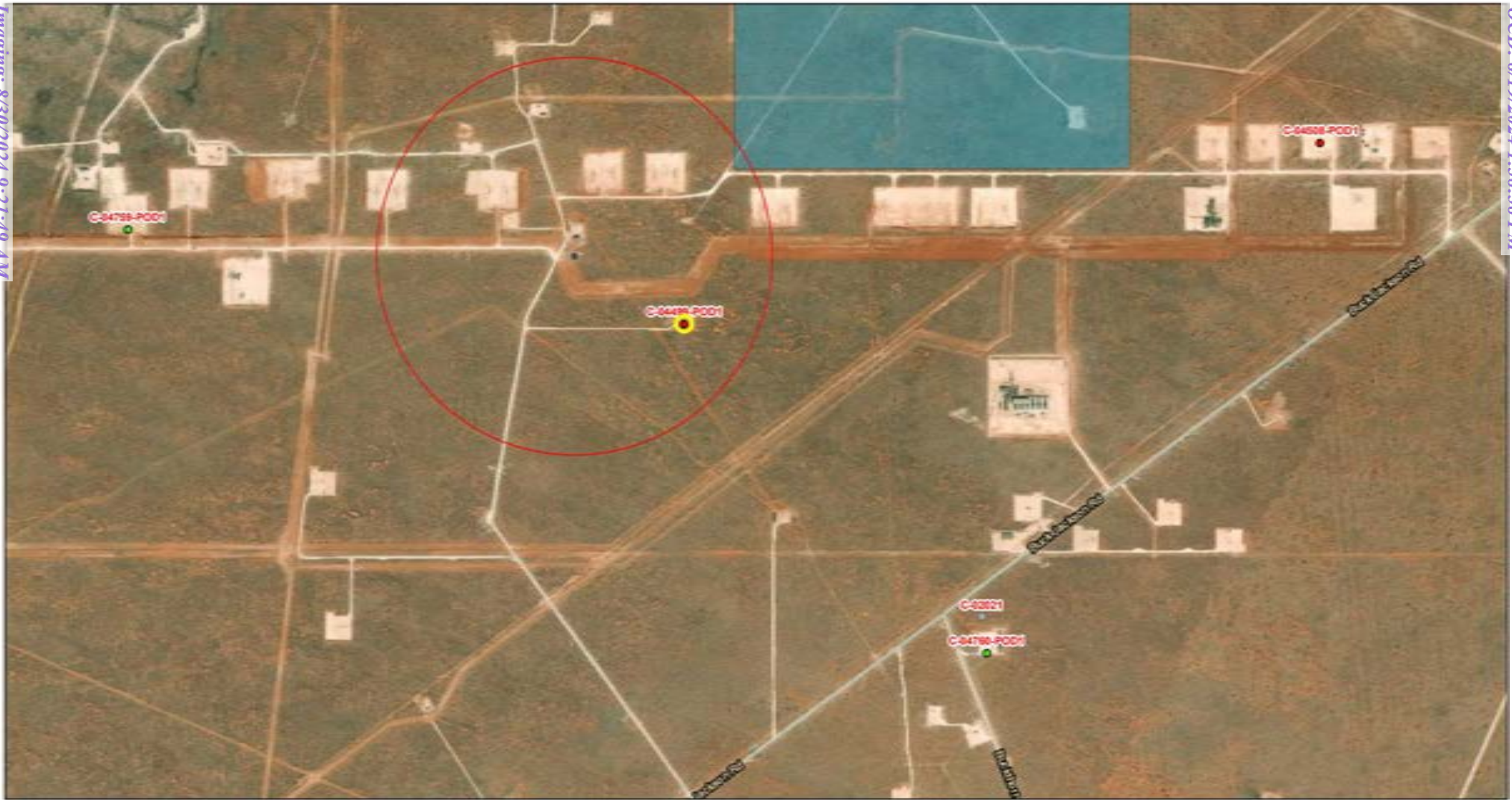


# OSE POD 0.5 mile



4/20/2024, 5:11:35 PM

GIS WATERS PODs

<span style="color: green;">●</span> Pending	<span style="border: 1px solid red;"> </span> OSE District Boundary	<span style="background-color: lightblue;"> </span> New Mexico State Trust Lands
<span style="color: red;">●</span> Plugged	<span style="border: 1px solid blue;"> </span> Water Right Regulations	<span style="background-color: lightblue;"> </span> Both Estates
	<span style="border: 1px solid blue;"> </span> Artesian Planning Area	

1:18,056

0 0.17 0.35 0.7 mi  
0 0.3 0.6 1.2 km

Esri, HERE, IFC, Esri, HERE, Garmin, IFC, Maxar

Online web user  
This is an unofficial map from the OSE's online application.



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">C_04499 POD1</a>		CUB	ED	3	4	2	20	24S	31E	613719	3563732	524	111		
<a href="#">C_04508 POD1</a>		CUB	ED	4	4	3	15	24S	31E	616298	3564493	3070	110		
<a href="#">C_03558 POD1</a>		CUB	ED	1	2	2	25	24S	30E	610412	3562651	3157	20	0	20
<a href="#">C_03558 POD2</a>		CUB	ED	1	2	2	25	24S	30E	610412	3562651	3157	20	0	20
<a href="#">C_03558 POD3</a>		CUB	ED	1	2	2	25	24S	30E	610412	3562651	3157	25	0	25
<a href="#">C_03558 POD4</a>		CUB	ED	1	2	2	25	24S	30E	610412	3562651	3157	25	0	25
<a href="#">C_03558 POD5</a>		CUB	ED	1	2	2	25	24S	30E	610412	3562651	3157	30	0	30
<a href="#">C_03702 POD1</a>		CUB	ED	4	1	4	24	24S	30E	610092	3563204	3274	20		
<a href="#">C_04478 POD1</a>		CUB	ED	3	3	2	25	24S	30E	610077	3562041	3743	0	0	0
<a href="#">C_02440</a>		C	ED	2	3	10	24S	31E	616103	3566599*	3846	350			
<a href="#">C_04388 POD1</a>		C	ED	3	2	1	23	24S	31E	617546	3564006	4278	910	868	42
<a href="#">C_04576 POD1</a>		CUB	ED	1	2	1	23	24S	31E	617700	3564324	4443	910	850	60
<a href="#">C_02783</a>		CUB	ED	3	3	1	04	24S	31E	613911	3568461	4508	708		
<a href="#">C_02783 POD2</a>		CUB	ED	3	3	1	04	24S	31E	613911	3568461	4508	672		
<a href="#">C_02784</a>		C	ED	4	2	4	04	24S	31E	613911	3568461	4508	584		
<a href="#">C_02661</a>		CUB	ED	3	3	1	04	24S	31E	613969	3568485*	4539	708		
<a href="#">C_02785</a>		CUB	ED	3	3	1	04	24S	31E	613969	3568485*	4539	692		
<a href="#">C_04479 POD1</a>		CUB	ED	2	1	1	04	25S	31E	614182	3559400	4689	0	0	0
<a href="#">C_02780</a>		CUB	ED	2	3	2	23	24S	30E	608535	3563857*	4735	505		
<a href="#">C_02781</a>		CUB	ED	4	3	2	23	24S	30E	608535	3563657*	4745	624		
<a href="#">C_02782</a>		CUB	ED	4	3	2	23	24S	30E	608535	3563657*	4745	808		
<a href="#">C_04575 POD1</a>		CUB	ED	1	1	2	23	24S	30E	608412	3564355	4869	105		

Average Depth to Water: **190 feet**  
Minimum Depth: **0 feet**  
Maximum Depth: **868 feet**

Record Count: 22

### UTMNAD83 Radius Search (in meters):

Easting (X): 613268

Northing (Y): 3564000

Radius: 5000

\*UTM location was derived from PLSS - see Help

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


4/20/24 5:08 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)		(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04499 POD1	3	4	2	20	24S	31E	613719	3563732 
x									
Driller License:	1249	Driller Company:				ATKINS ENGINEERING ASSOC. INC.			
Driller Name:	ATKINS, JACKIE D.UELENER								
Drill Start Date:	12/30/2020	Drill Finish Date:				12/30/2020	Plug Date:	01/19/2021	
Log File Date:	01/27/2021	PCW Rev Date:				Source:			
Pump Type:	Pipe Discharge Size:				Estimated Yield:				
Casing Size:	Depth Well:				111 feet	Depth Water:			
x									

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



New Mexico Office of the State Engineer

Water Right Summary



[get image list](#)

WR File Number: C 04499

Subbasin: CUB

Cross Reference: -

Primary Purpose: MON MONITORING WELL

Primary Status: PMT PERMIT

Total Acres:

Subfile: -

Header: -

Total Diversion: 0

Cause/Case: -

Agent: H WSP USA

Contact: JOSEPH HERNANDEZ


User: XTO ENERGY INC

Contact: KYLE LITTRELL

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
	<a href="#">get images</a>	<a href="#">682532 EXPL 2020-12-01</a>	PMT	APR	C 04499 POD1	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)											
POD Number	Well Tag	Source	Q					X	Y	Other Location Desc	
			64	Q16	Q4	Sec	Tws				Rng
<a href="#">C 04499 POD1</a>	NA		3	4	2	20	24S	31E	613719	3563732	 MW-1

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





# New Mexico Office of the State Engineer





## Transaction Summary

### EXPL Permit To Explore


**Transaction Number:** 682532 **Transaction Desc:** C 04499 POD1 **File Date:** 11/19/2020

**Primary Status:** PMT Permit  
**Secondary Status:** APR Approved  
**Person Assigned:** \*\*\*\*\*  
**Agent:** WSP USA  
**Contact:** JOSEPH HERNANDEZ  
**User:** XTO ENERGY INC  
**Contact:** KYLE LITTRELL

#### Events

	Date	Type	Description	Comment	Processed By
 <a href="#">get images</a>	11/19/2020	APP	Application Received	*	*****
 <a href="#">get images</a>	11/19/2020	TEC	Technical Report	*PLG PLN OPS C-	*****
	12/01/2020	FTN	Finalize non-published Trans.		*****
 <a href="#">get images</a>	01/27/2021	LOG	Well Log Received	*	*****
 <a href="#">get images</a>	01/27/2021	LGI	Well Log Image	*PLG RECORD C-	*****
	02/04/2021	DRY	Dry well log received		*****
	02/26/2021	QAT	Quality Assurance Completed	DATA	*****
	04/05/2021	QAT	Quality Assurance Completed	IMAGE	*****

#### Water Right Information

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 04499	0	0		MON MONITORING WELL
<b>**Point of Diversion</b>				
C 04499 POD1		613719	3563732	

#### Remarks

"XTO ENERGY, INC. RESPECTFULLY REQUESTS ACCESS REPRESENTED WITHIN THE ATTACHED FILE TO INSTALL (1) SOIL BORING TO ASSIST WITH DEPTH TO WATER DETERMINATION FOR INCIDENT FILE NRM2026531591 AND ADDITIONAL INCIDENTS WITH 1/2 MILE FROM THE BORE.

