	7664
LCS 8	885-7664/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	7664

HPLC/IC

Prep Batch: 7593

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-7006-1	BH24-27 0.0'	Total/NA	Solid	300_Prep	
885-7006-2	BH24-27 1.0'	Total/NA	Solid	300_Prep	
MB 885-7593/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-7593/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
Analysis Batch: 7597					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885 7006 1	BH24 27 0 0'	Total/NIA	Solid	300.0	7503

Lab Sample ID Client Sample ID Prep Iype Matrix Method Prep Batch 885-7006-1 BH24-27 0.0' Total/NA Solid 300.0 7593 885-7006-2 BH24-27 1.0' Total/NA Solid 300.0 7593

Eurofins Albuquerque

QC Association Summary

Client: Vertex Project/Site: JRU D12 Job ID: 885-7006-1

HPLC/IC (Continued)

Analysis Batch: 7597 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-7593/1-A	Method Blank	Total/NA	Solid	300.0	7593
LCS 885-7593/2-A	Lab Control Sample	Total/NA	Solid	300.0	7593

Eurofins Albuquerque

Job ID: 885-7006-1

Client: Vertex Project/Site: JRU D12

Client Sample ID: BH24-27 0.0' Date Collected: 06/25/24 09:30

Date Received: 06/27/24 07:30

	Batch	Batch		Dilution	Batch			Prepared	
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed	
Total/NA	Prep	5030C			7510	AT	EET ALB	06/27/24 13:48	
Total/NA	Analysis	8015M/D		1	7896	JP	EET ALB	07/04/24 08:10	
Total/NA	Prep	5030C			7510	AT	EET ALB	06/27/24 13:48	
Total/NA	Analysis	8021B		1	7946	JP	EET ALB	07/05/24 10:12	
Total/NA	Prep	SHAKE			7664	KR	EET ALB	07/01/24 08:38	
Total/NA	Analysis	8015M/D		1	7694	DH	EET ALB	07/01/24 12:01	
Total/NA	Prep	300_Prep			7593	RC	EET ALB	06/28/24 09:56	
Total/NA	Analysis	300.0		20	7597	RC	EET ALB	06/28/24 21:09	

Client Sample ID: BH24-27 1.0'

Date Collected: 06/25/24 10:30 Date Received: 06/27/24 07:30

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			7510	AT	EET ALB	06/27/24 13:48
Total/NA	Analysis	8015M/D		1	7896	JP	EET ALB	07/04/24 08:34
Total/NA	Prep	5030C			7510	AT	EET ALB	06/27/24 13:48
Total/NA	Analysis	8021B		1	7946	JP	EET ALB	07/05/24 10:35
Total/NA	Prep	SHAKE			7664	KR	EET ALB	07/01/24 08:38
Total/NA	Analysis	8015M/D		1	7694	DH	EET ALB	07/01/24 12:14
Total/NA	Prep	300_Prep			7593	RC	EET ALB	06/28/24 09:56
Total/NA	Analysis	300.0		20	7597	RC	EET ALB	06/28/24 21:22

Laboratory References:

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

Lab Sample ID: 885-7006-1 Matrix: Solid

5 6 8

Lab Sample ID: 885-7006-2 Matrix: Solid

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Vertex Project/Site: JRU D12

Laboratory: Eurofins Albuquerque

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

thority	Pr	ogram	Identification Number	Expiration Date		
w Mexico	St	ate	NM9425, NM0901	02-26-25		
The following analytes	are included in this repor	t, but the laboratory is not certi	fied by the governing authority. This lis	t may include analyte		
for which the agency d	oes not offer certification.	-				
Analysis Method	Prep Method	Matrix	Analyte			
300.0	300_Prep	Solid	Chloride			
8015M/D	5030C	Solid	Gasoline Range Organics	Gasoline Range Organics (GRO)-C6-C10		
8015M/D	SHAKE	Solid	Diesel Range Organics [C	Diesel Range Organics [C10-C28]		
8015M/D	SHAKE	Solid	Motor Oil Range Organics	[C28-C40]		
8021B	5030C	Solid	Benzene			
8021B	5030C	Solid	Ethylbenzene			
8021B	5030C	Solid	Toluene	Toluene		
8021B	5030C	Solid	Xylenes, Total			
egon	NF	ELAP	NM100001	02-26-25		

Job ID: 885-7006-1
ceived by OCD: 7/15/2024 2		Page 253 of 40
HALLENVIRO ANALYSIS LA MALYSIS LA Mww.hallenvironmental. 885-7006 coc 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	(1704) (8021) (1704) (8021) (1704) (80150) (1704) (8031) (1704) (8031) (1704) (8031) (1704) (8031) (1704) (8031) (1704) (904.1) (1704) (904.1) (1704) (904.1) (1704) (904.1) (1704) (904.1) (1704) (904.1) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) (904.10) (1704) <td< th=""><th>Date Time Date NTO Energy Date Time Remarks: B:IV direct to XTO Energy Date Time Remarks: B:IV direct to SoSt CoSt Energy Co: Scasterex.ca Any subcontracted data will</th></td<>	Date Time Date NTO Energy Date Time Remarks: B:IV direct to XTO Energy Date Time Remarks: B:IV direct to SoSt CoSt Energy Co: Scasterex.ca Any subcontracted data will
Turn-Around Time: Standard Sc Day Project Name: SRU D1 2 Project #: 23E-06065	Project Manager: Sally Carttar Sampler: RL Sampler: RL On Ice: 2768 DNO # of Coolers: 1 Cooler Temp(including CF): (C, 27001-Ca 3 (°C)) Cooler Temp(including CF): (C, 27001-Ca 3 (°C)) Type and # Type and # Type and # Type	
Client: Vertex Client: Vertex (XT0) Mailing Address: OA ドルピ	email or Fax#: QA/QC Package: CA/QC Package: CA/C Package: CA	Date: Time: Received by: MMMMM MMMMM MMMMM MMMMM MMMMM MMMMM MMMMM MMMMM MMMMM MMMMM MMMMM MMMMM MM MMMMM If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories

Login Sample Receipt Checklist

				1
Login Sample Rec	eipt Checklis	st		
Client: Vertex			Job Number: 885-7006-1	
Login Number: 7006 List Number: 1			List Source: Eurofins Albuquerque	4
Creator: McQuiston, Steven				5
Question	Answer	Comment		
The cooler's custody seal, if present, is intact.				
Sample custody seals, if present, are intact.				
The cooler or samples do not appear to have been compromised or tampered with.				8
Samples were received on ice.				
Cooler Temperature is acceptable.				9
Cooler Temperature is recorded.				
COC is present.				TU
COC is filled out in ink and legible.				11
COC is filled out with all pertinent information.				
Is the Field Sampler's name present on COC?				
There are no discrepancies between the containers received and the COC.				
Samples are received within Holding Time (excluding tests with immediate HTs)				
Sample containers have legible labels.				
Containers are not broken or leaking.				
Sample collection date/times are provided.				
Appropriate sample containers are used.				
Sample bottles are completely filled.				
Sample Preservation Verified.				
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs				
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").				

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 4/26/2024 4:21:36 PM

JOB DESCRIPTION

JRU DI 2

JOB NUMBER

885-3167-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109





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Eurofins Albuquerque

Job Notes

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

Authorization

Authorized for release by

(505)345-3975

Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com

Generated 4/26/2024 4:21:36 PM

Released to Imaging: 7/31/2024 2:57:32 PM

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Minimum Detectable Concentration (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Reporting Limit or Requested Limit (Radiochemistry)

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

Method Detection Limit

Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present

Presumptive

Quality Control

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Client: Vertex Project/Site: JRU DI 2 Page 258 of 400

Job ID: 885-3167-1

Eurofins Albuquerque

0		::::	-	
Q	ua	lifi	e	S

-

MDC

MDL ML

MPN

MQL

NC

ND NEG

POS

PQL

PRES

QC

RER

RPD

TEF

TEQ

TNTC

RL

Qualifiers		3
HPLC/IC		
Qualifier	Qualifier Description	
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.	5
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	8
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	9
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)	

Job ID: 885-3167-1

Project: JRU DI 2

Client: Vertex

Job ID: 885-3167-1

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Job Narrative 885-3167-1

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 4/20/2024 9:40 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 3.1°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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

HPLC/IC

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

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-04 Date Collected: 04/18/24 10:00

Date Received: 04/20/24 09:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/22/24 12:32	04/24/24 04:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/22/24 12:32	04/24/24 04:19	1
Method: SW846 8021B - Volat	tile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/22/24 12:32	04/24/24 04:19	1
Ethylbenzene	ND		0.047	mg/Kg		04/22/24 12:32	04/24/24 04:19	1
Toluene	ND		0.047	mg/Kg		04/22/24 12:32	04/24/24 04:19	1
Xylenes, Total	ND		0.095	mg/Kg		04/22/24 12:32	04/24/24 04:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		39 - 146			04/22/24 12:32	04/24/24 04:19	1
Method: SW846 8015D - Diese	el Range Or	ganics (DF	(GC) (GC)					
		<mark>ganics (DF</mark> Qualifier	RO) (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte				<mark>Unit</mark> mg/Kg	D	Prepared 04/23/24 13:42	Analyzed 04/24/24 23:44	Dil Fac
Analyte Diesel Range Organics [C10-C28]	Result		RL		D	04/23/24 13:42		Dil Fac 1 1
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	Result ND	Qualifier	RL 9.9	mg/Kg	<u>D</u>	04/23/24 13:42	04/24/24 23:44	Dil Fac 1 1 Dil Fac
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] <i>Surrogate</i>	Result ND ND	Qualifier	RL 9.9 49	mg/Kg	<u>D</u>	04/23/24 13:42 04/23/24 13:42	04/24/24 23:44 04/24/24 23:44 Analyzed	1
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	Result ND ND %Recovery 82	Qualifier Qualifier	RL 9.9 49 Limits	mg/Kg	<u>D</u>	04/23/24 13:42 04/23/24 13:42 Prepared	04/24/24 23:44 04/24/24 23:44 Analyzed	1 1 <i>Dil Fac</i>
Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Analyte	Result ND ND %Recovery 82	Qualifier Qualifier	RL 9.9 49 Limits	mg/Kg	D	04/23/24 13:42 04/23/24 13:42 Prepared	04/24/24 23:44 04/24/24 23:44 Analyzed	1 1 <i>Dil Fac</i>

Job ID: 885-3167-1

Matrix: Solid

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Lab Sample ID: 885-3167-1

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-05 Date Collected: 04/18/24 10:15

Date Received: 04/20/24 09:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/22/24 12:32	04/24/24 04:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244			04/22/24 12:32	04/24/24 04:43	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/22/24 12:32	04/24/24 04:43	1
Ethylbenzene	ND		0.050	mg/Kg		04/22/24 12:32	04/24/24 04:43	1
Toluene	ND		0.050	mg/Kg		04/22/24 12:32	04/24/24 04:43	1
Xylenes, Total	ND		0.10	mg/Kg		04/22/24 12:32	04/24/24 04:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		39 - 146			04/22/24 12:32	04/24/24 04:43	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		9.4	mg/Kg		04/23/24 13:42	04/24/24 23:55	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/23/24 13:42	04/24/24 23:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			04/23/24 13:42	04/24/24 23:55	1
Method: EPA 300.0 - Anions, I	lon Chroma	tography						
Amahata	Docult	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Quanner		Onic	-	Tropurou	/ mary zoa	Dirruo

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Job ID: 885-3167-1

Lab Sample ID: 885-3167-2 Matrix: Solid

Eurofins Albuquerque

Released to Imaging: 7/31/2024 2:57:32 PM

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-06 Date Collected: 04/18/24 10:30

Date Received: 04/20/24 09:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/22/24 12:32	04/24/24 05:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
-Bromofluorobenzene (Surr)	102		15 - 244			04/22/24 12:32	04/24/24 05:07	1
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/22/24 12:32	04/24/24 05:07	1
Ethylbenzene	ND		0.047	mg/Kg		04/22/24 12:32	04/24/24 05:07	1
Toluene	ND		0.047	mg/Kg		04/22/24 12:32	04/24/24 05:07	1
Kylenes, Total	ND		0.095	mg/Kg		04/22/24 12:32	04/24/24 05:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
-Bromofluorobenzene (Surr)	100		39 - 146			04/22/24 12:32	04/24/24 05:07	
Method: SW846 8015D - Diese	el Range Or	ganics (DF	(GC) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		04/23/24 13:42	04/25/24 00:06	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/23/24 13:42	04/25/24 00:06	1
	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Surrogate	/oncecovery					04/23/24 13:42	04/25/24 00:06	
	96		62 - 134					
Di-n-octyl phthalate (Surr)	96	tography	62 - 134					
Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Analyte	96 Jon Chroma	tography Qualifier	62 - 134 RL	Unit	D	Prepared	Analyzed	Dil Fac

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Job ID: 885-3167-1

Lab Sample ID: 885-3167-3 Matrix: Solid

Released to Imaging: 7/31/2024 2:57:32 PM

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-08 Date Collected: 04/18/24 10:45

Date Received: 04/20/24 09:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/22/24 12:32	04/24/24 05:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
-Bromofluorobenzene (Surr)	105		15 - 244			04/22/24 12:32	04/24/24 05:31	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		04/22/24 12:32	04/24/24 05:31	1
thylbenzene	ND		0.048	mg/Kg		04/22/24 12:32	04/24/24 05:31	1
oluene	ND		0.048	mg/Kg		04/22/24 12:32	04/24/24 05:31	1
(ylenes, Total	ND		0.096	mg/Kg		04/22/24 12:32	04/24/24 05:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
-Bromofluorobenzene (Surr)	103		39 - 146			04/22/24 12:32	04/24/24 05:31	1
Aethod: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
vietniou. 3vv040 ov 13D - Diest								
	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
nalyte	-	-		Unit mg/Kg	<u> </u>	Prepared 04/23/24 13:42	Analyzed 04/25/24 00:18	Dil Fac
nalyte viesel Range Organics [C10-C28]	Result	-	RL		D		04/25/24 00:18	Dil Fac 1 1
nalyte iesel Range Organics [C10-C28] lotor Oil Range Organics [C28-C40]	Result ND	Qualifier	RL 8.8	mg/Kg	<u>D</u>	04/23/24 13:42	04/25/24 00:18	1
analyte Diesel Range Organics [C10-C28] Notor Oil Range Organics [C28-C40]	Result ND ND	Qualifier	RL 8.8 44	mg/Kg	<u>D</u>	04/23/24 13:42 04/23/24 13:42	04/25/24 00:18 04/25/24 00:18 Analyzed	1 Dil Fac
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	Result ND ND %Recovery 102	Qualifier Qualifier	RL 8.8 44 Limits	mg/Kg	<u>D</u>	04/23/24 13:42 04/23/24 13:42 Prepared	04/25/24 00:18 04/25/24 00:18 Analyzed	1 Dil Fac
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, I Analyte	Result ND ND %Recovery 102	Qualifier Qualifier	RL 8.8 44 Limits	mg/Kg	D 	04/23/24 13:42 04/23/24 13:42 Prepared	04/25/24 00:18 04/25/24 00:18 Analyzed	Dil Fac

Job ID: 885-3167-1

Lab Sample ID: 885-3167-4 Matrix: Solid

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Matrix:

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-10 Date Collected: 04/18/24 11:00

Date Received: 04/20/24 09:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/22/24 12:32	04/24/24 05:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Bromofluorobenzene (Surr)	102		15 - 244			04/22/24 12:32	04/24/24 05:55	1
Method: SW846 8021B - Volat	tile Organic	Compound	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Senzene	ND		0.025	mg/Kg		04/22/24 12:32	04/24/24 05:55	1
thylbenzene	ND		0.049	mg/Kg		04/22/24 12:32	04/24/24 05:55	1
oluene	ND		0.049	mg/Kg		04/22/24 12:32	04/24/24 05:55	1
(ylenes, Total	ND		0.099	mg/Kg		04/22/24 12:32	04/24/24 05:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
-Bromofluorobenzene (Surr)	99		39 - 146			04/22/24 12:32	04/24/24 05:55	1
Method: SW846 8015D - Dies	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		04/23/24 13:42	04/25/24 00:29	1
Iotor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/23/24 13:42	04/25/24 00:29	1
	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Surrogate	%Recovery 113	Qualifier	Limits 62 - 134			Prepared 04/23/24 13:42	Analyzed 04/25/24 00:29	Dil Fac
Surrogate Di-n-octyl phthalate (Surr)	113					-		Dil Fac
Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Analyte	113 Ion Chroma			Unit	D	-		Dil Fac

Lab Sample ID: 885-3167-5

Matrix: Solid

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Eurofins Albuquerque

Released to Imaging: 7/31/2024 2:57:32 PM

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-11 Date Collected: 04/18/24 11:15

Date Received: 04/20/24 09:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/23/24 13:42	04/24/24 14:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Bromofluorobenzene (Surr)	94		15 - 244			04/23/24 13:42	04/24/24 14:43	1
Method: SW846 8021B - Volati	le Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/23/24 13:42	04/24/24 14:43	1
Ethylbenzene	ND		0.048	mg/Kg		04/23/24 13:42	04/24/24 14:43	1
Toluene	ND		0.048	mg/Kg		04/23/24 13:42	04/24/24 14:43	1
(ylenes, Total	ND		0.096	mg/Kg		04/23/24 13:42	04/24/24 14:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
	<i>/////////////////////////////////////</i>	quanner	Linits			Frepareu	Analyzeu	Dirrac
0	94		39 - 146			04/23/24 13:42		1
4-Bromofluorobenzene (Surr)	94		39 - 146			-		
I-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese	94 I Range Org		39 - 146	Unit	D	-		1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte	94 I Range Org	ganics (DF	39 - 146 RO) (GC)	Unit mg/Kg	D	04/23/24 13:42	04/24/24 14:43	1
I-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28]	94 I Range Org Result	ganics (DF	39 - 146 RO) (GC) RL		D	04/23/24 13:42 Prepared	04/24/24 14:43 Analyzed	1
I-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	I Range Org Result	ganics (DF Qualifier	39 - 146 RO) (GC) RL 9.3	mg/Kg	<u>D</u>	04/23/24 13:42 Prepared 04/23/24 15:26	04/24/24 14:43 Analyzed 04/24/24 19:15	1 Dil Fac
I-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	94 I Range Org Result ND ND	ganics (DF Qualifier	39 - 146 RO) (GC) RL 9.3 47	mg/Kg	<u>D</u>	04/23/24 13:42 Prepared 04/23/24 15:26 04/23/24 15:26	04/24/24 14:43 Analyzed 04/24/24 19:15 04/24/24 19:15	1 Dil Fac 1 1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	94 I Range Org Result ND ND %Recovery 97	ganics (DF Qualifier Qualifier	39 - 146 RO) (GC) RL 9.3 47 Limits	mg/Kg	<u>D</u>	04/23/24 13:42 Prepared 04/23/24 15:26 04/23/24 15:26 Prepared	04/24/24 14:43 Analyzed 04/24/24 19:15 04/24/24 19:15 Analyzed	1 Dil Fac 1 1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Io Analyte	94 I Range Org Result ND ND %Recovery 97	ganics (DF Qualifier Qualifier	39 - 146 RO) (GC) RL 9.3 47 Limits	mg/Kg	D	04/23/24 13:42 Prepared 04/23/24 15:26 04/23/24 15:26 Prepared	04/24/24 14:43 Analyzed 04/24/24 19:15 04/24/24 19:15 Analyzed	1 Dil Fac

Job ID: 885-3167-1

Matrix: Solid

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Lab Sample ID: 885-3167-6

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-17 Date Collected: 04/18/24 11:30

Date Received: 04/20/24 09:40

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		04/23/24 13:42	04/24/24 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 244			04/23/24 13:42	04/24/24 15:06	1
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/23/24 13:42	04/24/24 15:06	1
Ethylbenzene	ND		0.050	mg/Kg		04/23/24 13:42	04/24/24 15:06	1
Toluene	ND		0.050	mg/Kg		04/23/24 13:42	04/24/24 15:06	1
Xylenes, Total	ND		0.10	mg/Kg		04/23/24 13:42	04/24/24 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		39 - 146			04/23/24 13:42	04/24/24 15:06	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		8.8	mg/Kg		04/23/24 15:26	04/24/24 19:27	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/23/24 15:26	04/24/24 19:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	88		62 - 134			04/23/24 15:26	04/24/24 19:27	1
∑ Method: EPA 300.0 - Anions, I	lon Chroma	tography						
Method: EPA 300.0 - Anions, I Analyte		<mark>tography</mark> Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

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Job ID: 885-3167-1

Matrix: Solid

Lab Sample ID: 885-3167-7

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-18 Date Collected: 04/18/24 11:45

Date Received: 04/20/24 09:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/23/24 13:42	04/24/24 15:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 244			04/23/24 13:42	04/24/24 15:30	1
Method: SW846 8021B - Volat	tile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/23/24 13:42	04/24/24 15:30	1
Ethylbenzene	ND		0.048	mg/Kg		04/23/24 13:42	04/24/24 15:30	1
Toluene	ND		0.048	mg/Kg		04/23/24 13:42	04/24/24 15:30	1
Xylenes, Total	ND		0.096	mg/Kg		04/23/24 13:42	04/24/24 15:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		39 - 146			04/23/24 13:42	04/24/24 15:30	1
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Allalyte	Result	Quanner		Unit				
-	ND		9.5	mg/Kg		04/23/24 15:26	04/24/24 19:38	1
Diesel Range Organics [C10-C28]							04/24/24 19:38 04/24/24 19:38	1
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	ND		9.5	mg/Kg				1 1 Dil Fac
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] <i>Surrogate</i>	ND ND		9.5 48	mg/Kg		04/23/24 15:26	04/24/24 19:38	1 1 Dil Fac 1
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	ND ND %Recovery 89	Qualifier	9.5 48 <i>Limits</i>	mg/Kg		04/23/24 15:26 Prepared	04/24/24 19:38 Analyzed	1 1 <i>Dil Fac</i> 1
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	ND ND %Recovery 89 Ion Chromat	Qualifier	9.5 48 <i>Limits</i>	mg/Kg	 D	04/23/24 15:26 Prepared	04/24/24 19:38 Analyzed	1 1 <i>Dil Fac</i> 1 Dil Fac

4/26/2024

Matrix: Solid

Job ID: 885-3167-1

Lab Sample ID: 885-3167-8

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-20 Date Collected: 04/18/24 12:00

Date Received: 04/20/24 09:40

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/23/24 13:42	04/24/24 15:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 244			04/23/24 13:42	04/24/24 15:53	1
Method: SW846 8021B - Volat	tile Organic	Compoun	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/23/24 13:42	04/24/24 15:53	1
Ethylbenzene	ND		0.048	mg/Kg		04/23/24 13:42	04/24/24 15:53	1
Toluene	ND		0.048	mg/Kg		04/23/24 13:42	04/24/24 15:53	1
Kylenes, Total	ND		0.096	mg/Kg		04/23/24 13:42	04/24/24 15:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		39 - 146			04/23/24 13:42	04/24/24 15:53	1
								-
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
		<mark>ganics (DF</mark> Qualifier	RO) (GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte				<mark>Unit</mark> mg/Kg	D	Prepared 04/23/24 15:26		Dil Fac
Analyte Diesel Range Organics [C10-C28]	Result		RL		<u>D</u>	•	Analyzed 04/24/24 19:49	Dil Fac
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	Result ND	Qualifier	RL 9.5	mg/Kg	<u>D</u>	04/23/24 15:26	Analyzed 04/24/24 19:49	1
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	Result ND ND	Qualifier	RL 9.5 48	mg/Kg	D	04/23/24 15:26 04/23/24 15:26	Analyzed 04/24/24 19:49 04/24/24 19:49	1
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	Result ND ND %Recovery 88	Qualifier Qualifier	RL 9.5 48 Limits	mg/Kg	<u> </u>	04/23/24 15:26 04/23/24 15:26 Prepared	Analyzed 04/24/24 19:49 04/24/24 19:49 Analyzed	1
Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Analyte	Result ND ND %Recovery 88	Qualifier Qualifier	RL 9.5 48 Limits	mg/Kg	D	04/23/24 15:26 04/23/24 15:26 Prepared	Analyzed 04/24/24 19:49 04/24/24 19:49 Analyzed	Dil Fac 1 1 Dil Fac 1 Dil Fac

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Lab Sample ID: 885-3167-9

Matrix: Solid

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Job ID: 885-3167-1

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Job ID: 885-3167-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: MB 885-36 Matrix: Solid Analysis Batch: 3824	67/1-A						•	Clie	nt Samp	ole ID: Metho Prep Type: 1 Prep Bato	Total/NA
-		MB									
Analyte		Qualifier	RL		Unit		D .		repared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C1	0] ND		5.0		mg/K	g	(04/22	2/24 12:32	04/23/24 19:41	1
	МВ	MB									
Surrogate	%Recovery	Qualifier	Limits					Pi	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		15 - 244					04/2	2/24 12:32	04/23/24 19:41	1
Lab Sample ID: LCS 885-3 Matrix: Solid Analysis Batch: 3824	667/2-A					Clie	nt	San	nple ID:	Lab Control Prep Type: 1 Prep Bato	otal/NA
			Spike		LCS					%Rec	
Analyte			Added		Qualifier	Unit		D	%Rec	Limits	
Gasoline Range Organics [C6 - C10]			25.0	25.6		mg/Kg			102	70 - 130	
	LCS LC										
Surrogate	%Recovery Qu	alifier	Limits								
4-Bromofluorobenzene (Surr)	223		15 - 244								
Lab Sample ID: MB 885-37 Matrix: Solid	57/1-A						•	Clie	nt Samp	ole ID: Metho Prep Type: 1	Total/NA
Analysis Batch: 3868										Prep Bato	h: 3757
		MB									
Analyte		Qualifier	RL		Unit		D .		repared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C1	0] ND		5.0		mg/K	g	(04/2:	3/24 13:42	04/24/24 14:20	1
	MB	MB									
Surrogate	%Recovery	Qualifier	Limits					Pi	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 244					04/2	3/24 13:42	04/24/24 14:20	1
_ Lab Sample ID: LCS 885-3	757/2-A					Clie	nt	San	nple ID:	Lab Control	Sample
Matrix: Solid										Prep Type: 1	
Analysis Batch: 3868										Prep Bato	
-			Spike	LCS	LCS					%Rec	
Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits	
Gasoline Range Organics [C6 - C10]			25.0	23.9		mg/Kg		_	96	70 - 130	
	LCS LC	s									
Surrogate	%Recovery Qu		Limits								
4-Bromofluorobenzene (Surr)	199		15 - 244								
_ Lab Sample ID: 885-3167-6	6 MS								Client S	Sample ID: Bl	ES24-11
Matrix: Solid										Prep Type: 1	Total/NA
Analysis Batch: 3868										Prep Bato	h: 3757
	Sample Sar		Spike	-	MS					%Rec	
Analyte	Result Qu	alifier	Added		Qualifier	Unit		D	%Rec	Limits	
Gasoline Range Organics [C6 - C10]	ND		23.7	24.6		mg/Kg			104	70 - 130	
	MS MS										
Surrogate	%Recovery Qu	alifier	Limits								
4-Bromofluorobenzene (Surr)	214		15-244								

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Job ID: 885-3167-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: 885-3167- Matrix: Solid Analysis Batch: 3868	6 MSD							Client	Sample II Prep Ty Prep		al/NA
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics [C6 -	ND		23.9	24.6		mg/Kg		103	70 - 130	0	20
C10]											
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	213		15_244								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3 Matrix: Solid	3667/1-A							Client Samp	ole ID: Method Prep Type: T	otal/NA
Analysis Batch: 3825									Prep Batc	h: 3667
		MB								
Analyte		Qualifier	RL		Unit		D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/K	-			04/23/24 19:41	1
Ethylbenzene	ND		0.050		mg/K	-			04/23/24 19:41	1
Toluene	ND		0.050		mg/K	g		04/22/24 12:32	04/23/24 19:41	1
Xylenes, Total	ND		0.10		mg/K	g		04/22/24 12:32	04/23/24 19:41	1
	MB									
Surrogate	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104	l I	39 - 146					04/22/24 12:32	04/23/24 19:41	1
• • · ·			Spike		LCS				%Rec	
Analysis Batch: 3825			Sniko	1.05	1.05				Prep Batc	
Analyte			Added	Result	Qualifier	Unit		D %Rec	Limits	
Benzene			1.00	0.911		mg/Kg		91	70_130	
Ethylbenzene			1.00	0.892		mg/Kg		89	70 - 130	
m,p-Xylene			2.00	1.83		mg/Kg		92	70 - 130	
o-Xylene			1.00	0.907		mg/Kg		91	70_130	
Toluene			1.00	0.878		mg/Kg		88	70 - 130	
	LCS LC	s								
Surrogate	%Recovery Qu	alifier	Limits							
4-Bromofluorobenzene (Surr)	106		39 - 146							
Lab Sample ID: MB 885-3 Matrix: Solid Analysis Batch: 3869	3757/1-A							Client Samp	ole ID: Method Prep Type: T Prep Batc	otal/NA
Analysis Datch. 3005	MR	MB							Fiep Dalc	
	MB	MB								

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/23/24 13:42	04/24/24 14:20	1
Ethylbenzene	ND		0.050	mg/Kg		04/23/24 13:42	04/24/24 14:20	1
Toluene	ND		0.050	mg/Kg		04/23/24 13:42	04/24/24 14:20	1
Xylenes, Total	ND		0.10	mg/Kg		04/23/24 13:42	04/24/24 14:20	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		39 - 146			04/23/24 13:42	04/24/24 14:20	1

Job ID: 885-3167-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: LCS 885	-3757/3-A					Clier	nt Sar	nple ID	: Lab Con		
Matrix: Solid									Prep Ty	pe: Tot	tal/NA
Analysis Batch: 3869									Prep	Batch:	3757
			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	0.937		mg/Kg		94	70 - 130		
m,p-Xylene			2.00	1.92		mg/Kg		96	70 - 130		
o-Xylene			1.00	0.941		mg/Kg		94	70_130		
Toluene			1.00	0.920		mg/Kg		92	70 - 130		
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	96		39 - 146								
Lab Sample ID: 885-3167	-7 MS							Client	Sample I): BES	24-1 [°]
Matrix: Solid									Prep Ty		
Analysis Batch: 3869										Batch:	
,	Sample	Sample	Spike	MS	MS				%Rec		
Analyte		Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	ND		0.998	1.01		mg/Kg		101	70 - 130		
Ethylbenzene	ND		0.998	0.993		mg/Kg		99	70 - 130		
m,p-Xylene	ND		2.00	2.00		mg/Kg		100	70 - 130		
o-Xylene	ND		0.998	0.979		mg/Kg		98	70 - 130		
Toluene	ND		0.998	0.978		mg/Kg		96	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	95		39 - 146								
Lab Sample ID: 885-3167	-7 MSD							Client	Sample I): BES	24-1
Matrix: Solid									Prep Ty		
Analysis Batch: 3869										Batch:	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPI
Analyte	•	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Lim
Benzene	ND		0.994	1.02		mg/Kg		103	70 - 130	2	2
Ethylbenzene	ND		0.994	1.01		mg/Kg		102	70 - 130	2	2
m,p-Xylene	ND		1.99	2.04		mg/Kg		102	70 - 130	2	2
o-Xylene	ND		0.994	1.00		mg/Kg		102	70 - 130	2	2
Toluene	ND		0.994	1.00		mg/Kg		99	70 - 130 70 - 130	2	2
	MSD	MSD									
Surrogate	%Recovery		Limits								
4-Bromofluorobenzene (Surr)	98		39 - 146								

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

Lab Sample ID: MB 885-3758/1-/ Matrix: Solid Analysis Batch: 3832		МВ					le ID: Methoo Prep Type: To Prep Batcl	otal/NA
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/23/24 13:42	04/24/24 20:34	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/23/24 13:42	04/24/24 20:34	1