#### 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.
- 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.
- 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**

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

**Approval Code:** A - Approved

**Action Date:** 12/01/2020

**Log Due Date:** 12/01/2021

**State Engineer:** John R. D Antonio,

---

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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4/20/24 5:21 PM

TRANSACTION  
SUMMARY



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (MW-1)		WELL TAG ID NO. n/a		OSE FILE NO(S) C-4499			
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32°	MINUTES 12'	SECONDS 15.89" N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
LONGITUDE -103° 47' 36.29" W								
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE NE Sec. 20 T24S R31E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 12/30/2020	DRILLING ENDED 12/30/2020	DEPTH OF COMPLETED WELL (FT) temporary well material		BORE HOLE DEPTH (FT) 110	DEPTH WATER FIRST ENCOUNTERED (FT) n/a		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	110	±8.5	Boring- HSA	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO. C-4499	POD NO. 1	TRN NO. 182532
LOCATION 245.31E.20.243	WELL TAG ID NO.	PAGE 1 OF 2

OSE DJJ JAN 27 2021 PM 3:34

## 1. HYDROGEOLOGIC LOG OF WELL

USE DT JAN 27 2021 PM 3:34








# 2021-1-15\_C-4499\_POD1\_OSE\_Well Record and Log\_plu129-forsign

Final Audit Report

2021-01-15

Created:	2021-01-15
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAgs296c366oCiflrLCiy9WDKJlrUnq-9u

## "2021-1-15\_C-4499\_POD1\_OSE\_Well Record and Log\_plu129-f orsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2021-01-15 - 8:45:00 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2021-01-15 - 8:45:35 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2021-01-15 - 9:05:13 PM GMT- IP address: 74.50.153.115
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2021-01-15 - 9:13:18 PM GMT - Time Source: server- IP address: 74.50.153.115
-  Agreement completed.  
2021-01-15 - 9:13:18 PM GMT

OSE DTI JAN 27 2021 PM3:34



# PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4499-POD1

Well owner: XTO ENERGY (Kyle Littrell)

Phone No.: 432.682.8873

Mailing address: 6401 Holiday Hill Dr.

City: Midland

State: Texas

Zip code: 79707

## II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/21
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Eldridge
- 4) Date well plugging began: 1/19/2021 Date well plugging concluded: 1/19/2021
- 5) GPS Well Location: Latitude: 32 deg, 12 min, 15.89 sec  
Longitude: -104 deg, 47 min, 36.29 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 111 ft below ground level (bgl),  
by the following manner: weighted tape
- 7) Static water level measured at initiation of plugging: n/a ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 12/1/2020
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

245.31E.20.243

USE DJI JAN 27 2021 PM 3:34

- For each interval plugged, describe within the following columns:**

Released to Imaging: 8/30/2024 9:21:49 AM






# 2020-1-15\_C-4499-POD1\_Plugging Record-forsign

Final Audit Report

2021-01-20

Created:	2021-01-20
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAKYAlMzENwZcWpbipfZabZszsWa5ksl

## "2020-1-15\_C-4499-POD1\_Plugging Record-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2021-01-20 - 4:18:16 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2021-01-20 - 4:18:36 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2021-01-20 - 4:24:48 PM GMT- IP address: 74.50.153.115
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2021-01-20 - 4:27:30 PM GMT - Time Source: server- IP address: 74.50.153.115
-  Agreement completed.  
2021-01-20 - 4:27:30 PM GMT

DSE DIJ JAN 27 2021 #K3:34





2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

01/20/2021

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record C-4499 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4499 Pod1.

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: as noted above

OSE DII JAN 27 2021 PM 3:33



02\_PLU 68 Battery\_Watercourse\_14,16 f



March 1, 2024

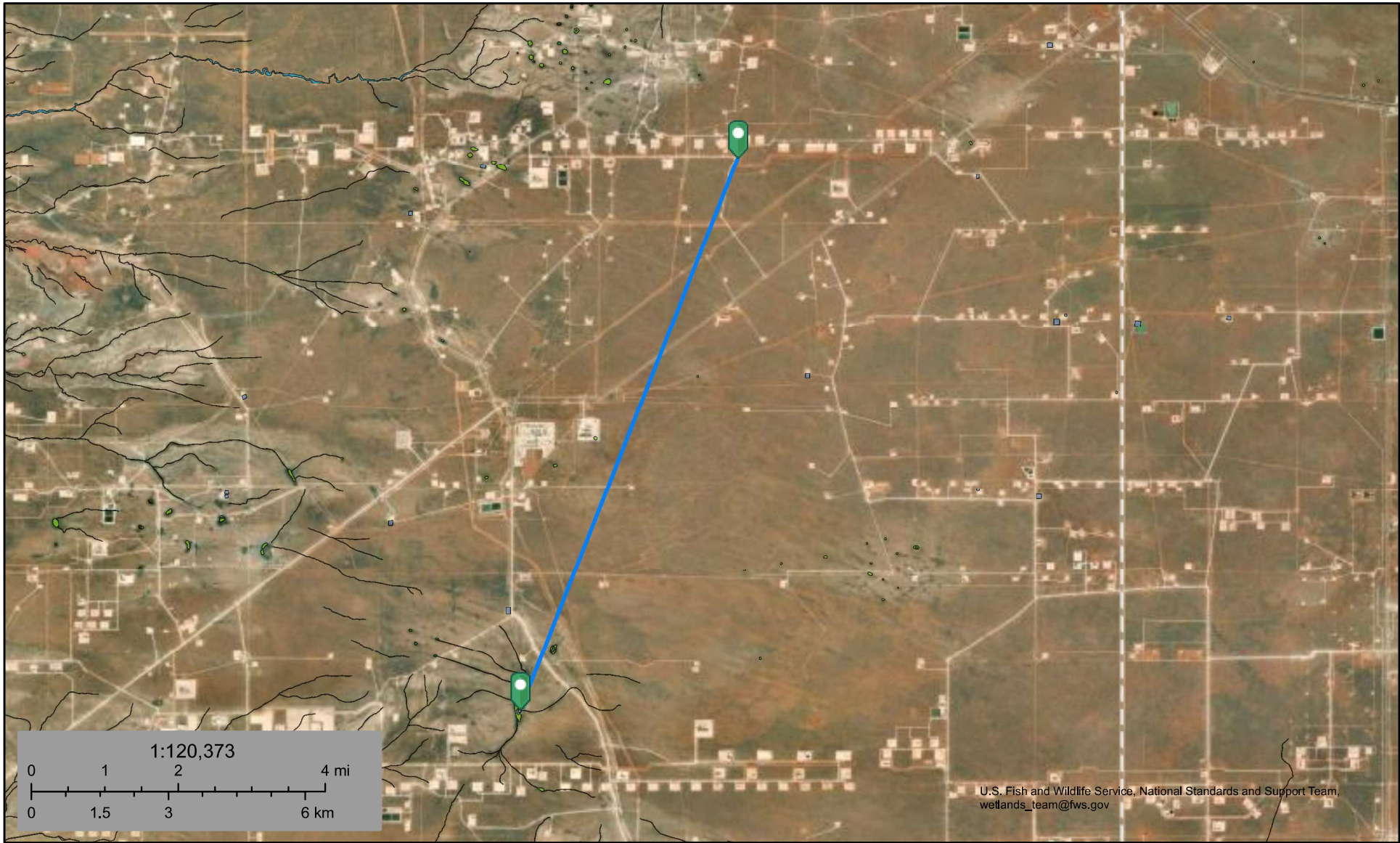
**Wetlands**

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



Pond 35,967 feet



April 20, 2024

Wetlands

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




## PLU 68 Battery

Nearest Residence:  
7.95 Miles  
41,980 ft.

### Legend

 32.20688,-103.79816

32.20688,-103.79816

 Residence

Google Earth

3 mi







# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum)



















(R=POD has been replaced

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

C=the file is closed)













(quarters are smallest to largest)

(NAD83 UTM in meters)

WR File Nbr	Sub				County	POD Number	Well		Source	q q q					X	Y	Distance		
	basin	Use	Diversion	Owner			Tag	Code Grant		6416 4	Sec	Tws	Rng						
<a href="#">C 04499</a>	CUB	MON		0 H WSP USA	ED	<a href="#">C 04499 POD1</a>	NA			3	4	2	20	24S	31E	613718	3563732		524
<a href="#">C 04759</a>	CUB	MON		0 XTO ENERGY, INC	ED	<a href="#">C 04759 POD1</a>	NA			4	2	1	19	24S	31E	611452	3564087		1818
<a href="#">C 02021</a>	C	STK		3 BUREAU OF LAND MANAGEMENT	ED	<a href="#">C 02021</a>				1	2	28	24S	31E		614944	3562559*		2210
<a href="#">C 04760</a>	CUB	MON		0 ENSOLUM LLC	ED	<a href="#">C 04760 POD1</a>	NA			4	1	2	28	24S	31E	614965	3562412		2324
<a href="#">C 04508</a>	CUB	MON		0 WSP USA	ED	<a href="#">C 04508 POD1</a>	NA			4	4	3	15	24S	31E	616298	3564493		3069
<a href="#">C 03558</a>	CUB	EXP		0 BOPCO, LP	ED	<a href="#">C 03558 POD1</a>				1	2	2	25	24S	30E	610412	3562651		3158
					ED	<a href="#">C 03558 POD2</a>				1	2	2	25	24S	30E	610412	3562651		3158
					ED	<a href="#">C 03558 POD3</a>				1	2	2	25	24S	30E	610412	3562651		3158
					ED	<a href="#">C 03558 POD4</a>				1	2	2	25	24S	30E	610412	3562651		3158
					ED	<a href="#">C 03558 POD5</a>				1	2	2	25	24S	30E	610412	3562651		3158
<a href="#">C 03702</a>	CUB	MON		0 STRAUB CORPORATION	ED	<a href="#">C 03702 POD1</a>				4	1	4	24	24S	30E	610092	3563204		3274
<a href="#">C 02020</a>	C	STK		3 BUREAU OF LAND MANAGEMENT	ED	<a href="#">C 02020</a>				4	4	28	24S	31E		615360	3561356*		3371
<a href="#">C 02959</a>	C	STK		3 TWIN WELLS RANCH LLC	ED	<a href="#">C 02959</a>				1	3	2	33	24S	31E	614866	3560646*		3715
<a href="#">C 04478</a>	CUB	MON		0 LT ENVIRONMENTAL INC	ED	<a href="#">C 04478 POD1</a>	NA			3	3	2	25	24S	30E	610077	3562041		3744
<a href="#">C 02440</a>	C	PRO		0 SONAT EXPLORATION	ED	<a href="#">C 02440</a>				2	3	10	24S	31E		616103	3566599*		3845
<a href="#">C 02958</a>	C	STK		3 TWIN WELLS RANCH LLC	ED	<a href="#">C 02958</a>				3	3	4	04	24S	31E	614781	3567690*		3987
<a href="#">C 04388</a>	C	DOM		1 TWIN WELLS RANCH LLC	ED	<a href="#">C 04388 POD1</a>	22333		Artesian	3	2	1	23	24S	31E	617546	3564006		4278
<a href="#">C 04576</a>	CUB	EXP		0 KB SERVICES LLC	ED	<a href="#">C 04576 POD1</a>	NA		Artesian	1	2	1	23	24S	31E	617699	3564324		4443

\*UTM location was derived from PLSS - see Help

(R=POD has been replaced  
and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

(acre ft per annum)							C=the file is closed)		(quarters are smallest to largest)					(NAD83 UTM in meters)						
WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q 64	q 16	q 4	Sec	Tws	Rng	X	Y	Distance	
<a href="#">C 02783</a>	CUB	OBS		0 U.S. DEPT. OF ENERGY - WIPP	ED	<a href="#">C 02783</a>				Shallow	3	3	1	04	24S	31E	613911	3568461		4507
					ED	<a href="#">C 02783 POD2</a>				Shallow	3	3	1	04	24S	31E	613911	3568461		4507
<a href="#">C 02784</a>	C	SAN		0 US DEPARTMENT OF ENERGY WASTE ISOLATION PILOT PLANT	ED	<a href="#">C 02784</a>				Shallow	4	2	4	04	24S	31E	613911	3568461		4507
<a href="#">C 03470</a>	C	PUB		0 U.S. DEPT. OF ENERGY (WIPP)	ED	<a href="#">C 02783 POD2</a>				Shallow	3	3	1	04	24S	31E	613911	3568461		4507
<a href="#">C 02661</a>	CUB	MON		0 SANDIA NATIONAL LABORATORIES	ED	<a href="#">C 02661</a>					3	3	1	04	24S	31E	613969	3568485*		4539
<a href="#">C 02785</a>	CUB	MON		0 U.S. DEPT. OF ENERGY - WIPP	ED	<a href="#">C 02785</a>					3	3	1	04	24S	31E	613969	3568485*		4539
<a href="#">C 04479</a>	CUB	MON		0 LT ENVIRONMENTAL INC	ED	<a href="#">C 04479 POD1</a>	NA				2	1	1	04	25S	31E	614182	3559400		4690
<a href="#">C 02780</a>	CUB	MON		0 U.S. DEPT. OF ENERGY - WIPP	ED	<a href="#">C 02780</a>					2	3	2	23	24S	30E	608535	3563857*		4735
<a href="#">C 02781</a>	CUB	MON		0 U.S. DEPT. OF ENERGY - WIPP	ED	<a href="#">C 02781</a>					4	3	2	23	24S	30E	608535	3563657*		4745
<a href="#">C 02782</a>	CUB	MON		0 U.S. BUREAU OF LAND MANAGEMENT	ED	<a href="#">C 02782</a>					4	3	2	23	24S	30E	608535	3563657*		4745
<a href="#">C 04220</a>	CUB	MON		0 CHEVRON N AMERICA EXPL & PROD	ED	<a href="#">C 04220 POD1</a>	NA				2	3	3	11	24S	31E	617401	3566340		4749
<a href="#">C 04575</a>	CUB	MON		0 WSP USA	ED	<a href="#">C 04575 POD1</a>	NA				1	1	2	23	24S	30E	608411	3564355		4869