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			QU	Sample	Resi	lits							
Client: Vertex Project/Site: JRU DI 2											Job ID:	885-3	3167-
lethod: 8015D - Diesel	Range O	rgani	cs ([DRO) (GC)	(Con	tinued)							
Lab Sample ID: MB 885-375	8/1-A								Clie	nt Samp	ole ID: Me	ethod	Blan
Matrix: Solid											Prep Typ	be: To	tal/N
Analysis Batch: 3832											Prep l	Batch	: 375
		МВ МІ	R										
Surrogate	%Reco	very Qu		Limits					Pi	repared	Analyz	ed	Dil Fa
Di-n-octyl phthalate (Surr)		99		62 - 134	-					•	04/24/24		
Lab Sample ID: LCS 885-37	58/2-A						Cli	ent	Sar	nple ID:	Lab Con		
Matrix: Solid											Prep Typ		
Analysis Batch: 3832				Omilia	1.00	1.00					Prep I	Batch	: 375
Analista				Spike	-	LCS	11		-	9/ D aa	%Rec		
Analyte Diesel Range Organics				Added	48.4	Qualifier	_ Unit mg/Kg		<u>D</u>	<u>%Rec</u> 97	Limits 60 - 135		
[C10-C28]				30.0	-0		ilig/itg			57	00-100		
	LCS	LCS											
Surrogate	%Recovery	Qualifie	er	Limits									
Di-n-octyl phthalate (Surr)	87			62 - 134									
Lab Sample ID: 885-3167-5 Matrix: Solid	MS									Client S	ample ID Prep Typ		
Analysis Batch: 3832											Prep		
	Sample	Sample	•	Spike	MS	MS					%Rec		
Analyte	Result	Qualifie	ər	Added	Result	Qualifier	Unit		D	%Rec	Limits		
Diesel Range Organics [C10-C28]	ND			47.0	56.8		mg/Kg			121	44 - 136		
		MS											
Surrogate	%Recovery	Qualifie	er	Limits									
Di-n-octyl phthalate (Surr)	114			62 - 134									
Lab Sample ID: 885-3167-5	MSD									Client S	ample ID	: BES	24-'
Matrix: Solid											Prep Typ		
Analysis Batch: 3832											Prep		
-	Sample	Sample	•	Spike	MSD	MSD					%Rec		RF
Analyte	Result	Qualifie	er	Added	Result	Qualifier	Unit		D	%Rec	Limits	RPD	Lin
Diesel Range Organics [C10-C28]	ND			49.5	42.8		mg/Kg			86	44 - 136	28	
	MSD	MSD											
Surrogate	%Recovery	Qualifie	er	Limits									
Di-n-octyl phthalate (Surr)	76			62 - 134									
Lab Sample ID: MB 885-376 Matrix: Solid	8/1 -A								Clie		ole ID: Me Prep Typ	be: To	tal/N
Analysis Batch: 3832		MB ME	3								Prep l	Batch	: 37(
Analyte	Re	sult Qu		RL		Unit		D	Pr	repared	Analyz	ed	Dil F
Diesel Range Organics [C10-C28]		ND		10		mg/k		_		-	04/24/24		
Motor Oil Range Organics [C28-C40]		ND		50)	mg/k	-				04/24/24		
			R										
		MB MI											
Surrogate	0/ Daar	very Qu	alifiar	Limits					D.	repared	Analyz	od	Dil Fa

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Job ID: 885-3167-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: LCS 885-3	769/2 4					Clier	+ 6-			atrol Ca	mala
Matrix: Solid	100/2-A					Clier	it Sai	mple ID	: Lab Coi		
									Prep Ty	Batch:	
Analysis Batch: 3832			Spike	LCS	1.09				%Rec	Datch.	3/00
Analyte			Added		Qualifier	Unit	D	%Rec	Limits		
				48.8	Quaimer			98	60 - 135		
Diesel Range Organics [C10-C28]			50.0	40.0		mg/Kg		90	60 - 135		
[010-020]											
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
Di-n-octyl phthalate (Surr)	85		62 - 134								
Lab Sample ID: 885-3167-	9 MS							Client	Sample I	D: BES	24-20
Matrix: Solid									Prep Ty	pe: Tot	al/NA
Analysis Batch: 3832									Prep	Batch:	3768
-	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics	ND		44.8	47.2		mg/Kg		105	44 - 136		
[C10-C28]											
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
Di-n-octyl phthalate (Surr)	97		62 - 134								
_ Lab Sample ID: 885-3167-	9 MSD							Client	Sample I	D: BES	24-20
Matrix: Solid									Prep Ty		
Analysis Batch: 3832										Batch:	
· ·····, · ··· · · · · · · · · · · · ·	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	•	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics	ND		48.1	46.9		mg/Kg		98	44 - 136	0	32
[C10-C28]						0 0					
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
Di-n-octyl phthalate (Surr)	98		62 - 134								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-3774/1-A Matrix: Solid Analysis Batch: 3852	МВ	МВ					Clie	ent Samp	ole ID: Method Prep Type: To Prep Batcl	otal/NA
Analyte	Result	Qualifier		RL	Unit	C) Р	repared	Analyzed	Dil Fac
Chloride	ND			1.5	mg/K	g	04/2	3/24 16:44	04/24/24 08:44	1
Lab Sample ID: LCS 885-3774/2-A						Clier	nt Sai	mple ID:	Lab Control	Sample
Matrix: Solid									Prep Type: To	otal/NA
Analysis Batch: 3852									Prep Batc	h: 3774
-			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			15.0	13.9		mg/Kg		93	90 - 110	

5 6 7

Job ID: 885-3167-1

Client: Vertex Project/Site: JRU DI 2

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-3838/1-4	4						C	Client San	ple ID: M	ethod	Blank
Matrix: Solid									Prep Ty	pe: Tot	tal/N/
Analysis Batch: 3852										Batch	
•		MB MB									
Analyte	Res	ult Qualifier		RL	Un	it	D	Prepared	Analyz	ed	Dil Fa
Chloride		ND		1.5	mg	/Kg	— ī)4/24/24 14:1	2 04/24/24	16:14	
Lab Sample ID: LCS 885-3838/2-	A					Cli	ent \$	Sample ID	: Lab Con	trol Sa	ample
Matrix: Solid									Prep Ty		
Analysis Batch: 3852										Batch	
-			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifie	er Unit		D %Rec	Limits		
Chloride			15.0	13.9		mg/Kg		93	90 - 110		
Lab Sample ID: 885-3167-2 MS								Client	Sample II		
Matrix: Solid									Prep Ty		
Analysis Batch: 3852										Batch	: 383
	ample 🖇	•	Spike	MS	MS				%Rec		
Analyte I	Result	Qualifier	Added	Result	Qualifie	er Unit		D %Rec	Limits		
Chloride	410		30.1	422	4	mg/Kg		27	50 - 150		
Lab Sample ID: 885-3167-2 MSD	1							Client	Sample II): BES	24-0
Matrix: Solid									Prep Ty		
Analysis Batch: 3852										Batch	
	ample 🖇	Sample	Spike	MSD	MSD				%Rec		RPI
Analyte	Result (Qualifier	Added	Result	Qualifie	er Unit		D %Rec	Limits	RPD	Lim
Chloride	410		30.0	412	1	mg/Kg			50 - 150	3	2

QC Association Summary

Client: Vertex Project/Site: JRU DI 2

GC VOA

Prep Batch: 3667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3167-1	BES24-04	Total/NA	Solid	5030C	
885-3167-2	BES24-05	Total/NA	Solid	5030C	
885-3167-3	BES24-06	Total/NA	Solid	5030C	
885-3167-4	BES24-08	Total/NA	Solid	5030C	
885-3167-5	BES24-10	Total/NA	Solid	5030C	
MB 885-3667/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3667/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3667/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 3757

Lab Sample ID 885-3167-6	Client Sample ID BES24-11	Prep Type Total/NA	Matrix	Method 5030C	Prep Batch
885-3167-7	BES24-17	Total/NA Total/NA	Solid	5030C	
885-3167-8	BES24-18	Total/NA	Solid	5030C	
885-3167-9	BES24-20	Total/NA	Solid	5030C	
MB 885-3757/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3757/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3757/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-3167-6 MS	BES24-11	Total/NA	Solid	5030C	
885-3167-6 MSD	BES24-11	Total/NA	Solid	5030C	
885-3167-7 MS	BES24-17	Total/NA	Solid	5030C	
885-3167-7 MSD	BES24-17	Total/NA	Solid	5030C	

Analysis Batch: 3824

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3167-1	BES24-04	Total/NA	Solid	8015D	3667
885-3167-2	BES24-05	Total/NA	Solid	8015D	3667
885-3167-3	BES24-06	Total/NA	Solid	8015D	3667
885-3167-4	BES24-08	Total/NA	Solid	8015D	3667
885-3167-5	BES24-10	Total/NA	Solid	8015D	3667
MB 885-3667/1-A	Method Blank	Total/NA	Solid	8015D	3667
LCS 885-3667/2-A	Lab Control Sample	Total/NA	Solid	8015D	3667

Analysis Batch: 3825

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3167-1	BES24-04	Total/NA	Solid	8021B	3667
885-3167-2	BES24-05	Total/NA	Solid	8021B	3667
885-3167-3	BES24-06	Total/NA	Solid	8021B	3667
885-3167-4	BES24-08	Total/NA	Solid	8021B	3667
885-3167-5	BES24-10	Total/NA	Solid	8021B	3667
MB 885-3667/1-A	Method Blank	Total/NA	Solid	8021B	3667
LCS 885-3667/3-A	Lab Control Sample	Total/NA	Solid	8021B	3667

Analysis Batch: 3868

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3167-6	BES24-11	Total/NA	Solid	8015D	3757
885-3167-7	BES24-17	Total/NA	Solid	8015D	3757
885-3167-8	BES24-18	Total/NA	Solid	8015D	3757
885-3167-9	BES24-20	Total/NA	Solid	8015D	3757
MB 885-3757/1-A	Method Blank	Total/NA	Solid	8015D	3757
LCS 885-3757/2-A	Lab Control Sample	Total/NA	Solid	8015D	3757

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Job ID: 885-3167-1

QC Association Summary

Client: Vertex Project/Site: JRU DI 2

GC VOA (Continued)

Analysis Batch: 3868 (Continued)

BES24-20

BES24-17

BES24-17

Method Blank

Lab Control Sample

Lab Sample ID 885-3167-6 MS 885-3167-6 MSD	Client Sample ID BES24-11 BES24-11	Prep Type Total/NA Total/NA	Matrix Solid Solid	Method 8015D 8015D	Prep Batch 3757 3757
Analysis Batch: 386	9 Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3167-6	BES24-11	Total/NA	Solid	8021B	3757
885-3167-7	BES24-17	Total/NA	Solid	8021B	3757
885-3167-8	BES24-18	Total/NA	Solid	8021B	3757

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Solid

Solid

Solid

Solid

Solid

8021B

8021B

8021B

8021B

8021B

885-3167-7 MSD

885-3167-9

MB 885-3757/1-A

LCS 885-3757/3-A

885-3167-7 MS

Prep Batch: 3758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3167-1	BES24-04	Total/NA	Solid	SHAKE	
885-3167-2	BES24-05	Total/NA	Solid	SHAKE	
885-3167-3	BES24-06	Total/NA	Solid	SHAKE	
885-3167-4	BES24-08	Total/NA	Solid	SHAKE	
885-3167-5	BES24-10	Total/NA	Solid	SHAKE	
MB 885-3758/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3758/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-3167-5 MS	BES24-10	Total/NA	Solid	SHAKE	
885-3167-5 MSD	BES24-10	Total/NA	Solid	SHAKE	

Prep Batch: 3768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3167-6	BES24-11	Total/NA	Solid	SHAKE	
885-3167-7	BES24-17	Total/NA	Solid	SHAKE	
885-3167-8	BES24-18	Total/NA	Solid	SHAKE	
885-3167-9	BES24-20	Total/NA	Solid	SHAKE	
MB 885-3768/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3768/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-3167-9 MS	BES24-20	Total/NA	Solid	SHAKE	
885-3167-9 MSD	BES24-20	Total/NA	Solid	SHAKE	

Analysis Batch: 3832

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3167-1	BES24-04	Total/NA	Solid	8015D	3758
885-3167-2	BES24-05	Total/NA	Solid	8015D	3758
885-3167-3	BES24-06	Total/NA	Solid	8015D	3758
885-3167-4	BES24-08	Total/NA	Solid	8015D	3758
885-3167-5	BES24-10	Total/NA	Solid	8015D	3758
885-3167-6	BES24-11	Total/NA	Solid	8015D	3768
885-3167-7	BES24-17	Total/NA	Solid	8015D	3768
885-3167-8	BES24-18	Total/NA	Solid	8015D	3768
885-3167-9	BES24-20	Total/NA	Solid	8015D	3768
MB 885-3758/1-A	Method Blank	Total/NA	Solid	8015D	3758

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Job ID: 885-3167-1

3757

3757

3757

3757

3757

QC Association Summary

Client: Vertex Project/Site: JRU DI 2

GC Semi VOA (Continued)

Analysis Batch: 3832 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-3768/1-A	Method Blank	Total/NA	Solid	8015D	3768
LCS 885-3758/2-A	Lab Control Sample	Total/NA	Solid	8015D	3758
LCS 885-3768/2-A	Lab Control Sample	Total/NA	Solid	8015D	3768
885-3167-5 MS	BES24-10	Total/NA	Solid	8015D	3758
885-3167-5 MSD	BES24-10	Total/NA	Solid	8015D	3758
885-3167-9 MS	BES24-20	Total/NA	Solid	8015D	3768
885-3167-9 MSD	BES24-20	Total/NA	Solid	8015D	3768

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Prep Batch: 3774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3167-1	BES24-04	Total/NA	Solid	300_Prep	
MB 885-3774/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-3774/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Prep Batch: 3838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3167-2	BES24-05	Total/NA	Solid	300_Prep	
885-3167-3	BES24-06	Total/NA	Solid	300_Prep	
885-3167-4	BES24-08	Total/NA	Solid	300_Prep	
885-3167-5	BES24-10	Total/NA	Solid	300_Prep	
885-3167-6	BES24-11	Total/NA	Solid	300_Prep	
885-3167-7	BES24-17	Total/NA	Solid	300_Prep	
885-3167-8	BES24-18	Total/NA	Solid	300_Prep	
885-3167-9	BES24-20	Total/NA	Solid	300_Prep	
MB 885-3838/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-3838/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-3167-2 MS	BES24-05	Total/NA	Solid	300_Prep	
885-3167-2 MSD	BES24-05	Total/NA	Solid	300_Prep	

Analysis Batch: 3852

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3167-1	BES24-04	Total/NA	Solid	300.0	3774
885-3167-2	BES24-05	Total/NA	Solid	300.0	3838
885-3167-3	BES24-06	Total/NA	Solid	300.0	3838
885-3167-4	BES24-08	Total/NA	Solid	300.0	3838
885-3167-5	BES24-10	Total/NA	Solid	300.0	3838
885-3167-6	BES24-11	Total/NA	Solid	300.0	3838
885-3167-7	BES24-17	Total/NA	Solid	300.0	3838
885-3167-8	BES24-18	Total/NA	Solid	300.0	3838
885-3167-9	BES24-20	Total/NA	Solid	300.0	3838
MB 885-3774/1-A	Method Blank	Total/NA	Solid	300.0	3774
MB 885-3838/1-A	Method Blank	Total/NA	Solid	300.0	3838
LCS 885-3774/2-A	Lab Control Sample	Total/NA	Solid	300.0	3774
LCS 885-3838/2-A	Lab Control Sample	Total/NA	Solid	300.0	3838
885-3167-2 MS	BES24-05	Total/NA	Solid	300.0	3838
885-3167-2 MSD	BES24-05	Total/NA	Solid	300.0	3838

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Job ID: 885-3167-1

Lab Sample ID: 885-3167-1

Matrix: Solid

8 9 1

Lab Sample ID: 885-3167-2

Lab Sample ID: 885-3167-3

Lab Sample ID: 885-3167-4

Matrix: Solid

Matrix: Solid

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-04 Date Collected: 04/18/24 10:00 Date Received: 04/20/24 09:40

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3667	JR	EET ALB	04/22/24 12:32
Total/NA	Analysis	8015D		1	3824	JP	EET ALB	04/24/24 04:19
Total/NA	Prep	5030C			3667	JR	EET ALB	04/22/24 12:32
Total/NA	Analysis	8021B		1	3825	JP	EET ALB	04/24/24 04:19
otal/NA	Prep	SHAKE			3758	JU	EET ALB	04/23/24 13:42
īotal/NA	Analysis	8015D		1	3832	JU	EET ALB	04/24/24 23:44
Total/NA	Prep	300_Prep			3774	SS	EET ALB	04/23/24 16:44
otal/NA	Analysis	300.0		20	3852	JT	EET ALB	04/24/24 14:19

Client Sample ID: BES24-05

Date Collected: 04/18/24 10:15 Date Received: 04/20/24 09:40

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3667	JR	EET ALB	04/22/24 12:32
Total/NA	Analysis	8015D		1	3824	JP	EET ALB	04/24/24 04:43
Total/NA	Prep	5030C			3667	JR	EET ALB	04/22/24 12:32
Total/NA	Analysis	8021B		1	3825	JP	EET ALB	04/24/24 04:43
Total/NA	Prep	SHAKE			3758	JU	EET ALB	04/23/24 13:42
Total/NA	Analysis	8015D		1	3832	JU	EET ALB	04/24/24 23:55
Total/NA	Prep	300_Prep			3838	RC	EET ALB	04/24/24 14:12
Total/NA	Analysis	300.0		20	3852	JT	EET ALB	04/24/24 17:04

Client Sample ID: BES24-06

Date Collected: 04/18/24 10:30 Date Received: 04/20/24 09:40

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3667	JR	EET ALB	04/22/24 12:32
Total/NA	Analysis	8015D		1	3824	JP	EET ALB	04/24/24 05:07
Total/NA	Prep	5030C			3667	JR	EET ALB	04/22/24 12:32
Total/NA	Analysis	8021B		1	3825	JP	EET ALB	04/24/24 05:07
Total/NA	Prep	SHAKE			3758	JU	EET ALB	04/23/24 13:42
Total/NA	Analysis	8015D		1	3832	JU	EET ALB	04/25/24 00:06
Total/NA	Prep	300_Prep			3838	RC	EET ALB	04/24/24 14:12
Total/NA	Analysis	300.0		20	3852	JT	EET ALB	04/24/24 17:42

Client Sample ID: BES24-08 Date Collected: 04/18/24 10:45 Date Received: 04/20/24 09:40

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3667	JR	EET ALB	04/22/24 12:32
Total/NA	Analysis	8015D		1	3824	JP	EET ALB	04/24/24 05:31

Eurofins Albuquerque

Matrix: Solid

Client Sample ID: BES24-08

Batch

Туре

Prep

Prep

Prep

Analysis

Analysis

Analysis

Batch

Method

5030C

8021B

SHAKE

8015D

300.0

300 Prep

Date Collected: 04/18/24 10:45

Date Received: 04/20/24 09:40

Client: Vertex

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Project/Site: JRU DI 2

Dilution

Run

Factor

1

1

20

Batch

3667 JR

3825 JP

3758 JU

3832 JU

3838 RC

3852 JT

Number Analyst

Lab

EET ALB

EET ALB

EET ALB

EET ALB

EET ALB

EET ALB

Job ID: 885-3167-1

Lab Sample ID: 885-3167-4

Lab Sample ID: 885-3167-5

Prepared

or Analyzed

04/22/24 12:32

04/24/24 05:31

04/23/24 13:42

04/25/24 00:18

04/24/24 14:12

04/24/24 17:55

Matrix: Solid

Matrix: Solid

Client Sample ID: BES24-10 Date Collected: 04/18/24 11:00 Date Received: 04/20/24 09:40

	Batch	Batch		Dilution	Batch			Prepared
Prep Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3667	JR	EET ALB	04/22/24 12:32
Total/NA	Analysis	8015D		1	3824	JP	EET ALB	04/24/24 05:55
Total/NA	Prep	5030C			3667	JR	EET ALB	04/22/24 12:32
Total/NA	Analysis	8021B		1	3825	JP	EET ALB	04/24/24 05:55
Total/NA	Prep	SHAKE			3758	JU	EET ALB	04/23/24 13:42
Total/NA	Analysis	8015D		1	3832	JU	EET ALB	04/25/24 00:29
Total/NA	Prep	300_Prep			3838	RC	EET ALB	04/24/24 14:12
Total/NA	Analysis	300.0		20	3852	JT	EET ALB	04/24/24 18:08

Client Sample ID: BES24-11 Date Collected: 04/18/24 11:15 Date Received: 04/20/24 09:40

Lab	Sample	ID:	885-31	67-6
			Matulara	Collid

Lab Sample ID: 885-3167-7

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3757	JP	EET ALB	04/23/24 13:42
Total/NA	Analysis	8015D		1	3868	JP	EET ALB	04/24/24 14:43
Total/NA	Prep	5030C			3757	JP	EET ALB	04/23/24 13:42
Total/NA	Analysis	8021B		1	3869	JP	EET ALB	04/24/24 14:43
Total/NA	Prep	SHAKE			3768	JU	EET ALB	04/23/24 15:26
Total/NA	Analysis	8015D		1	3832	JU	EET ALB	04/24/24 19:15
Total/NA	Prep	300_Prep			3838	RC	EET ALB	04/24/24 14:12
Total/NA	Analysis	300.0		20	3852	JT	EET ALB	04/24/24 18:21

Client Sample ID: BES24-17 Date Collected: 04/18/24 11:30 Date Received: 04/20/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3757	JP	EET ALB	04/23/24 13:42
Total/NA	Analysis	8015D		1	3868	JP	EET ALB	04/24/24 15:06
Total/NA	Prep	5030C			3757	JP	EET ALB	04/23/24 13:42
Total/NA	Analysis	8021B		1	3869	JP	EET ALB	04/24/24 15:06

Prep	5030C		3757 JP
Analysis	8021B	1	3869 JP

Lab Chronicle

Job ID: 885-3167-1

Matrix: Solid

Matrix: Solid

8

Lab Sample ID: 885-3167-7

Lab Sample ID: 885-3167-8

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-17 Date Collected: 04/18/24 11:30 Date Received: 04/20/24 09:40

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	SHAKE			3768	JU	EET ALB	04/23/24 15:26
Total/NA	Analysis	8015D		1	3832	JU	EET ALB	04/24/24 19:27
Total/NA	Prep	300_Prep			3838	RC	EET ALB	04/24/24 14:12
Total/NA	Analysis	300.0		20	3852	JT	EET ALB	04/24/24 18:59

Client Sample ID: BES24-18 Date Collected: 04/18/24 11:45 Date Received: 04/20/24 09:40

	Batch	Batch		Dilution	Batch			Prepared
Prep Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3757	JP	EET ALB	04/23/24 13:42
Total/NA	Analysis	8015D		1	3868	JP	EET ALB	04/24/24 15:30
Total/NA	Prep	5030C			3757	JP	EET ALB	04/23/24 13:42
Total/NA	Analysis	8021B		1	3869	JP	EET ALB	04/24/24 15:30
Total/NA	Prep	SHAKE			3768	JU	EET ALB	04/23/24 15:26
Total/NA	Analysis	8015D		1	3832	JU	EET ALB	04/24/24 19:38
Total/NA	Prep	300_Prep			3838	RC	EET ALB	04/24/24 14:12
Total/NA	Analysis	300.0		20	3852	JT	EET ALB	04/24/24 19:12

Client Sample ID: BES24-20 Date Collected: 04/18/24 12:00 Date Received: 04/20/24 09:40

Lab Sample ID: 885-3167-9 Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3757	JP	EET ALB	04/23/24 13:42
Total/NA	Analysis	8015D		1	3868	JP	EET ALB	04/24/24 15:53
Total/NA	Prep	5030C			3757	JP	EET ALB	04/23/24 13:42
Total/NA	Analysis	8021B		1	3869	JP	EET ALB	04/24/24 15:53
Total/NA	Prep	SHAKE			3768	JU	EET ALB	04/23/24 15:26
Total/NA	Analysis	8015D		1	3832	JU	EET ALB	04/24/24 19:49
Total/NA	Prep	300_Prep			3838	RC	EET ALB	04/24/24 14:12
Total/NA	Analysis	300.0		20	3852	JT	EET ALB	04/24/24 19:25

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex Project/Site: JRU DI 2 Job ID: 885-3167-1

Laboratory: Eurofins Albuquerque

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

uthority	Progra	am	Identification Number	Expiration Date
lew Mexico	State		NM9425, NM0901	02-26-25
		-	not certified by the governing author	ity. This list may include analytes
for which the agency Analysis Method	does not offer certification Prep Method	n. 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	
8021B	5030C	Solid	Benzene	
8021B	5030C	Solid	Ethylbenzene	
8021B	5030C	Solid	Toluene	
8021B	5030C	Solid	Xylenes, Total	
regon	NELA	P	NM100001	02-26-25

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

Client Vertex (XOL) Z Standard Z Rundh Z Rundh <thz rundh<="" th=""> Z Rundh <thz <="" rundh<="" th=""><th>Ch</th><th>ain-</th><th>of-Cu</th><th>Chain-of-Custody Record</th><th>Turn-Around Time</th><th>Time</th><th></th><th></th><th></th><th></th><th>Ì</th><th>100 100 100</th><th>Ц</th><th>.VEN</th><th></th><th></th><th></th><th></th></thz></thz>	Ch	ain-	of-Cu	Chain-of-Custody Record	Turn-Around Time	Time					Ì	100 100 100	Ц	.VEN				
Project Name JRU D1 2 diffess On File www.hallenvironmental com diffess On File Project Nanager Saly Cartar Project Manager Saly Cartar Project Manager Saly Cartar Confile Project Manager Saly Cartar Project Manager Saly Cartar Project Manager Saly Cartar Project Manager Maleiter Multiclem On File Project Manager Saly Cartar Project Manager Multiclem Project Manager Maleiton do Mal Plant Contance Project Manager Multiclem Project Manager Multiclem Project Maleiton do Mal Plant Project Maleiton <	ent Ver	tex (X1	0)		应 Standard	Z Rush	Daw		Щ.				i X		LAB		2 (2 (2	1
ddress On File 4901 Hawkins NE Albugenque, NM 87105 On File Project # 23-00065 Fax 5065-345-3075 Fax 506-345-3075 Fax 506-345-3075 Fax 506-345-3075 Fax 506-345-3075 Fax 508-345-3075 Fax 506-345-3075 Fax 506-345-3075 Fax 506-345-3075 Fax 506-345-3075 Fax 506-345-3075 Fax 506-345-3075 Albugenque, NM 87109 and Contam Project Manager Sally Caritar Albugenque, NM 87109 and Contam Project Manager Sally Caritar Time Albugendex, NM 87109 Contam Project Manager Sally Caritar Time Project Manager Sally Caritar Contam Project Manager Sally Caritar Time Project Manager Sally Caritar Time Project Manager Sally Caritar Contam Project Manager Sally Caritar Time <td></td> <td></td> <td></td> <td></td> <td>Project Name</td> <td>e JRU DI 2</td> <td></td> <td></td> <td></td> <td></td> <td>Ś</td> <td>, h</td> <td>allenv</td> <td>Ironn</td> <td>ental con</td> <td></td> <td></td> <td>2213</td>					Project Name	e JRU DI 2					Ś	, h	allenv	Ironn	ental con			2213
On File Torgect # 23-06053 Tel B05-345-3975 Fax 605-346-3071 Faxe# Scattar@ivertex.ca Project # 23-06055 Faxe# Scattar@ivertex.ca Project # 23-06055 Faxe# Scattar@ivertex.ca Project # 23-06055 Eaxe# Scattar@ivertex.ca Project # 23-06055 ard □ Level 4 (Fult Validation) Sampler Wyatt Wadleigh Anabia 7 (Sampler Wyatt Wadleigh) Time Matrix Sampler Wyatt Wadleigh Sampler Wyatt Wadleigh Anabia 7 (Samt-VOA) Time Matrix Sample Name Prosection and # 170e Content Prosection and NA Time Matrix Sample Name Prosection and NA NRE Anabia 7 (Samt-VOA) Time Matrix Sample Name Prosection and NA NRE Anabia 7 (Samt-VOA) Time Matrix Sample Name Prosection and NA NRE Anabia 7 (Samt-VOA) Time Matrix Sample Name Prosection and NA NRE Anabia 7 (Samt-VOA) Tipo Solid BES24-06 1, 4zz jar 1, 4zz jar 2 X X X X X <td>alling Ad</td> <td></td> <td>On File</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>490</td> <td>1 Ha</td> <td>wkins</td> <td>ЯR</td> <td>- Alb</td> <td>anbn</td> <td>rque, NM</td> <td>87109</td> <td></td> <td>্য</td>	alling Ad		On File						490	1 Ha	wkins	ЯR	- Alb	anbn	rque, NM	87109		্য
On File Analysis Reduces Fask Scatter@vertex ca Project Manager Saly Carttar Project Manager Saly Carttar Project Manager Saly Carttar State □ Level 4 (Full Validation) 0 East Scattar@vertex ca Project Manager Saly Carttar atta □ Level 4 (Full Validation) Sampler Wyatt Wadlegh Sampler Wyatt Wadlegh Sampler Wyatt Wadlegh atta □ Level 4 (Full Validation) Sampler Wyatt Wadlegh Sampler Wyatt Wadlegh Sampler Wyatt Wadlegh (1) 0 0 Solid ESS24-04 1,402,8035 PCB's NOs, NOs, SO, SOL ESS24-05 1,402,91 X					Project # 23-	06065			Tel	505	-345-	3975		ax 5	05-345-4	107	885-3167 C	20
Fax# Scattar@vertex ca Project Manager Sally Carttar ard □ Level 4 (Full Validation) ard □ Level 4 (Full Validation) ation □ Az Compliance C □ Other Time Matrix Sampler Wyatt Wadlegh C □ Other Time Matrix Sampler Wyatt Wadlegh C □ Other Time Matrix 10 00 Soil BES24-05 1, 4oz jar 10 15 Soil BES24-06 1, 4oz jar 10 16 Soil BES24-05 1, 4oz jar 10 16 Soil BES24-06 1, 4oz jar 10 15 Soil BES24-06 1, 4oz jar 11 10 Soil BES24-10 1, 4oz jar 11 11 Soil BES24-17 1, 4oz jar 11 40 Soil BES24-18 1, 4oz jar 11 40 1, 4oz jar 11 15 Soil BES24-18 1, 4oz jar 11 40 1, 4oz jar 11 40 Soil BES24-17 1, 4oz jar 11 40 1, 4oz jar 11 40	one# C	Dn File											Analy	sis F	equest			
ackage ackage and the second and the	iail or Fá		:attar@v€	ertex ca	Project Mana		ttar	(12	(02	5			os		(juə			
ard I Level 4 (Full Validation) ation Az Compliance Sampler Wyatt Wadleigh C I Other A Compliance On Ice: T Yes IN0 Motiva Type) HEAL No. Time Matrix Sample Name Type and # Type HEAL No. Time BES24-05 1, 4oz jar Preservative HEAL No. 10 15 Soil BES24-05 1, 4oz jar Preservative HEAL No. 10 15 Soil BES24-05 1, 4oz jar Preservative HEAL No. 10 45 Soil BES24-06 1, 4oz jar Preservative HEAL No. 11 15 Soil BES24-10 1, 4oz jar Preservative HEAL No. 11 15 Soil BES24-10 1, 4oz jar P. 11 16 Soil BES24-10 1, 4oz jar P. 11 17 20 Soil BES24-10 1, 4oz jar P. 11 16 Soil BES24-18 1, 4oz jar P. 11 17 20 Soil BES24-18 1, 4oz jar P. 11 16 Soil BES24-18 1, 4oz jar P. 11 17 20 Soil BES24-18 1, 4oz jar P. 11 16 Soil BES24-18 1, 4oz jar P. 11 16 P. 11 16 P. 11 16 P. 11 17 20 Soil BES24-18 1, 4oz jar P. 11 16 P. 11 16 P. 11 16 P. 11 16 P. 11 16 P. 11 17 17 17 10 P. 11 17 10 P. 11 16 P. 11 16 P. 11 17 10 P. 11 17 10 P. 11 16 P. 11 17 10 P. 11 17 10 P. 11 16 P. 11 17 10 P. 11 17 10 P. 11 17 10 P. 11 16 P. 11 17 10 P. 11 16 P. 11 17 10 P. 11 17 10 P. 11 16 P. 11 16 P. 11 17 10 P. 11 17 10 P. 11 17 10 P. 11 17 10 P. 11 16 P.	/QC Pac	kage						:08)	IW /	CB.	2001		'*O	····· ·	sdA		· · · · · · · · · · · · · · · · · · ·	
Interpretation Sampler Wyatt Wadleigh C Cother Matrix Sample Name If Yes No Type) # of Coolers: I I No Matrix Time Matrix Sample Name Type and # Type If Accolers: I 10 00 Soil BES24-04 1, 4oz jar Preservative HEAL No. 10 15 Soil BES24-05 1, 4oz jar Preservative HEAL No. 10 30 Soil BES24-05 1, 4oz jar Preservative HEAL No. 11 10 Soil BES24-05 1, 4oz jar Preservative HEAL No. 11 11 Soil BES24-10 1, 4oz jar Preservative HEAL No. 11 15 Soil BES24-11 1, 4oz jar Preservative HeAL No. 11 130 Soil BES24-11 1, 4oz jar Preservative Preservative 11 145 Soil BES24-12 1, 4oz jar Preservative Preservative 11 150 Soil BES24-11 1, 4oz jar Preservative Preservative 11 150 Soil BES24-12 1, 4oz jar Preservative Preservative 11 145 Soil	Standar	p		Level 4 (Full Validation)				s'a	οя				^{з,} Р		удие			
C C C C Matrix Do loe: Types No Matrix Time Matrix Sample Name Type and # Type: I Accoler:: I 10 Soli BES24-05 1, 4oz jar Preservative HEAL No. 10 Soli BES24-05 1, 4oz jar Preservative HEAL No. 10 Soli BES24-05 1, 4oz jar Preservative HEAL No. 10 Soli BES24-05 1, 4oz jar Preservative HEAL No. 11 Soli BES24-05 1, 4oz jar Preservative HEAL No. 11 Soli BES24-05 1, 4oz jar Prezist Prezist Prezist 11 Soli BES24-10 1, 4oz jar Prezist Prezist Prezist 11 Soli BES24-11 1, 4oz jar Prezist Prezist Prezist 11 Soli BES24-12 1, 4oz jar Prezist Prezist Prezist Prezis	creditati	Б		ompliance	>	att Wadleigh		MT	a / e			70	ON		ú			
Type) # of Coolers: I Time Matrix Sample Name Cooler Templeuding cP: S. I to 10 00 Soil BES24-04 1, 402 Jar Freservative 10 15 Soil BES24-06 1, 402 Jar Z 10 45 Soil BES24-06 1, 402 Jar Z 10 45 Soil BES24-06 1, 402 Jar Z 10 45 Soil BES24-06 1, 402 Jar Z 11 00 Soil BES24-06 1, 402 Jar Z 11 11 15 Soil BES24-10 1, 402 Jar Z 11 130 Soil BES24-10 1, 402 Jar Z 11 145 Soil BES24-10 1, 402 Jar Z 11 130 Soil BES24-10 1, 402 Jar Z 11 145 Soil BES24-10 1, 402 Jar Z 11 145 Soil BES24-10 1, 402 Jar Z 11 145 Soil BES24-10 1, 402 Jar Z <	NELAC		□ Othe		On Ice:			/ 3	οя									
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10 Soil BES24-04 1, 4oz jar Z 10 15 Soil BES24-05 1, 4oz jar Z 10 30 Soil BES24-06 1, 4oz jar Z 10 30 Soil BES24-06 1, 4oz jar Z 10 45 Soil BES24-10 1, 4oz jar Z 11 100 Soil BES24-10 1, 4oz jar Z 11 15 Soil BES24-10 1, 4oz jar Z 11 130 Soil BES24-17 1, 4oz jar Z 11 45 Soil BES24-18 1, 4oz jar Z 11 45 Soil BES24-18 1, 4oz jar Z 11 45 Soil BES24-18 1, 4oz jar Z 11 45 1, 4oz jar 1, 4oz jar Z Z 12 00 Soil BES24-20 1, 4oz jar Z 12 00		ime	Matrix	Sample Name	Container Type and #	Preservative Type		X XII	08 H9T					/) 0928				
10 15SoilBES24-051, 4oz jar210 30SoilBES24-061, 4oz jar310 45SoilBES24-061, 4oz jar310 45SoilBES24-101, 4oz jar411 10SoilBES24-111, 4oz jar511 15SoilBES24-171, 4oz jar511 130SoilBES24-171, 4oz jar711 145SoilBES24-181, 4oz jar711 45SoilBES24-181, 4oz jar712 00SoilBES24-201, 4oz jar7TimeRelinquished by Wyatt WadleighReceived by Via0MinutureRelinquished byMinuture8MinutureRelinquished byNia0MinutureRelinquished byNia0MinutureRelinquished byNia0MinutureRelinquished byNia0MinutureRelinquished byNia0MinutureRelinquished byNia0MinutureRelinquished byNia0MinutureRelinquished by <t< td=""><td></td><td>10 00</td><td>Soil</td><td>BES24-04</td><td>1, 4oz jar</td><td></td><td></td><td>×</td><td>×</td><td></td><td></td><td></td><td>×</td><td></td><td></td><td></td><td></td><td></td></t<>		10 00	Soil	BES24-04	1, 4oz jar			×	×				×					
10 30SoilBES24-061, 4oz jar310 45SoilBES24-081, 4oz jar411 00SoilBES24-101, 4oz jar 4 11 15SoilBES24-171, 4oz jar 5 11 130SoilBES24-171, 4oz jar 7 11 45SoilBES24-181, 4oz jar 7 11 45SoilBES24-181, 4oz jar 7 11 45SoilBES24-181, 4oz jar 7 12 00SoilBES24-201, 4oz jar 7 11 00SoilBES24-201, 4oz jar 7 12 00SoilBES24-201, 4oz jar 7 12 00SoilBES24-201, 4oz jar 7 12 00So		10 15	Soil	BES24-05	1, 4oz jar		2	×	×				×					
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11 00SoilBES24-101, 4oz jar $<$ 11 15SoilBES24-171, 4oz jar $<$ 11 30SoilBES24-171, 4oz jar $<$ 11 45SoilBES24-181, 4oz jar $<$ 11 45SoilBES24-181, 4oz jar $<$ 12 00SoilBES24-201, 4oz jar $<$ 12 00 <td< td=""><td></td><td>10 45</td><td>Sol</td><td>BES24-08</td><td>1, 4oz jar</td><td></td><td>ų</td><td>×</td><td>×</td><td></td><td></td><td></td><td>×</td><td></td><td></td><td></td><td></td><td></td></td<>		10 45	Sol	BES24-08	1, 4oz jar		ų	×	×				×					
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11 30 Soil BES24-17 1, 4oz jar T 11 45 Soil BES24-18 1, 4oz jar T 12 00 Soil BES24-20 1, 4oz jar T 12 00 Soil BES24 MMMULL T 11 00 MMULL MMULL MIT M 12 0 MIL MIL MIL M 12 0 MIL MIL MIL M		11 15	Soil	BES24-11	1, 4oz jar		с С	×	×				×					
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12 00 Soll BES24-20 1, 4oz jar A Ime Relinquished by Wyatt Wadleigh Received by Via MMMULU M5 MMMULU 19/04 0/0 Ime Relinquished by Via Date Time M5 MMMULU 19/04 0/0 Ime Relinquished by Via Date Time M5 MMULU 19/04 0/0		11 45	Sol	BES24-18	1, 4oz jar		8	×	×				×					
Time Relinquished by Wyatt Wadleigh Received by Via Date Time BJG BJG Time Relinquished by Wia. Country Date Time PJG Time Relinquished by Via. Country Date Time 950		12 00	Soil	BES24-20	1, 4oz jar		G	×	×				×					
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11

Job Number: 885-3167-1

List Source: Eurofins Albuquerque

Login Sample Receipt Checklist

Client: Vertex

Login Number: 3167 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	N/A	

<6mm (1/4").

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 5/6/2024 4:01:59 PM

JOB DESCRIPTION

JRU DI 2

JOB NUMBER

885-3298-1

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

Authorized for release by

(505)345-3975

Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com

Generated 5/6/2024 4:01:59 PM

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Chain of Custody	41
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Definitions/Glossary

Client: Vertex Project/Site: JRU DI 2 Job ID: 885-3298-1

11.0

Qualifiers		3
GC Semi VO	Α	
Qualifier	Qualifier Description	
S1+	Surrogate recovery exceeds control limits, high biased.	
Glossary		5
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	9
CNF	Contains No Free Liquid	0
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	9
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

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Job ID: 885-3298-1

Client: Vertex

Project: JRU DI 2

Eurofins Albuquerque

Job ID: 885-3298-1

Job Narrative 885-3298-1

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 4/24/2024 7:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.1°C and 1.6°C.

Receipt Exceptions

The container count for the following samples did not match what was listed on the Chain-of-Custody (COC). The laboratory received 18 total containers, while the COC lists 12 total containers. Client was contacted through Erin Cummings and advised lab to add samples to login using info on containers. An updated COC was provided.

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 885-3939 recovered above the upper control limit for Di-n-octyl phthalate (Surr). Percent recovery for DRO is acceptable. The samples associated with this had passing surrogate or high surrogate/ND results; therefore, the data have been reported. Re-running any samples with high surrogate and hits. The associated samples are impacted: BES24-21 1' (885-3298-1), BES24-22 1' (885-3298-2), (CCV 885-3939/42), (LCS 885-3839/2-A), (MB 885-3839/1-A), (885-3300-A-23-B), (885-3300-A-23-C MS) and (885-3300-A-23-D MSD).

Method 8015D_DRO: Surrogate recovery for the following sample was outside the upper control limit: BES24-21 1' (885-3298-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.
Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-21 1' Date Collected: 04/19/24 10:00 Date Received: 04/24/24 07:45

Job ID: 885-3298-1

Lab Sample ID: 885-3298-1

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/24/24 09:40	04/26/24 14:06	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	100		15 - 244			04/24/24 09:40	04/26/24 14:06	
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.025	mg/Kg		04/24/24 09:40	04/26/24 14:06	
Ethylbenzene	ND		0.049	mg/Kg		04/24/24 09:40	04/26/24 14:06	
Toluene	ND		0.049	mg/Kg		04/24/24 09:40	04/26/24 14:06	
Xylenes, Total	ND		0.098	mg/Kg		04/24/24 09:40	04/26/24 14:06	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	99		39 - 146			04/24/24 09:40	04/26/24 14:06	
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		9.1	mg/Kg		04/24/24 15:00	04/25/24 21:06	
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/24/24 15:00	04/25/24 21:06	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	137	S1+	62 - 134			04/24/24 15:00	04/25/24 21:06	
51								
	on Chroma	tography -	Soluble					
Method: EPA 300.0 - Anions, I Analyte		tography - Qualifier	Soluble RL	Unit	D	Prepared	Analyzed	Dil Fa

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-22 1' Date Collected: 04/19/24 10:15 Date Received: 04/24/24 07:45

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Job ID: 885-3298-1

Lab Sample ID: 885-3298-2 Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC) Analyte **Result Qualifier** Unit D Dil Fac RL Prepared Analyzed Gasoline Range Organics [C6 - C10] 4.8 04/24/24 09:40 04/26/24 14:30 ND mg/Kg Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 15 - 244 04/24/24 09:40 04/26/24 14:30 100 Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte **Result Qualifier** RL Unit D Prepared Analyzed Dil Fac Benzene ND 0.024 mg/Kg 04/24/24 09:40 04/26/24 14:30 Ethylbenzene ND 04/24/24 09:40 04/26/24 14:30 0.048 mg/Kg 1 Toluene ND 0.048 mg/Kg 04/24/24 09:40 04/26/24 14:30 1 ND 0.095 mg/Kg 04/24/24 09:40 04/26/24 14:30 Xylenes, Total %Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 39 - 146 04/24/24 09:40 04/26/24 14:30 4-Bromofluorobenzene (Surr) 97 Method: SW846 8015D - Diesel Range Organics (DRO) (GC) Analyte **Result Qualifier** Unit D Prepared Dil Fac RL Analyzed Diesel Range Organics [C10-C28] ND 9.2 04/24/24 15:00 04/25/24 21:18 mg/Kg 1 Motor Oil Range Organics [C28-C40] ND 46 mg/Kg 04/24/24 15:00 04/25/24 21:18 1 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 62 - 134 04/24/24 15:00 04/25/24 21:18 134 1 Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Analyte **Result Qualifier** RL Unit D Prepared Analyzed Dil Fac 05/04/24 21:59 Chloride 86 5.0 mg/Kg 1

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-23 1' Date Collected: 04/19/24 10:30

Date Received: 04/24/24 07:45

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/24/24 09:40	04/26/24 15:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			04/24/24 09:40	04/26/24 15:16	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/24/24 09:40	04/26/24 15:16	1
Ethylbenzene	ND		0.049	mg/Kg		04/24/24 09:40	04/26/24 15:16	1
Toluene	ND		0.049	mg/Kg		04/24/24 09:40	04/26/24 15:16	1
Xylenes, Total	ND		0.098	mg/Kg		04/24/24 09:40	04/26/24 15:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		39 - 146			04/24/24 09:40	04/26/24 15:16	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		9.5	mg/Kg		04/25/24 15:27	04/26/24 14:23	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/25/24 15:27	04/26/24 14:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	107		62 - 134			04/25/24 15:27	04/26/24 14:23	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	540		5.1	mg/Kg			05/04/24 22:05	

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Job ID: 885-3298-1

Matrix: Solid

Lab Sample ID: 885-3298-3

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-24 1' Date Collected: 04/19/24 10:45 Date Received: 04/24/24 07:45

Job ID: 885-3298-1

Lab Sample ID: 885-3298-4

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/24/24 09:40	04/26/24 15:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 244			04/24/24 09:40	04/26/24 15:40	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/24/24 09:40	04/26/24 15:40	1
Ethylbenzene	ND		0.049	mg/Kg		04/24/24 09:40	04/26/24 15:40	1
Toluene	ND		0.049	mg/Kg		04/24/24 09:40	04/26/24 15:40	1
Xylenes, Total	ND		0.097	mg/Kg		04/24/24 09:40	04/26/24 15:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		39 - 146			04/24/24 09:40	04/26/24 15:40	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		9.7	mg/Kg		04/25/24 15:27	04/26/24 14:36	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/25/24 15:27	04/26/24 14:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		62 - 134			04/25/24 15:27	04/26/24 14:36	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-25 1' Date Collected: 04/19/24 11:00

Date Received: 04/24/24 07:45

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/24/24 09:40	04/26/24 16:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 244			04/24/24 09:40	04/26/24 16:03	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/24/24 09:40	04/26/24 16:03	1
Ethylbenzene	ND		0.050	mg/Kg		04/24/24 09:40	04/26/24 16:03	1
Toluene	ND		0.050	mg/Kg		04/24/24 09:40	04/26/24 16:03	1
Xylenes, Total	ND		0.099	mg/Kg		04/24/24 09:40	04/26/24 16:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		39 - 146			04/24/24 09:40	04/26/24 16:03	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		9.5	mg/Kg		04/25/24 15:27	04/26/24 14:49	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/25/24 15:27	04/26/24 14:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			04/25/24 15:27	04/26/24 14:49	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Job ID: 885-3298-1

Matrix: Solid

5

Lab Sample ID: 885-3298-5

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-26 1' Date Collected: 04/19/24 11:15

Date Received: 04/24/24 07:45

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/24/24 13:52	04/26/24 18:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/24/24 13:52	04/26/24 18:44	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/24/24 13:52	04/26/24 18:44	1
Ethylbenzene	ND		0.046	mg/Kg		04/24/24 13:52	04/26/24 18:44	1
Toluene	ND		0.046	mg/Kg		04/24/24 13:52	04/26/24 18:44	1
Kylenes, Total	ND		0.092	mg/Kg		04/24/24 13:52	04/26/24 18:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/24/24 13:52	04/26/24 18:44	
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		9.2	mg/Kg		04/25/24 15:27	04/26/24 15:01	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/25/24 15:27	04/26/24 15:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	105		62 - 134			04/25/24 15:27	04/26/24 15:01	
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	rtoount			•	_		· · · · · · · · · · · · · · · · · · ·	

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Job ID: 885-3298-1

Lab Sample ID: 885-3298-6 Matrix: Solid

Released to Imaging: 7/31/2024 2:57:32 PM

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-27 1' Date Collected: 04/19/24 11:30

Date Received: 04/24/24 07:45

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/24/24 13:52	04/26/24 19:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244			04/24/24 13:52	04/26/24 19:06	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/24/24 13:52	04/26/24 19:06	1
Ethylbenzene	ND		0.048	mg/Kg		04/24/24 13:52	04/26/24 19:06	1
Toluene	ND		0.048	mg/Kg		04/24/24 13:52	04/26/24 19:06	1
Xylenes, Total	ND		0.096	mg/Kg		04/24/24 13:52	04/26/24 19:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/24/24 13:52	04/26/24 19:06	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		9.7	mg/Kg		04/25/24 15:27	04/26/24 15:14	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/25/24 15:27	04/26/24 15:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			04/25/24 15:27	04/26/24 15:14	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			5.0	mg/Kg			05/04/24 22:43	

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Job ID: 885-3298-1

Matrix: Solid

5

Lab Sample ID: 885-3298-7

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-28 1' Date Collected: 04/19/24 11:45

Date Received: 04/24/24 07:45

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/24/24 13:52	04/26/24 19:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Bromofluorobenzene (Surr)	102		15 - 244			04/24/24 13:52	04/26/24 19:28	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/24/24 13:52	04/26/24 19:28	1
Ethylbenzene	ND		0.046	mg/Kg		04/24/24 13:52	04/26/24 19:28	1
Toluene	ND		0.046	mg/Kg		04/24/24 13:52	04/26/24 19:28	1
Kylenes, Total	ND		0.092	mg/Kg		04/24/24 13:52	04/26/24 19:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Bromofluorobenzene (Surr)	89		39 - 146			04/24/24 13:52	04/26/24 19:28	
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		9.4	mg/Kg		04/25/24 15:27	04/26/24 15:27	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/25/24 15:27	04/26/24 15:27	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	88		62 - 134			04/25/24 15:27	04/26/24 15:27	
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Job ID: 885-3298-1

Matrix: Solid

5

Lab Sample ID: 885-3298-8

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-29 1' Date Collected: 04/19/24 12:00 Date Received: 04/24/24 07:45

Released to In	naging: 7/	/31/2024	2:57:32 .	PM

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Job ID: 885-3298-1

Lab Sample ID: 885-3298-9

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/24/24 13:52	04/26/24 19:49	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	102		15 - 244			04/24/24 13:52	04/26/24 19:49	
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.023	mg/Kg		04/24/24 13:52	04/26/24 19:49	
Ethylbenzene	ND		0.046	mg/Kg		04/24/24 13:52	04/26/24 19:49	
Toluene	ND		0.046	mg/Kg		04/24/24 13:52	04/26/24 19:49	
Xylenes, Total	ND		0.091	mg/Kg		04/24/24 13:52	04/26/24 19:49	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	89		39 - 146			04/24/24 13:52	04/26/24 19:49	
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		9.2	mg/Kg		04/25/24 15:27	04/26/24 15:40	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/25/24 15:27	04/26/24 15:40	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	99		62 - 134			04/25/24 15:27	04/26/24 15:40	
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	81		5.1	mg/Kg			05/04/24 22:56	

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-30 1' Date Collected: 04/19/24 12:15

Date Received: 04/24/24 07:45

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/24/24 13:52	04/26/24 20:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244			04/24/24 13:52	04/26/24 20:11	1
Method: SW846 8021B - Volati	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/24/24 13:52	04/26/24 20:11	1
Ethylbenzene	ND		0.047	mg/Kg		04/24/24 13:52	04/26/24 20:11	1
Toluene	ND		0.047	mg/Kg		04/24/24 13:52	04/26/24 20:11	1
Xylenes, Total	ND		0.093	mg/Kg		04/24/24 13:52	04/26/24 20:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			04/24/24 13:52	04/26/24 20:11	1
Method: SW846 8015D - Diese	I Range Or	ganics (DF	RO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	25		9.1	mg/Kg		04/25/24 15:27	04/26/24 15:53	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/25/24 15:27	04/26/24 15:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	118		62 - 134			04/25/24 15:27	04/26/24 15:53	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
-		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Quanner		Unit		i iopaioa	Analyzea	Diriuo

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Job ID: 885-3298-1

Matrix: Solid

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Lab Sample ID: 885-3298-10

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-02 1.5' Date Collected: 04/19/24 12:45 Date Received: 04/24/24 07:45

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Job ID: 885-3298-1

Lab Sample ID: 885-3298-11

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/24/24 13:52	04/26/24 20:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/24/24 13:52	04/26/24 20:33	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/24/24 13:52	04/26/24 20:33	1
Ethylbenzene	ND		0.048	mg/Kg		04/24/24 13:52	04/26/24 20:33	1
Toluene	ND		0.048	mg/Kg		04/24/24 13:52	04/26/24 20:33	1
Xylenes, Total	ND		0.095	mg/Kg		04/24/24 13:52	04/26/24 20:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/24/24 13:52	04/26/24 20:33	
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		8.6	mg/Kg		04/25/24 15:27	04/26/24 16:06	· · · ·
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/25/24 15:27	04/26/24 16:06	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	97		62 - 134			04/25/24 15:27	04/26/24 16:06	
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-03 1.5' Date Collected: 04/19/24 13:00 Date Received: 04/24/24 07:45

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Job ID: 885-3298-1

Lab Sample ID: 885-3298-12 Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/24/24 13:52	04/26/24 20:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/24/24 13:52	04/26/24 20:55	1
Method: SW846 8021B - Volat	ile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/24/24 13:52	04/26/24 20:55	1
Ethylbenzene	ND		0.049	mg/Kg		04/24/24 13:52	04/26/24 20:55	1
Toluene	ND		0.049	mg/Kg		04/24/24 13:52	04/26/24 20:55	1
Xylenes, Total	ND		0.098	mg/Kg		04/24/24 13:52	04/26/24 20:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/24/24 13:52	04/26/24 20:55	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		9.4	mg/Kg		04/25/24 15:27	04/26/24 16:18	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/25/24 15:27	04/26/24 16:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			04/25/24 15:27	04/26/24 16:18	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		5.0	mg/Kg			05/04/24 23:27	1

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-12 1.5' Date Collected: 04/22/24 11:30

Date Received: 04/24/24 07:45

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/25/24 12:10	04/27/24 05:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/25/24 12:10	04/27/24 05:17	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/25/24 12:10	04/27/24 05:17	1
Ethylbenzene	ND		0.049	mg/Kg		04/25/24 12:10	04/27/24 05:17	1
Toluene	ND		0.049	mg/Kg		04/25/24 12:10	04/27/24 05:17	1
Xylenes, Total	ND		0.098	mg/Kg		04/25/24 12:10	04/27/24 05:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			04/25/24 12:10	04/27/24 05:17	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		9.5	mg/Kg		04/26/24 12:53	04/29/24 17:55	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/26/24 12:53	04/29/24 17:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	110		62 - 134			04/26/24 12:53	04/29/24 17:55	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result							

Matrix: Solid

Job ID: 885-3298-1

Lab Sample ID: 885-3298-13

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Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-13 1.5' Date Collected: 04/22/24 11:35 Date Received: 04/24/24 07:45

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Job ID: 885-3298-1

JUD ID. 000-0290-

Lab Sample ID: 885-3298-14 Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/25/24 12:10	04/27/24 05:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 244			04/25/24 12:10	04/27/24 05:39	
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/25/24 12:10	04/27/24 05:39	1
Ethylbenzene	ND		0.049	mg/Kg		04/25/24 12:10	04/27/24 05:39	1
Toluene	ND		0.049	mg/Kg		04/25/24 12:10	04/27/24 05:39	1
Xylenes, Total	ND		0.098	mg/Kg		04/25/24 12:10	04/27/24 05:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			04/25/24 12:10	04/27/24 05:39	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		8.8	mg/Kg		04/26/24 12:53	04/29/24 18:08	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/26/24 12:53	04/29/24 18:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	118		62 - 134			04/26/24 12:53	04/29/24 18:08	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		5.0	mg/Kg			04/30/24 15:46	-

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Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-15 1.5' Date Collected: 04/22/24 11:45 Date Received: 04/24/24 07:45

Released to Imaging: 7/31/2024 2:57:32 PM

Eurofins Albuquerque

Lab Sample ID: 885-3298-15 Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/25/24 12:10	04/27/24 06:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244			04/25/24 12:10	04/27/24 06:01	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/25/24 12:10	04/27/24 06:01	1
Ethylbenzene	ND		0.048	mg/Kg		04/25/24 12:10	04/27/24 06:01	1
Toluene	ND		0.048	mg/Kg		04/25/24 12:10	04/27/24 06:01	1
Xylenes, Total	ND		0.097	mg/Kg		04/25/24 12:10	04/27/24 06:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			04/25/24 12:10	04/27/24 06:01	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		9.1	mg/Kg		04/26/24 12:53	04/29/24 18:21	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/26/24 12:53	04/29/24 18:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	128		62 - 134			04/26/24 12:53	04/29/24 18:21	1
Method: EPA 300.0 - Anions, I	on Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		5.0	mg/Kg			04/30/24 15:53	

RL

Unit

D

Prepared

Client: Vertex Project/Site: JRU DI 2

Analyte

Client Sample ID: BES24-16 1.5' Date Collected: 0 Date Received: 04/24/24 07:45

ю.	DE024-10 1.0	
4/22	/24 12:00	

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

Result Qualifier

Analyte	Result	Quanner		onic		Tiopulou	Analyzea	Dirruo
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/25/24 12:10	04/27/24 06:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/25/24 12:10	04/27/24 06:22	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/25/24 12:10	04/27/24 06:22	1
Ethylbenzene	ND		0.050	mg/Kg		04/25/24 12:10	04/27/24 06:22	1
Toluene	ND		0.050	mg/Kg		04/25/24 12:10	04/27/24 06:22	1
Xylenes, Total	ND		0.10	mg/Kg		04/25/24 12:10	04/27/24 06:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			04/25/24 12:10	04/27/24 06:22	1
Method: SW846 8015D - Diese	el Range Or	ganics (DI	RO) (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.5	mg/Kg		04/26/24 12:53	04/29/24 18:35	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/26/24 12:53	04/29/24 18:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	107		62 - 134			04/26/24 12:53	04/29/24 18:35	1
Method: EPA 300.0 - Anions,	lon Chroma	tography -	Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	260		5.0	mg/Kg			04/30/24 16:11	1
Analyte	Result		RL		D	Prepared		Dil Fac
Chloride	260		5.0	mg/Kg			04/30/24 16:11	_



Dil Fac

5

Job ID: 885-3298-1

Lab Sample ID: 885-3298-16

Analyzed

Matrix: Solid

RL

4.8

Limits

Client: Vertex Project/Site: JRU DI 2

Analyte

Surrogate

Client Sample ID: BES24-19 1.5' Date Collected: 04/22/24 12:05 Date Received: 04/24/24 07:45

Gasoline Range Organics [C6 - C10]

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

Result Qualifier

Qualifier

ND

%Recovery

Job ID: 885-3298-1

Lab Sample ID: 885-3298-17 Matrix: Solid

Analyzed

Analyzed

Dil Fac

Dil Fac

4-Bromofluorobenzene (Surr)	102		15 - 244			04/25/24 12:10	04/27/24 06:44	1
Method: SW846 8021B - Volat	ile Organic	Compoun	ds (GC)					
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/25/24 12:10	04/27/24 06:44	1
Ethylbenzene	ND		0.048	mg/Kg		04/25/24 12:10	04/27/24 06:44	1
Toluene	ND		0.048	mg/Kg		04/25/24 12:10	04/27/24 06:44	1
Xylenes, Total	ND		0.097	mg/Kg		04/25/24 12:10	04/27/24 06:44	1
0	% Decessory	0	1 : : 6			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			Frepareu	Analyzeu	Dirruc
Surrogate 4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese	90		39 - 146				04/27/24 06:44	1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese	90 Pl Range Org	ganics (DF	39 - 146 RO) (GC)	Unit	п	04/25/24 12:10	04/27/24 06:44	1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte	90 el Range Org Result		39 - 146 RO) (GC) RL	Unit	D	04/25/24 12:10 Prepared	04/27/24 06:44 Analyzed	$\frac{\text{Dil Fac}}{1}$
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28]	90 el Range Org Result ND	ganics (DF	39 - 146 RO) (GC) RL 8.5	mg/Kg	D	04/25/24 12:10 Prepared 04/26/24 12:53	04/27/24 06:44 Analyzed 04/29/24 18:48	1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28]	90 el Range Org Result	ganics (DF	39 - 146 RO) (GC) RL		<u>D</u>	04/25/24 12:10 Prepared	04/27/24 06:44 Analyzed 04/29/24 18:48	1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	90 el Range Org Result ND	<mark>ganics (DF</mark> Qualifier	39 - 146 RO) (GC) RL 8.5	mg/Kg	<u>D</u>	04/25/24 12:10 Prepared 04/26/24 12:53	04/27/24 06:44 Analyzed 04/29/24 18:48	1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	90 el Range Org Result ND ND	<mark>ganics (DF</mark> Qualifier	39 - 146 RO) (GC) RL 8.5 43	mg/Kg	<u>D</u>	04/25/24 12:10 Prepared 04/26/24 12:53 04/26/24 12:53 Prepared	04/27/24 06:44 Analyzed 04/29/24 18:48 04/29/24 18:48	1 Dil Fac 1 1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	90 El Range Or Result ND ND %Recovery 109	ganics (DF Qualifier Qualifier	39 - 146 RO) (GC) RL 8.5 43 Limits 62 - 134	mg/Kg	<u>D</u>	04/25/24 12:10 Prepared 04/26/24 12:53 04/26/24 12:53 Prepared	04/27/24 06:44 Analyzed 04/29/24 18:48 04/29/24 18:48 Analyzed	1 Dil Fac 1 1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diese Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	90 El Range Or Result ND ND %Recovery 109	ganics (DF Qualifier Qualifier	39 - 146 RO) (GC) RL 8.5 43 Limits 62 - 134	mg/Kg	<u>D</u>	04/25/24 12:10 Prepared 04/26/24 12:53 04/26/24 12:53 Prepared	04/27/24 06:44 Analyzed 04/29/24 18:48 04/29/24 18:48 Analyzed	1 Dil Fac 1 1
	90 el Range Org Result ND ND %Recovery 109 on Chromat	ganics (DF Qualifier Qualifier	39 - 146 RO) (GC) RL 8.5 43 Limits 62 - 134	mg/Kg	D	04/25/24 12:10 Prepared 04/26/24 12:53 04/26/24 12:53 Prepared	04/27/24 06:44 Analyzed 04/29/24 18:48 04/29/24 18:48 Analyzed	1 Dil Fac 1 1