Record Count: 30

UTMNAD83 Radius Search (in meters):

Easting (X): 613268.19      Northing (Y): 3564000.37      Radius: 5000

Sorted by: Distance


\*UTM location was derived from PLSS - see Help

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



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)					(NAD83 UTM in meters)		
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02021	1	2	28	24S	31E		614944	3562559* 

Driller License:		Driller Company:	
Driller Name:			
Drill Start Date:		Drill Finish Date:	
Log File Date:		PCW Rcv Date:	
Pump Type:		Pipe Discharge Size:	
Casing Size:		Depth Well:	
		Plug Date:	
		Source:	
		Estimated Yield:	
		Depth Water:	

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Water Right Summary



WR File Number: C 02021Subbasin: CCross Reference: -

Primary Purpose: STK 72-12-1 LIVESTOCK WATERING

Primary Status: PMT PERMIT

Total Acres:Subfile: -Header: -

Total Diversion: 3Cause/Case: -

Owner: BUREAU OF LAND MANAGEMENT

### Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
	<a href="#">465190</a>	<a href="#">72121</a>	<a href="#">1982-07-07</a>	PMT	APR	C 02021	T		3

### Current Points of Diversion

POD Number	Well Tag	Source	Q			(NAD83 UTM in meters)			Other Location Desc
			64	Q16	Q4	Sec	Tws	Rng	
<a href="#">C 02021</a>			1	2	28	24	S	31E	614944 3562559*

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

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07\_PLU 68 BATTERY\_Wetland\_ 9,072



U.S. Fish and Wildlife Service, National Standards and Support Team,  
wetlands\_team@fws.gov

March 1, 2024

**Wetlands**

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

## Active Mines in New Mexico



3/1/2024, 11:52:26 AM

1:144,448

## Registered Mines

X Aggregate, Stone etc.

X Aggregate, Stone etc.

Potash

## Land Ownership

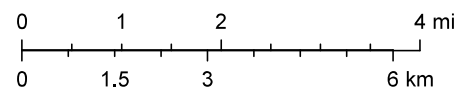
BLM

DOE

P

S

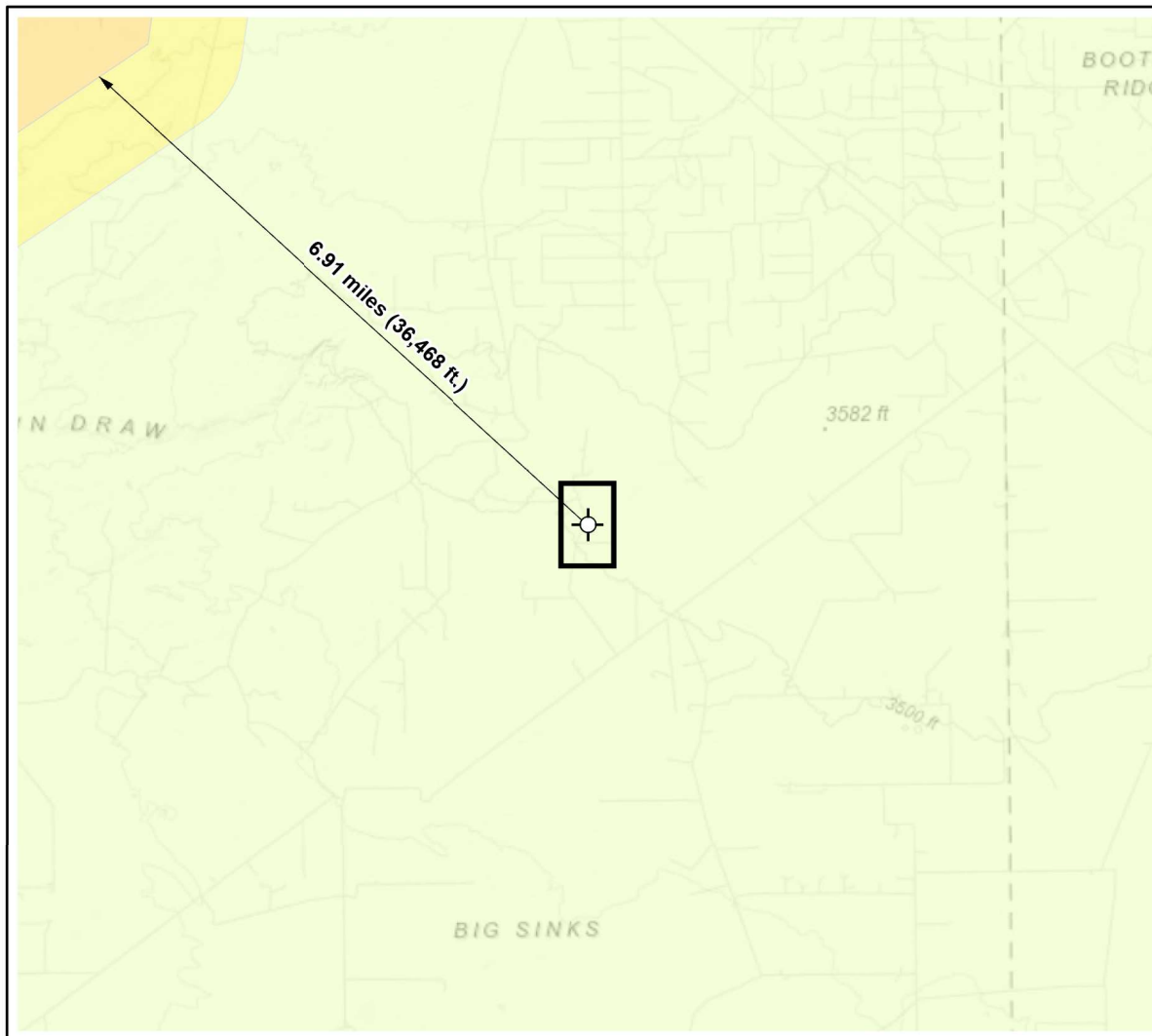
PLSS Townships



U.S. BLM, Esri, NASA, NGA, USGS, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, BLM

EMNRD MMD GIS Coordinator





#### Karst Potential

- Critical
- High
- Medium
- Low

- Site Location
- Site Buffer (1000 ft.)