Unit

mg/Kg

D

Prepared

Prepared

04/25/24 12:10 04/27/24 06:44

5/6/2024

Page 306 of 400

5 6 7

Job ID: 885-3298-1

Client: Vertex Project/Site: JRU DI 2

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

Matrix: Solid Analysis Batch: 4029 MB MB Prep Type: Prep Bat Analysis Batch: 4029 MB MS MS<	od Blan
MB MB MB Analyte Qualifier Result Qualifier Limits D Prepared Analyze Gasoline Range Organics (C6 - C10) ND 5.0 mg/Kg D Prepared Analyze MB MB MB MB Surrogate Stereovry Qualifier Limits Prepared Analyze Analysis Batch: 4029 Spike LCS	
Analyte Result Qualifier RL Unit D Prepared Analyzed Gasoline Range Organics (C6 - C10) ND 5.0 mg/Kg 04/24/24 13:52 04/28/24 11:55 Surrogate %Recovery Qualifier Limits Prepared Analyzed 4-Bromofiluorobenzene (Surr) 98 15.244 Client Sample ID: LOS 885-3834/2-A Client Sample ID: Lob Contro Prep Prepared Analyzed Analysis Batch: 4029 Spike LCS LCS CS LCS %Rec Witts Spike LCS LCS Unit D %Rec Witts Spike LS LCS LCS Witts Prep Type: ND Spike LS LCS LCS LS LCS LCS LS LCS LCS LS LCS LCS LS LCS LCS LCS MB MB Matrix: Solid Malifier	ch: 383/
Gasoline Range Organics (C6 - C10) ND 5.0 mg/kg 04/24/24 13:52 04/26/24 11:52 Surrogate %Recovery Quelifier Limits Prepared Analyzed 4-Bromofiluorobenzene (Surr) 98 15.244 Od/24/24 13:52 04/26/24 11:52 Lab Sample ID: LCS 885-3834/2-A Client Sample ID: Lab Contro Prep Type: Prep Type: Analyte Added Result Qualifier Unit D %Rec Himits Gasoline Range Organics (C6 - C10) LCS LCS LCS LCS Unit D %Rec YRec Surrogate %Recovery Qualifier Limits 101 70.130 To.130 Addyte Result Qualifier Limits Prep Bat Prep Bat Analyte Keecovery Qualifier Limits Prepared Analyzed Analyte Result Qualifier Limits Prepared Analyzed Gasoline Range Organics (C6 - C10) ND 5.0 mg/Kg 04/25/24 12:10 04/26/24 22:4 Surrogate %Recovery Qualifier Limits Prepared Analyzed 04/25/24 12:10 04/26/24 22:4	
MB MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Lab Sample D: LCS 885-3834/2-A Client Sample D: LCS 885-3834/2-A Client Sample D: LCS bas-3834/2-A Prep Type: Analyzei Spike LCS LCS Prep Type: Prep Type: Analyzei Spike LCS LCS Write: Write: N/Kecovery Cilient Sample D: MB MB Client Sample D: MB MB Analyzei %Recovery Qualifier Limits 4/Bromofluorobenzene (Surr) LCS LCS Client Sample ID: MB MB Analyzei MB MB MB MB Prep Type: Prep Type: Analysis Batch: 4029 MB MB MB MB Prep Type: Prep Type: Surrogate %Recovery Qualifier Limits Prep Type: Prep Type: Analysis Batch: 4029 MB MB MB MB Prepared Analyzed Analysis Batch: 4029 MB MB Limits Prepared Analyzed Gasoline Range Organics (C6 - C10) ND 5.0 mg/Kg Prep Type: Matrix: Solid Result Qualifier Limits Prep Type: Prep Type: Analysis Batch: 4029 MB MB Client Sample D: Lab Contro <t< th=""><th>Dil Fa</th></t<>	Dil Fa
Surrogate 4-Bromofiluorobenzene (Surr) %Recovery 98 Qualifier 15.244 Limits 15.244 Prepared 04/24/21352 Analyzed 04/24/21352 Analyzed 04/26/21352 Analyzed 04/26/21352 Analyzed 04/26/21 Analyzed Prepared 101 To a 130 Prepared WRec Analyzed Prepared 101 To a 130 Prepared 04/26/21 Analyzed 101 To a 130 Prepared Prepared 04/26/21 Analyzed 101 To a 130 Prepared 04/26/21 Analyzed 101 To a 130 Prepared 04/26/21 Analyzed 101 Prepared 04/26/24 Analyzed 101 Depared 04/26/24 Analyzed 04/26/24 Prepared 04/26/24 Analyzed 04/26/24 Analyzed 04/26/24 Analyzed 04/26/24 Prepared 04/26/24 Analyzed 04/26/24 Prepared 04/26/24 Analyzed 04/26/24 Prepared 04/26/24 Analyzed 04/26/24 Prepared 04/26/24 Analyzed 04/26/24 Prepared 04/26/24 Analyzed 04/26/24 Analyzed 04/26/24 Prepared 04/26/24 Analyzed 04/26/24 Prepared 04/26/24 Analyzed 04/26/24 Prepared 04/26/24 Analyzed 04/26/24 Prep)
4:Bromofluorobenzene (Sum) 98 15.244 04/24/24 13:52 04/25/24 12:10 04/25/24 12:1	
Lab Sample ID: LCS 885-3834/2-A Client Sample ID: Lab Contro Matrix: Solid Analysis Batch: 4029 Prep Type: Analysis Batch: 4029 Spike LCS LCS View Control Analysis Batch: 4029 Spike LCS LCS View Control View Control Surrogate View Control View Control Limits View Control View Contro View Control View Contro	Dil Fa
Matrix: Solid Analysis Batch: 4029 Prep Type: Prep Bat %Rec Analysis Batch: 4029 Spike LCS LCS <td>2</td>	2
Matrix: Solid Analysis Batch: 4029 Prep Type: Prep Bat %Rec Analysis Batch: 4029 Spike LCS LCS LCS LCS LCS LCS LImits Marking Marking <td>Sampl</td>	Sampl
Analysis Batch: 4029 Spike LCS L	
Spike Analyte Gasoline Range Organics [C6 - C10] Spike Added LCS 25.0 LCS 25.4 LCS Qualifier Unit Unit D %Rec 101 Limits 101 Surrogate 4-Bromofluorobenzene (Surr) LCS 222 LCS 222 LCS 15.244 LCS 25.4 Client Sample ID: MB 885-3888/1-A Matrix: Solid Analyte Client Sample ID: Mether Prep Type: Prep Bat Analyte Gasoline Range Organics [C6 - C10] MB MB MB D Prepared 04/25/24 12:10 Analyzed 04/25/24 12:10 Analyzed 04/25/24 12:10 Analyzed 04/25/24 12:10 Analyzed 04/25/24 12:10 Analyzed 04/25/24 12:10 D Prepared 04/25/24 12:10 Analyzed 04/25/24 12:10 D Prep Bat 04/25/24 12:10 D Prep Bat 04/25/24 12:10 D Prep Bat 04/25/24 12:10 D Analyzed 04/25/24 12:10 D D Prep Type: Prep Bat 04/25/24 12:10 D NB Surrogate %Recovery Qualifier 101 LCS 101 LCS 101 Client Sample ID: Lab Contro Prep Type: Prep Bat %Recovery Qualifier 101 LCS 101 Client Sample ID: Lab Contro Prep Type: Prep Bat %Recovery Qualifier 101 LCS 101 Client Sample ID: Mather 101 MB %Rec YRecovery Qualifier 101 LCS 101 Client Sample ID: Mather Prep Type: Prep Bat Surrogate %Recovery Qualifier 1224 Limits 15.244 <t< td=""><td></td></t<>	
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Gasoline Range Organics [C6- C10] LCS LCS mg/Kg 101 70.130 Surrogate %Recovery Qualifier Limits 15.244 Client Sample ID: MB 885-3888/1-A Prep Type: Lab Sample ID: MB 885-3888/1-A MB MB MB Prep Bat Prep Bat Analysis Batch: 4029 MB MB MB MB MB MB MB Analyte Result Qualifier Limits Unit D Prepared Analyzed Gasoline Range Organics [C6 - C10] MB MB MB MB MB MB Analyzed Od/25/24 12:10 Analyzed Gasoline Range Organics [C6 - C10] MB MB MB MB MB Analyzed Prepared Analyzed Gasoline Range Organics [C6 - C10] MB MB Client Sample ID: Lab Contro Prep Type: Prep Bat Analyte Skecovery Qualifier Limits Client Sample ID: Lab Contro Prep Bat Analyte Added Added Result Qualifier Unit D %Rec %Rec Surrogate %Recovery Qualiffer Limits 15.244 C	
C10] LCS LCS Surrogate %Recovery Qualifier Limits 4Bromofluorobenzene (Surr) 222 15.244 Lab Sample ID: MB 885-3888/1-A Client Sample ID: Mether Prep Type: Matrix: Solid Prep Bat Analyte Result Qualifier Limits Analyte Result Qualifier Limits Surrogate %Recovery Qualifier Limits 4Bromofluorobenzene (Surr) 101 15.244 Surrogate %Recovery Qualifier Limits 4Bromofluorobenzene (Surr) 101 15.244 Lab Sample ID: LCS 885-3888/2-A Client Sample ID: Lab Contro Matrix: Solid Prepared Analyzed Analyte Added Result Qualifier Unit D 9 %Rec Analyte Added Result Qualifier Unit D 9 %Rec Gasoline Range Organics [C6- 25.0 25.1 mg/Kg 101 70.130 C10] LCS LCS Spike LCS LCS Methet 101 70.130 Surrogate %Recovery Qualifier Limits 15.244 15.244	
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Gasoline Range Organics [C6 - C10] ND 5.0 mg/Kg 04/25/24 12:10 04/26/24 22:4 Surrogate %Recovery Qualifier Limits Prepared Analyzed 4-Bromofluorobenzene (Surr) 101 15 - 244 Client Sample ID: LCS 885-3888/2-A Client Sample ID: LCS 885-3888/2-A Matrix: Solid Analyzed Added Result Qualifier Unit D %Rec Analyte Added Z5.0 25.0 25.1 Unit D %Rec %Rec Surrogate Actor 224 15 - 244 Client Sample ID: Lab Contro Prep Bat Gasoline Range Organics [C6 - C10] LCS LCS LCS LCS LCS Matrix: 0 %Rec Limits 70 - 130 <td></td>	
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Gasoline Range Organics [C6 - 25.0 25.0 25.1 mg/Kg 101 70 - 130 C10] LCS LCS LCS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 224 15 - 244 15 - 244 Imits Client Sample ID: MB 885-3834/1-A Matrix: Solid Matrix: Solid Prep Type: Prep Bat Prep Bat Prep Bat Analyte MB MB Result Qualifier RL Unit D Prepared Analyzed	
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Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 224 15 - 244 Method: 8021B - Volatile Organic Compounds (GC) Image: Compounds (GC) Lab Sample ID: MB 885-3834/1-A Client Sample ID: Method: Prep Type: Prep Bate Matrix: Solid MB Analysis Batch: 4030 MB MB MB Analyte Result Qualifier RL Unit D Prepared Analyzed	
4-Bromofluorobenzene (Surr) 224 15 - 244 Method: 8021B - Volatile Organic Compounds (GC) Image: Client Sample ID: Method Sample ID: Meth	
Method: 8021B - Volatile Organic Compounds (GC) Lab Sample ID: MB 885-3834/1-A Client Sample ID: Method Matrix: Solid Prep Type: Analysis Batch: 4030 Prep Bat MB MB Analyte Result Qualifier RL Unit D Prepared Analyzed	
Lab Sample ID: MB 885-3834/1-A Client Sample ID: Method Matrix: Solid Prep Type: Analysis Batch: 4030 MB MB Analyte Result Qualifier RL Unit D Prepared Analyzed	
Matrix: Solid Prep Type: Analysis Batch: 4030 MB MB MB Analyte Result Qualifier RL Unit D Prepared Analyzed	
Matrix: Solid Prep Type: Analysis Batch: 4030 MB MB MB Analyte Result Qualifier RL Unit D Prepared Analyzed	od Blan
Analysis Batch: 4030 MB MB Prep Bat Analyte Result Qualifier RL Unit D Prepared Analyzed	
MB MB Analyte Result Qualifier RL Unit D Prepared Analyzed	
· · · · · · · · · · · · · · · · · · ·	
	Dil Fa
Benzene ND 0.025 mg/Kg 04/24/24 13:52 04/26/24 11:5	

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	0.025	mg/Kg		04/24/24 13:52	04/26/24 11:50	1
Ethylbenzene	ND	0.050	mg/Kg		04/24/24 13:52	04/26/24 11:50	1
Toluene	ND	0.050	mg/Kg		04/24/24 13:52	04/26/24 11:50	1
Xylenes, Total	ND	0.10	mg/Kg		04/24/24 13:52	04/26/24 11:50	1

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Job ID: 885-3298-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: MB 885-3 Matrix: Solid Analysis Batch: 4030	3834/1-A							Clie		le ID: Method Prep Type: To Prep Batc	otal/NA
		мв м	IR								
Surrogate	%Recov			Limits				P	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		87	uunnei		_			-	-	04/26/24 11:50	Dirrac
		•						• =			
Lab Sample ID: LCS 885	-3834/3-A						Clien	t Sai	mple ID:	Lab Control	Sample
Matrix: Solid										Prep Type: To	otal/NA
Analysis Batch: 4030										Prep Batc	h: 3834
				Spike	LCS	LCS				%Rec	
Analyte				Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene				1.00	0.889		mg/Kg		89	70 - 130	
Ethylbenzene				1.00	0.900		mg/Kg		90	70 - 130	
m,p-Xylene				2.00	1.80		mg/Kg		90	70 - 130	
o-Xylene				1.00	0.908		mg/Kg		91	70 - 130	
Toluene				1.00	0.899		mg/Kg		90	70 - 130	
Xylenes, Total				3.00	2.71		mg/Kg		90	70 - 130	
	LCS	100									
Surrogate	%Recovery		ior	Limits							
4-Bromofluorobenzene (Surr)	87	Quann		39 - 146							
Analyte		MB M sult Q	ualifier	R	L	Unit	D	Р	repared	Analyzed	Dil Fa
Benzene		ND									Diria
Ethylbenzene		ND		0.02	5	mg/K	g	04/2	25/24 12:10	04/26/24 22:44	
		ND		0.02 0.05		mg/K mg/K	-				·
					0	-	g	04/2	25/24 12:10	04/26/24 22:44	
Toluene		ND		0.05	0 0	mg/K	a a	04/2 04/2	25/24 12:10 25/24 12:10	04/26/24 22:44 04/26/24 22:44	-
Toluene		ND ND ND		0.05 0.05	0 0	mg/K mg/K	a a	04/2 04/2	25/24 12:10 25/24 12:10	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44	-
Toluene Xylenes, Total		ND ND ND MB M		0.05 0.05 0.1	0 0	mg/K mg/K	a a	04/2 04/2 04/2	25/24 12:10 25/24 12:10 25/24 12:10	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44	1
Toluene Xylenes, Total Surrogate		ND ND ND MB M rery Q		0.05 0.05 0.1 	0 0 0	mg/K mg/K	a a	04/2 04/2 04/2 P	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44	Dil Fac
Toluene Xylenes, Total Surrogate		ND ND ND MB M		0.05 0.05 0.1	0 0 0	mg/K mg/K	a a	04/2 04/2 04/2 P	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44	
Toluene Xylenes, Total <i>Surrogate</i> 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 	0 0 0	mg/K mg/K	g g	04/2 04/2 04/2 P 04/2	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID:	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 <u>Analyzed</u> 04/26/24 22:44 Lab Control \$	Dil Fac
	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 	0 0 0	mg/K mg/K	g g	04/2 04/2 04/2 P 04/2	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID:	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 Analyzed 04/26/24 22:44	Dil Fa
Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Lab Sample ID: LCS 885- Matrix: Solid	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 	0 0 0	mg/K mg/K mg/K	g g	04/2 04/2 04/2 P 04/2	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID:	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 <u>Analyzed</u> 04/26/24 22:44 Lab Control S Prep Type: To Prep Batc	Dil Fa
Toluene Xylenes, Total <i>Surrogate</i> 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885- Matrix: Solid	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 	0 0 - LCS	mg/K mg/K mg/K	g g	04/2 04/2 04/2 P 04/2	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID:	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 Analyzed 04/26/24 22:44 Lab Control S Prep Type: To Prep Batcl %Rec	Dil Fa
Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Lab Sample ID: LCS 885 Matrix: Solid Analysis Batch: 4030 Analyte	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 	D D LCS Result	mg/K mg/K mg/K LCS Qualifier	g g Clien	04/2 04/2 04/2 P 04/2	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID: %Rec	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 Lab Control S Prep Type: To Prep Batcl %Rec Limits	Dil Fac
Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Lab Sample ID: LCS 885 Matrix: Solid Analysis Batch: 4030 Analyte Benzene	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 <u>Limits</u> 39 - 146 Spike Added 1.00	0 0 	mg/K mg/K mg/K LCS Qualifier	g g Clien <u>Unit</u> mg/Kg	04/2 04/2 04/2 P 04/2 t Sai	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID: <u>%Rec</u> 91	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 Lab Control S Prep Type: To Prep Batc %Rec Limits 70 - 130	Dil Fac
Toluene Xylenes, Total <i>Surrogate</i> 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885 Matrix: Solid Analysis Batch: 4030 Analyte Benzene Ethylbenzene	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 <u>Limits</u> 39 - 146 Spike Added 1.00 1.00	0 0 0 	mg/K mg/K mg/K LCS Qualifier	g g Clien Unit mg/Kg mg/Kg	04/2 04/2 04/2 P 04/2 t Sai	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID: <u>%Rec</u> 91 93	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 Lab Control \$ Prep Type: To Prep Batc %Rec Limits 70 - 130 70 - 130	Dil Fac
Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Lab Sample ID: LCS 885- Matrix: Solid Analysis Batch: 4030 Analyte Benzene Ethylbenzene m,p-Xylene	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 <u>Limits</u> 39 - 146 Spike Added 1.00 1.00 2.00	0 0 0 	mg/K mg/K mg/K LCS Qualifier	g g Clien <u>Unit</u> mg/Kg mg/Kg mg/Kg	04/2 04/2 04/2 P 04/2 t Sai	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID: <u>%Rec</u> 91 93 92	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 Description 04/26/24 22:44 Lab Control S Prep Type: To Prep Batc %Rec Limits 70 - 130 70 - 130 70 - 130	Dil Fac
Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Lab Sample ID: LCS 885- Matrix: Solid Analysis Batch: 4030 Analyte Benzene Ethylbenzene m,p-Xylene o-Xylene	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 <u>Limits</u> 39 - 146 Spike Added 1.00 1.00 2.00 1.00	0 0 0 ELCS Result 0.910 0.927 1.85 0.925	mg/K mg/K mg/K LCS Qualifier	g g Clien <u>Unit</u> mg/Kg mg/Kg mg/Kg mg/Kg	04/2 04/2 04/2 P 04/2 t Sai	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID: 95/24 12:10 mple ID: 91 93 92 92	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 Lab Control S Prep Type: To Prep Batc %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Dil Fac
Toluene Xylenes, Total 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885- Matrix: Solid Analysis Batch: 4030 Analyte Benzene Ethylbenzene m,p-Xylene o-Xylene Toluene	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 <u>Limits</u> 39 - 146 <u>Spike</u> Added 1.00 1.00 1.00 1.00 1.00	LCS Result 0.910 0.927 1.85 0.925 0.919	mg/K mg/K mg/K LCS Qualifier	g g g Clien <u>Unit</u> mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	04/2 04/2 04/2 P 04/2 t Sai	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID: 91 93 92 92 92 92 92	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 Lab Control S Prep Type: To Prep Batc %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Dil Fac
Toluene Xylenes, Total <i>Surrogate</i> <i>4-Bromofluorobenzene (Surr)</i> Lab Sample ID: LCS 885- Matrix: Solid Analysis Batch: 4030 Analyte Benzene Ethylbenzene m,p-Xylene o-Xylene	%Recov	ND ND ND MB M rery Q		0.05 0.05 0.1 <u>Limits</u> 39 - 146 Spike Added 1.00 1.00 2.00 1.00	0 0 0 ELCS Result 0.910 0.927 1.85 0.925	mg/K mg/K mg/K LCS Qualifier	g g Clien <u>Unit</u> mg/Kg mg/Kg mg/Kg mg/Kg	04/2 04/2 04/2 P 04/2 t Sai	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID: 95/24 12:10 mple ID: 91 93 92 92	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 Lab Control S Prep Type: To Prep Batc %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Dil Fac
Toluene Xylenes, Total 4-Bromofluorobenzene (Surr) Lab Sample ID: LCS 885- Matrix: Solid Analysis Batch: 4030 Analyte Benzene Ethylbenzene m,p-Xylene o-Xylene Toluene	%Recov	ND ND MB M rery Q		0.05 0.05 0.1 <u>Limits</u> 39 - 146 <u>Spike</u> Added 1.00 1.00 1.00 1.00 1.00	LCS Result 0.910 0.927 1.85 0.925 0.919	mg/K mg/K mg/K LCS Qualifier	g g g Clien <u>Unit</u> mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	04/2 04/2 04/2 P 04/2 t Sai	25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 25/24 12:10 mple ID: 91 93 92 92 92 92 92	04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 04/26/24 22:44 Lab Control S Prep Type: To Prep Batc %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Dil Fac

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Job ID: 885-3298-1

Client: Vertex Project/Site: JRU DI 2

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

9/1 -A									Clie	ent Sam	Prep Type: T	otal/N
											Prep Batc	h: 383
_								_				
Re		Qualifier						L		•		Dil Fa
						-	-					
	ND			50		mg	J/Kg		04/2	24/24 15:00	04/25/24 17:15	
	MB	MB										
%Reco	very	Qualifier	Limi	its					P	repared	Analyzed	Dil Fa
	111		62 -	134					04/2	24/24 15:00	04/25/24 17:15	
9/2-A								Clier	nt Sa	mnle ID [.]	Lab Control	Samn
J/2-A								oner	n ou			
			Spike		LCS	LCS						
			•				or I	Unit	р	%Rec		
									_ <u>-</u>			
			20.0		10.0		'			02		
1.00	1.00											
			1 : :4									
	Qua											
113			02 - 134									
4/1-A									Clie	ent Sam	Prep Type: T	'otal/N
	мр	мв									Ргер Ватс	n: 391
Po				ы		lln			ם ר	roparad	Analyzod	Dil Fa
		Quaimer								•		
						-	-					
				00			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0 1/2	.0,21 10.21	0 1/20/21 11:01	
	MВ	MB										
%Recov	-	Qualifier									Analyzed	Dil Fa
	101		62 -	134					04/2	25/24 15:27	04/26/24 11:51	
4/2-4								Clier	nt Sa	mole ID:	Lab Control	Samn
									n ou			
			Spike		LCS	LCS						
			Added				er l	Unit	D	%Rec	Limits	
			50.0		43.6			mg/Kg		87	60 - 135	
LCS	LCS	5										
%Recovery	Qua	alifier	Limits									
106			62 - 134									
MC										ont Com		024
UI O										ent Sam		
											Prep Batc	11: 221
Samula	Sam	nlo	Spiles		MC	MC					% Pac	
Sample Result			Spike Added			MS Qualifie	.r 1	Unit	D	%Rec	%Rec Limits	
	 %Reco 39/2-A LCS %Recovery 113 4/1-A %Reco 4/2-A	MB Result ND ND MB %Recovery 111 39/2-A LCS LCS %Recovery 113 4/1-A MB Result ND MB %Recovery 101 MB %Recovery 101 4/2-A LCS LCS KR ND ND ND MB %Recovery 101 4/2-A LCS LCS LCS KCS KCS	MB MB Result Qualifier ND ND MB MB %Recovery Qualifier 111 111 39/2-A Use of the second s	MB MB ND ND ND ND MB MB %Recovery Qualifier Limits 111 62- 39/2-A Spike Added 50.0 LCS LCS %Recovery Qualifier Limits 113 62-134 4/1-A MB MB MB MB MB MB MB 101 MB MB 101 4/2-A Spike Added 50.0 LCS LCS MB MB MB MB MB MB MB MB MB MB MB MB MB Spike Added 50.0 LCS LCS %Recovery Qualifier Limits 106 62-134	MB MB MB III OND III OND IIII OND IIIII OND IIIII OND IIIIIIIIII	MB MB $Result Qualifier RL$ $ND 10$ $S0$ $MB MB$ $%Recovery Qualifier Limits$ 62.134 $S9/2-A$ $Spike LCS$ $Added Result$ $50.0 46.0$ $LCS LCS$ $%Recovery Qualifier Limits$ 62.134 $4/1-A$ $MB MB$ $Result Qualifier RL$ 10 $S0$ $MB MB$ $%Recovery Qualifier Limits$ 62.134 $4/1-A$ $MB MB$ MB MB MB MB MB MB MB	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	MB MB Result Qualifier RL Unit D P ND 50 mg/Kg 04/2 MB MB MB P P ''Mecovery Qualifier Limits P ''Mecovery Qualifier Limits P ''Mecovery Qualifier Limits P ''Mecovery Qualifier Limits Qualifier D LCS LCS Client Sa Sa Client Sa ''Mecovery Qualifier Limits D P ''Max Client Sa Client Sa Client Sa ''Mecovery Qualifier Limits D P ''MB MB MB P O4/2 ''MB MB Limits P O4/2 ''MB MB LCS LCS Client Sa	MB MB ND 10 mg/Kg D $04/24/24$ $15:00$ ND 50 mg/Kg $04/24/24$ $15:00$ MB MB MB Prepared $04/24/24$ $15:00$ MB MB MB Prepared $04/24/24$ $04/24/24$ $15:00$ MB MB MB Prepared $04/24/24$ $04/24/24$ $15:00$ MB MB MB Client Sample ID: $04/24/24$ $04/24/24$ $15:00$ MS Added Result Qualifier Unit D $%Rec$ 92 LCS LCS LCS MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB	MB MB MB MB ND 10 mg/Kg 0 Prepared Analyzed ND 50 mg/Kg 04/24/24 15:00 04/25/24 17:15 MB MB MB Prepared Analyzed MRecovery Qualifier Limits %Rec WRec NRecovery Qualifier Limits %Rec Limits 113 62-134 Client Sample ID: Lab Control Prepared

				Samp	'ne '	vest	1115						
lient: Vertex											Job ID: 88	85-32	<u>298-1</u>
roject/Site: JRU DI 2													
ethod: 8015D - Diese	el Range O	raz	anics ([JRO) ((GC)	(Con	tinued)						
Lab Sample ID: 885-3298-		13	<u></u>			(<u></u>		C	liont Sami	ple ID: BES		2 4 5'
Lab Sample ID: 865-3296- Matrix: Solid	-12 1013								G				
											Prep Type:		
Analysis Batch: 4043											Prep Ba	ACH. (3914
	MS	MS											
Surrogate	%Recovery	Qua	lifier	Limits	_								
Di-n-octyl phthalate (Surr)	95			62 - 134									
Lab Sample ID: 885-3298-	-12 MSD								C	lient Samr	ple ID: BES	;24-0 ?	3 1.5'
Matrix: Solid											Prep Type:		
Analysis Batch: 4043											Prep Ba		
-	Sample	Sarr	nple	Spike		MSD	MSD				%Rec		RPD
Analyte	Result	Qua	lifier	Added		Result	Qualifier	Unit	Γ	D %Rec	Limits F	RPD	Limit
Diesel Range Organics	ND			47.3		40.7		mg/Kg		86	44 - 136	4	32
[C10-C28]													
	MSD	MSI	D										
Surrogate	%Recovery			Limits									
Di-n-octyl phthalate (Surr)	98			62 - 134	•								
									~		1. 10. 14.4		•1
Lab Sample ID: MB 885-39	,963/1-A								CI		ple ID: Meth		
Matrix: Solid											Prep Type:		
Analysis Batch: 4042			10								Prep Ba	itch: a	3963
A			MB		ы		Unit	r		Dremared	Analyzed	· -	NI Eoo
Analyte Diesel Range Organics [C10-C28]		ND	Qualifier		RL 10		<u>Unit</u> mg/Ko			Prepared 4/26/24 12:53	Analyzed 04/29/24 17:2		Dil Fac
Motor Oil Range Organics [C10-C26]		ND			50		mg/Kg	-			04/29/24 17:2 04/29/24 17:2		1
MOLOI OII Range Organius [020-0-	40]				50		IIIg/1X	J	0-	20/24 12.00	04/23/24 11.2	29	I
		MB	MB										
Surrogate		-	Qualifier							Prepared	Analyzed		Dil Fac
Di-n-octyl phthalate (Surr)		102		62 -	. 134				04	ł/26/24 12:53	04/29/24 17:2	29	1
Lab Sample ID: LCS 885-3	-3963/2-A							Clie	nt S	ample ID:	Lab Contro	ol Sar	mple
Matrix: Solid											Prep Type:		
Analysis Batch: 4042											Prep Ba		
-				Spike		LCS	LCS				%Rec		
Analyte				Added		Result	Qualifier	Unit	Г	D %Rec	Limits		
Diesel Range Organics				50.0		41.8		mg/Kg		84	60 - 135		
[C10-C28]													
	LCS												
Surrogate	%Recovery	Qua	lifier	Limits	-								
Di-n-octyl phthalate (Surr)	100			62 - 134									
lethod: 300.0 - Anions	s, Ion Chrc	วทส	atograp	bhy									
Let Comple ID: MD 000 7	70602/4 A								<u> </u>	liant Com	ala IDi Mati		lenk
Lab Sample ID: MB 880-79	9603/1-A								G	lient Samp	ple ID: Meth		
Matrix: Solid											Prep Type	3: 201	upie
Analysis Batch: 79670		MD	MD										
A			MB		ы		Unit	r		Dremared	Analyzad	· -	NI Eee
Analyte	Ke	Suit	Qualifier		RL		Unit	D		Prepared	Analyzed	U	Dil Fac

Eurofins Albuquerque

04/30/24 13:43

Chloride

5.0

mg/Kg

ND

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Job ID: 885-3298-1

Client: Vertex Project/Site: JRU DI 2

Method: 300.0 - Anions, Ion Chromatography (Continued)

_ 	70002/2 4					Clien					
Lab Sample ID: LCS 880-7 Matrix: Solid	(9603/2-A					Clier	it Sai	mpie iD	: Lab Cor Prep Ty		
Analysis Batch: 79670											
			Spike	LCS	LCS				%Rec		
Analyte			Added		Qualifier	Unit	D	%Rec	Limits		
Chloride			250	250		mg/Kg		100	90 - 110		
Lab Sample ID: LCSD 880 Matrix: Solid	-79603/3-A				C	lient Sa	mple	ID: Lat	Control Prep Ty		
Analysis Batch: 79670									i ieb ij	pe. oc	Jubie
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	250		mg/Kg		100	90 - 110	0	20
_ Lab Sample ID: 885-3298-	13 MS						Clie	ent Sam	nple ID: Bl	ES24-1	2 1.5'
Matrix: Solid									· Prep Ty		
Analysis Batch: 79670										•	
-	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	390		252	644		mg/Kg		101	90 - 110		
 Lab Sample ID: 885-3298-	13 MSD						Clie	ent Sam	nple ID: B		
Matrix: Solid									Prep Ty	/pe: So	oluble
Analysis Batch: 79670											
		• • • • • • • • •	0	MSD	MSD				%Rec		RPD
	Sample	Sample	Spike	mob							
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid	Result 390	Sample Qualifier	Added 252	-	Qualifier	Unit mg/Kg	D Clie	%Rec 101	Limits 90 - 110 Prep Ty		20 Blank
Analyte Chloride Lab Sample ID: MB 880-75	Result 390	•	Added	Result	-			101	90 - 110	0 ethod l	20 Blank
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid	Result 390 9925/1-A	Qualifier	Added	Result 643 RL	Qualifier	mg/Kg	Clie	101	90 - 110	ethod I /pe: Sc	20 Blank bluble
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932	Result 390 9925/1-A	Qualifier	Added	Result 643	Qualifier	mg/Kg	Clie	101 ent Sam	90 - 110 nple ID: M Prep Ty	o ethod I /pe: Sc	20 Blank bluble
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride	Result 390 9925/1-A Re	Qualifier MB MB esult Qualifier	Added	Result 643 RL	Qualifier	mg/Kg D	Clie	101 ent Sam	90 - 110 ple ID: M Prep Ty - Analyz 05/04/24	0 ethod I /pe: Sc 21:21	20 Blank Dluble Dil Fac 1
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte	Result 390 9925/1-A Re	Qualifier MB MB esult Qualifier	Added	Result 643 RL	Qualifier	mg/Kg D	Clie	101 ent Sam	90 - 110 ple ID: M Prep Ty 	ethod I /pe: So 21:21	Blank bluble Dil Fac 1 ample
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7	Result 390 9925/1-A Re	Qualifier MB MB esult Qualifier	Added	Result 643 RL	Qualifier	mg/Kg D	Clie	101 ent Sam	90 - 110 ple ID: M Prep Ty - Analyz 05/04/24	ethod I /pe: So 21:21	Blank bluble Dil Fac 1 ample
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid	Result 390 9925/1-A Re	Qualifier MB MB esult Qualifier	Added	Result 643 8 5.0	Qualifier	mg/Kg D	Clie	101 ent Sam	90 - 110 ple ID: M Prep Ty 	ethod I /pe: So 21:21	Blank bluble Dil Fac 1 ample
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid	Result 390 9925/1-A Re	Qualifier MB MB esult Qualifier	Added 252	Result 643 RL 5.0	Qualifier Unit mg/K	mg/Kg D	Clie	101 ent Sam	90 - 110 ple ID: M Prep Ty 	ethod I /pe: So 21:21	Blank bluble Dil Fac 1 ample
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932	Result 390 9925/1-A Re	Qualifier MB MB esult Qualifier	Added 252	Result 643 RL 5.0	Qualifier Unit mg/K	mg/Kg g Clier	Clie	repared	90 - 110 101e ID: Ma Prep Ty 	ethod I /pe: So 21:21	Blank bluble Dil Fac 1 ample
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte	<u>Result</u> 390 9925/1-A <u>Re</u> 79925/2-A	Qualifier MB MB esult Qualifier	Added 252 Spike Added	Result 643 843 5.0 LCS Result	Qualifier Unit mg/K LCS Qualifier	mg/Kg	Clie <u>P</u> nt Sai	101 ent Sam repared mple ID <u>%Rec</u> 96	90 - 110 ple ID: M Prep Ty 	ethod I /pe: Sc 21:21 atrol Sa /pe: Sc	Dil Fac
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte Chloride	<u>Result</u> 390 9925/1-A <u>Re</u> 79925/2-A	Qualifier MB MB esult Qualifier	Added 252 Spike Added	Result 643 843 5.0 LCS Result	Qualifier Unit mg/K LCS Qualifier	mg/Kg	Clie <u>P</u> nt Sai	101 ent Sam repared mple ID <u>%Rec</u> 96	90 - 110 ple ID: M Prep Ty 	ethod I /pe: Sc 21:21 htrol Sa /pe: Sc Sample	Dil Fac 1 ample bluble
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880	<u>Result</u> 390 9925/1-A <u>Re</u> 79925/2-A	Qualifier MB MB esult Qualifier	Added 252 Spike Added	Result 643 843 5.0 LCS Result	Qualifier Unit mg/K LCS Qualifier	mg/Kg	Clie <u>P</u> nt Sai	101 ent Sam repared mple ID <u>%Rec</u> 96	90 - 110 ple ID: M Prep Ty 	ethod I /pe: Sc 21:21 htrol Sa /pe: Sc Sample	Dil Fac 1 ample bluble
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid	<u>Result</u> 390 9925/1-A <u>Re</u> 79925/2-A	Qualifier MB MB esult Qualifier	Added 252 Spike Added	Result 643 5.0 LCS Result 240	Qualifier Unit mg/K LCS Qualifier	mg/Kg	Clie <u>P</u> nt Sai	101 ent Sam repared mple ID <u>%Rec</u> 96	90 - 110 ple ID: M Prep Ty 	ethod I /pe: Sc 21:21 htrol Sa /pe: Sc Sample	Dil Fac 1 ample bluble
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 79932 Analyte	<u>Result</u> 390 9925/1-A <u>Re</u> 79925/2-A	Qualifier MB MB esult Qualifier	Added 252 Spike Added 250 Spike Added	Result 643 RL 5.0 LCS Result 240 LCSD Result	Qualifier Unit mg/K LCS Qualifier	mg/Kg g Clien Unit Client Sau Unit	Clie <u>P</u> nt Sai	101 ent Sam repared mple ID <u>%Rec</u> 96 ID: Lak	90 - 110 Prep Ty Analyz 05/04/24 2: Lab Corr Prep Ty %Rec Limits 90 - 110 0 Control s Prep Ty %Rec Limits	ethod I /pe: Sc 21:21 htrol Sa /pe: Sc Sample	Dil Fac 1 ample bluble
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 79932	<u>Result</u> 390 9925/1-A <u>Re</u> 79925/2-A	Qualifier MB MB esult Qualifier	Added 252 Spike Added 250	Result 643 5.0 LCS Result 240 LCSD	Qualifier Unit mg/K LCS Qualifier	mg/Kg g Clien Unit mg/Kg Client Sar	Clie	nt Sam repared mple ID <u>%Rec</u> 96 ID: Lat	90 - 110 Prep Ty Analyz 05/04/24 Call Control S Prep Ty %Rec Limits 90 - 110 Control S Prep Ty %Rec	0 ethod I /pe: Sc 21:21 atrol Sa /pe: Sc Sample /pe: Sc	Dil Fac 1 ample bluble
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 79932 Analyte	Result 390 9925/1-A Re 79925/2-A -79925/3-A	Qualifier MB MB esult Qualifier	Added 252 Spike Added 250 Spike Added	Result 643 RL 5.0 LCS Result 240 LCSD Result	Qualifier Unit mg/K LCS Qualifier	mg/Kg g Clien Unit Client Sau Unit	Clie <u>P</u> nt Sar <u>D</u> mple <u>D</u>	101 ent Sam repared mple ID %Rec 96 ID: Lak	90 - 110 Prep Ty Analyz 05/04/24 2: Lab Corr Prep Ty %Rec Limits 90 - 110 0 Control s Prep Ty %Rec Limits	0 ethod I /pe: Sc 21:21 atrol Sa /pe: Sc Sample /pe: Sc 	Dil Fac 1 ample bluble e Dup bluble RPD Limit 20
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 79932	Result 390 9925/1-A Re 79925/2-A -79925/3-A	Qualifier MB MB esult Qualifier	Added 252 Spike Added 250 Spike Added	Result 643 RL 5.0 LCS Result 240 LCSD Result	Qualifier Unit mg/K LCS Qualifier	mg/Kg g Clien Unit Client Sau Unit	Clie <u>P</u> nt Sar <u>D</u> mple <u>D</u>	101 ent Sam repared mple ID %Rec 96 ID: Lak	90 - 110 90 - 110 Prep Ty Analyz 05/04/24 2: Lab Corr Prep Ty %Rec Limits 90 - 110 0 Control S Prep Ty %Rec Limits 90 - 110	0 ethod I /pe: Sc 21:21 atrol Sa /pe: Sc Sample /pe: Sc 	Dil Fac 1 ample bluble e Dup bluble RPD Limit 20
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 79932	Result 390 9925/1-A Re 79925/2-A -79925/3-A 1 MS	Qualifier	Added 252 Spike Added 250 Spike Added 250	Result 643 5.0 LCS Result 240 LCSD Result 240	Qualifier Unit mg/K LCS Qualifier	mg/Kg g Clien Unit Client Sau Unit	Clie <u>P</u> nt Sar <u>D</u> mple <u>D</u>	101 ent Sam repared mple ID %Rec 96 ID: Lak	90 - 110 ple ID: M Prep Ty - Analyz 05/04/24 : Lab Corr Prep Ty %Rec Limits 90 - 110 0 Control S Prep Ty %Rec Limits 90 - 110 0 Control S Prep Ty %Rec Limits 90 - 110 0 Control S Prep Ty %Rec Limits 90 - 110	0 ethod I /pe: Sc 21:21 atrol Sa /pe: Sc Sample /pe: Sc 	Dil Fac 1 ample bluble e Dup bluble RPD Limit 20
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: 885-3298- Matrix: Solid Analysis Batch: 79932	Result 390 9925/1-A Re 79925/2-A -79925/3-A 1 MS Sample	Qualifier	Added 252 Spike Added 250 Spike Added 250	Result 643 5.0 LCS Result 240 LCSD Result 240	Qualifier Unit mg/K LCS Qualifier	mg/Kg g Clier Unit mg/Kg Client Sar Unit mg/Kg	Clie <u>P</u> nt Sar <u>D</u> mple <u>D</u> C	101 ent Sam repared mple ID <u>%Rec</u> 96 ID: Lat <u>%Rec</u> 96	90 - 110 ple ID: M Prep Ty - Analyz 05/04/24 : Lab Corr Prep Ty %Rec Limits 90 - 110 0 Control 3 Prep Ty %Rec Limits 90 - 110 ample ID: Prep Ty %Rec	0 ethod I /pe: Sc 21:21 atrol Sa /pe: Sc Sample /pe: Sc 	Blank Dil Fac 1 ample Dilble Pluble RPD Limit 20 21 1'
Analyte Chloride Lab Sample ID: MB 880-79 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCS 880-7 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 79932 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 79932	Result 390 9925/1-A Re 79925/2-A -79925/3-A 1 MS Sample	Qualifier	Added 252 Spike Added 250 Spike Added 250	Result 643 5.0 LCS Result 240 LCSD Result 240	Qualifier Unit mg/K LCS Qualifier	mg/Kg g Clien Unit Client Sau Unit	Clie <u>P</u> nt Sar <u>D</u> mple <u>D</u>	101 ent Sam repared mple ID %Rec 96 ID: Lak	90 - 110 ple ID: M Prep Ty - Analyz 05/04/24 : Lab Corr Prep Ty %Rec Limits 90 - 110 0 Control S Prep Ty %Rec Limits 90 - 110 0 Control S Prep Ty %Rec Limits 90 - 110 0 Control S Prep Ty %Rec Limits 90 - 110	0 ethod I /pe: Sc 21:21 atrol Sa /pe: Sc Sample /pe: Sc 	Dil Fac 1 ample bluble e Dup bluble RPD Limit 20

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Job ID: 885-3298-1

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Client: Vertex Project/Site: JRU DI 2

Method: 300.0 - Ani	ions, Ion Chro	omatogra	aphy						
Lab Sample ID: 885-32	298-1 MSD						Clie	ent Sa	ample ID:
Matrix: Solid									Prep 1
Analysis Batch: 79932	2								
	Sample	Sample	Spike	MSD	MSD				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D %	6Rec	Limits
Chloride	540		253	768		mg/Kg		90	90 - 110
_ Lab Sample ID: 885-32	298-11 MS						Clien	t San	nple ID: B
Matrix: Solid									· Prep T
Analysis Batch: 79932	2								
-	Sample	Sample	Spike	MS	MS				%Rec

		Sample	Sample	Spike	MS	MS				%Rec	
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Chloride	200		249	434		mg/Kg		94	90 - 110	
ļ											

Lab Sample ID: 885-3298-	11 MSD						Clie	ent San	nple ID: B	ES24-0	2 1.5'
Matrix: Solid									Prep T	ype: Sc	oluble
Analysis Batch: 79932											
-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	200		249	432		mg/Kg		93	90 - 110	1	20

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ID: BES24-21 1' p Type: Soluble RPD RPD Limit 6 20 D: BES24-02 1.5' p Type: Soluble

Client: Vertex Project/Site: JRU DI 2

GC VOA

Prep Batch: 3800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3298-1	BES24-21 1'	Total/NA	Solid	5030C	
885-3298-2	BES24-22 1'	Total/NA	Solid	5030C	
885-3298-3	BES24-23 1'	Total/NA	Solid	5030C	
885-3298-4	BES24-24 1'	Total/NA	Solid	5030C	
885-3298-5	BES24-25 1'	Total/NA	Solid	5030C	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3298-6	BES24-26 1'	Total/NA	Solid	5030C	
885-3298-7	BES24-27 1'	Total/NA	Solid	5030C	
885-3298-8	BES24-28 1'	Total/NA	Solid	5030C	
885-3298-9	BES24-29 1'	Total/NA	Solid	5030C	
885-3298-10	BES24-30 1'	Total/NA	Solid	5030C	
885-3298-11	BES24-02 1.5'	Total/NA	Solid	5030C	
885-3298-12	BES24-03 1.5'	Total/NA	Solid	5030C	
MB 885-3834/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3834/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3834/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 3888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3298-13	BES24-12 1.5'	Total/NA	Solid	5030C	
885-3298-14	BES24-13 1.5'	Total/NA	Solid	5030C	
885-3298-15	BES24-15 1.5'	Total/NA	Solid	5030C	
885-3298-16	BES24-16 1.5'	Total/NA	Solid	5030C	
885-3298-17	BES24-19 1.5'	Total/NA	Solid	5030C	
MB 885-3888/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3888/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3888/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 4029

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3298-6	BES24-26 1'	Total/NA	Solid	8015D	3834
885-3298-7	BES24-27 1'	Total/NA	Solid	8015D	3834
885-3298-8	BES24-28 1'	Total/NA	Solid	8015D	3834
885-3298-9	BES24-29 1'	Total/NA	Solid	8015D	3834
885-3298-10	BES24-30 1'	Total/NA	Solid	8015D	3834
885-3298-11	BES24-02 1.5'	Total/NA	Solid	8015D	3834
885-3298-12	BES24-03 1.5'	Total/NA	Solid	8015D	3834
885-3298-13	BES24-12 1.5'	Total/NA	Solid	8015D	3888
885-3298-14	BES24-13 1.5'	Total/NA	Solid	8015D	3888
885-3298-15	BES24-15 1.5'	Total/NA	Solid	8015D	3888
885-3298-16	BES24-16 1.5'	Total/NA	Solid	8015D	3888
885-3298-17	BES24-19 1.5'	Total/NA	Solid	8015D	3888
MB 885-3834/1-A	Method Blank	Total/NA	Solid	8015D	3834
MB 885-3888/1-A	Method Blank	Total/NA	Solid	8015D	3888
LCS 885-3834/2-A	Lab Control Sample	Total/NA	Solid	8015D	3834
LCS 885-3888/2-A	Lab Control Sample	Total/NA	Solid	8015D	3888

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Client: Vertex Project/Site: JRU DI 2

GC VOA

Analysis Batch: 4030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3298-6	BES24-26 1'	Total/NA	Solid	8021B	3834
885-3298-7	BES24-27 1'	Total/NA	Solid	8021B	3834
885-3298-8	BES24-28 1'	Total/NA	Solid	8021B	3834
885-3298-9	BES24-29 1'	Total/NA	Solid	8021B	3834
885-3298-10	BES24-30 1'	Total/NA	Solid	8021B	3834
885-3298-11	BES24-02 1.5'	Total/NA	Solid	8021B	3834
885-3298-12	BES24-03 1.5'	Total/NA	Solid	8021B	3834
885-3298-13	BES24-12 1.5'	Total/NA	Solid	8021B	3888
885-3298-14	BES24-13 1.5'	Total/NA	Solid	8021B	3888
885-3298-15	BES24-15 1.5'	Total/NA	Solid	8021B	3888
885-3298-16	BES24-16 1.5'	Total/NA	Solid	8021B	3888
885-3298-17	BES24-19 1.5'	Total/NA	Solid	8021B	3888
MB 885-3834/1-A	Method Blank	Total/NA	Solid	8021B	3834
MB 885-3888/1-A	Method Blank	Total/NA	Solid	8021B	3888
LCS 885-3834/3-A	Lab Control Sample	Total/NA	Solid	8021B	3834
LCS 885-3888/3-A	Lab Control Sample	Total/NA	Solid	8021B	3888

Analysis Batch: 4035

Lab Sample ID 885-3298-1	Client Sample ID BES24-21 1'	Prep Type Total/NA	Matrix Solid	Method 8015D	Prep Batch 3800
885-3298-2	BES24-22 1'	Total/NA	Solid	8015D	3800
885-3298-3	BES24-23 1'	Total/NA	Solid	8015D	3800
885-3298-4	BES24-24 1'	Total/NA	Solid	8015D	3800
885-3298-5	BES24-25 1'	Total/NA	Solid	8015D	3800

Analysis Batch: 4036

Lab Sample ID 885-3298-1	Client Sample ID BES24-21 1'	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 3800
885-3298-2	BES24-22 1'	Total/NA	Solid	8021B	3800
885-3298-3	BES24-23 1'	Total/NA	Solid	8021B	3800
885-3298-4	BES24-24 1'	Total/NA	Solid	8021B	3800
885-3298-5	BES24-25 1'	Total/NA	Solid	8021B	3800

GC Semi VOA

Prep Batch: 3839

Lab Sa 885-32	ample ID 298-1	Client Sample ID BES24-21 1'	Prep Type Total/NA	Matrix Solid	Method	Prep Batch
885-32	298-2	BES24-22 1'	Total/NA	Solid	SHAKE	
MB 88	5-3839/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 8	85-3839/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Prep Batch: 3914

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3298-3	BES24-23 1'	Total/NA	Solid	SHAKE	
885-3298-4	BES24-24 1'	Total/NA	Solid	SHAKE	
885-3298-5	BES24-25 1'	Total/NA	Solid	SHAKE	
885-3298-6	BES24-26 1'	Total/NA	Solid	SHAKE	
885-3298-7	BES24-27 1'	Total/NA	Solid	SHAKE	
885-3298-8	BES24-28 1'	Total/NA	Solid	SHAKE	
885-3298-9	BES24-29 1'	Total/NA	Solid	SHAKE	

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Client: Vertex Project/Site: JRU DI 2

GC Semi VOA (Continued)

Prep Batch: 3914 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3298-10	BES24-30 1'	Total/NA	Solid	SHAKE	
885-3298-11	BES24-02 1.5'	Total/NA	Solid	SHAKE	
885-3298-12	BES24-03 1.5'	Total/NA	Solid	SHAKE	
MB 885-3914/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3914/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-3298-12 MS	BES24-03 1.5'	Total/NA	Solid	SHAKE	
885-3298-12 MSD	BES24-03 1.5'	Total/NA	Solid	SHAKE	

Analysis Batch: 3939

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3298-1	BES24-21 1'	Total/NA	Solid	8015D	3839
885-3298-2	BES24-22 1'	Total/NA	Solid	8015D	3839
MB 885-3839/1-A	Method Blank	Total/NA	Solid	8015D	3839
LCS 885-3839/2-A	Lab Control Sample	Total/NA	Solid	8015D	3839

Prep Batch: 3963

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3298-13	BES24-12 1.5'	Total/NA	Solid	SHAKE	
885-3298-14	BES24-13 1.5'	Total/NA	Solid	SHAKE	
885-3298-15	BES24-15 1.5'	Total/NA	Solid	SHAKE	
885-3298-16	BES24-16 1.5'	Total/NA	Solid	SHAKE	
885-3298-17	BES24-19 1.5'	Total/NA	Solid	SHAKE	
MB 885-3963/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3963/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 4042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3298-13	BES24-12 1.5'	Total/NA	Solid	8015D	3963
885-3298-14	BES24-13 1.5'	Total/NA	Solid	8015D	3963
885-3298-15	BES24-15 1.5'	Total/NA	Solid	8015D	3963
885-3298-16	BES24-16 1.5'	Total/NA	Solid	8015D	3963
885-3298-17	BES24-19 1.5'	Total/NA	Solid	8015D	3963
MB 885-3963/1-A	Method Blank	Total/NA	Solid	8015D	3963
LCS 885-3963/2-A	Lab Control Sample	Total/NA	Solid	8015D	3963

Analysis Batch: 4043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3298-3	BES24-23 1'	Total/NA	Solid	8015D	3914
885-3298-4	BES24-24 1'	Total/NA	Solid	8015D	3914
885-3298-5	BES24-25 1'	Total/NA	Solid	8015D	3914
885-3298-6	BES24-26 1'	Total/NA	Solid	8015D	3914
885-3298-7	BES24-27 1'	Total/NA	Solid	8015D	3914
885-3298-8	BES24-28 1'	Total/NA	Solid	8015D	3914
885-3298-9	BES24-29 1'	Total/NA	Solid	8015D	3914
885-3298-10	BES24-30 1'	Total/NA	Solid	8015D	3914
885-3298-11	BES24-02 1.5'	Total/NA	Solid	8015D	3914
885-3298-12	BES24-03 1.5'	Total/NA	Solid	8015D	3914
MB 885-3914/1-A	Method Blank	Total/NA	Solid	8015D	3914
LCS 885-3914/2-A	Lab Control Sample	Total/NA	Solid	8015D	3914
885-3298-12 MS	BES24-03 1.5'	Total/NA	Solid	8015D	3914
885-3298-12 MSD	BES24-03 1.5'	Total/NA	Solid	8015D	3914

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Client: Vertex Project/Site: JRU DI 2

HPLC/IC

Leach Batch: 79603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3298-13	BES24-12 1.5'	Soluble	Solid	DI Leach	
885-3298-14	BES24-13 1.5'	Soluble	Solid	DI Leach	
885-3298-15	BES24-15 1.5'	Soluble	Solid	DI Leach	
885-3298-16	BES24-16 1.5'	Soluble	Solid	DI Leach	
885-3298-17	BES24-19 1.5'	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	
885-3298-13 MS	BES24-12 1.5'	Soluble	Solid	DI Leach	
885-3298-13 MSD	BES24-12 1.5'	Soluble	Solid	DI Leach	

Analysis Batch: 79670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3298-13	BES24-12 1.5'	Soluble	Solid	300.0	79603
885-3298-14	BES24-13 1.5'	Soluble	Solid	300.0	79603
885-3298-15	BES24-15 1.5'	Soluble	Solid	300.0	79603
885-3298-16	BES24-16 1.5'	Soluble	Solid	300.0	79603
885-3298-17	BES24-19 1.5'	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
885-3298-13 MS	BES24-12 1.5'	Soluble	Solid	300.0	79603
885-3298-13 MSD	BES24-12 1.5'	Soluble	Solid	300.0	79603

Leach Batch: 79925

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3298-1	BES24-21 1'	Soluble	Solid	DI Leach	
885-3298-2	BES24-22 1'	Soluble	Solid	DI Leach	
885-3298-3	BES24-23 1'	Soluble	Solid	DI Leach	
885-3298-4	BES24-24 1'	Soluble	Solid	DI Leach	
885-3298-5	BES24-25 1'	Soluble	Solid	DI Leach	
885-3298-6	BES24-26 1'	Soluble	Solid	DI Leach	
885-3298-7	BES24-27 1'	Soluble	Solid	DI Leach	
885-3298-8	BES24-28 1'	Soluble	Solid	DI Leach	
885-3298-9	BES24-29 1'	Soluble	Solid	DI Leach	
885-3298-10	BES24-30 1'	Soluble	Solid	DI Leach	
885-3298-11	BES24-02 1.5'	Soluble	Solid	DI Leach	
885-3298-12	BES24-03 1.5'	Soluble	Solid	DI Leach	
MB 880-79925/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-79925/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-79925/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-3298-1 MS	BES24-21 1'	Soluble	Solid	DI Leach	
885-3298-1 MSD	BES24-21 1'	Soluble	Solid	DI Leach	
885-3298-11 MS	BES24-02 1.5'	Soluble	Solid	DI Leach	
885-3298-11 MSD	BES24-02 1.5'	Soluble	Solid	DI Leach	

Analysis Batch: 79932

Lab Sample ID 885-3298-1	Client Sample ID BES24-21 1'	Prep Type Soluble	Matrix Solid	Method 300.0	Prep Batch 79925
885-3298-2	BES24-22 1'	Soluble	Solid	300.0	79925
885-3298-3	BES24-23 1'	Soluble	Solid	300.0	79925

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Client: Vertex Project/Site: JRU DI 2

HPLC/IC (Continued)

Analysis Batch: 79932 (Continued)

nalysis Batch: 7993	32 (Continued)				
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
385-3298-4	BES24-24 1'	Soluble	Solid	300.0	79925
385-3298-5	BES24-25 1'	Soluble	Solid	300.0	79925
85-3298-6	BES24-26 1'	Soluble	Solid	300.0	79925
85-3298-7	BES24-27 1'	Soluble	Solid	300.0	79925
85-3298-8	BES24-28 1'	Soluble	Solid	300.0	79925
85-3298-9	BES24-29 1'	Soluble	Solid	300.0	79925
85-3298-10	BES24-30 1'	Soluble	Solid	300.0	79925
85-3298-11	BES24-02 1.5'	Soluble	Solid	300.0	79925
85-3298-12	BES24-03 1.5'	Soluble	Solid	300.0	79925
/IB 880-79925/1-A	Method Blank	Soluble	Solid	300.0	79925
CS 880-79925/2-A	Lab Control Sample	Soluble	Solid	300.0	79925
CSD 880-79925/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	79925
85-3298-1 MS	BES24-21 1'	Soluble	Solid	300.0	79925
85-3298-1 MSD	BES24-21 1'	Soluble	Solid	300.0	79925
85-3298-11 MS	BES24-02 1.5'	Soluble	Solid	300.0	79925
385-3298-11 MSD	BES24-02 1.5'	Soluble	Solid	300.0	79925

Job ID: 885-3298-1

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Job ID: 885-3298-1

Lab Sample ID: 885-3298-1

Matrix: Solid

Lab Sample ID: 885-3298-2

Lab Sample ID: 885-3298-3

Lab Sample ID: 885-3298-4

Matrix: Solid

Matrix: Solid

Matrix: Solid

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-21 1' Date Collected: 04/19/24 10:00 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3800	JP	EET ALB	04/24/24 09:40
Total/NA	Analysis	8015D		1	4035	JP	EET ALB	04/26/24 14:06
Total/NA	Prep	5030C			3800	JP	EET ALB	04/24/24 09:40
Total/NA	Analysis	8021B		1	4036	JP	EET ALB	04/26/24 14:06
Total/NA	Prep	SHAKE			3839	JU	EET ALB	04/24/24 15:00
Total/NA	Analysis	8015D		1	3939	JU	EET ALB	04/25/24 21:06
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 21:40

Client Sample ID: BES24-22 1'

Date Collected: 04/19/24 10:15 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3800	JP	EET ALB	04/24/24 09:40
Total/NA	Analysis	8015D		1	4035	JP	EET ALB	04/26/24 14:30
Total/NA	Prep	5030C			3800	JP	EET ALB	04/24/24 09:40
Total/NA	Analysis	8021B		1	4036	JP	EET ALB	04/26/24 14:30
Total/NA	Prep	SHAKE			3839	JU	EET ALB	04/24/24 15:00
Total/NA	Analysis	8015D		1	3939	JU	EET ALB	04/25/24 21:18
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 21:59

Client Sample ID: BES24-23 1'

Date Collected: 04/19/24 10:30 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3800	JP	EET ALB	04/24/24 09:40
Total/NA	Analysis	8015D		1	4035	JP	EET ALB	04/26/24 15:16
Total/NA	Prep	5030C			3800	JP	EET ALB	04/24/24 09:40
Total/NA	Analysis	8021B		1	4036	JP	EET ALB	04/26/24 15:16
Total/NA	Prep	SHAKE			3914	DH	EET ALB	04/25/24 15:27
Total/NA	Analysis	8015D		1	4043	JU	EET ALB	04/26/24 14:23
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 22:05

Client Sample ID: BES24-24 1' Date Collected: 04/19/24 10:45 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3800	JP	EET ALB	04/24/24 09:40
Total/NA	Analysis	8015D		1	4035	JP	EET ALB	04/26/24 15:40

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Job ID: 885-3298-1

Lab Sample ID: 885-3298-4

Matrix: Solid

Matrix: Solid

Client: Vertex

Client Sample ID: BES24-24 1' Date Collected: 04/19/24 10:45 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3800	JP	EET ALB	04/24/24 09:40
Total/NA	Analysis	8021B		1	4036	JP	EET ALB	04/26/24 15:40
Total/NA	Prep	SHAKE			3914	DH	EET ALB	04/25/24 15:27
Total/NA	Analysis	8015D		1	4043	JU	EET ALB	04/26/24 14:36
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 22:11

Client Sample ID: BES24-25 1' Date Collected: 04/19/24 11:00 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3800	JP	EET ALB	04/24/24 09:40
Total/NA	Analysis	8015D		1	4035	JP	EET ALB	04/26/24 16:03
Total/NA	Prep	5030C			3800	JP	EET ALB	04/24/24 09:40
Total/NA	Analysis	8021B		1	4036	JP	EET ALB	04/26/24 16:03
Total/NA	Prep	SHAKE			3914	DH	EET ALB	04/25/24 15:27
Total/NA	Analysis	8015D		1	4043	JU	EET ALB	04/26/24 14:49
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 22:18

Client Sample ID: BES24-26 1' Date Collected: 04/19/24 11:15 Date Received: 04/24/24 07:45

Lab Sample ID: 885-3298-6 Matrix: Solid

Lab Sample ID: 885-3298-7

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/26/24 18:44
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/26/24 18:44
Total/NA	Prep	SHAKE			3914	DH	EET ALB	04/25/24 15:27
Total/NA	Analysis	8015D		1	4043	JU	EET ALB	04/26/24 15:01
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 22:37

Client Sample ID: BES24-27 1' Date Collected: 04/19/24 11:30 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/26/24 19:06
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/26/24 19:06

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Lab Chronicle

Job ID: 885-3298-1

Matrix: Solid

Matrix: Solid

Lab Sample ID: 885-3298-7

Lab Sample ID: 885-3298-8

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-27 1' Date Collected: 04/19/24 11:30 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	SHAKE			3914	DH	EET ALB	04/25/24 15:27
Total/NA	Analysis	8015D		1	4043	JU	EET ALB	04/26/24 15:14
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 22:43

Client Sample ID: BES24-28 1' Date Collected: 04/19/24 11:45 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/26/24 19:28
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/26/24 19:28
Total/NA	Prep	SHAKE			3914	DH	EET ALB	04/25/24 15:27
Total/NA	Analysis	8015D		1	4043	JU	EET ALB	04/26/24 15:27
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 22:49

Client Sample ID: BES24-29 1' Date Collected: 04/19/24 12:00 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/26/24 19:49
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/26/24 19:49
Total/NA	Prep	SHAKE			3914	DH	EET ALB	04/25/24 15:27
Total/NA	Analysis	8015D		1	4043	JU	EET ALB	04/26/24 15:40
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 22:56

Client Sample ID: BES24-30 1' Date Collected: 04/19/24 12:15 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/26/24 20:11
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/26/24 20:11
Total/NA	Prep	SHAKE			3914	DH	EET ALB	04/25/24 15:27
Total/NA	Analysis	8015D		1	4043	JU	EET ALB	04/26/24 15:53

Lab Sample ID: 885-3298-9 Matrix: Solid

Lab Sample ID: 885-3298-10

Eurofins Albuquerque

Matrix: Solid

Lab Chronicle

Job ID: 885-3298-1

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

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Lab Sample ID: 885-3298-10

Lab Sample ID: 885-3298-11

Lab Sample ID: 885-3298-12

Lab Sample ID: 885-3298-13

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-30 1' Date Collected: 04/19/24 12:15 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 23:02

Client Sample ID: BES24-02 1.5' Date Collected: 04/19/24 12:45 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/26/24 20:33
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/26/24 20:33
Total/NA	Prep	SHAKE			3914	DH	EET ALB	04/25/24 15:27
Total/NA	Analysis	8015D		1	4043	JU	EET ALB	04/26/24 16:06
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 23:08

Client Sample ID: BES24-03 1.5' Date Collected: 04/19/24 13:00 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/26/24 20:55
Total/NA	Prep	5030C			3834	JR	EET ALB	04/24/24 13:52
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/26/24 20:55
Total/NA	Prep	SHAKE			3914	DH	EET ALB	04/25/24 15:27
Total/NA	Analysis	8015D		1	4043	JU	EET ALB	04/26/24 16:18
Soluble	Leach	DI Leach			79925	SA	EET MID	05/03/24 11:27
Soluble	Analysis	300.0		1	79932	SMC	EET MID	05/04/24 23:27

Client Sample ID: BES24-12 1.5' Date Collected: 04/22/24 11:30 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3888	JP	EET ALB	04/25/24 12:10
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/27/24 05:17
Total/NA	Prep	5030C			3888	JP	EET ALB	04/25/24 12:10
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/27/24 05:17
Total/NA	Prep	SHAKE			3963	DH	EET ALB	04/26/24 12:53
Total/NA	Analysis	8015D		1	4042	JU	EET ALB	04/29/24 17:55
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 15:28

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3298-1

Client Sample ID: BES24-13 1.5'

Job ID: 885-3298-1

Lab Sample ID: 885-3298-14 Matrix: Solid

Date Collected: 04/22/24 11:35 Date Received: 04/24/24 07:45

Client: Vertex

Project/Site: JRU DI 2

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3888	JP	EET ALB	04/25/24 12:10
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/27/24 05:39
Total/NA	Prep	5030C			3888	JP	EET ALB	04/25/24 12:10
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/27/24 05:39
Total/NA	Prep	SHAKE			3963	DH	EET ALB	04/26/24 12:53
Total/NA	Analysis	8015D		1	4042	JU	EET ALB	04/29/24 18:08
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 15:46

Client Sample ID: BES24-15 1.5'

Date Collected: 04/22/24 11:45 Date Received: 04/24/24 07:45

—	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3888	JP	EET ALB	04/25/24 12:10
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/27/24 06:01
Total/NA	Prep	5030C			3888	JP	EET ALB	04/25/24 12:10
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/27/24 06:01
Total/NA	Prep	SHAKE			3963	DH	EET ALB	04/26/24 12:53
Total/NA	Analysis	8015D		1	4042	JU	EET ALB	04/29/24 18:21
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 15:53

Client Sample ID: BES24-16 1.5'

Date Collected: 04/22/24 12:00 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3888	JP	EET ALB	04/25/24 12:10
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/27/24 06:22
Total/NA	Prep	5030C			3888	JP	EET ALB	04/25/24 12:10
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/27/24 06:22
Total/NA	Prep	SHAKE			3963	DH	EET ALB	04/26/24 12:53
Total/NA	Analysis	8015D		1	4042	JU	EET ALB	04/29/24 18:35
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 16:11

Client Sample ID: BES24-19 1.5' Date Collected: 04/22/24 12:05 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3888	JP	EET ALB	04/25/24 12:10
Total/NA	Analysis	8015D		1	4029	RA	EET ALB	04/27/24 06:44

Eurofins Albuquerque

Lab Sample ID: 885-3298-15

Lab Sample ID: 885-3298-16

Lab Sample ID: 885-3298-17

Matrix: Solid

Matrix: Solid

Matrix: Solid

Job ID: 885-3298-1

Matrix: Solid

Lab Sample ID: 885-3298-17

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-19 1.5' Date Collected: 04/22/24 12:05 Date Received: 04/24/24 07:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			3888	JP	EET ALB	04/25/24 12:10
Total/NA	Analysis	8021B		1	4030	RA	EET ALB	04/27/24 06:44
Total/NA	Prep	SHAKE			3963	DH	EET ALB	04/26/24 12:53
Total/NA	Analysis	8015D		1	4042	JU	EET ALB	04/29/24 18:48
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 16:17

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

Eurofins Albuquerque

322 05 400

5

Laboratory: Eurofins Albuquerque

for which the agency does not offer certification.