#### Overview Map

0 0.5 1 2 mi

#### Detail Map

0 150 300 600 ft



Map Center:  
-103.79816° 32.20688°

NAD 1983 UTM Zone 13N  
Date: Mar 01/24



### Karst Potential Map PLU 68 Battery

Figure:  
**X**



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


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

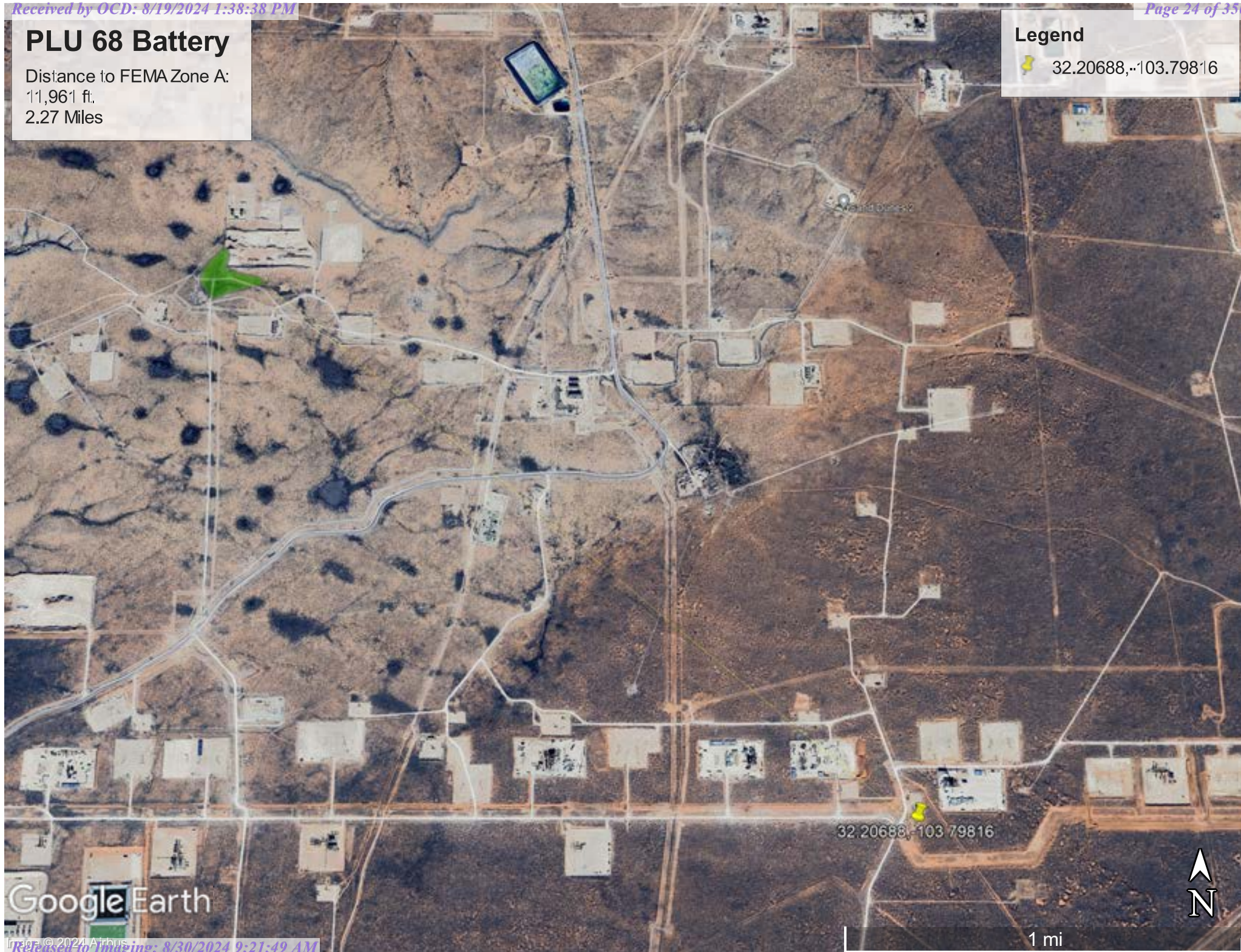


## PLU 68 Battery

Distance to FEMA Zone A:  
11,961 ft.,  
2.27 Miles

### Legend

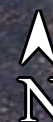
 32.20688,-103.79816



Google Earth

32.20688,-103.79816

1 mi

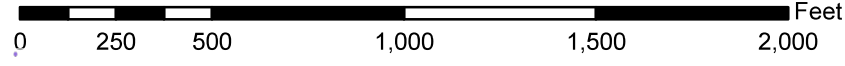
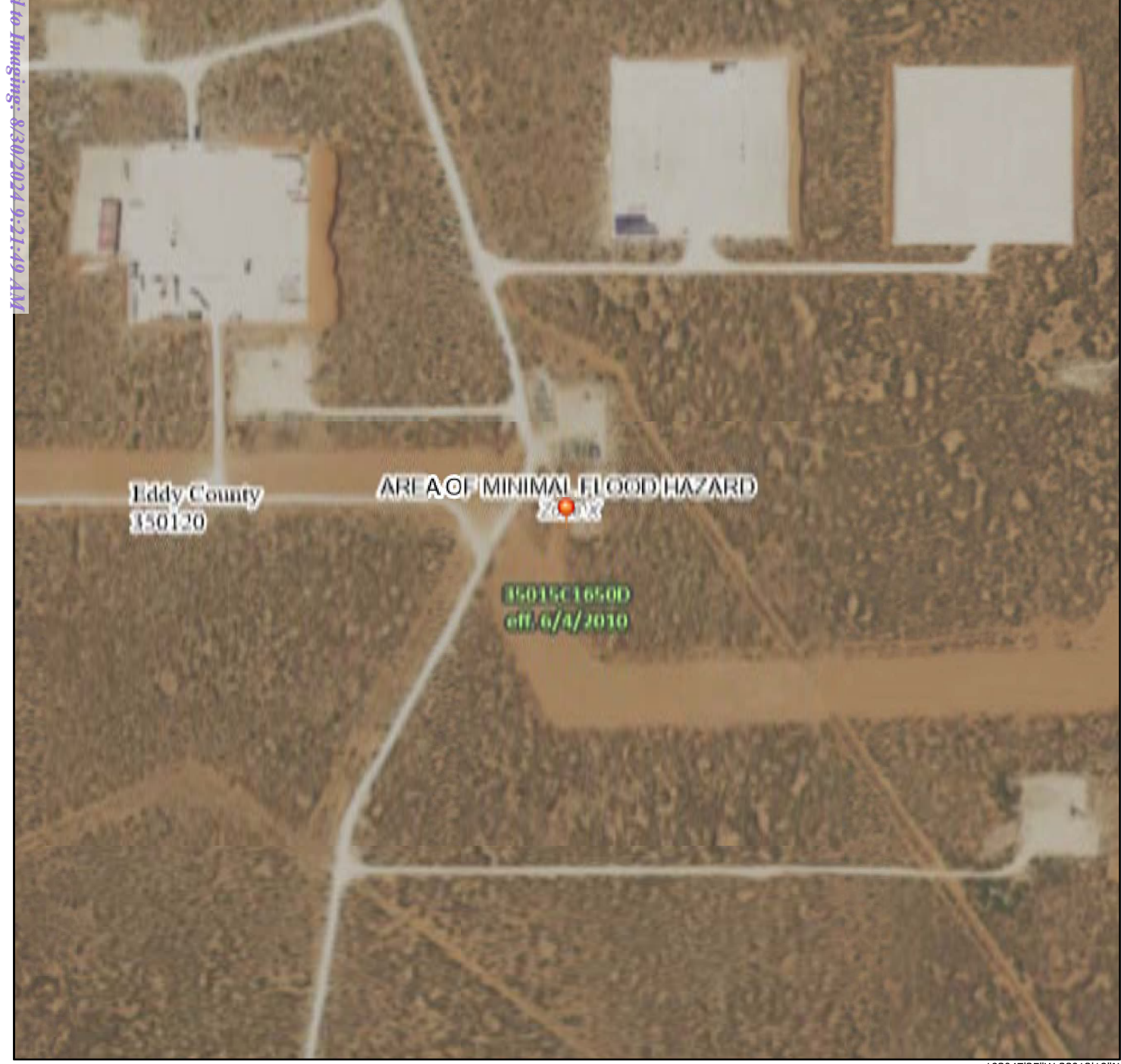




# National Flood Hazard Layer FIRMette



103°48'12"W 32°12'40"N



1:6,000

103°47'35"W 32°12'10"N

Basemap Imagery Source: USGS National Map 2023

### Legend

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

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

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **3/1/2024 at 2:09 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Released to Imaging: 8/30/2024 9:21:49 AM

Received by OCD: 8/30/2024 1:38:38 PM



United States  
Department of  
Agriculture

NRCS

Natural  
Resources  
Conservation  
Service

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

# Custom Soil Resource Report for Eddy Area, New Mexico



March 1, 2024

## Soil Map

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









## Custom Soil Resource Report

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BB	Berino complex, 0 to 3 percent slopes, eroded	0.1	2.5%
KM	Kermit-Berino fine sands, 0 to 3 percent slopes	2.3	97.5%
<b>Totals for Area of Interest</b>		<b>2.4</b>	<b>100.0%</b>

## 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,

## Custom Soil Resource Report

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.

## Custom Soil Resource Report

**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



## Custom Soil Resource Report

**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

## Custom Soil Resource Report

**KM—Kermit-Berino fine sands, 0 to 3 percent slopes****Map Unit Setting**

*National map unit symbol:* 1w4q  
*Elevation:* 3,100 to 4,200 feet  
*Mean annual precipitation:* 10 to 14 inches  
*Mean annual air temperature:* 60 to 64 degrees F  
*Frost-free period:* 190 to 230 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Kermit and similar soils:* 50 percent  
*Berino and similar soils:* 35 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Kermit****Setting**

*Landform:* Plains, alluvial fans  
*Landform position (three-dimensional):* Talf, rise  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium and/or eolian sands

**Typical profile**

*H1 - 0 to 7 inches:* fine sand  
*H2 - 7 to 60 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Excessively drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high (20.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline (0.0 to 1.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water supply, 0 to 60 inches:* Low (about 3.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* R070BD005NM - Deep Sand  
*Hydric soil rating:* No

## Custom Soil Resource Report

**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 50 inches:* fine sandy loam  
*H3 - 50 to 58 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 7.2 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* B  
*Ecological site:* R070BD003NM - Loamy Sand  
*Hydric soil rating:* No

**Minor Components****Active dune land**

*Percent of map unit:* 15 percent  
*Hydric soil rating:* No



Ecological site R070BD003NM  
Loamy Sand

Accessed: 03/01/2024

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	<b>Sandy</b> Sandy
R070BD005NM	<b>Deep Sand</b> 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

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

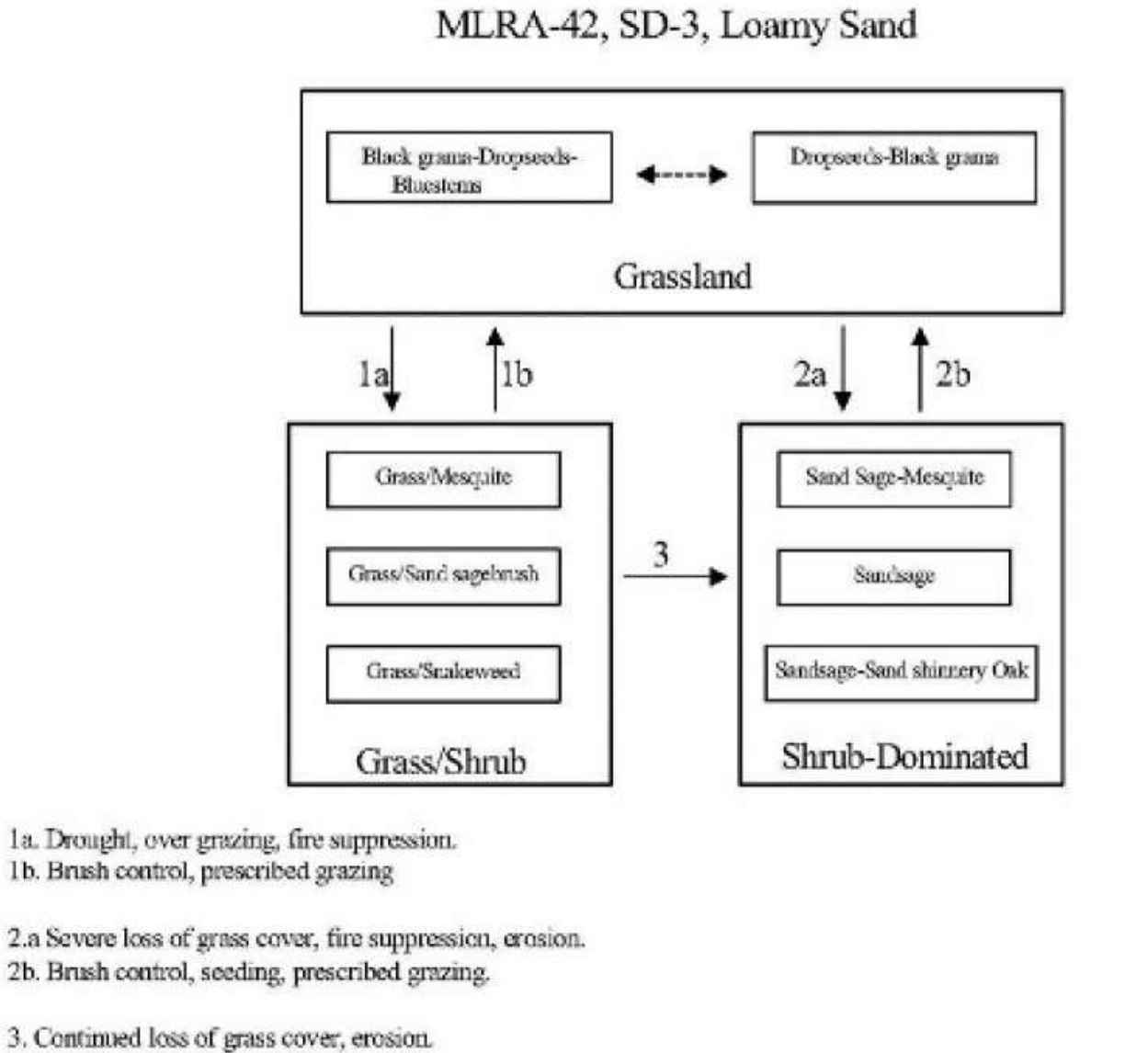
### Overview

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):



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

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)	High (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	0%
Grass/grasslike foliar cover	28%
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%

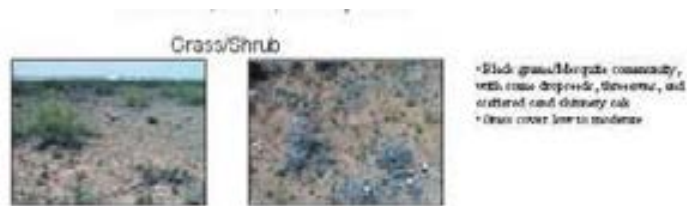
Figure 5. Plant community growth curve (percent production by month). NM2803, R042XC003NM-Loamy Sand-HCPC, SD-3 Loamy Sand - Warm season plant community .

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 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

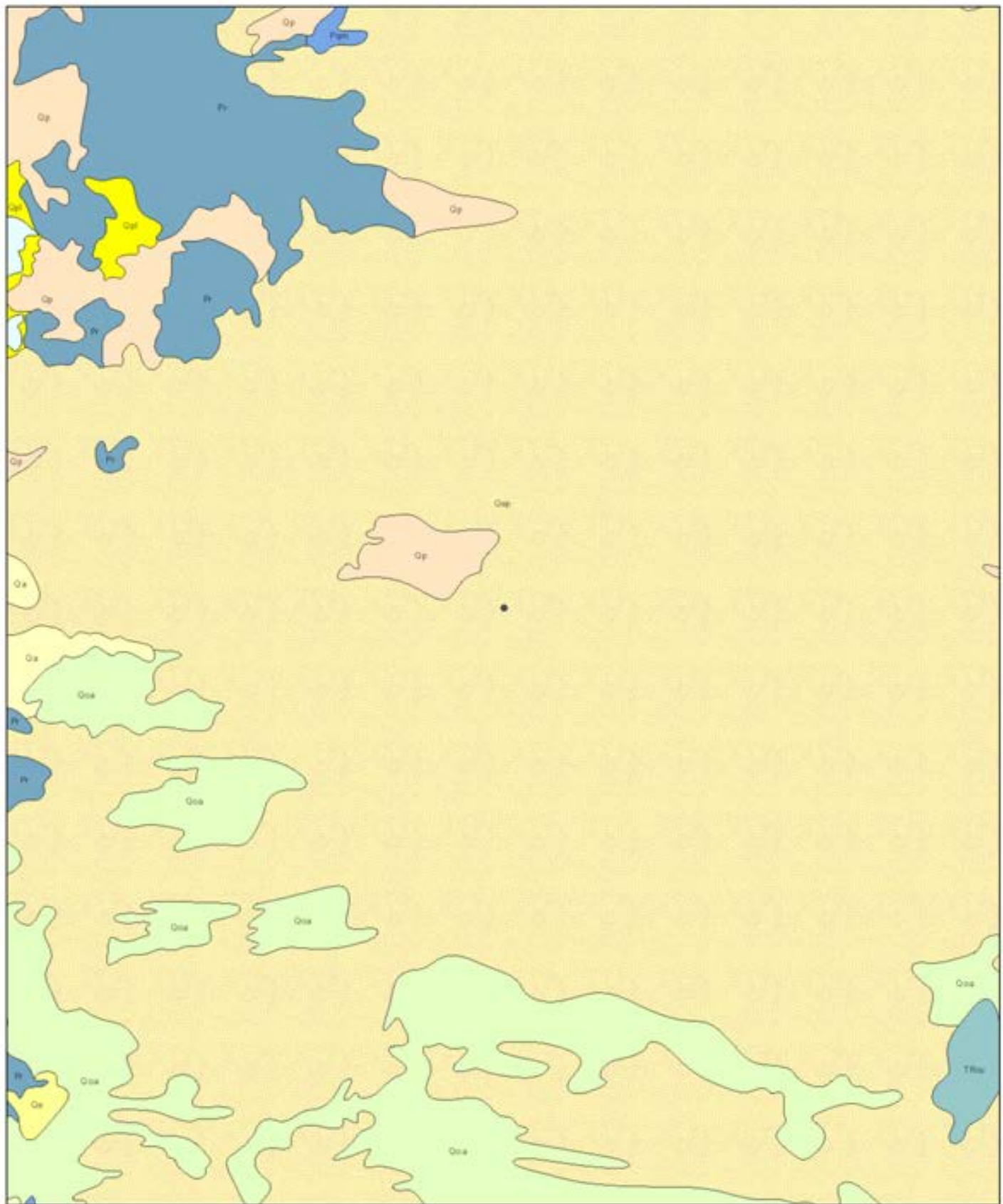
Shrub-Dominated State: The shrub-dominated state results from a severe loss of grass cover. This state's primary species is sand sage. Shinnery oak and mesquite also occur; however, grass cover is limited to intershrub distribution. Sand sage stabilizes light sandy soils from wind erosion, which enhances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

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/threawns cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite/dropseed/threawn 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 (%)
<b>Grass/Grasslike</b>					
1	<b>Warm Season</b>			61–123	
	little bluestem	SCSC	<i>Schizachyrium scoparium</i>	61–123	—
2	<b>Warm Season</b>			37–61	
	sand bluestem	ANHA	<i>Andropogon hallii</i>	37–61	—
3	<b>Warm Season</b>			37–61	
	cane bluestem	BOBA3	<i>Bothriochloa barbinodis</i>	37–61	—
	silver bluestem	BOSA	<i>Bothriochloa saccharoides</i>	37–61	—
4	<b>Warm Season</b>			123–184	
	black grama	BOER4	<i>Bouteloua eriopoda</i>	123–184	—
	bush muhly	MUPO2	<i>Muhlenbergia porteri</i>	123–184	—
5	<b>Warm Season</b>			123–184	
	thin paspalum	PASE5	<i>Paspalum setaceum</i>	123–184	—
	plains bristlegrass	SEVU2	<i>Setaria vulpiseta</i>	123–184	—
	fringed signalgrass	URCI	<i>Urochloa ciliatissima</i>	123–184	—
6	<b>Warm Season</b>			123–184	
	spike dropseed	SPCO4	<i>Sporobolus contractus</i>	123–184	—
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	123–184	—
	mesa dropseed	SPFL2	<i>Sporobolus flexuosus</i>	123–184	—
7	<b>Warm Season</b>			61–123	
	hooded windmill grass	CHCU2	<i>Chloris cucullata</i>	61–123	—
	Arizona cottontop	DICA8	<i>Digitaria californica</i>	61–123	—
9	<b>Other Perennial Grasses</b>			37–61	
	Grass, perennial	2GP	<i>Grass, perennial</i>	37–61	—
<b>Shrub/Vine</b>					
8	<b>Warm Season</b>			37–61	
	New Mexico feathergrass	HENE5	<i>Hesperostipa neomexicana</i>	37–61	—
	giant dropseed	SPGI	<i>Sporobolus giganteus</i>	37–61	—
10	<b>Shrub</b>			61–123	

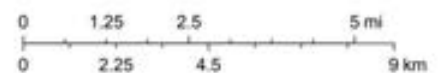


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## Lithologic Units

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

1:144,448



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



Incident Number: nAPP2402630186

## Release Assessment and Deferral

Poker Lake Unit 68 Battery  
Section 20, Township 24 South, Range 31 East  
County: Eddy  
Vertex File Number: 24E-00664

**Prepared for:**  
XTO Energy, Inc.

**Prepared by:**  
Vertex Resource Services Inc.

**Date:**  
August 2024



**XTO Energy, Inc.**  
Poker Lake Unit 68 Battery

**Release Assessment and Deferral**  
August 2024

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**Release Assessment and Deferral**  
**Poker Lake Unit 68 Battery**  
**Section 20, Township 24 South, Range 31 East**  
**County: Eddy**

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\_\_\_\_\_  
Sally Carttar, B.A.  
PROJECT MANAGER, REPORT REVIEW

August 14, 2024  
\_\_\_\_\_  
Date

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**XTO Energy, Inc.**  
Poker Lake Unit 68 Battery

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## 1.0 Introduction

XTO Energy, Inc. (XTO) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Deferral for a crude oil release that occurred on January 15, 2024, at Poker Lake Unit 68 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 January 26, 2024. Incident ID number nAPP2402630186 was assigned to this incident.

This report provides a description of the release assessment and remediation activities associated with the site. The information presented demonstrates that closure criteria established in Table I of 19.15.29.12 of the *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) related to NMOCD has been met and all applicable regulations are being followed. This document is intended to serve as a report to obtain deferral from NMOCD for all areas directly under production equipment, with the understanding that remediation and restoration of the release site will be deferred until such time as all oil and gas activities are terminated and the site is reclaimed as per NMAC 19.15.29.13. The remainder of the area that has been disturbed through remediation activities will be seeded using recommendations set forth by the Bureau of Land Management (BLM).

## 2.0 Incident Description

The release occurred on January 15, 2024, due to oil being released from the flare following a frozen water line when the pilot was off. The incident was reported on January 26, 2024, and involved the release of approximately 16 barrels of crude oil off the pad site, around the flare. No 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 15.5 miles east of Malaga, New Mexico (Google Inc., 2024). The legal location for the site is Section 20, Township 24 South and Range 31 East in Eddy County, New Mexico. The release area is located on BLM 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 at the flare on or in proximity to the constructed pad (Figure 1).

The surrounding landscape is associated with piedmont and alluvial fans and dunes with elevations ranging between 2,800 and 5,000 feet. The climate is semiarid with average annual precipitation ranging between 8 and 13 inches. Using information from the United States Department of Agriculture, the dominant vegetation was determined to be grassland (Ecological). Grasses with shrubs and half-shrubs dominate the historic plant community (United States Department of Agriculture, Natural Resources Conservation Service, 2024).

The surface geology at the site primarily comprises Qep – Eolian and piedmont deposits, Holocene to middle Pleistocene (New Mexico Bureau of Geology and Mineral Resources, 2024) and the soil at the site is characterized as loamy sand (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Additional soil characteristics include a drainage class of well-drained to somewhat excessively drained with a runoff class of low.



The karst geology potential for the site is low (United States Department of the Interior, Bureau of Land Management, 2018).

#### 4.0 Closure Criteria Determination

The nearest active well to the site is a New Mexico Office of the State Engineer (NMOSE) monitoring well located approximately 0.32 miles southeast of the location (United States Geological Survey, 2024). Data from 2020 show the NMOSE borehole recorded a depth to groundwater of greater than 110 feet below ground surface (bgs). Information pertaining to the depth to ground water determination is included in Appendix B.

There is no surface water present at the site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is an intermittent stream (National Wetlands Inventory) located approximately 0.78 miles northwest 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.

XTO Energy, Inc.  
Poker Lake Unit 68 Battery

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August 2024

Table 1. Closure Criteria Determination			
Site Name: Poker Lake Unit 68 Battery			
Spill Coordinates: 32.20688,-103.79816		X: 613268.19	Y: 3564000.37
Site Specific Conditions		Value	Unit
1	Depth to Groundwater (nearest reference)	>110	feet
	Distance between release and nearest DTGW reference	1,719	feet
		0.32	miles
	Date of nearest DTGW reference measurement		December 30, 2020
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	14,165 ft	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	35,967	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	41,980	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or	7,250	feet
	ii) Within 1000 feet of any fresh water well or spring	7,250	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	9,072	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	60,044	feet
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
	Distance between release and nearest unstable area	36,468	feet
10	Within a 100-year Floodplain	>500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	11,961	feet
11	Soil Type	Fine sand	
12	Ecological Classification	Loamy sand	
13	Geology	Eolian and piedmont deposits	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	>100'	<50' 51-100' >100'

**XTO Energy, Inc.**  
Poker Lake Unit 68 Battery

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The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

<b>Table 2. Closure Criteria for Soils to Remediation and Reclamation Standards</b>		
	<b>Constituent</b>	<b>Limit</b>
0-4 feet bgs (19.15.29.13)	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
DTGW > 100 feet (19.15.29.12)	Chloride	20,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

bgs – below ground surface

DTGW – depth to groundwater

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

An initial site inspection of the release area was completed on March 1, 2024, which identified the area of the release specified in the initial C-141 Report, estimated the approximate volume of the release and white lined the area required for the One Call request. The impacted area was determined to be approximately 94 feet long and 121 feet wide; the total affected area is 8,337 square feet. The Daily Field Report (DFR) associated with the site inspection is included in Appendix C.

Remediation efforts began on March 7, 2024, and were finalized on May 1, 2024. Vertex personnel supervised the excavation of impacted soils. Field screening was completed on a total of 20 sample points and consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dextil 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. Characterization sampling results are provided in Table 3. Soils were removed to a depth of 0 to 4 feet bgs. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility. The DFRs documenting various phases of the remediation are presented in Appendix C.

Notifications that confirmatory samples were being collected were provided to the NMOCD 48 hours before each sampling event, and are included in Appendix D. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. A total of 63 samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Eurofins Environmental Testing/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). Confirmatory laboratory results are presented in Table 4, and the laboratory data reports are included in Appendix E. All confirmatory samples collected and analyzed were below closure criteria for the site.

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When conditions are favorable, the backfilled area will be seeded using BLM Mix 2 for Sandy Sites. Seed will be broadcast by hand at double the rate of pounds per acre than that used for drilling. The entire seeded area will be raked over to cover the seed.