Prep Method

5030C

SHAKE

SHAKE

5030C

5030C

5030C

5030C

Accreditation/Certification Summary

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes

Identification Number

Gasoline Range Organics [C6 - C10]

Motor Oil Range Organics [C28-C40]

Diesel Range Organics [C10-C28]

NM9425, NM0901

Analyte

Benzene

Toluene

Ethylbenzene

Xylenes, Total

NM100001

Expiration Date

02-26-25

02-26-25

Client: Vertex Project/Site: JRU DI 2

Analysis Method

8015D

8015D

8015D

8021B

8021B

8021B

8021B

Oregon

Authority

New Mexico

Job ID: 885-3298-1

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5 6 7 9

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

Matrix

Solid

Solid

Solid

Solid

Solid

Solid

Solid

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

Program

State

NELAP

Eurofins Albuquerque

U	hain-	of-Cu	Chain-of-Custody Record	Turn-Around Time	me			2				Call/TD Caladeatra		4	
Client Vertex (XTO)	ertex (X	10)		□ Standard	Á Rush	G Rush 500M				N N N	ר א הא	ANALYSTS LABORA			
				Project Name	R			5	w hal	www hallenvironmental com	menta	com	j		H.
Mailing Address		On File					4901 F	4901 Hawkins NE -	, NE		Ierque	Albuquerque, NM 87109	60	ä	59
				Project # 23-0	23-06065		Tel 5	505-345-3975	3975	Fax	505-3	505-345-4107		885-3298 COC	ö
Phone #	On File								A	Analysis	Request	est			
email or Fax#		Scattar@vertex ca	ertex ca	Project Manager	ler Sally Carttar	ttar	(05			os		່ງນອ			
QA/QC Package	ackage lard		□ Level 4 (Full Validation)				6CB 0 / WI 803	500130	SWISC	۶O4,		edA\tr			
Accreditation	ation			Sampler Wva	Wvatt Wadleigh		אם א		170	103		əsə			
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04/19/24	10 45	Sol	BES24-24 1ft	1, 4oz jar		-4	××			×					
04/19/24	11 00	Soil	BES24-25 1ft	1 4oz jar		Ŷ	××			×					
04/19/24	11 15	Soil	BES24-26 1ft	1, 4oz jar		2	××			×			 		[
04/19/24	11 30	Soil	BES24-27 1ft	1, 4oz jar		L-	X X			×					
04/19/24	11 45	Sol	BES24-28 1ft	1, 4oz jar		-8	X X			×					ti Fareste
04/19/24	12 00	Soil	BES24-29 1ft	1, 4oz jar		-9	X X			×					-
04/19/24	12 15	Soil	BES24-30 1ft	1, 4oz jar		-10	XX			×					
04/19/24	12 45	Soil	BES24-02 1 5 ft	1, 4oz jar		-11	X X			×					
04/19/24	13 00	Sol	BES24-03 1 5ft	1, 4oz jar		21-	XX			×					
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	lf necessary	samples sut	If necessary samples submitted to Hall Environmental may be subcontracted to other accredited laboratories	ontracted to when acc	credited laboratorie	s This serves as notice of this possibility Any sub-contracted data will be clearly notated on the analytical report,	possibility Any (sub-contra	cted data	will be clea	rly notat∈	d on the anal	lytical rep	ort.	

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Mailing Address		On File						4901 Haw	kins N	, Ш	Nbuque	erque,	4901 Hawkins NE - Albuquerque, NM 87109	64 0	뷥	2.1.5
				Project # 23-0	23-06065		r	Tel 505-	505-345-3975	975	Fax	505-34	Fax 505-345-4107		885-3298 COC	υ
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	f necessary	· samples sul	If necessary samples submitted to Hall Environmental may be subcontracted to		Sher accredited laboratories	es This serves as notice of this possibility	is pos:		contracte	d data w	Il be clear	ly notated	Any sub-contracted data will be clearly notated on the analytical report.	tical report		

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5/6/2024

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Client: Vertex (XTO)	<u>қ (ХТО)</u>	4		C Standard	X Rush	5 day	L_					ANALYSTS		I ABORATOR				
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				Cooler Temp(Induding CF):	(înduding CF).		ΤM	19D					imə	ofilo				
Date -	Time	Matrix	Sample Name	Container Type and #	Preservative Type	, HEAL No.	X X T 8	r08:H9T	EDB (Me	(d sHA9	8 AЯЭЯ	Chloride V) 0328	S) 0728	Total Co				
04.22 2024	11:30	Soil	BES24-12 1.5 ft	1, 4oz jar	ICe		×	×				×						1
04.22 2024	11:35	Soil	BES24-13 1.5 ft	1, 4oz jar	ice		×	×				×						l
04.22.2024	11:45	Soil	BES24-15 1.5 ft	1, 4oz jar	e		×	×				×		<u> </u>	<u> </u>			1
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Login Sample Receipt Checklist

Client: Vertex

Login Number: 3298 List Number: 1 Creator: Proctor, Nancy

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

List Source: Eurofins Albuquerque

Job Number: 885-3298-1

Login Sample Receipt Checklist

Client: Vertex

<6mm (1/4").

Login Number: 3298 List Number: 2 Creator: Rodriguez, Leticia

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	N/A	

11

Job Number: 885-3298-1

List Source: Eurofins Midland

List Creation: 04/26/24 11:12 AM

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 5/9/2024 5:09:23 PM

JOB DESCRIPTION

JRU DI 2

JOB NUMBER

885-3742-1

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

Authorized for release by

(505)345-3975

Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com

Generated 5/9/2024 5:09:23 PM

Released to Imaging: 7/31/2024 2:57:32 PM

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Case Narrative	5
Client Sample Results	6
QC Sample Results	13
QC Association Summary	16
Lab Chronicle	18
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Chain of Custody	22
Receipt Checklists	24

Client: Vertex Project/Site: JRU DI 2 Job ID: 885-3742-1

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Page	332	01	400

Glossary		3
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	5
CFU	Colony Forming Unit	J
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)	8
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	9
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	

Eurofins Albuquerque

Case Narrative

Job Narrative

885-3742-1

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

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

Client: Vertex Project: JRU DI 2

Job ID: 885-3742-1

method.

Eurofins Albuquerque

Job ID: 885-3742-1

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.

quality control (QC) is further explained in narrative comments.

Receipt

The samples were received on 5/2/2024 7:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.3°C.

Gasoline Range Organics

No additional analytical or guality 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 885-4408 recovered above the upper control limit for Diesel Range Organics [C10-C28]. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: WES24-01 (885-3742-1), WES24-02 (885-3742-2), WES24-03 (885-3742-3), WES24-04 (885-3742-4), WES24-05 (885-3742-5), BES24-14 2.5ft (885-3742-6), BES24-31 3.5ft (885-3742-7) and (885-3745-A-1-B).

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

Matrix: Solid

5

Lab Sample ID: 885-3742-1

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: WES24-01

Date Collected: 04/30/24 10:00 Date Received: 05/02/24 07:55

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		05/02/24 14:55	05/04/24 03:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			05/02/24 14:55	05/04/24 03:35	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC))					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/02/24 14:55	05/04/24 03:35	1
Ethylbenzene	ND		0.050	mg/Kg		05/02/24 14:55	05/04/24 03:35	1
Toluene	ND		0.050	mg/Kg		05/02/24 14:55	05/04/24 03:35	1
Xylenes, Total	ND		0.099	mg/Kg		05/02/24 14:55	05/04/24 03:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		39 - 146			05/02/24 14:55	05/04/24 03:35	
Method: SW846 8015D - Diesel R	ange Organics	6 (DRO) (GC	;)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		05/03/24 11:28	05/04/24 01:26	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/03/24 11:28	05/04/24 01:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	97		62 - 134			05/03/24 11:28	05/04/24 01:26	
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	240		5.0	mg/Kg			05/07/24 18:44	·

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Client Sample ID: WES24-02

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

Result Qualifier

ND

170

Date Collected: 04/30/24 10:15

Date Received: 05/02/24 07:55

Gasoline Range Organics [C6 - C10]

Client: Vertex

Analyte

Chloride

Project/Site: JRU DI 2

RL

4.6

Unit

mg/Kg

mg/Kg

D

Prepared

05/02/24 14:55

Job ID: 885-3742-1

Lab Sample ID: 885-3742-2

Analyzed

05/04/24 03:58

05/07/24 19:03

Matrix: Solid

Dil Fac

1

1

5

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 244			05/02/24 14:55	05/04/24 03:58	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		05/02/24 14:55	05/04/24 03:58	1
Ethylbenzene	ND		0.046	mg/Kg		05/02/24 14:55	05/04/24 03:58	1
Toluene	ND		0.046	mg/Kg		05/02/24 14:55	05/04/24 03:58	1
Xylenes, Total	ND		0.092	mg/Kg		05/02/24 14:55	05/04/24 03:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		39 - 146			05/02/24 14:55	05/04/24 03:58	1
Method: SW846 8015D - Diesel R	ange Organics	s (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		05/03/24 11:28	05/04/24 01:50	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		05/03/24 11:28	05/04/24 01:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			05/03/24 11:28	05/04/24 01:50	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Soluble	e					
· · · · · · · · · · · · · · · · · · ·	• •	-	RL					

5.0

Matrix: Solid

5

Lab Sample ID: 885-3742-3

Project/Site: JRU DI 2

Client: Vertex

Client Sample ID: WES24-03

Date Collected: 04/30/24 10:30 Date Received: 05/02/24 07:55

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		05/02/24 14:55	05/04/24 04:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			05/02/24 14:55	05/04/24 04:22	1
Method: SW846 8021B - Volatile (Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/02/24 14:55	05/04/24 04:22	1
Ethylbenzene	ND		0.049	mg/Kg		05/02/24 14:55	05/04/24 04:22	1
Toluene	ND		0.049	mg/Kg		05/02/24 14:55	05/04/24 04:22	1
Xylenes, Total	ND		0.099	mg/Kg		05/02/24 14:55	05/04/24 04:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		39 - 146			05/02/24 14:55	05/04/24 04:22	1
Method: SW846 8015D - Diesel R	ange Organics	s (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		05/03/24 11:28	05/04/24 02:13	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		05/03/24 11:28	05/04/24 02:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			05/03/24 11:28	05/04/24 02:13	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		5.0	mg/Kg			05/07/24 19:09	1

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Matrix: Solid

5

Lab Sample ID: 885-3742-4

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: WES24-04

Date Collected: 04/30/24 10:45 Date Received: 05/02/24 07:55

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		05/02/24 14:55	05/04/24 04:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244			05/02/24 14:55	05/04/24 04:45	1
Method: SW846 8021B - Volatile (Organic Comp	ounds (GC)	1					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/02/24 14:55	05/04/24 04:45	1
Ethylbenzene	ND		0.047	mg/Kg		05/02/24 14:55	05/04/24 04:45	1
Toluene	ND		0.047	mg/Kg		05/02/24 14:55	05/04/24 04:45	1
Xylenes, Total	ND		0.095	mg/Kg		05/02/24 14:55	05/04/24 04:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		39 - 146			05/02/24 14:55	05/04/24 04:45	1
Method: SW846 8015D - Diesel R	ange Organics	(DRO) (GC	;)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		05/03/24 11:28	05/04/24 02:37	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/03/24 11:28	05/04/24 02:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	96		62 - 134			05/03/24 11:28	05/04/24 02:37	
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		5.0	mg/Kg			05/07/24 19:15	

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Lab Sample ID: 885-3742-5

Matrix: Solid

5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		05/02/24 14:55	05/04/24 05:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244			05/02/24 14:55	05/04/24 05:09	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/02/24 14:55	05/04/24 05:09	1
Ethylbenzene	ND		0.049	mg/Kg		05/02/24 14:55	05/04/24 05:09	1
Toluene	ND		0.049	mg/Kg		05/02/24 14:55	05/04/24 05:09	1
Xylenes, Total	ND		0.099	mg/Kg		05/02/24 14:55	05/04/24 05:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		39 - 146			05/02/24 14:55	05/04/24 05:09	1
Method: SW846 8015D - Diesel R	ange Organics	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		05/03/24 11:28	05/04/24 03:01	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/03/24 11:28	05/04/24 03:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			05/03/24 11:28	05/04/24 03:01	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Soluble	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74		5.0	mg/Kg			05/07/24 19:21	-

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Client: Vertex Project/Site: JRU DI 2

Client Sample ID: WES24-05 Date Collected: 04/30/24 11:00

Date Received: 05/02/24 07:55

Client Sample ID: BES24-14 2.5ft

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

Date Collected: 04/30/24 11:15

Date Received: 05/02/24 07:55

Client: Vertex

Project/Site: JRU DI 2

Job ID: 885-3742-1

Lab Sample ID: 885-3742-6

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Basoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		05/02/24 14:55	05/04/24 05:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
I-Bromofluorobenzene (Surr)	98		15 - 244			05/02/24 14:55	05/04/24 05:32	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/02/24 14:55	05/04/24 05:32	1
Ethylbenzene	ND		0.049	mg/Kg		05/02/24 14:55	05/04/24 05:32	1
Toluene	ND		0.049	mg/Kg		05/02/24 14:55	05/04/24 05:32	1
(ylenes, Total	ND		0.098	mg/Kg		05/02/24 14:55	05/04/24 05:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
-Bromofluorobenzene (Surr)	92		39 - 146			05/02/24 14:55	05/04/24 05:32	1
Method: SW846 8015D - Diesel R	ange Organics	s (DRO) (GC	;)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		05/03/24 11:28	05/04/24 03:25	1
Notor Oil Range Organics [C28-C40]	ND		45	mg/Kg		05/03/24 11:28	05/04/24 03:25	1
5 5 1 1						Descent	A	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Wethou. LFA 300.0 - Amons, Ion C	momatograp	ily - Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		5.0	mg/Kg			05/07/24 19:39	1

Client Sample ID: BES24-31 3.5ft

Date Collected: 04/30/24 11:30

Client: Vertex

Project/Site: JRU DI 2

Client Sample Results

Job ID: 885-3742-1

Lab Sample ID: 885-3742-7

Matrix: Solid

Method: SW846 8015D - Gasoline	• •							
Analyte		Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		05/02/24 14:55	05/04/24 05:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			05/02/24 14:55	05/04/24 05:56	1
Method: SW846 8021B - Volatile (Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/02/24 14:55	05/04/24 05:56	1
Ethylbenzene	ND		0.048	mg/Kg		05/02/24 14:55	05/04/24 05:56	1
Toluene	ND		0.048	mg/Kg		05/02/24 14:55	05/04/24 05:56	1
Xylenes, Total	ND		0.096	mg/Kg		05/02/24 14:55	05/04/24 05:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		39 - 146			05/02/24 14:55	05/04/24 05:56	1
Method: SW846 8015D - Diesel R	ange Organics	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		05/03/24 11:28	05/04/24 03:48	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/03/24 11:28	05/04/24 03:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			05/03/24 11:28	05/04/24 03:48	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		5.0	mg/Kg			05/07/24 19:46	1

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Job ID: 885-3742-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: MB 885-4280/1-A										Client Sa	mple ID: Metho	d Blank
Matrix: Solid											Prep Type: 7	Fotal/NA
Analysis Batch: 4416											Prep Bate	ch: 4280
		ΜВ	MB									
Analyte	Re	sult	Qualifier	RL		Unit		D	Р	repared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]		ND		5.0		mg/K	g	_	05/0	2/24 14:55	05/03/24 20:32	1
		ΜВ	МВ									
Surrogate	%Reco	very	Qualifier	Limits					Ρ	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		99		15 _ 244					05/0	2/24 14:55	05/03/24 20:32	1
Lab Sample ID: LCS 885-4280/2-A								С	lient	Sample	ID: Lab Control	Sample
Matrix: Solid											Prep Type: ⁻	
Analysis Batch: 4416											Prep Bate	
-				Spike	LCS	LCS					%Rec	
Analyte				Added	Result	Qualifier	Unit		D	%Rec	Limits	
Gasoline Range Organics [C6 -				25.0	26.4		mg/Kg			106	70 - 130	
C10]												
	LCS	LCS										
Surrogate	LCS %Recovery		ifier	Limits								

Lab Sample ID: MB 885-4280/1-/ Matrix: Solid	4									Client Sa	mple ID: Meth Prep Type	
Analysis Batch: 4418												tch: 4280
Analysis Datch. 4410		мв	мв								Перьс	4200
Analyte	R		Qualifier	RL	_	Unit		D	Р	repared	Analyzed	Dil Fac
Benzene		ND		0.025		mg/K	a	-		2/24 14:55	05/03/24 20:32	
Ethylbenzene		ND		0.050)	mg/K	g		05/0	2/24 14:55	05/03/24 20:32	1
Toluene		ND		0.050)	mg/K	g		05/0	2/24 14:55	05/03/24 20:32	1
Xylenes, Total		ND		0.10)	mg/K	g		05/0	2/24 14:55	05/03/24 20:32	1
		ΜВ	МВ									
Surrogate	%Reco	overy	Qualifier	Limits					P	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		95		39 - 146	-				05/0	2/24 14:55	05/03/24 20:32	2 1
- Lab Sample ID: LCS 885-4280/3	- A							c	lient	Sample	ID: Lab Contro	ol Sample
Matrix: Solid											Prep Type	
Analysis Batch: 4418												tch: 4280
-				Spike	LCS	LCS					%Rec	
Analyte				Added	Result	Qualifier	Unit		D	%Rec	Limits	
Benzene				1.00	0.966		mg/Kg			97	70 - 130	
Ethylbenzene				1.00	0.903		mg/Kg			90	70 - 130	
m,p-Xylene				2.00	1.82		mg/Kg			91	70 - 130	
o-Xylene				1.00	0.887		mg/Kg			89	70 - 130	
Toluene				1.00	0.902		mg/Kg			90	70 - 130	
	LCS	LCS										
Surrogate	%Recovery	Qua	lifier	Limits								
1 Promofluorobonzono (Surr)	07			20 146								

Job ID: 885-3742-1

Client: Vertex Project/Site: JRU DI 2

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

												Sample ID: I		
Matrix: Solid													ype: T	
Analysis Batch: 4408												Pre	p Batcl	n: 433
Analyta	D,	MB	MB Qualifier		RL		Unit		D	ь.	ronarad	Analua	ad	Dil Fa
Analyte Diesel Range Organics [C10-C28]		ND	Quaimer		10		0///		_		repared 3/24 11:28	Analyz 3 05/03/24		DIF
Motor Oil Range Organics [C28-C40]		ND			50		mg/Kg				3/24 11:28			
		ND			00		mg/rq	9		00/0	0/24 11.20	00/00/24	10.07	
			МВ											
Surrogate	%Reco	-	Qualifier	Limit							repared	Analyz		Dil Fa
Di-n-octyl phthalate (Surr)		89		62 - 1	134					05/0	3/24 11:28	3 05/03/24	19:07	
Lab Sample ID: LCS 885-4338/2-/	Δ								С	lient	Sample	D: Lab Co	ontrol S	Samp
Matrix: Solid													ype: To	
Analysis Batch: 4408													p Batcl	
				Spike		LCS	LCS					%Rec		
Analyte				Added		Result	Qualifier	Unit		D	%Rec	Limits		
Diesel Range Organics				50.0		49.0		mg/Kg		_	98	60 - 135		
[C10-C28]								- •						
	LCS	105												
Surrogate	%Recovery		ifior	Limits										
Di-n-octyl phthalate (Surr)	115	Quun		62 - 134										
	110			02 - 707										
Lab Sample ID: MB 880-80168/1- Matrix: Solid	A										Client S	Sample ID: I Prep	Methoo Type: \$	
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184			мв									Prep	Type: S	Solub
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte		esult	MB Qualifier		RL		Unit		D		Client S	Prep Analyz	Type: S	Solub
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte					RL 5.0		Unit mg/Kg	9	<u>D</u>			Prep	Type: S	Solub
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride	Re	esult						9	_	Pı	repared	Analyz 05/07/24	Type: \$	Solub Dil Fa
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride	Re	esult						9	_	Pı	repared	Prep 	Type: \$	Dil Fa
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid	Re	esult						9	_	Pı	repared	Prep 	Type: \$	Dil Fa
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid	Re	esult				LCS		3	_	Pı	repared	Prep 	Type: \$	Dil Fa
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184	Re	esult		Spike Added			mg/K	Unit	_	Pı	repared	Analyz 05/07/24 e ID: Lab Co Prep	Type: \$	Dil Fa
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Analyte	Re	esult					mg/Kg	-	_	Pi	repared Sample	Analyz 05/07/24 DD: Lab Co Prep %Rec	Type: \$	Dil Fa
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Analyte Chloride	Re	esult		Added		Result	mg/Kg	Unit mg/Kg	C	Pi lient	Sample Sample <u>%Rec</u> 97	Analyz 05/07/24 e ID: Lab Co Prep %Rec Limits 90 - 110	Type: \$ ed 18:26 control \$ Type: \$	Solub Dil Fa Sampi Solub
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCSD 880-80168	Re	esult		Added		Result	mg/Kg	Unit mg/Kg	C	Pi lient	Sample Sample <u>%Rec</u> 97	Analyz 05/07/24 D: Lab Co Prep %Rec Limits 90 - 110 Lab Contro	Type: \$ ed 18:26 ontrol \$ Type: \$ I Samp	Solub Dil Fa Sampl Solub
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCSD 880-80168 Matrix: Solid	Re	esult		Added		Result	mg/Kg	Unit mg/Kg	C	Pi lient	Sample Sample <u>%Rec</u> 97	Analyz 05/07/24 D: Lab Co Prep %Rec Limits 90 - 110 Lab Contro	Type: \$ ed 18:26 control \$ Type: \$	Dil Fa Dil Fa Sampl Solub
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCSD 880-80168 Matrix: Solid	Re	esult		Added 250		Result 244	LCS Qualifier	Unit mg/Kg	C	Pi lient	Sample Sample <u>%Rec</u> 97	Analyz 05/07/24 D: Lab Co Prep %Rec Limits 90 - 110 Lab Contro Prep	Type: \$ ed 18:26 ontrol \$ Type: \$ I Samp	Dil Fa Sampl Solub
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCSD 880-80168 Matrix: Solid Analysis Batch: 80184	Re	esult		Added 250 Spike		Result 244 LCSD	LCS Qualifier	Unit mg/Kg Cl	C	Pr lient Sam	Sample Sample <u>%Rec</u> 97 sple ID: I	Analyz O5/07/24 D: Lab Co Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec	Type: \$ ced t8:26 control \$ Type: \$ control \$ Type: \$ control \$ co	Dil Fa Sampl Solubi Die Du Solubi
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCSD 880-80168 Matrix: Solid Analysis Batch: 80184 Analyte	Re	esult		Added 250 Spike Added		Result 244 LCSD Result	LCS Qualifier	Unit mg/Kg Cl	C	Pi lient	Sample %Rec 97 ple ID: I	Analyz O5/07/24 Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits	Type: \$ ed 18:26 control \$ Type: \$ l Samp Type: \$	Solub Dil Fa Sampi Solub Solub RF
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCSD 880-80168 Matrix: Solid Analysis Batch: 80184 Analyte	Re	esult		Added 250 Spike		Result 244 LCSD	LCS Qualifier	Unit mg/Kg Cl	C	Pr lient Sam	Sample Sample <u>%Rec</u> 97 sple ID: I	Analyz O5/07/24 D: Lab Co Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec	Type: \$ ced t8:26 control \$ Type: \$ control \$ Type: \$ control \$ co	Dil Fa Sampl Solub Die Du Solub RP Lim
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCSD 880-80168 Matrix: Solid Analysis Batch: 80184 Analysis Batch: 80184	Re	esult		Added 250 Spike Added		Result 244 LCSD Result	LCS Qualifier	Unit mg/Kg Cl	C	Pr lient Sam	Sample %Rec 97 ple ID: 1 %Rec 97	Analyz 05/07/24 a ID: Lab Co Prep %Rec Limits 90 - 110 %Rec Limits 90 - 110 %Rec Limits 90 - 110	Type: Sed 18:26 - ontrol S Type: S Il Samp - VI Samp - VI Samp - 0 - 0 0	Solub Dil Fa Sampl Solub Solub RP Lim 2
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCSD 880-80168 Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: 885-3742-1 MS	Re	esult		Added 250 Spike Added		Result 244 LCSD Result	LCS Qualifier	Unit mg/Kg Cl	C	Pr lient Sam	Sample %Rec 97 ple ID: 1 %Rec 97	Analyz 05/07/24 D: Lab Co Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 mit Sample	Type: \$ ed 18:26 control \$ Type: \$ I Samp Type: \$ execute RPD 0 ID: WE	Solubi Dil Fa Sampi Solubi Solubi RP Lim 2 S24-0
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCSD 880-80168 Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: 885-3742-1 MS Matrix: Solid	Re	esult		Added 250 Spike Added		Result 244 LCSD Result	LCS Qualifier	Unit mg/Kg Cl	C	Pr lient Sam	Sample %Rec 97 ple ID: 1 %Rec 97	Analyz 05/07/24 D: Lab Co Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 mit Sample	Type: Sed 18:26 - ontrol S Type: S Il Samp - VI Samp - VI Samp - 0 - 0 0	Solubi Dil Fa Sampi Solubi Die Du Solubi RP Lim 2 SS24-0
Lab Sample ID: MB 880-80168/1- Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Analyte Chloride	Re	esult ND	Qualifier	Added 250 Spike Added		Result 244 LCSD Result 244	LCS Qualifier	Unit mg/Kg Cl	C	Pr lient Sam	Sample %Rec 97 ple ID: 1 %Rec 97	Analyz 05/07/24 D: Lab Co Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 mit Sample	Type: \$ ed 18:26 control \$ Type: \$ I Samp Type: \$ execute RPD 0 ID: WE	Solubi Dil Fa Sample Solubi Solubi RPI Lim 2 S24-0
Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCS 880-80168/2 Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: LCSD 880-80168 Matrix: Solid Analysis Batch: 80184 Analyte Chloride Lab Sample ID: 885-3742-1 MS Matrix: Solid	Re !-A /3-A	Samp	Qualifier	Added 250 Spike Added 250		Result 244 LCSD Result 244	LCS Qualifier Qualifier	Unit mg/Kg Cl	C	Pr lient Sam	Sample %Rec 97 ple ID: 1 %Rec 97	Prep Analyz 05/07/24 D: Lab Co Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 mt Sample Prep	Type: \$ ed 18:26 control \$ Type: \$ I Samp Type: \$ execute RPD 0 ID: WE	Soluble Dil Fa Sample Soluble Die Duy Soluble RPI Limi 20 SS24-0

QC Sample Results

Client: Vertex Project/Site: JRU DI 2

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-3742-1 MSD Matrix: Solid Analysis Batch: 80184								Clie	nt Sample Prep	ID: WES Type: So	
·	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	240		250	481		mg/Kg		97	90 - 110	0	20

Eurofins Albuquerque

Job ID: 885-3742-1
2
mple ID: WES24-01
Prep Type: Soluble
ec RPD
10
0 20
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QC Association Summary

Client: Vertex Project/Site: JRU DI 2

Job ID: 885-3742-1

GC VOA

Prep Batch: 4280

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3742-1	WES24-01	Total/NA	Solid	5030C	
885-3742-2	WES24-02	Total/NA	Solid	5030C	
885-3742-3	WES24-03	Total/NA	Solid	5030C	
885-3742-4	WES24-04	Total/NA	Solid	5030C	
885-3742-5	WES24-05	Total/NA	Solid	5030C	
885-3742-6	BES24-14 2.5ft	Total/NA	Solid	5030C	
885-3742-7	BES24-31 3.5ft	Total/NA	Solid	5030C	
MB 885-4280/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-4280/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-4280/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 4416

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3742-1	WES24-01	Total/NA	Solid	8015D	4280
885-3742-2	WES24-02	Total/NA	Solid	8015D	4280
885-3742-3	WES24-03	Total/NA	Solid	8015D	4280
885-3742-4	WES24-04	Total/NA	Solid	8015D	4280
885-3742-5	WES24-05	Total/NA	Solid	8015D	4280
885-3742-6	BES24-14 2.5ft	Total/NA	Solid	8015D	4280
885-3742-7	BES24-31 3.5ft	Total/NA	Solid	8015D	4280
MB 885-4280/1-A	Method Blank	Total/NA	Solid	8015D	4280
LCS 885-4280/2-A	Lab Control Sample	Total/NA	Solid	8015D	4280

Analysis Batch: 4418

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3742-1	WES24-01	Total/NA	Solid	8021B	4280
885-3742-2	WES24-02	Total/NA	Solid	8021B	4280
885-3742-3	WES24-03	Total/NA	Solid	8021B	4280
885-3742-4	WES24-04	Total/NA	Solid	8021B	4280
885-3742-5	WES24-05	Total/NA	Solid	8021B	4280
885-3742-6	BES24-14 2.5ft	Total/NA	Solid	8021B	4280
885-3742-7	BES24-31 3.5ft	Total/NA	Solid	8021B	4280
MB 885-4280/1-A	Method Blank	Total/NA	Solid	8021B	4280
LCS 885-4280/3-A	Lab Control Sample	Total/NA	Solid	8021B	4280

GC Semi VOA

Prep Batch: 4338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3742-1	WES24-01	Total/NA	Solid	SHAKE	
885-3742-2	WES24-02	Total/NA	Solid	SHAKE	
885-3742-3	WES24-03	Total/NA	Solid	SHAKE	
885-3742-4	WES24-04	Total/NA	Solid	SHAKE	
885-3742-5	WES24-05	Total/NA	Solid	SHAKE	
885-3742-6	BES24-14 2.5ft	Total/NA	Solid	SHAKE	
885-3742-7	BES24-31 3.5ft	Total/NA	Solid	SHAKE	
MB 885-4338/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-4338/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Client Sample ID

WES24-01

WES24-02

WES24-03

WES24-04

WES24-05

BES24-14 2.5ft

BES24-31 3.5ft

Lab Control Sample

Method Blank

QC Association Summary

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Matrix

Solid

Solid

Solid

Solid

Solid

Solid

Solid

Solid

Solid

Client: Vertex Project/Site: JRU DI 2

Analysis Batch: 4408

GC Semi VOA

Lab Sample ID

885-3742-1

885-3742-2

885-3742-3

885-3742-4

885-3742-5

885-3742-6

885-3742-7

MB 885-4338/1-A

LCS 885-4338/2-A

Job ID: 885-3742-1

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Prep Batch

4338

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Method

8015D

8015D

8015D

8015D

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Leach Batch: 80168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3742-1	WES24-01	Soluble	Solid	DI Leach	
885-3742-2	WES24-02	Soluble	Solid	DI Leach	
885-3742-3	WES24-03	Soluble	Solid	DI Leach	
885-3742-4	WES24-04	Soluble	Solid	DI Leach	
885-3742-5	WES24-05	Soluble	Solid	DI Leach	
885-3742-6	BES24-14 2.5ft	Soluble	Solid	DI Leach	
885-3742-7	BES24-31 3.5ft	Soluble	Solid	DI Leach	
MB 880-80168/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-80168/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-80168/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-3742-1 MS	WES24-01	Soluble	Solid	DI Leach	
885-3742-1 MSD	WES24-01	Soluble	Solid	DI Leach	