## **6.0 Deferral Request**

The release area was fully delineated and backfilled with local soils by May 16, 2024. All areas not directly underneath the flare were remediated to meet all applicable closure criteria, and areas actively used for production activity were fully delineated. All confirmatory samples in the pasture were analyzed by the laboratory and found to be below allowable concentrations as per the NMAC Closure Criteria for Soils Impacted by a Release locations "greater than 100 feet to groundwater." Facility deconstruction will be required to complete remediation of the release. The proposed deferral area consists of approximately 1,894 square feet immediately surrounding the flare and associated flowlines. Based on the results of delineation sampling, this area will be excavated to a depth of 2 feet bgs, requiring the removal of approximately 180 cubic yards of soil following equipment removal.

Vertex requests that the incident (nAPP2402630186) be deferred until the production equipment is retired and removed prior to reclamation. XTO certifies that all information in this report and the attachments is correct, and that they have complied with all applicable requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain deferral on the January 15, 2024, release at Poker Lake Unit 68 Battery.

Should you have any questions or concerns, please do not hesitate to contact Sally Carttar at 575.361.3561 or [scarttar@vertexresource.com](mailto:scarttar@vertexresource.com).



## 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 Department of Surface Water Quality Bureau. (2024). *Assessed and Impaired Waters of New Mexico*. Retrieved from <https://gis.web.env.nm.gov/oem/?map=swqb>
- New Mexico Energy, Minerals and Natural Resources Department. (2024). *OCD Permitting - Spill Search*. Retrieved from <https://wwwapps.emnrd.nm.gov/ocd/ocdpermitting/Data/Spills/Spills.aspx>
- New Mexico Mining and Minerals Division. (2024). *Coal Mine Resources in New Mexico*. Retrieved from <https://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=5f80f3b0faa545e58fe747cc7b037a93>
- New Mexico Office of the State Engineer. (2024a). *Point of Diversion Location Report - New Mexico Water Rights Reporting System*. Retrieved from <http://nmwrrs.ose.state.nm.us/nmwrrs/wellSurfaceDiversion.html>
- New Mexico Office of the State Engineer. (2024b). *Water Column/Average Depth to Water Report - New Mexico Water Rights Reporting System*. Retrieved from <http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html>
- New Mexico Office of the State Engineer. (2024c). *Well Log/Meter Information Report - New Mexico Water Rights Reporting System*. Retrieved from <http://nmwrrs.ose.state.nm.us/nmwrrs/meterReport.html>
- 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](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://fwspprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>
- United States Geological Survey. (2024). *National Water Information System: Web Interface*. Retrieved from <https://waterdata.usgs.gov/nwis>

**XTO Energy, Inc.**  
Poker Lake Unit 68 Battery

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August 2024

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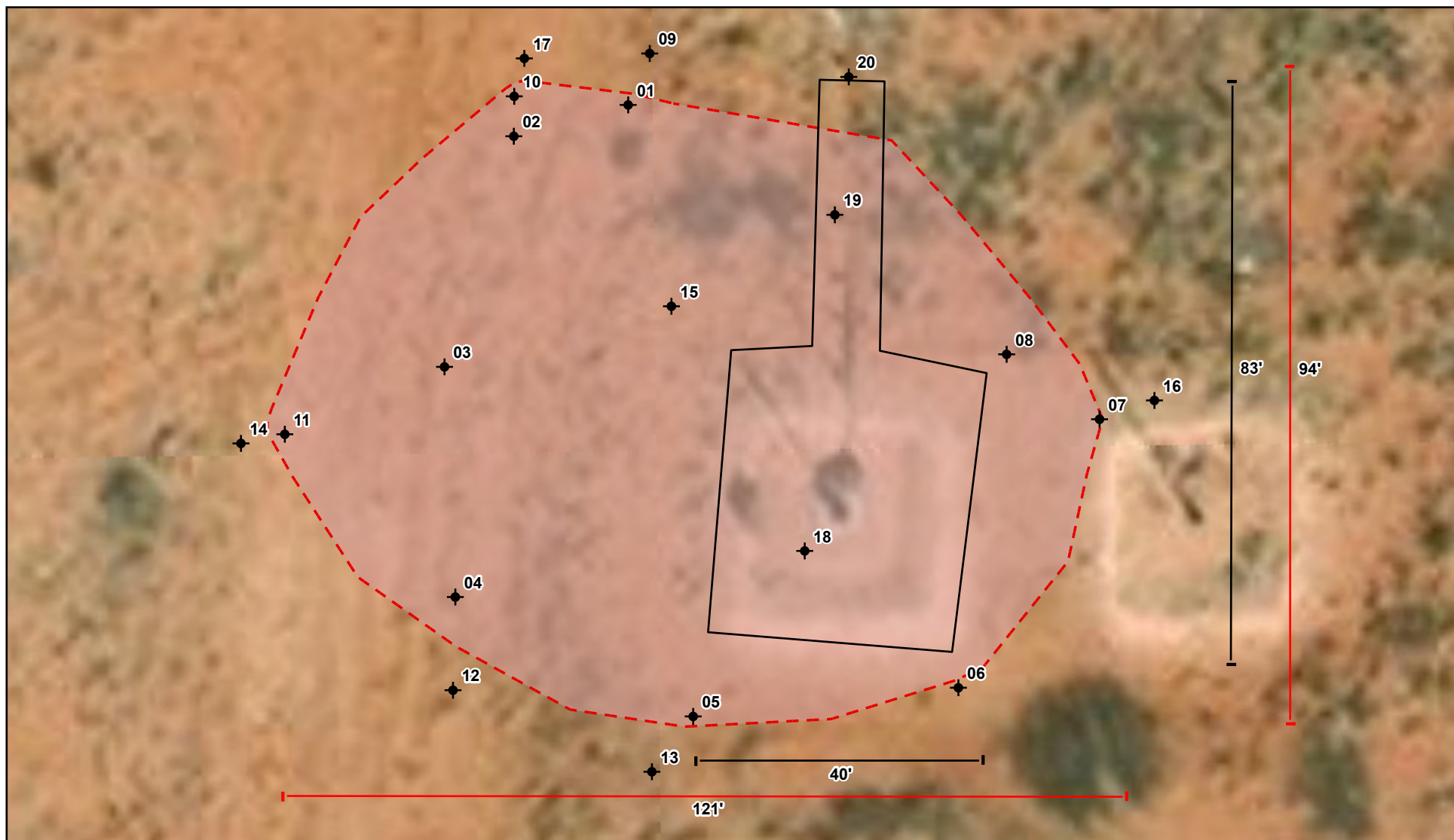
## **8.0 Limitations**

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

## **FIGURES**

Document Path: S:\04\_Geomatics\1-Projects\US PROJECTS\XTO Energy\24E-00864 - PLU 68 Battery\Project\24E-00864 - PLU 68 Battery.aprx



◆ Borehole (Prefixed by "BH24-")    □ Flare Infrastructure (~ 1,895 sq. ft.)    - - - Release Area (~ 8,337 sq. ft.)



0 5 10 20 ft  
Map Center:  
Lat/Long 32.207002°N, 103.798105°W

WGS 1984 UTM Zone 13N  
Date: Apr 24/24



### Characterization Sampling Site Schematic PLU 68 Battery

FIGURE:

1

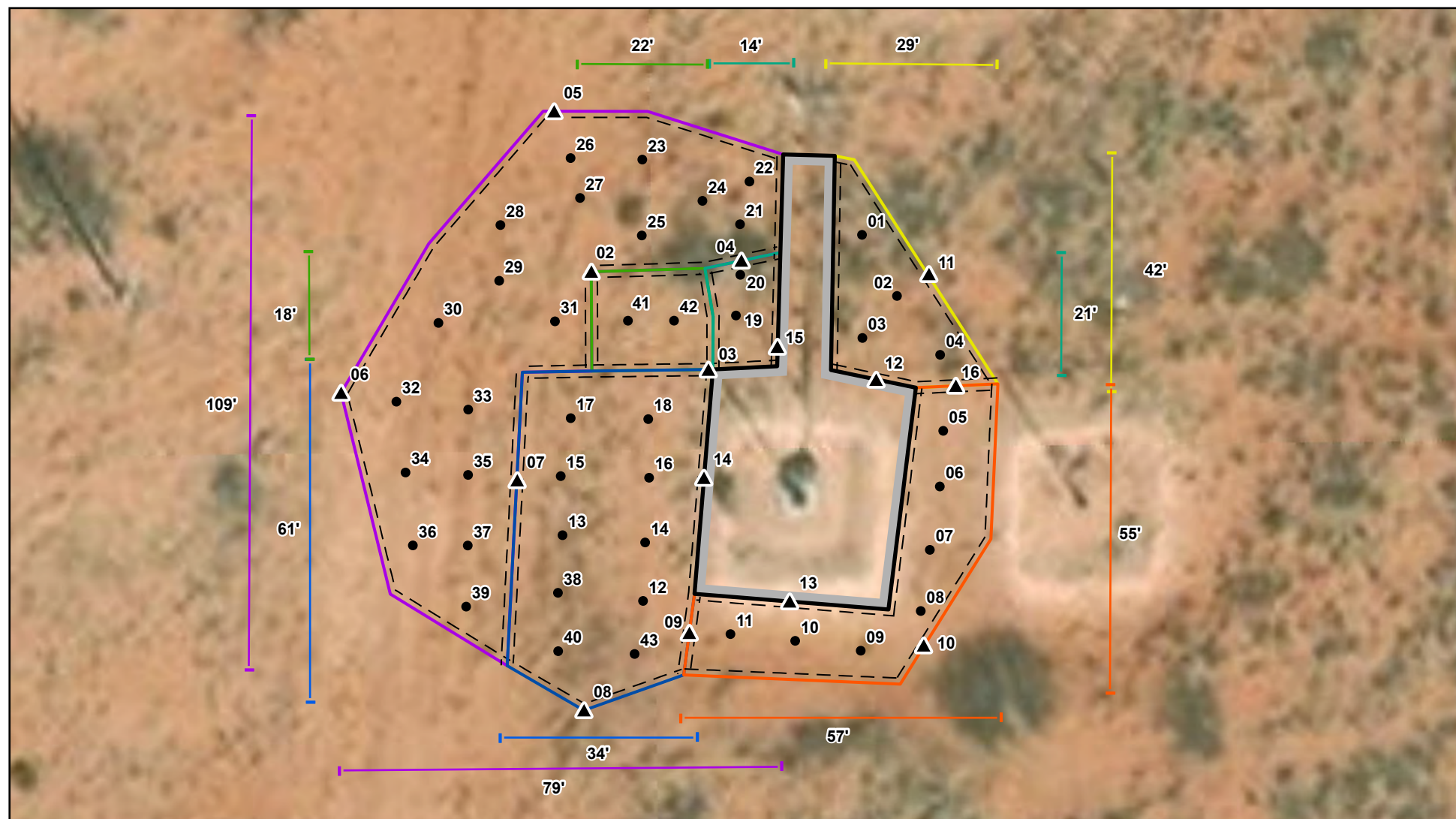


Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2022. Site features from GPS, Vertex Professional Services Ltd., 2024.

VERSATILITY. EXPERTISE.





- Base Sample (Prefixed by "BES24-")
- ▲ Wall Sample (Prefixed by "WES24-")
- Deferral Request Area (~1,894 sq. ft.)
- East Excavation to 1' bgs (~ 1,226 sq. ft.)
- East Excavation to 2' bgs (~ 686 sq. ft.)
- Excavation to 4' bgs (~ 398 sq. ft.)
- North Excavation to 2' bgs (~ 243 sq. ft.)
- South Excavation to 2' bgs (~ 1,961 sq. ft.)
- West Excavation to 1' bgs (~ 3,466 sq. ft.)



0 5 10 20 ft  
Map Center:  
Lat/Long 32.207003°, -103.798083°

NAD 1983 UTM Zone 13N  
Date: May 29/24



### Confirmatory Sampling Schematic PLU 68 Battery

FIGURE:

2

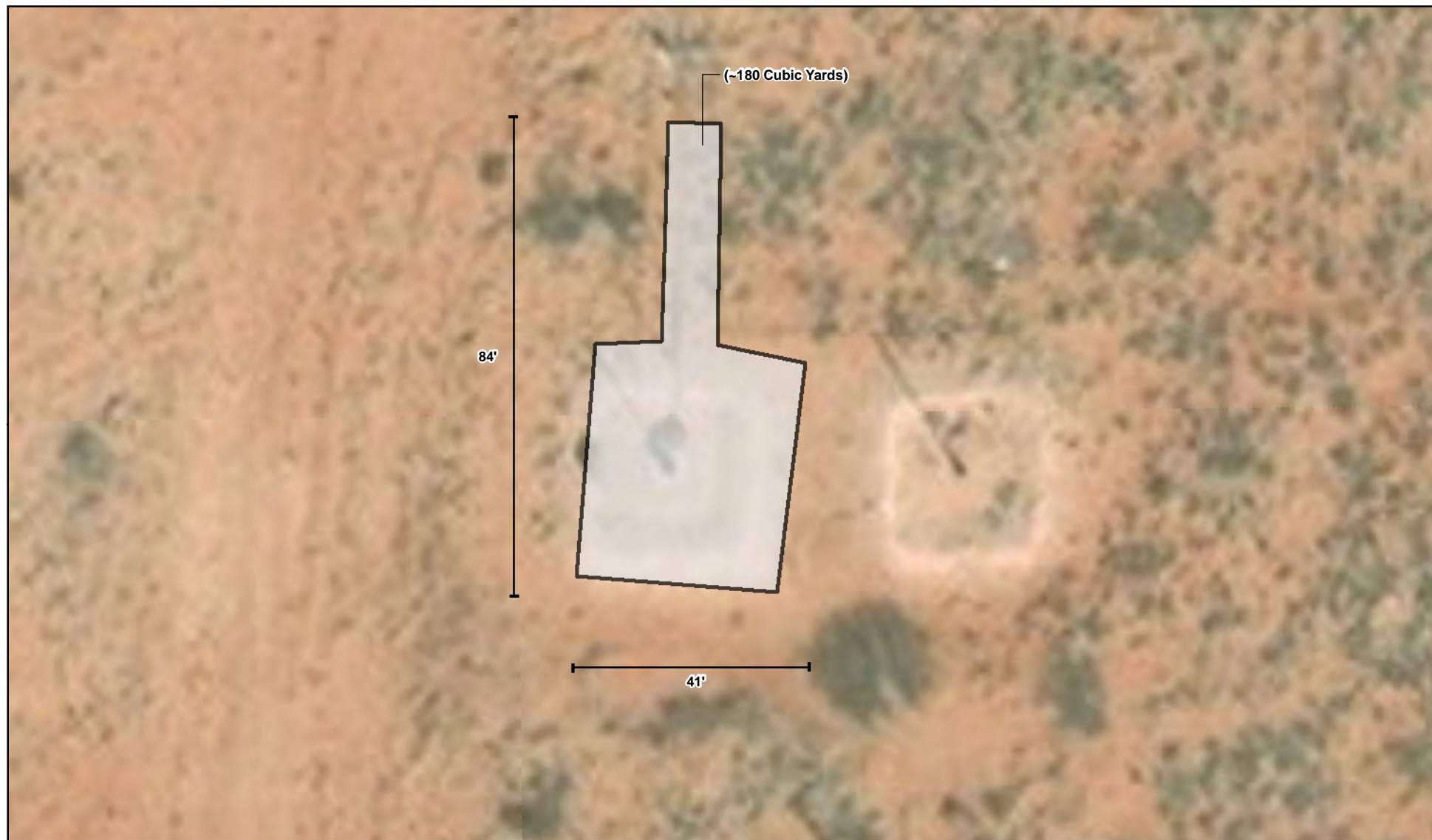


Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2022. Site features from GPS, Vertex Professional Services Ltd., 2024.

VERSATILITY. EXPERTISE.

Document Path: S:\04\_Geomatics\1-Projects\US PROJECTS\XTO Energy\24E-00664 - PLU 68 Battery\Project\Figure 3 Deferral Area Schematic (24E-00664).mxd



 Deferral Request Area (~1,894 sq.ft.)



0 10 20 ft  
Map Center:  
Lat/Long: 32.206986, -103.798024

NAD 1983 UTM Zone 13N  
Date: May 29/24



**Deferral Area Schematic  
PLU 68 Battery**

FIGURE:

**3**



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

Note: Georeferenced image from Esri, 2023. Approximate site boundary from sketch by Vertex Professional Services Ltd. (Vertex), 2024. Site features from GPS, Vertex, 2024.

**VERSATILITY. EXPERTISE.**

## **TABLES**



Client Name: XTO Energy, Inc.

Site Name: PLU 68 Battery

NMOCD Tracking #: nAPP2402630186

Project #: 24E-00664

Lab Reports: 885-834-1, 885-993-1, and 885-2770-1

Table 3. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater >100 feet bgs												
Sample Description			Field Screening		Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
					Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
BH24-01	0	March 7, 2024	-	962	-	-	-	-	-	-	-	-
	2	March 7, 2024	-	108	-	-	-	-	-	-	-	-
BH24-02	0	March 7, 2024	-	5,595	-	-	-	-	-	-	-	-
	2	March 7, 2024	-	98	-	-	-	-	-	-	-	-
BH24-03	0	March 7, 2024	-	12,163	-	-	-	-	-	-	-	-
	2	March 7, 2024	-	143	-	-	-	-	-	-	-	-
BH24-04	0	March 7, 2024	-	2,539	-	-	-	-	-	-	-	-
	2	March 7, 2024	-	118	-	-	-	-	-	-	-	-
BH24-05	0	March 7, 2024	-	1,170	-	-	-	-	-	-	-	-
	2	March 7, 2024	-	93	-	-	-	-	-	-	-	-
BH24-06	0	March 7, 2024	35	125	ND	ND	ND	ND	ND	ND	ND	110
	2	March 7, 2024	19	155	ND	ND	ND	ND	ND	ND	ND	ND
BH24-07	0	March 7, 2024	237	960	-	-	-	-	-	-	-	-
	2	March 7, 2024	16	18	-	-	-	-	-	-	-	-
BH24-08	0	March 7, 2024	27	145	ND	ND	ND	ND	ND	ND	ND	200
	2	March 7, 2024	16	65	ND	ND	ND	ND	ND	ND	ND	ND
BH24-09	0	March 7, 2024	45	175	ND	ND	ND	ND	ND	ND	ND	130
	2	March 7, 2024	16	60	ND	ND	ND	ND	ND	ND	ND	ND
BH24-10	0	March 7, 2024	137	700	-	-	-	-	-	-	-	-
	2	March 7, 2024	18	70	-	-	-	-	-	-	-	-
BH24-11	0	March 7, 2024	-	1,020	-	-	-	-	-	-	-	-
	2	March 7, 2024	-	75	-	-	-	-	-	-	-	-
BH24-12	0	March 7, 2024	127	180	ND	ND	ND	14	ND	14	14	89
	2	March 7, 2024	18	83	ND	ND	ND	ND	ND	ND	ND	ND
BH24-13	0	March 7, 2024	47	175	ND	ND	ND	22	ND	22	22	140
	2	March 7, 2024	13	68	ND	ND	ND	ND	ND	ND	ND	ND
BH24-14	0	March 7, 2024	96	570	ND	ND	ND	51	ND	51	51	600
	2	March 7, 2024	17	50	ND	ND	ND	ND	ND	ND	ND	ND
BH24-15	0	March 8, 2024	-	13,198	-	-	-	-	-	-	-	-
	2	March 8, 2024	92	165	ND	ND	ND	ND	ND	ND	ND	98
	4	March 8, 2024	20	155	ND	ND	ND	210	130	210	330	120
BH24-16	0	March 8, 2024	59	95	ND	ND	ND	ND	ND	ND	ND	ND
	2	March 8, 2024	38	75	ND	ND	ND	ND	ND	ND	ND	ND
BH24-17	0	March 8, 2024	84	168	ND	ND	ND	ND	ND	ND	ND	120
	2	March 8, 2024	15	45	ND	ND	ND	ND	ND	ND	ND	ND
BH24-18	0	April 10, 2024	-	12,913	ND	ND	ND	2100	930	2100	3030	10,000
	2	April 10, 2024	27	34	ND	ND	ND	ND	ND	ND	ND	20
	4	April 10, 2024	32	0	ND	ND	ND	ND	ND	ND	ND	23
BH24-19	0	April 10, 2024	-	7,533	ND	ND	ND	830	430	830	1260	4,300
	2	April 10, 2024	101	178	ND	ND	ND	44	ND	44	44	68
	4	April 10, 2024	72	63	ND	ND	ND	ND	ND	ND	ND	38
BH24-20	0	April 10, 2024	11	279	ND	ND	ND	ND	ND	ND	ND	41
	2	April 10, 2024	8	0	ND	ND	ND	ND	ND	ND	ND	9.1

"ND" Not Detected at the Reporting Limit

"- " indicates not analyzed/assessed

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Closure Criteria



Client Name: XTO Energy, Inc.