Analysis Batch: 80184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3742-1	WES24-01	Soluble	Solid	300.0	80168
885-3742-2	WES24-02	Soluble	Solid	300.0	80168
885-3742-3	WES24-03	Soluble	Solid	300.0	80168
885-3742-4	WES24-04	Soluble	Solid	300.0	80168
885-3742-5	WES24-05	Soluble	Solid	300.0	80168
885-3742-6	BES24-14 2.5ft	Soluble	Solid	300.0	80168
885-3742-7	BES24-31 3.5ft	Soluble	Solid	300.0	80168
MB 880-80168/1-A	Method Blank	Soluble	Solid	300.0	80168
LCS 880-80168/2-A	Lab Control Sample	Soluble	Solid	300.0	80168
LCSD 880-80168/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	80168
885-3742-1 MS	WES24-01	Soluble	Solid	300.0	80168
885-3742-1 MSD	WES24-01	Soluble	Solid	300.0	80168

Matrix: Solid

Matrix: Solid

Matrix: Solid

Lab Sample ID: 885-3742-1

Lab Sample ID: 885-3742-3

Lab Sample ID: 885-3742-4

Project/Site: JRU DI 2

Client: Vertex

Client Sample ID: WES24-01 Date Collected: 04/30/24 10:00

Date Received: 05/02/24 07:55

	Batch	Batch		Dilution	Batch			Prepared	
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed	
Fotal/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55	
Total/NA	Analysis	8015D		1	4416	JP	EET ALB	05/04/24 03:35	
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55	
Total/NA	Analysis	8021B		1	4418	JP	EET ALB	05/04/24 03:35	
Total/NA	Prep	SHAKE			4338	DH	EET ALB	05/03/24 11:28	
Fotal/NA	Analysis	8015D		1	4408	JU	EET ALB	05/04/24 01:26	
Soluble	Leach	DI Leach			80168	SA	EET MID	05/07/24 13:37	
Soluble	Analysis	300.0		1	80184	SMC	EET MID	05/07/24 18:44	

Client Sample ID: WES24-02

Date Collected: 04/30/24 10:15 Date Received: 05/02/24 07:55

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55
Total/NA	Analysis	8015D		1	4416	JP	EET ALB	05/04/24 03:58
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55
Total/NA	Analysis	8021B		1	4418	JP	EET ALB	05/04/24 03:58
Total/NA	Prep	SHAKE			4338	DH	EET ALB	05/03/24 11:28
Total/NA	Analysis	8015D		1	4408	JU	EET ALB	05/04/24 01:50
Soluble	Leach	DI Leach			80168	SA	EET MID	05/07/24 13:37
Soluble	Analysis	300.0		1	80184	SMC	EET MID	05/07/24 19:03

Client Sample ID: WES24-03

Date Collected: 04/30/24 10:30 Date Received: 05/02/24 07:55

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55
Total/NA	Analysis	8015D		1	4416	JP	EET ALB	05/04/24 04:22
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55
Total/NA	Analysis	8021B		1	4418	JP	EET ALB	05/04/24 04:22
Total/NA	Prep	SHAKE			4338	DH	EET ALB	05/03/24 11:28
Total/NA	Analysis	8015D		1	4408	JU	EET ALB	05/04/24 02:13
Soluble	Leach	DI Leach			80168	SA	EET MID	05/07/24 13:37
Soluble	Analysis	300.0		1	80184	SMC	EET MID	05/07/24 19:09

Client Sample ID: WES24-04

Date Collected: 04/30/24 10:45 Date Received: 05/02/24 07:55

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55
Total/NA	Analysis	8015D		1	4416	JP	EET ALB	05/04/24 04:45

Eurofins Albuquerque

Matrix: Solid

Matrix: Solid

Matrix: Solid

Lab Sample ID: 885-3742-4

Lab Sample ID: 885-3742-5

Project/Site: JRU DI 2

Client: Vertex

Client Sample ID: WES24-04

Date Collected: 04/30/24 10:45 Date Received: 05/02/24 07:55

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55
Total/NA	Analysis	8021B		1	4418	JP	EET ALB	05/04/24 04:45
Total/NA	Prep	SHAKE			4338	DH	EET ALB	05/03/24 11:28
Total/NA	Analysis	8015D		1	4408	JU	EET ALB	05/04/24 02:37
Soluble	Leach	DI Leach			80168	SA	EET MID	05/07/24 13:37
Soluble	Analysis	300.0		1	80184	SMC	EET MID	05/07/24 19:15

Client Sample ID: WES24-05 Date Collected: 04/30/24 11:00

Date Received: 05/02/24 07:55

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55
Total/NA	Analysis	8015D		1	4416	JP	EET ALB	05/04/24 05:09
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55
Total/NA	Analysis	8021B		1	4418	JP	EET ALB	05/04/24 05:09
Total/NA	Prep	SHAKE			4338	DH	EET ALB	05/03/24 11:28
Total/NA	Analysis	8015D		1	4408	JU	EET ALB	05/04/24 03:01
Soluble	Leach	DI Leach			80168	SA	EET MID	05/07/24 13:37
Soluble	Analysis	300.0		1	80184	SMC	EET MID	05/07/24 19:21

Client Sample ID: BES24-14 2.5ft Date Collected: 04/30/24 11:15 Date Received: 05/02/24 07:55

Batch Batch Dilution Prepared Batch Method Prep Type Туре Run Factor Number Analyst Lab or Analyzed Total/NA 5030C 4280 JP EET ALB 05/02/24 14:55 Prep Total/NA 8015D 05/04/24 05:32 Analysis 1 4416 JP EET ALB Total/NA 5030C EET ALB 05/02/24 14:55 Prep 4280 JP Total/NA 8021B 4418 JP 05/04/24 05:32 Analysis EET ALB 1 Total/NA SHAKE 4338 DH EET ALB 05/03/24 11:28 Prep Total/NA 8015D EET ALB 05/04/24 03:25 Analysis 4408 JU 1 05/07/24 13:37 Soluble Leach DI Leach 80168 SA EET MID 80184 SMC EET MID 05/07/24 19:39 Soluble Analysis 300.0 1

Client Sample ID: BES24-31 3.5ft Date Collected: 04/30/24 11:30

Date Received: 05/02/24 07:55

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55
Total/NA	Analysis	8015D		1	4416	JP	EET ALB	05/04/24 05:56
Total/NA	Prep	5030C			4280	JP	EET ALB	05/02/24 14:55
Total/NA	Analysis	8021B		1	4418	JP	EET ALB	05/04/24 05:56

Lab Sample ID: 885-3742-6

Matrix: Solid

Lab Sample ID: 885-3742-7 Matrix: Solid

Eurofins Albuquerque

Lab Chronicle

Job ID: 885-3742-1

Matrix: Solid

Lab Sample ID: 885-3742-7

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-31 3.5ft Date Collected: 04/30/24 11:30 Date Received: 05/02/24 07:55

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	SHAKE			4338	DH	EET ALB	05/03/24 11:28
Total/NA	Analysis	8015D		1	4408	JU	EET ALB	05/04/24 03:48
Soluble	Leach	DI Leach			80168	SA	EET MID	05/07/24 13:37
Soluble	Analysis	300.0		1	80184	SMC	EET MID	05/07/24 19:46

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

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Vertex Project/Site: JRU DI 2

Laboratory: Eurofins Albuquerque

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

thority	Progra	am	Identification Number	Expiration Date
w Mexico	State		NM9425, NM0901	02-26-25
The following analytes	are included in this report. bu	it the laboratory is not certif	ied by the governing authority. This lis	t may include analytes
• •	bes not offer certification.	,	, , , , ,	, ,
Analysis Method	Prep Method	Matrix	Analyte	
8015D	5030C	Solid	Gasoline Range Organics	[C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C	10-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	
gon	NELA	P	NM100001	02-26-25
The following analytes	are included in this report, bu	it the laboratory is not certif	ied by the governing authority. This lis	t may include analytes
for which the agency do	oes not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte	
8015D	5030C	Solid	Gasoline Range Organics	[C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C	10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics	[C28-C40]
8021B	5030C	Solid	Benzene	

Ethylbenzene

Xylenes, Total

Toluene

Laboratory: Eurofins Midland

8021B

8021B

8021B

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

5030C

5030C

5030C

Authority	Progra	m	Identification Number	Expiration Date	
Texas	NELAP		T104704400-23-26	06-30-24	
0,	are included in this report, bu oes not offer certification.	t the laboratory is not certif	ied by the governing authority. This lis	st may include analytes	
0,	1 /	t the laboratory is not certif Matrix	ied by the governing authority. This lis Analyte	st may include analytes	

Solid

Solid

Solid

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8 9

Sold WES24-01 Sold WES24-02 Sold WES24-03 Sold WES24-04 Sold WES24-04 Sold WES24-05 Sold WES24-05 Sold BES24-14.2.5.ft Sold BES24-31.3.5.ft Sold BES24-31.3.5.ft	10:45 Soil 11:00 Soil 11:15 Soil 11:30 Soil 11:30 Soil 11:30 Soil
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Released to Imaging: 7/31/2024 2:57:32 PM

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Login Sample Receipt Checklist

Client: Vertex

Login Number: 3742 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	N/A	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

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Job Number: 885-3742-1

List Source: Eurofins Albuquerque

Job Number: 885-3742-1

List Source: Eurofins Midland

List Creation: 05/07/24 11:30 AM

Login Sample Receipt Checklist

Client: Vertex

<6mm (1/4").

Login Number: 3742 List Number: 2 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	N/A	

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 5/6/2024 11:40:15 AM

JOB DESCRIPTION

JRU DI 2

JOB NUMBER

885-3546-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

See page two for job notos and contact information

Eurofins Albuquerque

Job Notes

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

Authorization

Authorized for release by

(505)345-3975

Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com

Generated 5/6/2024 11:40:15 AM

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QC Sample Results	9
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Client: Vertex Project/Site: JRU DI 2 Job ID: 885-3546-1

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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	Ę
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)	5
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	9
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	

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Case Narrative

Client: Vertex Project: JRU DI 2

Job ID: 885-3546-1

Eurofins Albuquerque

Job ID: 885-3546-1

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Job Narrative 885-3546-1

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 4/27/2024 7:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°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 guality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

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

Client Sample ID: BES24-31 1ft

Date Collected: 04/19/24 12:30

Date Received: 04/27/24 07:35

Client: Vertex

Project/Site: JRU DI 2

Client Sample Results

Job ID: 885-3546-1

Lab Sample ID: 885-3546-1

Matrix: Solid

5

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 21:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			04/29/24 13:29	04/30/24 21:12	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/29/24 13:29	04/30/24 21:12	1
Ethylbenzene	ND		0.047	mg/Kg		04/29/24 13:29	04/30/24 21:12	1
Toluene	ND		0.047	mg/Kg		04/29/24 13:29	04/30/24 21:12	1
Xylenes, Total	ND		0.094	mg/Kg		04/29/24 13:29	04/30/24 21:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)						04/29/24 13:29	04/30/24 21:12	1
Method: SW846 8015D - Diesel F	Range Organics	(DRO) (GC	;)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		05/01/24 12:46	05/02/24 00:08	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/01/24 12:46	05/02/24 00:08	1
		0 ""	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Eminto					
-	%Recovery 96	Qualifier	62 - 134			05/01/24 12:46	05/02/24 00:08	1
Di-n-octyl phthalate (Surr)	96		62 - 134			05/01/24 12:46	05/02/24 00:08	1
Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Ion Analyte	96 Ochromatograp		62 - 134	Unit	D	05/01/24 12:46 Prepared	05/02/24 00:08 Analyzed	1 Dil Fac

Eurofins Albuquerque

Released to Imaging: 7/31/2024 2:57:32 PM

Job ID: 885-3546-1

Matrix: Solid

5

Lab Sample ID: 885-3546-2

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-09 1.5ft

Date Collected: 04/19/24 13:15

Date Received: 04/27/24 07:35

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/29/24 13:29	04/30/24 21:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 244			04/29/24 13:29	04/30/24 21:33	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (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 21:33	1
Ethylbenzene	ND		0.048	mg/Kg		04/29/24 13:29	04/30/24 21:33	1
Toluene	ND		0.048	mg/Kg		04/29/24 13:29	04/30/24 21:33	1
Kylenes, Total	ND		0.097	mg/Kg		04/29/24 13:29	04/30/24 21:33	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Bromofluorobenzene (Surr)						04/29/24 13:29	04/30/24 21:33	
Method: SW846 8015D - Diesel R	ange Organics	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		05/01/24 12:46	05/02/24 00:31	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/01/24 12:46	05/02/24 00:31	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	95		62 - 134			05/01/24 12:46	05/02/24 00:31	
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	9					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			5.0	mg/Kg			05/05/24 05:45	
Job ID: 885-3546-1

Matrix: Solid

5

Lab Sample ID: 885-3546-3

Client: Vertex Project/Site: JRU DI 2

Client Sample ID: BES24-07 1.5ft

Date Collected: 04/19/24 13:30

|--|

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/29/24 13:29	04/30/24 21:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244			04/29/24 13:29	04/30/24 21:55	1
Method: SW846 8021B - Volatile (Organic Comp	ounds (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 21:55	1
Ethylbenzene	ND		0.049	mg/Kg		04/29/24 13:29	04/30/24 21:55	1
Toluene	ND		0.049	mg/Kg		04/29/24 13:29	04/30/24 21:55	1
Xylenes, Total	ND		0.097	mg/Kg		04/29/24 13:29	04/30/24 21:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)						04/29/24 13:29	04/30/24 21:55	1
Method: SW846 8015D - Diesel R	ange Organics	6 (DRO) (GC	;)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		05/01/24 12:46	05/02/24 00:55	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		05/01/24 12:46	05/02/24 00:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			05/01/24 12:46	05/02/24 00:55	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77		5.0	mg/Kg			05/05/24 05:52	1

Released to Imaging: 7/31/2024 2:57:32 PM

Job ID: 885-3546-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: MB 885-4053/1-A										Client Sa	mple ID: Metho	d Blank
Matrix: Solid											Prep Type: 7	Total/NA
Analysis Batch: 4241											Prep Bate	h: 405
		ΜВ	МВ									
Analyte	Re	sult	Qualifier	RL		Unit		D	P	repared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]		ND		5.0		mg/K	g		04/2	9/24 13:26	04/30/24 14:41	
		ΜВ	МВ									
Surrogate	%Reco	very	Qualifier	Limits					P	repared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)		100		15 - 244					04/2	9/24 13:26	04/30/24 14:41	
Matrix: Solid Analysis Batch: 4241											Prep Type: ⁻ Prep Bate	
				Spike	LCS	LCS						
				эріке	200						%Rec	
Analyte				Added		Qualifier	Unit		D	%Rec	%Rec Limits	
Gasoline Range Organics [C6 -				•			Unit mg/Kg		_ <u>D</u>	%Rec		
Gasoline Range Organics [C6 -	LCS	LCS		Added	Result				<u>D</u>		Limits	
Analyte Gasoline Range Organics [C6 - C10] Surrogate %	LCS Recovery			Added	Result				<u>D</u>		Limits	

Lab Sample ID: MB 885-4053/1-A Matrix: Solid Analysis Batch: 4242									Client Sa	mple ID: Metho Prep Type: Prep Bat	
	MB	МВ									
Analyte	Result	Qualifier	RL		Unit		D	Pr	epared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/K	g	0	4/29	9/24 13:26	04/30/24 14:41	1
Ethylbenzene	ND		0.050		mg/K	g	0	4/29	9/24 13:26	04/30/24 14:41	1
Toluene	ND		0.050		mg/K	g	0	4/29	9/24 13:26	04/30/24 14:41	1
Xylenes, Total	ND		0.10		mg/K	g	0	4/29	9/24 13:26	04/30/24 14:41	1
	МВ	МВ									
Surrogate	%Recovery	Qualifier	Limits					Pr	epared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)							0	4/29	9/24 13:26	04/30/24 14:41	1
Lab Sample ID: LCS 885-4053/4-A							Clie	ent	Sample I	D: Lab Contro	I Sample
Matrix: Solid										Prep Type:	
Analysis Batch: 4242											ch: 4053
-			Spike	LCS	LCS					%Rec	
Analyte			Added	Result	Qualifier	Unit	I	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		mg/Kg			95	70 - 130	

5 6

Job ID: 885-3546-1

Client: Vertex Project/Site: JRU DI 2

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

Lab Sample ID: MB 885-4189/1	I-A										Client Sa	ample ID:		
Matrix: Solid												Prep 1	Type: To	otal/N/
Analysis Batch: 4251												Pre	p Batc	h: 4189
		MB	МВ											
Analyte	Re	esult	Qualifier	RL		ι	Jnit		D	P	repared	Analyz	ed	Dil Fac
Diesel Range Organics [C10-C28]		ND		10		r	ng/Kg			05/0	1/24 12:46	05/01/24	16:13	1
Motor Oil Range Organics [C28-C40]		ND		50		r	ng/Kg			05/0	1/24 12:46	05/01/24	16:13	
			MB											
Surrogate	%Reco		Qualifier	Limits							repared	Analyz		Dil Fac
Di-n-octyl phthalate (Surr)		99		62 - 134						05/0	1/24 12:46	05/01/24	16:13	
Lab Sample ID: LCS 885-4189	2-A								C	lient	Sample	ID: Lab C	ontrol	Sample
Matrix: Solid												Prep 1	Type: To	otal/NA
Analysis Batch: 4251												Pre	p Batc	h: 4189
-				Spike	LCS	LCS						%Rec	·	
Analyte				Added	Result	Qualif	ier I	Unit		D	%Rec	Limits		
Diesel Range Organics				50.0	49.2		I	mg/Kg		_	98	60 - 135		
[C10-C28]														
	LCS	LCS												
Surrogate	%Recovery	Quali	fier	Limits										
Di-n-octyl phthalate (Surr)	98			62 - 134										
Lab Sample ID: 885-3546-3 MS	5									(Client Sa	mple ID: E		
Matrix: Solid												Prep 1	Type: To	otal/NA
Analysis Batch: 4251												Pre	p Batc	h: 4189
	Sample	Samp	le	Spike	MS	MS						%Rec		
Analyte	Result	Quali	fier	Added	Result	Qualif	ier I	Unit		D	%Rec	Limits		
Diesel Range Organics	ND			47.4	44.1		1	mg/Kg			93	44 - 136		
[C10-C28]														
	MS	MS												
Surrogate	%Recovery	Quali	fier	Limits										
Di-n-octyl phthalate (Surr)	90			62 - 134										
Lab Campia ID: 005 2540 2 MG	' D										Client Co			
Lab Sample ID: 885-3546-3 MS Matrix: Solid	D										Jient Sa	mple ID: E		
													Type: To	
Analysis Batch: 4251	Commis		1.	Calles	MOD	MOD							p Batc	
Analuta	Sample	•		Spike Addod		MSD Qualif	ior '	linit		D	% Bac	%Rec	000	RPD
Analyte	Result ND	Qualit		49.4	49.4	Qualif		Unit mg/Kg		D	%Rec	Limits		Limit 32
Diesel Range Organics [C10-C28]	ND			49.4	49.4		r	ing/kg			100	44 - 130	11	32
	MSD													
Surrogate		Quali	fier	Limits										
Di-n-octyl phthalate (Surr)	97			62 - 134										
lethod: 300.0 - Anions, Io	n Chromate	ogra	phy											
Lab Sample ID: MB 880-79937	/1-A										Client Sa	ample ID:	Method	l Blank
Matrix: Solid												Prep	Type: S	Soluble
Analysis Batch: 79956														

Job ID: 885-3546-1

QC Sample Results

Client: Vertex Project/Site: JRU DI 2

Method: 300.0 - Anions, Ion Chromatography (Continued)

ab Sample ID: LCS 880-79937/2-A					Client	t Sample	ID: Lab C	ontrol Sa	ample	
atrix: Solid							Prep	Type: So	oluble	
nalysis Batch: 79956										
	Spike	LCS	LCS				%Rec			
nalyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
nloride	250	239		mg/Kg		95	90 - 110			
ab Sample ID: LCSD 880-79937/3-A				Clier	nt Sam	nple ID:	Lab Contro	ol Sample	e Dup	
atrix: Solid						-	Prep	Type: So	oluble	
nalysis Batch: 79956										
-	Spike	LCSD	LCSD				%Rec		RPD	
alyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
loride	250	238		mg/Kg		95	90 - 110	0	20	

Client Sample ID

BES24-31 1ft

BES24-09 1.5ft

BES24-07 1.5ft

Method Blank

Lab Control Sample

Lab Control Sample

Client Sample ID

BES24-31 1ft

BES24-09 1.5ft

BES24-07 1.5ft

Method Blank

Lab Control Sample

QC Association Summary

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Matrix

Solid

Solid

Solid

Solid

Solid

Solid

Matrix

Solid

Solid

Solid

Solid

Solid

Client: Vertex Project/Site: JRU DI 2

Prep Batch: 4053 Lab Sample ID

GC VOA

885-3546-1

885-3546-2

885-3546-3

MB 885-4053/1-A

LCS 885-4053/3-A

LCS 885-4053/4-A

Lab Sample ID

885-3546-1

885-3546-2

885-3546-3

Analysis Batch: 4241

Job ID: 885-3546-1

Prep Batch

Method

5030C

5030C

5030C

5030C

5030C

5030C

Method

8015D

8015D

8015D

8015D

8015D

7

Prep Batch 4053 4053

4053

4053

4053

LCS 885-4053/3-A Analysis Batch: 4242

MB 885-4053/1-A

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3546-1	BES24-31 1ft	Total/NA	Solid	8021B	4053
885-3546-2	BES24-09 1.5ft	Total/NA	Solid	8021B	4053
885-3546-3	BES24-07 1.5ft	Total/NA	Solid	8021B	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: 4189

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3546-1	BES24-31 1ft	Total/NA	Solid	SHAKE	
885-3546-2	BES24-09 1.5ft	Total/NA	Solid	SHAKE	
885-3546-3	BES24-07 1.5ft	Total/NA	Solid	SHAKE	
MB 885-4189/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-4189/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-3546-3 MS	BES24-07 1.5ft	Total/NA	Solid	SHAKE	
885-3546-3 MSD	BES24-07 1.5ft	Total/NA	Solid	SHAKE	

Analysis Batch: 4251

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3546-1	BES24-31 1ft	Total/NA	Solid	8015D	4189
885-3546-2	BES24-09 1.5ft	Total/NA	Solid	8015D	4189
885-3546-3	BES24-07 1.5ft	Total/NA	Solid	8015D	4189
MB 885-4189/1-A	Method Blank	Total/NA	Solid	8015D	4189
LCS 885-4189/2-A	Lab Control Sample	Total/NA	Solid	8015D	4189
885-3546-3 MS	BES24-07 1.5ft	Total/NA	Solid	8015D	4189
885-3546-3 MSD	BES24-07 1.5ft	Total/NA	Solid	8015D	4189

HPLC/IC

Leach Batch: 79937

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3546-1	BES24-31 1ft	Soluble	Solid	DI Leach	
885-3546-2	BES24-09 1.5ft	Soluble	Solid	DI Leach	
885-3546-3	BES24-07 1.5ft	Soluble	Solid	DI Leach	

QC Association Summary

Client: Vertex Project/Site: JRU DI 2

HPLC/IC (Continued)

Leach Batch: 79937 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-79937/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-79937/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-79937/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 79956

_ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
IB 880-79937/1-A	Method Blank	Soluble	Solid	DI Leach	
.CS 880-79937/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
_CSD 880-79937/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
nalysis Batch: 79956					
alysis Daten. 75550					
_ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
385-3546-1	BES24-31 1ft	Soluble	Solid	300.0	79937
385-3546-1 385-3546-2	BES24-31 1ft BES24-09 1.5ft	Soluble Soluble	Solid Solid	300.0 300.0	79937 79937
385-3546-2	BES24-09 1.5ft	Soluble	Solid	300.0	79937
385-3546-2 385-3546-3	BES24-09 1.5ft BES24-07 1.5ft	Soluble Soluble	Solid Solid	300.0 300.0	79937 79937

Job ID: 885-3546-1

Matrix: Solid

Matrix: Solid

Matrix: Solid

Lab Sample ID: 885-3546-1

Lab Sample ID: 885-3546-2

Lab Sample ID: 885-3546-3

Project/Site: JRU DI 2

Client: Vertex

Client Sample ID: BES24-31 1ft Date Collected: 04/19/24 12:30

Date Received: 04/27/24 07:35

	Batch	Batch		Dilution	Batch			Prepared
Prep Туре	Туре	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 21:12
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 21:12
Total/NA	Prep	SHAKE			4189	PD	EET ALB	05/01/24 12:46
Total/NA	Analysis	8015D		1	4251	JU	EET ALB	05/02/24 00:08
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 05:39

Client Sample ID: BES24-09 1.5ft

Date Collected: 04/19/24 13:15 Date Received: 04/27/24 07:35

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	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 21:33
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 21:33
Total/NA	Prep	SHAKE			4189	PD	EET ALB	05/01/24 12:46
Total/NA	Analysis	8015D		1	4251	JU	EET ALB	05/02/24 00:31
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 05:45

Client Sample ID: BES24-07 1.5ft

Date Collected: 04/19/24 13:30 Date Received: 04/27/24 07:35

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	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 21:55
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 21:55
Total/NA	Prep	SHAKE			4189	PD	EET ALB	05/01/24 12:46
Total/NA	Analysis	8015D		1	4251	JU	EET ALB	05/02/24 00:55
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 05:52

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex Project/Site: JRU DI 2

Laboratory: Eurofins Albuquerque

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

Authority	Prog	gram	Identification Number	Expiration Date	
New Mexico	Stat	e	NM9425, NM0901	02-26-25	
The following analyte	es are included in this report,	but the laboratory is not certif	fied by the governing authority. This list	t 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 [C	10-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		
Dregon	NEL	AP	NM100001	02-26-25	
aboratory: Eurofir					

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

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

Job ID: 885-3546-1

Received by OCD: 7/15/2024 2:12:50 PM

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11

Job Number: 885-3546-1

List Source: Eurofins Albuquerque

Login Sample Receipt Checklist

Client: Vertex

Login Number: 3546 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	N/A	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Login Sample Receipt Checklist

Client: Vertex

Login Number: 3546 List Number: 2 Creator: Rodriguez, Leticia

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	N/A	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Job Number: 885-3546-1

List Source: Eurofins Midland

List Creation: 05/03/24 11:32 AM

Received by OCD: 7/15/2024 2:12:50 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar Vertex 3101 Boyd Dr Carlsbad, New Mexico 88220 Generated 6/7/2024 3:48:34 PM

JOB DESCRIPTION

JRU DI 2A

JOB NUMBER

885-5292-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

See page two for job notos and contact information



Eurofins Albuquerque

Job Notes

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

Authorization

Authorized for release by

(505)345-3975

Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com

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Definitions/Glossary

Client: Vertex Project/Site: JRU DI 2A Job ID: 885-5292-1

0 lifi

PRES

QC RER

RL

RPD

TEF

TEQ

TNTC

Qualifiers		3
GC VOA		
Qualifier	Qualifier Description	
S1+	Surrogate recovery exceeds control limits, high biased.	
Glossary		5
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	0
CNF	Contains No Free Liquid	0
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	9
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	

Presumptive Quality Control

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

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

Case Narrative

Client: Vertex Project: JRU DI 2A

Job ID: 885-5292-1

Eurofins Albuquerque

Job ID: 885-5292-1

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Job Narrative 885-5292-1

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 5/30/2024 8:10 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 0.3°C.

Gasoline Range Organics

No additional analytical or guality 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 885-6068 recovered outside acceptance criteria, low biased, for Di-n-octyl phthalate (Surrogate). Samples with Di-n-octyl phthalate (Surrogate) in normal range will still be reported. The following samples are associated CCV 885-6068/1, CCV 885-6068/2 and CCV 885-6068/11.

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.

Job ID: 885-5292-1

Lab Sample ID: 885-5292-1

Client: Vertex Project/Site: JRU DI 2A

Client Sample ID: BES24-04 1.5ft

Date Collected: 05/28/24 10:00 Date Received: 05/30/24 08:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.6	mg/Kg		05/30/24 12:45	06/04/24 16:16	1
(GRO)-C6-C10								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		35 - 166			05/30/24 12:45	06/04/24 16:16	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC))					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		05/30/24 12:45	06/04/24 16:16	1
Ethylbenzene	ND		0.046	mg/Kg		05/30/24 12:45	06/04/24 16:16	1
Toluene	ND		0.046	mg/Kg		05/30/24 12:45	06/04/24 16:16	1
Xylenes, Total	ND		0.092	mg/Kg		05/30/24 12:45	06/04/24 16:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145			05/30/24 12:45	06/04/24 16:16	1
Method: SW846 8015M/D - Diese	l Range Organ	ics (DRO) (GC)					
Analyte	• •	Qualifier	, RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		05/30/24 14:54	05/31/24 18:04	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		05/30/24 14:54	05/31/24 18:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			05/30/24 14:54	05/31/24 18:04	1
	Chromatograp	ohy						
Method: EPA 300.0 - Anions, Ion								
Method: EPA 300.0 - Anions, Ion Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Matrix: Solid

Job ID: 885-5292-1

Lab Sample ID: 885-5292-2

Client: Vertex Project/Site: JRU DI 2A

Client Sample ID: BES24-18 1.5ft

Date Collected: 05/28/24 10:45 Date Received: 05/30/24 08:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.9	mg/Kg		05/30/24 12:45	06/04/24 16:40	1
(GRO)-C6-C10								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		35 - 166			05/30/24 12:45	06/04/24 16:40	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC))					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/30/24 12:45	06/04/24 16:40	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 16:40	1
Toluene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 16:40	1
Xylenes, Total	ND		0.097	mg/Kg		05/30/24 12:45	06/04/24 16:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		48 - 145			05/30/24 12:45	06/04/24 16:40	1
Method: SW846 8015M/D - Diese	l Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.5	mg/Kg		06/03/24 15:57	06/04/24 15:21	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		06/03/24 15:57	06/04/24 15:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			06/03/24 15:57	06/04/24 15:21	1
	Chromatogram	ohy						
Method: EPA 300.0 - Anions, Ion								
Method: EPA 300.0 - Anions, Ion Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Matrix: Solid

5

Released to Imaging: 7/31/2024 2:57:32 PM

Job ID: 885-5292-1

Matrix: Solid

5

Lab Sample ID: 885-5292-3

Client: Vertex Project/Site: JRU DI 2A

Client Sample ID: BES24-20 1.5ft

Date Collected: 05/28/24 11:30 Date Received: 05/30/24 08:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.9	mg/Kg		05/30/24 12:45	06/04/24 17:04	1
(GRO)-C6-C10								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			05/30/24 12:45	06/04/24 17:04	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC))					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/30/24 12:45	06/04/24 17:04	1
Ethylbenzene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 17:04	1
Toluene	ND		0.049	mg/Kg		05/30/24 12:45	06/04/24 17:04	1
Xylenes, Total	ND		0.098	mg/Kg		05/30/24 12:45	06/04/24 17:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145			05/30/24 12:45	06/04/24 17:04	1
Method: SW846 8015M/D - Diese	l Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		05/30/24 14:54	06/03/24 14:41	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/30/24 14:54	06/03/24 14:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	74		62 - 134			05/30/24 14:54	06/03/24 14:41	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	ohy						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Job ID: 885-5292-1

Lab Sample ID: 885-5292-4

Client: Vertex Project/Site: JRU DI 2A

Client Sample ID: WES24-06 2ft

Date Collected: 05/28/24 13:00 Date Received: 05/30/24 08:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.8	mg/Kg		05/30/24 12:45	06/04/24 17:27	1
(GRO)-C6-C10								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Bromofluorobenzene (Surr)	95		35 - 166			05/30/24 12:45	06/04/24 17:27	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC))					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/30/24 12:45	06/04/24 17:27	1
Ethylbenzene	ND		0.048	mg/Kg		05/30/24 12:45	06/04/24 17:27	1
Toluene	ND		0.048	mg/Kg		05/30/24 12:45	06/04/24 17:27	1
Xylenes, Total	ND		0.096	mg/Kg		05/30/24 12:45	06/04/24 17:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			05/30/24 12:45	06/04/24 17:27	1
Method: SW846 8015M/D - Diese	l Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	, RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		05/30/24 14:54	05/31/24 18:45	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 14:54	05/31/24 18:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		62 - 134			05/30/24 14:54	05/31/24 18:45	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	ohy						
Amelute	Posult	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result		••=	•				

ID: 005 5000 4

Matrix: Solid

Job ID: 885-5292-1

Matrix: Solid

Lab Sample ID: 885-5292-5

Client: Vertex Project/Site: JRU DI 2A

Client Sample ID: WES24-07 2.5ft

Date Collected: 05/28/24 13:15 Date Received: 05/30/24 08:10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.8	mg/Kg		05/30/24 12:45	06/04/24 17:50	1
(GRO)-C6-C10								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Bromofluorobenzene (Surr)	100		35 - 166			05/30/24 12:45	06/04/24 17:50	1
Method: SW846 8021B - Volatile (Organic Comp	ounds (GC))					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		05/30/24 12:45	06/04/24 17:50	1
Ethylbenzene	ND		0.048	mg/Kg		05/30/24 12:45	06/04/24 17:50	1
Toluene	ND		0.048	mg/Kg		05/30/24 12:45	06/04/24 17:50	1
Xylenes, Total	ND		0.097	mg/Kg		05/30/24 12:45	06/04/24 17:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		48 - 145			05/30/24 12:45	06/04/24 17:50	1
Method: SW846 8015M/D - Diesel	Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		05/30/24 14:54	05/31/24 18:59	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		05/30/24 14:54	05/31/24 18:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	72		62 - 134			05/30/24 14:54	05/31/24 18:59	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	ohy						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			60				05/31/24 19:01	

6/7/2024

QC Sample Results

Job ID: 885-5292-1

Client: Vertex Project/Site: JRU DI 2A

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

Lab Sample ID: MB 885-5880/1-A											Client Sa	mple ID: Metho	od Blank
Matrix: Solid												Prep Type:	Total/NA
Analysis Batch: 6130												Prep Bat	ch: 5880
		MB	MB										
Analyte	R	esult	Qualifier	RL		U	nit		D	Р	repared	Analyzed	Dil Fac
Gasoline Range Organics		ND		5.0		m	ıg/Ko	1	_	05/3	0/24 12:45	06/04/24 11:12	1
(GRO)-C6-C10													
		ΜВ	МВ										
Surrogate	%Reco	overy	Qualifier	Limits						Ρ	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		96		35 - 166						05/3	80/24 12:45	06/04/24 11:12	1
Analysis Batch: 6130				Spike	LCS	LCS						Prep Bate %Rec	ch: 588(
Analyte				Added	Result	Qualifie	ər	Unit		D	%Rec	Limits	
Gasoline Range Organics				25.0	23.9			mg/Kg			95	70 - 130	
(GRO)-C6-C10													
	LCS	LCS											
Surrogate	%Recovery	Qua	lifier	Limits									
4-Bromofluorobenzene (Surr)	206	S1+		35 - 166									
/lethod: 8021B - Volatile Org	anic Cor	mpo	ounds (C	GC)									
Lab Sample ID: MB 885-5880/1-A											Client Sc	mple ID: Metho	d Blank

Prep Type: Total/NA Prep Batch: 5880 Analysis Batch: 6131 MB MB Analyte Result Qualifier RL Unit D Prepared Dil Fac Analyzed 0.025 05/30/24 12:45 06/04/24 11:12 Benzene ND mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 05/30/24 12:45 06/04/24 11:12 1 Toluene ND 0.050 mg/Kg 05/30/24 12:45 06/04/24 11:12 1 Xylenes, Total ND 0.10 mg/Kg 05/30/24 12:45 06/04/24 11:12 1 MB MB Prepared Analyzed Dil Fac

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

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

Matrix: Solid Analysis Batch: 6131

Matrix: Solid

Analysis Batch: 6131									Prep	Batch: 5880
			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene			1.00	0.910		mg/Kg		91	70 - 130	
Ethylbenzene			1.00	0.868		mg/Kg		87	70 - 130	
m-Xylene & p-Xylene			2.00	1.77		mg/Kg		88	70 - 130	
o-Xylene			1.00	0.868		mg/Kg		87	70 - 130	
Toluene			1.00	0.875		mg/Kg		87	70 - 130	
Xylenes, Total			3.00	2.64		mg/Kg		88	70 - 130	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							

48 - 145

4-Bromofluorobenzene (Surr) 94

Eurofins Albuquerque

05/30/24 12:45

06/04/24 11:12

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

1

5

QC Sample Results

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Job ID: 885-5292-1

Client: Vertex Project/Site: JRU DI 2A

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

Lab Sample ID: MB 885-5888/1	- A										Client Sa	mple ID: Metho	od Blank
Matrix: Solid												Prep Type:	Total/NA
Analysis Batch: 5950												Prep Bat	ch: 5888
		MB	MB										
Analyte	Re	esult	Qualifier	RL		I	Unit		D	Pr	epared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]		ND		10		1	mg/Kg	I	_	05/30)/24 14:54	05/31/24 14:13	1
Motor Oil Range Organics [C28-C40]		ND		50		I	mg/Kg			05/30)/24 14:54	05/31/24 14:13	
		ΜВ	МВ										
Surrogate	%Reco			Limits						Dr	repared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)		133	Quanner	62 - 134							0/24 14:54	05/31/24 14:13	
Lab Sample ID: LCS 885-5888/2	2-A								С	lient	Sample	ID: Lab Control	Sample
Matrix: Solid												Prep Type:	Total/NA
Analysis Batch: 5950												Prep Bat	ch: 5888
				Spike	LCS	LCS						%Rec	
Analyte				Added	Result	Qualif	fier	Unit		D	%Rec	Limits	
Diesel Range Organics C10-C28]				50.0	43.5			mg/Kg			87	60 - 135	
	LCS	LCS											
Surrogate	%Recovery	Qua	lifier	Limits									
Di-n-octyl phthalate (Surr)	102	Qua	lifier	Limits 62 - 134							Client Sa	umplo ID: Mothe	d Blan
	102										Client Sa	imple ID: Metho Prep Type: Prep Bat	Total/N/
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1 Matrix: Solid Analysis Batch: 6100	102 -A	МВ	MB	62 - 134								Prep Type: Prep Bate	Total/NA ch: 6042
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1 Matrix: Solid Analysis Batch: 6100 Analyte	102 -A	MB esult		62 - 134 			Unit		D	Pr	epared	Prep Type: Prep Bate Analyzed	Total/N/ ch: 6042 Dil Fac
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28]	102 -A	MB esult ND	MB	62 - 134 			mg/Kg		<u>D</u>	Pr 06/03	epared 3/24 15:57	Prep Type: Prep Bate Analyzed 06/04/24 11:44	Total/NA ch: 6042 Dil Fa
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1 Matrix: Solid Analysis Batch: 6100 Analyte	102 -A	MB esult	MB	62 - 134 					<u>D</u>	Pr 06/03	epared	Prep Type: Prep Bate Analyzed	Total/NA ch: 6042 Dil Fac
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28]	102 -A	MB esult ND	MB	62 - 134 			mg/Kg		<u>D</u>	Pr 06/03	epared 3/24 15:57	Prep Type: Prep Bate Analyzed 06/04/24 11:44	Total/NA
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28]	102 -A	MB esult ND ND MB	MB Qualifier MB	62 - 134 			mg/Kg		<u>D</u>	Pr 06/03 06/03	epared 3/24 15:57	Prep Type: Prep Bate Analyzed 06/04/24 11:44	Total/NA ch: 6042 Dil Fac
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	102 -A 	MB esult ND ND MB	MB Qualifier MB	62 - 134 			mg/Kg		<u>D</u>	Pr 06/03 06/03 Pr	epared 3/24 15:57 3/24 15:57	Prep Type: Prep Bate 06/04/24 11:44 06/04/24 11:44	Total/NA ch: 6042 Dil Fac
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	102 -A 	MB esult ND ND MB	MB Qualifier MB	62 - 134 			mg/Kg		_	Pr 06/03 06/03 Pr 06/03	epared 3/24 15:57 3/24 15:57 a/24 15:57 epared 3/24 15:57	Prep Type: Prep Bate 06/04/24 11:44 06/04/24 11:44 Analyzed	Total/NA ch: 6042 Dil Fac
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	102 -A 	MB esult ND ND MB	MB Qualifier MB	62 - 134 			mg/Kg		_	Pr 06/03 06/03 Pr 06/03	epared 3/24 15:57 3/24 15:57 a/24 15:57 epared 3/24 15:57	Prep Type: Prep Bate 06/04/24 11:44 06/04/24 11:44 Analyzed 06/04/24 11:44	Total/NA ch: 6042 Dil Fac Dil Fac
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Lab Sample ID: LCS 885-6042/2	102 -A 	MB esult ND ND MB	MB Qualifier MB	62 - 134 			mg/Kg		_	Pr 06/03 06/03 Pr 06/03	epared 3/24 15:57 3/24 15:57 a/24 15:57 epared 3/24 15:57	Prep Type: Prep Bate Analyzed 06/04/24 11:44 06/04/24 11:44 Analyzed 06/04/24 11:44 ID: Lab Control	Total/NA ch: 6042 Dil Fac Dil Fac Dil Fac Sample Total/NA
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Lab Sample ID: LCS 885-6042/2 Matrix: Solid	102 -A 	MB esult ND ND MB	MB Qualifier MB	62 - 134 	LCS		mg/Kg		_	Pr 06/03 06/03 Pr 06/03	epared 3/24 15:57 3/24 15:57 a/24 15:57 epared 3/24 15:57	Prep Type: Prep Bate 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44	Total/NA ch: 6042
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Lab Sample ID: LCS 885-6042/2 Matrix: Solid	102 -A 	MB esult ND ND MB	MB Qualifier MB	62 - 134 	LCS Result	LCS	mg/Kg mg/Kg		_	Pr 06/03 06/03 Pr 06/03	epared 3/24 15:57 3/24 15:57 a/24 15:57 epared 3/24 15:57	Prep Type: Prep Bate 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44	Total/N/ ch: 6042
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Lab Sample ID: LCS 885-6042/2 Matrix: Solid Analysis Batch: 6100	102 -A 	MB esult ND ND MB	MB Qualifier MB	62 - 134 		LCS	mg/Kg mg/Kg		_	Pr 06/03 06/03 Pr 06/03	epared 3/24 15:57 3/24 15:57 Separed 3/24 15:57 Sample	Prep Type: Prep Bate 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44	Total/NA ch: 6042
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Lab Sample ID: LCS 885-6042/2 Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics	102 -A 	MB esult ND ND MB vvery 109	MB Qualifier MB Qualifier	62 - 134 	Result	LCS	mg/Kg mg/Kg	Unit	_	Pr 06/03 06/03 Pr 06/03	epared 3/24 15:57 3/24 15:57 epared 3/24 15:57 Sample	Analyzed 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 ID: Lab Control Prep Type: Prep Bate %Rec Limits	Total/NA ch: 6042
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Lab Sample ID: LCS 885-6042/2 Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics	102 -A 	MB esuit ND ND MB very 109	MB Qualifier MB Qualifier	62 - 134 	Result	LCS	mg/Kg mg/Kg	Unit	_	Pr 06/03 06/03 Pr 06/03	epared 3/24 15:57 3/24 15:57 epared 3/24 15:57 Sample	Analyzed 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 ID: Lab Control Prep Type: Prep Bate %Rec Limits	Total/NA ch: 6042 Dil Fac Dil Fac Dil Fac Sample Total/NA
Di-n-octyl phthalate (Surr) Lab Sample ID: MB 885-6042/1- Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics [C10-C28] Votor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Lab Sample ID: LCS 885-6042/2 Matrix: Solid Analysis Batch: 6100 Analyte Diesel Range Organics C10-C28]	102 -A 	MB esuit ND ND MB very 109	MB Qualifier MB Qualifier	62 - 134 	Result	LCS	mg/Kg mg/Kg	Unit	_	Pr 06/03 06/03 Pr 06/03	epared 3/24 15:57 3/24 15:57 epared 3/24 15:57 Sample	Analyzed 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 06/04/24 11:44 ID: Lab Control Prep Type: Prep Bate %Rec Limits	Total/NA ch: 6042

Lab Sample ID: MB 885-5912/2-A Matrix: Solid						Client Sa	mple ID: Metho Prep Type: 1	Fotal/NA
Analysis Batch: 5977							Prep Bate	ch: 5912
	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		05/31/24 07:03	05/31/24 08:33	1

QC Sample Results

Job ID: 885-5292-1

Client: Vertex Project/Site: JRU DI 2A

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MRL 885-5912/1-A								Clie	nt Sample	D: Lab Control	
Matrix: Solid										Prep Type:	
Analysis Batch: 5977										Prep Bat	ch: 591
			Spike			MRL				%Rec	
Analyte			Added			Qualifier	Unit		D %Rec	Limits	
Chloride			1.50		1.61		mg/L		107	50 - 150	
Lab Sample ID: MB 885-5922/1-A									Client S	Sample ID: Metho	od Blan
Matrix: Solid										Prep Type:	Total/N/
Analysis Batch: 5977										Prep Bat	ch: 592
	MB	MB									
Analyte	Result	Qualifier		RL		Unit		D	Prepared	Analyzed	Dil Fa
Chloride	ND			3.0		mg/K	g	05	5/31/24 08:25	5 05/31/24 12:38	
Lab Sample ID: LCS 885-5922/2-A								Clie	nt Sample	ID: Lab Control	Sampl
Matrix: Solid										Prep Type:	
Analysis Batch: 5977										Prep Bat	
-			Spike		LCS	LCS				%Rec	
Analyte			Added		Result	Qualifier	Unit	[D %Rec	Limits	
Chloride			30.0		28.2		mg/Kg		94	90 - 110	
Lab Sample ID: MB 885-5977/109									Client S	Sample ID: Metho	od Blan
Matrix: Solid										Prep Type:	Total/N/
Analysis Batch: 5977											
	MB	MB									
Analyte	Result	Qualifier		RL		Unit		D	Prepared	Analyzed	Dil Fa
Chloride	ND			0.50		mg/K	g			06/01/24 01:36	
Lab Sample ID: MRL 885-5977/108								Clie	nt Sample	ID: Lab Control	Sampl
Matrix: Solid										Prep Type:	
Analysis Batch: 5977											
			Spike		MRL	MRL				%Rec	
Analyte			Added		Result	Qualifier	Unit	[D %Rec	Limits	

Client Sample ID

BES24-04 1.5ft

BES24-18 1.5ft

BES24-20 1.5ft

WES24-06 2ft

Method Blank

WES24-07 2.5ft

Lab Control Sample

Lab Control Sample

QC Association Summary

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Client: Vertex Project/Site: JRU DI 2A

GC VOA

885-5292-1

885-5292-2

885-5292-3

885-5292-4

885-5292-5

MB 885-5880/1-A

LCS 885-5880/2-A

LCS 885-5880/3-A

Prep Batch: 5880

Page 386 of 400

Prep Batch

Method

5030C

5030C

5030C

5030C

5030C

5030C

5030C

5030C

Matrix

Solid

Solid

Solid

Solid

Solid

Solid

Solid

Solid

2 3 4 5 6 7

	8
	9
Prep B	atch
Ę	5880
Ę	5880
ţ	5880
	5880
Ę	5880
	2000

Analysis Batch: 6130

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-5292-1	BES24-04 1.5ft	Total/NA	Solid	8015M/D	5880
885-5292-2	BES24-18 1.5ft	Total/NA	Solid	8015M/D	5880
885-5292-3	BES24-20 1.5ft	Total/NA	Solid	8015M/D	5880
885-5292-4	WES24-06 2ft	Total/NA	Solid	8015M/D	5880
885-5292-5	WES24-07 2.5ft	Total/NA	Solid	8015M/D	5880
MB 885-5880/1-A	Method Blank	Total/NA	Solid	8015M/D	5880
LCS 885-5880/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	5880

Analysis Batch: 6131

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-5292-1	BES24-04 1.5ft	Total/NA	Solid	8021B	5880
885-5292-2	BES24-18 1.5ft	Total/NA	Solid	8021B	5880
885-5292-3	BES24-20 1.5ft	Total/NA	Solid	8021B	5880
885-5292-4	WES24-06 2ft	Total/NA	Solid	8021B	5880
885-5292-5	WES24-07 2.5ft	Total/NA	Solid	8021B	5880
MB 885-5880/1-A	Method Blank	Total/NA	Solid	8021B	5880
LCS 885-5880/3-A	Lab Control Sample	Total/NA	Solid	8021B	5880

GC Semi VOA

Prep Batch: 5888

Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
BES24-04 1.5ft	Total/NA	Solid	SHAKE	
BES24-20 1.5ft	Total/NA	Solid	SHAKE	
WES24-06 2ft	Total/NA	Solid	SHAKE	
WES24-07 2.5ft	Total/NA	Solid	SHAKE	
Method Blank	Total/NA	Solid	SHAKE	
Lab Control Sample	Total/NA	Solid	SHAKE	
Client Sample ID	Prep Type	Matrix	Method	Prep Batch
BES24-04 1.5ft	Total/NA	Solid	8015M/D	5888
WES24-06 2ft	Total/NA	Solid	8015M/D	5888
WES24-07 2.5ft	Total/NA	Solid	8015M/D	5888
Method Blank	Total/NA	Solid	8015M/D	5888
Lab Control Sample	Total/NA	Solid	8015M/D	5888
Client Sample ID BES24-18 1.5ft	Prep Type Total/NA	Matrix Solid	Method	Prep Batch
	BES24-04 1.5ft BES24-20 1.5ft WES24-06 2ft WES24-07 2.5ft Method Blank Lab Control Sample Client Sample ID BES24-04 1.5ft WES24-06 2ft WES24-07 2.5ft Method Blank Lab Control Sample Client Sample ID	BES24-04 1.5ft Total/NA BES24-20 1.5ft Total/NA WES24-06 2ft Total/NA WES24-07 2.5ft Total/NA Method Blank Total/NA Lab Control Sample Total/NA Client Sample ID Prep Type BES24-04 1.5ft Total/NA WES24-06 2ft Total/NA WES24-06 2ft Total/NA WES24-07 2.5ft Total/NA Method Blank Total/NA WES24-07 2.5ft Total/NA Method Blank Total/NA WES24-07 12.5ft Total/NA Method Blank Total/NA Lab Control Sample Total/NA Client Sample ID Prep Type Client Sample ID Prep Type	BES24-04 1.5ft Total/NA Solid BES24-20 1.5ft Total/NA Solid WES24-06 2ft Total/NA Solid WES24-07 2.5ft Total/NA Solid Method Blank Total/NA Solid Lab Control Sample Total/NA Solid Client Sample ID Prep Type Matrix BES24-04 1.5ft Total/NA Solid WES24-06 2ft Total/NA Solid WES24-06 2ft Total/NA Solid WES24-07 2.5ft Total/NA Solid WES24-06 2ft Total/NA Solid WES24-07 2.5ft Total/NA Solid Method Blank Total/NA Solid Lab Control Sample Total/NA Solid Method Blank Total/NA Solid Lab Control Sample Total/NA Solid Client Sample ID Prep Type Matrix	BES24-04 1.5ft Total/NA Solid SHAKE BES24-20 1.5ft Total/NA Solid SHAKE WES24-06 2ft Total/NA Solid SHAKE WES24-07 2.5ft Total/NA Solid SHAKE Method Blank Total/NA Solid SHAKE Lab Control Sample Total/NA Solid SHAKE Client Sample ID Prep Type Matrix Method BES24-04 1.5ft Total/NA Solid 8015M/D WES24-06 2ft Total/NA Solid 8015M/D WES24-06 2ft Total/NA Solid 8015M/D WES24-07 2.5ft Total/NA Solid 8015M/D WES24-07 2.5ft Total/NA Solid 8015M/D Method Blank Total/NA Solid 8015M/D Lab Control Sample Total/NA Solid 8015M/D Lab Control Sample Total/NA Solid 8015M/D Lab Control Sample Prep Type Matrix Method

QC Association Summary

Client: Vertex Project/Site: JRU DI 2A

GC Semi VOA (Continued)

Prep Batch: 6042 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-6042/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-6042/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
Analysis Batch: 6068					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-5292-3	BES24-20 1.5ft	Total/NA	Solid	8015M/D	5888
Analysis Batch: 6100					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-5292-2	BES24-18 1.5ft	Total/NA	Solid	8015M/D	6042
MB 885-6042/1-A	Method Blank	Total/NA	Solid	8015M/D	6042
LCS 885-6042/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	6042

HPLC/IC

Prep Batch: 5912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-5912/2-A	Method Blank	Total/NA	Solid	300_Prep	
MRL 885-5912/1-A	MRL 885-5912/1-A Lab Control Sample		Solid	300_Prep	
Prep Batch: 5922					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5292-1	BES24-04 1.5ft	Total/NA	Solid	300_Prep	
885-5292-2	BES24-18 1.5ft	Total/NA	Solid	300_Prep	
885-5292-3	BES24-20 1.5ft	Total/NA	Solid	300_Prep	
885-5292-4	WES24-06 2ft	Total/NA	Solid	300_Prep	
885-5292-5	WES24-07 2.5ft	Total/NA	Solid	300_Prep	
MB 885-5922/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-5922/2-A	Lab Control Sample	Total/NA	Solid	300 Prep	

Analysis Batch: 5977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-5292-1	BES24-04 1.5ft	Total/NA	Solid	300.0	5922
885-5292-2	BES24-18 1.5ft	Total/NA	Solid	300.0	5922
885-5292-3	BES24-20 1.5ft	Total/NA	Solid	300.0	5922
885-5292-4	WES24-06 2ft	Total/NA	Solid	300.0	5922
885-5292-5	WES24-07 2.5ft	Total/NA	Solid	300.0	5922
MB 885-5912/2-A	Method Blank	Total/NA	Solid	300.0	5912
MB 885-5922/1-A	Method Blank	Total/NA	Solid	300.0	5922
MB 885-5977/109	Method Blank	Total/NA	Solid	300.0	
LCS 885-5922/2-A	Lab Control Sample	Total/NA	Solid	300.0	5922
MRL 885-5912/1-A	Lab Control Sample	Total/NA	Solid	300.0	5912
MRL 885-5977/108	Lab Control Sample	Total/NA	Solid	300.0	

Job ID: 885-5292-1

Client Sample ID: BES24-04 1.5ft

Job ID: 885-5292-1

Lab Sample ID: 885-5292-1 Matrix: Solid

Date Collected: 05/28/24 10:00 Date Received: 05/30/24 08:10

Client: Vertex

Project/Site: JRU DI 2A

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 16:16
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 16:16
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 18:04
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 17:47

Client Sample ID: BES24-18 1.5ft

Date Collected: 05/28/24 10:45 Date Received: 05/30/24 08:10

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 16:40
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 16:40
Total/NA	Prep	SHAKE			6042	JU	EET ALB	06/03/24 15:57
Total/NA	Analysis	8015M/D		1	6100	JU	EET ALB	06/04/24 15:21
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 18:24

Client Sample ID: BES24-20 1.5ft

Date Collected: 05/28/24 11:30 Date Received: 05/30/24 08:10

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 17:04
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 17:04
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	6068	JU	EET ALB	06/03/24 14:41
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 18:36

Client Sample ID: WES24-06 2ft

Date Collected: 05/28/24 13:00 Date Received: 05/30/24 08:10

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 17:27

Eurofins Albuquerque

Lab Sample ID: 885-5292-2

Lab Sample ID: 885-5292-3

Lab Sample ID: 885-5292-4

Matrix: Solid

Matrix: Solid

Matrix: Solid

Client Sample ID: WES24-06 2ft

Job ID: 885-5292-1

Lab Sample ID: 885-5292-4 Matrix: Solid

Lab Sample ID: 885-5292-5

Matrix: Solid

Date Collected: 05/28/24 13:00 Date Received: 05/30/24 08:10

Client: Vertex

Project/Site: JRU DI 2A

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 17:27
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 18:45
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 18:49

Client Sample ID: WES24-07 2.5ft Date Collected: 05/28/24 13:15 Date Received: 05/30/24 08:10

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8015M/D		1	6130	JP	EET ALB	06/04/24 17:50
Total/NA	Prep	5030C			5880	AT	EET ALB	05/30/24 12:45
Total/NA	Analysis	8021B		1	6131	JP	EET ALB	06/04/24 17:50
Total/NA	Prep	SHAKE			5888	SB	EET ALB	05/30/24 14:54
Total/NA	Analysis	8015M/D		1	5950	JU	EET ALB	05/31/24 18:59
Total/NA	Prep	300_Prep			5922	SS	EET ALB	05/31/24 08:25
Total/NA	Analysis	300.0		20	5977	JT	EET ALB	05/31/24 19:01

Laboratory References:

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

5 6 7

8

Accreditation/Certification Summary

Client: Vertex Project/Site: JRU DI 2A

Laboratory: Eurofins Albuquerque

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

hority	Prog	gram	Identification Number	Expiration Date
v Mexico	Stat	e	NM9425, NM0901	02-26-25
The following analytes	are included in this report,	but the laboratory is not certi	fied by the governing authority. This lis	st may include analyte
for which the agency d	oes not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte	
300.0	300_Prep	Solid	Chloride	
8015M/D	5030C	Solid	Gasoline Range Organics	(GRO)-C6-C10
8015M/D	SHAKE	Solid	Diesel Range Organics [C	:10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics	s [C28-C40]
8021B	5030C	Solid	Benzene	
8021B	5030C	Solid	Ethylbenzene	
8021B	5030C	Solid	Toluene	
8021B	5030C	Solid	Xylenes, Total	
gon	NEL	AP	NM100001	02-26-25

Received by OCD: 7/15/2024 2:12:50 PM

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Job Number: 885-5292-1

List Source: Eurofins Albuquerque

Login Sample Receipt Checklist

Client: Vertex

Login Number: 5292 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	True	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

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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 364135

QUESTION	15
Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	364135
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS Proroquisitos

rierequisites	
Incident ID (n#)	nAPP2403353247
Incident Name	NAPP2403353247 JRU DI 2 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	JRU DI 2 Battery
Date Release Discovered	01/21/2024
Surface Owner	Federal

Incident Details

Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion Flow Line - Production Produced Water Released: 11 BBL Recovered: 7 BBL Lost: 4 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 364135

QUESTIONS (continued)

Operator:	OGRID:
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6401 Holiday Hill Road	Action Number:
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QUESTIONS

Nature and Volume of Release (continued)		
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.	
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	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 s	afety 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.
	ation 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 valuation in the follow-up C-141 submission.
to report and/or file certain release notifications and perform corrective actions for releat the OCD does not relieve the operator of liability should their operations have failed to a	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 t does not relieve the operator of responsibility for compliance with any other federal, state, or
I hereby agree and sign off to the above statement	Name: Garrett Green Title: SHE Coordinator Email: garrett.green@exxonmobil.com Date: 02/02/2024

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Action 364135

QUESTIONS (continued)	
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Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	364135
	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 26 and 50 (ft.)	
What method was used to determine the depth to ground water	NM OSE iWaters Database Search	
Did this release impact groundwater or surface water	No	
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:		
A continuously flowing watercourse or any other significant watercourse	Between ½ and 1 (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 1 and 5 (mi.)	
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)	
Any other fresh water well or spring	Between ½ and 1 (mi.)	
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)	
A wetland	Between 1 and 5 (mi.)	
A subsurface mine	Between 1 and 5 (mi.)	
An (non-karst) unstable area	Between 1 and 5 (mi.)	
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	Νο	

Remediation Plan

Requesting a remediation	plan approval with this submission	Yes
1 0		on associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.
	al extents of contamination been fully delineated	Yes
	ontained within a lined containment area	No
,	: (Provide the highest observable value for each, in n	
Chloride	(EPA 300.0 or SM4500 Cl B)	1000
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	19
GRO+DRO	(EPA SW-846 Method 8015M)	19
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0
		ed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NM
	nelines for beginning and completing the remediation.	
· · ·	nelines for beginning and completing the remediation. Il the remediation commence	04/08/2024
On what estimated date wi		04/08/2024 05/28/2024
On what estimated date wi On what date will (or did) th	II the remediation commence	
On what estimated date wi On what date will (or did) th On what date will (or was)	Il the remediation commence he final sampling or liner inspection occur	05/28/2024
On what estimated date wi On what date will (or did) th On what date will (or was) What is the estimated surfa	II the remediation commence he final sampling or liner inspection occur the remediation complete(d)	05/28/2024 05/28/2024
On what estimated date wi On what date will (or did) th On what date will (or was) What is the estimated surfa What is the estimated volu	Ill the remediation commence he final sampling or liner inspection occur the remediation complete(d) ace area (in square feet) that will be reclaimed	05/28/2024 05/28/2024 5848
On what estimated date wi On what date will (or did) th On what date will (or was) What is the estimated surfa What is the estimated volum What is the estimated surfa	III the remediation commence he final sampling or liner inspection occur the remediation complete(d) ace area (in square feet) that will be reclaimed me (in cubic yards) that will be reclaimed	05/28/2024 05/28/2024 5848 425

sp 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

1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

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QUESTIONS, Page 4

Action 364135

QUESTIONS (continued)		
Operator:	OGRID:	
XTO ENERGY, INC	5380	
6401 Holiday Hill Road	Action Number:	
Midland, TX 79707	364135	
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Remediation Plan (continued)

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date. This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants: (Select all answers below that apply.) (Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.) Yes Which OCD approved facility will be used for off-site disposal HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510] OR which OCD approved well (API) will be used for off-site disposal Not answered. OR is the off-site disposal site, to be used, out-of-state Not answered. OR is the off-site disposal site, to be used, an NMED facility Not answered. (Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms) Not answered (In Situ) Soil Vapor Extraction Not answered. (In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.) Not answered. (In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.) Not answered. (In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.) Not answered. Ground Water Abatement pursuant to 19.15.30 NMAC Not answered. OTHER (Non-listed remedial process) Not answered. Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Name: Alan Romero Title: Regulatory Analyst I hereby agree and sign off to the above statement Email: alan.romero1@exxonmobil.com Date: 07/15/2024

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 364135

QUESTIONS (continued)		
Operator: XTO ENERGY, INC	OGRID: 5380	
6401 Holiday Hill Road Midland, TX 79707	Action Number: 364135	
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)	
QUESTIONS		
Deferral Requests Only		

Only answer the questions in this group if seeking a deferral upon approval this submission. Each of	the following items must be confirmed as part of any request for deferral of remediation.
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 364135

QUESTIONS (continued)		
Operator:	OGRID:	
XTO ENERGY, INC	5380	
6401 Holiday Hill Road	Action Number:	
Midland, TX 79707	364135	
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	346431
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	5
What was the sampling surface area in square feet	1000

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.		
Requesting a remediation closure approval with this submission	Yes	
Have the lateral and vertical extents of contamination been fully delineated	Yes	
Was this release entirely contained within a lined containment area	No	
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes	
What was the total surface area (in square feet) remediated	5848	
What was the total volume (cubic yards) remediated	425	
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	5848	
What was the total volume (in cubic yards) reclaimed	425	
Summarize any additional remediation activities not included by answers (above)	Excavated to strictest criteria for chloride and TPH	
	closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of	
	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: Alan Damana	

I hereby agree and sign off to the above statement	Name: Alan Komero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 07/15/2024
--	--

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Action 364135

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QUESTIONS (continued)	
Operator: XTO ENERGY, INC	OGRID: 5380
6401 Holiday Hill Road Midland, TX 79707	Action Number: 364135
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)
QUESTIONS	
Reclamation Report	

Only answer the questions in this group if all reclamation steps have been completed. Requesting a reclamation approval with this submission

No

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CONDITIONS

Action 364135

CONDITIONS Operator: OGRID: **XTO ENERGY, INC** 5380 6401 Holiday Hill Road Action Number: Midland, TX 79707 364135 Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

ſ	Created By	Condition	Condition Date
	rhamlet	We have received your Remediation Closure Report for Incident #NAPP2403353247 JRU DI 2 BATTERY, thank you. This Remediation Closure Report is approved.	7/31/2024