Site Name: PLU 68 Battery

NMOCD Tracking #: nAPP2402630186

Project #: 24E-00664

Lab Reports: 885-2411-1, 885-2417-1, 885-2772-1, 885-2776-1, and 885-3833-1

Table 4. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater &gt;100 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
						Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-01	2	April 3, 2024	0	32	147	ND	ND	ND	ND	ND	ND	ND	5.0
BES24-02	2	April 3, 2024	0	25	180	ND	ND	ND	ND	ND	ND	ND	6.4
BES24-03	2	April 3, 2024	0	30	162	ND	ND	ND	ND	ND	ND	ND	14
BES24-04	2	April 3, 2024	0	42	210	ND	ND	ND	ND	ND	ND	ND	ND
BES24-05	1	April 2, 2024	-	31	450	ND	ND	ND	18	ND	ND	18	190
BES24-06	1	April 2, 2024	-	27	450	ND	ND	ND	ND	ND	ND	ND	970
BES24-06	1	May 1, 2024	-	18	203	ND	ND	ND	ND	ND	ND	ND	6
BES24-07	1	April 2, 2024	5	41	325	ND	ND	ND	17	ND	ND	ND	200
BES24-08	1	April 2, 2024	5	51	600	ND	ND	ND	ND	ND	ND	ND	910
BES24-08	1	May 1, 2024	-	26	175	ND	ND	ND	ND	ND	ND	ND	8
BES24-09	1	April 2, 2024	5	47	342	ND	ND	ND	13	ND	ND	13	170
BES24-10	1	April 2, 2024	8	57	559	ND	ND	ND	ND	ND	ND	ND	440
BES24-11	1	April 2, 2024	-	25	372	ND	ND	ND	ND	ND	ND	ND	99
BES24-12	2	April 9, 2024	0	33	342	ND	ND	ND	ND	ND	ND	ND	23
BES24-13	2	April 9, 2024	0	9	187	ND	ND	ND	ND	ND	ND	ND	13
BES24-14	2	April 9, 2024	0	30	587	ND	ND	ND	ND	ND	ND	ND	150
BES24-15	2	April 9, 2024	0	4	138	ND	ND	ND	ND	ND	ND	ND	17
BES24-16	2	April 9, 2024	0	16	145	ND	ND	ND	ND	ND	ND	ND	9
BES24-17	2	April 9, 2024	0	13	184	ND	ND	ND	ND	ND	ND	ND	10
BES24-18	2	April 9, 2024	0	33	158	ND	ND	ND	ND	ND	ND	ND	24
BES24-19	2	April 10, 2024	0	109	385	ND	ND	ND	14	ND	ND	14	200
BES24-20	2	April 10, 2024	0	92	277	ND	ND	ND	11	ND	ND	11	160
BES24-21	1	April 9, 2024	0	85	460	ND	ND	ND	ND	ND	ND	ND	280
BES24-22	1	April 9, 2024	0	55	485	ND	ND	ND	ND	ND	ND	ND	190
BES24-23	1	April 9, 2024	0	48	236	ND	ND	ND	ND	ND	ND	ND	43
BES24-24	1	April 9, 2024	0	36	186	ND	ND	ND	ND	ND	ND	ND	180
BES24-24	1	April 9, 2024	0	36	186	ND	ND	ND	ND	ND	ND	ND	26
BES24-25	1	April 9, 2024	0	82	342	ND	ND	ND	ND	ND	ND	ND	120
BES24-26	1	April 10, 2024	0	61	72	ND	ND	ND	ND	ND	ND	ND	66
BES24-27	1	April 3, 2024	0	31	266	ND	ND	ND	ND	ND	ND	ND	120
BES24-28	1	April 3, 2024	0	45	167	ND	ND	ND	24	ND	24	48	120
BES24-29	1	April 3, 2024	0	32	350	ND	ND	ND	22	ND	22	44	180
BES24-30	1	April 3, 2024	0	15	201	ND	ND	ND	ND	ND	ND	ND	22
BES24-31	1	April 3, 2024	0	25	175	ND	ND	ND	ND	ND	ND	ND	27
BES24-32	1	April 3, 2024	0	10	350	ND	ND	ND	ND	ND	ND	ND	24
BES24-33	1	April 10, 2024	0	35	ND	ND	ND	ND	ND	ND	ND	ND	27
BES24-34	1	April 10, 2024	0	17	ND	ND	ND	ND	ND	ND	ND	ND	11
BES24-35	1	April 10, 2024	0	21	ND	ND	ND	ND	ND	ND	ND	ND	12
BES24-36	1	April 10, 2024	0	39	ND	ND	ND	ND	ND	ND	ND	ND	49
BES24-37	1	April 10, 2024	0	32	ND	ND	ND	ND	ND	ND	ND	ND	58
BES24-38	2	April 10, 2024	0	5	284	ND	ND	ND	ND	ND	ND	ND	13
BES24-39	1	April 3, 2024	0	41	195	ND	ND	ND	ND	ND	ND	ND	11
BES24-40	2	April 9, 2024	0	6	298	ND	ND	ND	ND	ND	ND	ND	ND
BES24-41	4	April 3, 2024	0	41	200	ND	ND	ND	ND	ND	ND	ND	140
BES24-42	1	April 3, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	240
BES24-42	4	April 9, 2024	0	93	518	ND	ND	ND	ND	ND	ND	ND	290
BES24-43	2	April 9, 2024	0	24	181	ND	ND	ND	ND	ND	ND	ND	17
WES24-01	1-4	April 3, 2024	-	-	379	ND	ND	ND	ND	ND	ND	ND	1,600
WES24-02	1-4	April 10, 2024	0	54	243	ND	ND	ND	ND	ND	ND	ND	180
WES24-03	2-4	April 10, 2024	0	78	193	ND	ND	ND	13	ND	ND	13	240
WES24-04	1-2	April 10, 2024	0	13	ND	ND	ND	ND	ND	ND	ND	ND	25
WES24-05	0-1	April 10, 2024	0	68	899	ND	ND	ND	ND	ND	ND	ND	76
WES24-06	0-1	April 10, 2024	0	40	2	ND	ND	ND	ND	ND	ND	ND	62
WES24-07	1-2	April 10, 2024	0	31	ND	ND	ND	ND	ND	ND	ND	ND	51

Client Name: XTO Energy, Inc.

Site Name: PLU 68 Battery

NMOCD Tracking #: nAPP2402630186

Project #: 24E-00664

Lab Reports: 885-2411-1, 885-2417-1, 885-2772-1, 885-2776-1, and 885-3833-1

Table 4. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater &gt;100 feet bgs

Table 4. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater >100 feet bgs													
Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic Chloride Concentration (mg/kg)
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration (ppm)	Volatile		Extractable					
						Benzene (mg/kg)	BTEX (Total) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Diesel Range Organics (DRO) (mg/kg)	Motor Oil Range Organics (MRO) (mg/kg)	(GRO + DRO) (mg/kg)	Total Petroleum Hydrocarbons (TPH) (mg/kg)	
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
WES24-08	0-2	April 10, 2024	0	20	ND	ND	ND	ND	ND	ND	ND	ND	33
WES24-09	1-2	April 10, 2024	0	10	ND	ND	ND	ND	ND	ND	ND	ND	5.7
WES24-10	0-1	April 10, 2024	0	16	ND	ND	ND	ND	ND	ND	ND	ND	8
WES24-11	0-2	April 10, 2024	0	32	ND	ND	ND	ND	ND	ND	ND	ND	25
WES24-12	0-2	April 10, 2024	0	-	5,402	ND	ND	ND	23	ND	23	23	3,300
WES24-13	0-1	April 10, 2024	0	-	2,558	ND	ND	ND	33	ND	33	33	1,400
WES24-14	0-2	April 10, 2024	0	-	2,782	ND	ND	ND	220	110	220	330	1,600
WES24-15	0-2	April 10, 2024	0	-	2,192	ND	ND	ND	63	47	63	110	1,300
WES24-16	1-2	April 10, 2024	0	18	ND	ND	ND	ND	ND	ND	ND	ND	7.3

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Closure Criteria

Purple shaded indicates exceedance outside of NMOCD Closure Criteria and in Deferral Request area

Bold and blue shaded indicates re-collected sample results inside NMOCD Closure Criteria

## **APPENDIX A - NMOCD C-141 Report**

<b>Location:</b>	<b>PLU 68 Battery</b>		
<b>Spill Date:</b>	<b>1/15/2024</b>		
<b>Area 1</b>			
Approximate Area =	9468.40	sq. ft.	
Average Saturation (or depth) of spill =	0.75	inches	
Average Porosity Factor =	0.15		
<b>VOLUME OF LEAK</b>			
Total Crude Oil =	15.81	bbls	
Total Produced Water =	0.00	bbls	
<b>TOTAL VOLUME OF LEAK</b>			
Total Crude Oil =	15.81	bbls	
Total Produced Water =	0.00	bbls	
<b>TOTAL VOLUME RECOVERED</b>			
Total Crude Oil =	15.81	bbls	
Total Produced Water =	0.00	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

Action 308246

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 308246
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2402630186
Incident Name	NAPP2402630186 PLU 68 BATTERY @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Received

Location of Release Source

Please answer all the questions in this group.

Site Name	PLU 68 Battery
Date Release Discovered	01/15/2024
Surface Owner	Federal

Incident Details

Please answer all the questions in this group.

Incident Type	Oil 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	Cause: Freeze   Other (Specify)   Crude Oil   Released: 16 BBL   Recovered: 0 BBL   Lost: 16 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
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)	Frozen water line caused oil to release from flare. Pilot was off.

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**District IV**  
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Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 2  
  
Action 308246

QUESTIONS (continued)

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  308246
	Action Type:  [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Melanie Collins Title: Regulatory Analyst Email: Melanie.Collins@exxonmobil.com Date: 01/26/2024

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

QUESTIONS, Page 3

Action 308246

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 308246
	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 release in feet below ground surface (ft bgs)	Not answered.
What method was used to determine the depth to ground water	Not answered.
Did this release impact groundwater or surface water	Not answered.
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
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.
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 storage site	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.

**District I**  
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**District IV**  
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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

CONDITIONS  
  
Action 308246

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 308246
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	1/26/2024



## **APPENDIX B – Closure Criteria Research Documentation**

## **APPENDIX C – Daily Field Reports**



## Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Inspection Date:	3/7/2024
Site Location Name:	PLU 68 Battery	Report Run Date:	3/8/2024 12:55 AM
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 3/7/2024 8:30 AM

Departed Site

### Field Notes

**15:02** Filled out safety paper work

**15:02** Met with Jason with XTO and located underground lines and space needed between them

**15:03** Began horizontal delineation of the release area

### Next Steps & Recommendations

**1** Continue with delineation tomorrow and get vertical samples



# Daily Site Visit Report

## Site Photos

**Viewing Direction: Northeast**



Southwest corner of release area and flagging indicating underground lines

**Viewing Direction: South**



BH24-01 was angered to a depth of 2ft surface sample was above criteria

**Viewing Direction: South**



BH24-09 was a step out from BH24-01 and was sampled to a depth of 2ft

**Viewing Direction: Southeast**

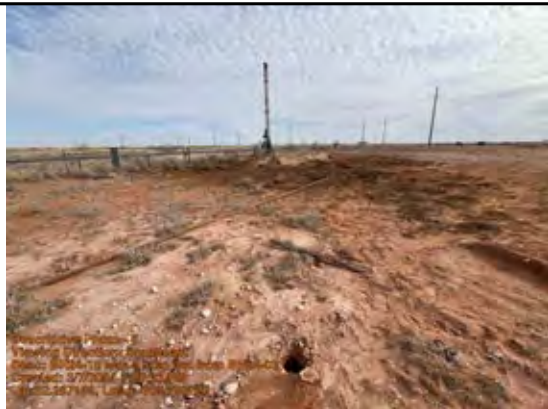


BH24-02 was sampled to a depth of 2ft surface sample was above criteria



## Daily Site Visit Report

**Viewing Direction: Southeast**



BH24-10 was a step out from BH24-02

**Viewing Direction: East**



BH24-03 was sampled to a depth of 2 ft  
surface sample was above criteria

**Viewing Direction: East**



BH24-11 was a step out from BH24-03 and was  
sampled to a depth of 2ft

**Viewing Direction: Northeast**



BH24-04 was sampled to a depth of 2ft and  
surface sample was above criteria





## Daily Site Visit Report

**Viewing Direction: Northeast**



BH24-12 was a step out from BH24-04 and was sampled to a depth of 2ft

**Viewing Direction: Northeast**



BH24-05 was sampled to a depth of 2ft surface sample was above criteria

**Viewing Direction: Northeast**



BH24-13 was a step out from BH24-05 and was sampled to a depth of 2ft

**Viewing Direction: Northwest**



BH24-06 was sampled to a depth of 2ft and both samples surface and 2ft were below criteria



## Daily Site Visit Report

**Viewing Direction: West**



BH24-08 was sampled to a depth of 2ft both surface and 2ft samples were below criteria

**Viewing Direction: Southwest**



BH24-08 was sampled to a depth of 2ft and both surface and 2ft samples were below criteria

**Viewing Direction: East**



BH24-14 was a step out from BH24-11 and was sampled to a depth of 2ft

## Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Wyatt Wadleigh

**Signature:**



## Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Inspection Date:	4/10/2024
Site Location Name:	PLU 68 Battery	Report Run Date:	4/11/2024 2:56 AM
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 4/10/2024 7:01 AM

Departed Site 4/10/2024 6:51 PM

### Field Notes

- 8:14** Completed JSA on arrival. On site to complete excavation and collection on confirmation samples. Conducted Vertex and XTO safety meeting with Standard Safety crew prior to work.
- 10:53** Lease operator Connor Gould arrived to shut off flare. Swept excavation areas with magnetic locator prior to ground disturbance. Discussed logistics of covering steel pipe on ground surface with additional soil prior to crossing.
- 20:32** Work crew excavated area around BES24-18 and BES24-19 to 2 feet bgs. Once complete the crew added sand bags under the steel line and removed the remaining soil "islands" under the line. The remaining spoil pile and liner were also completely hauled out by the end of the day.
- 20:36** Collected remaining excavation base confirmation samples at 1 feet bgs: BES24-26 and BES24-33 through BES24-37. Collected additional confirmation base sample BES24-38 from south excavation to 2 feet bgs. Collected base samples BES24-19 and BES24-20 at 2 feet bgs. Field screening results for base samples were below NMOCD strictest criteria for chloride and TPH.
- 20:42** Collected wall excavation samples WES24-02 through WES24-11 from surfaces of completed excavation. Field screening results were below NMOCD strictest criteria for chloride and TPH.
- 20:44** Collected wall excavation samples WES24-12 through WES24-15 from excavation surfaces surrounding deferral area around flare and associated infrastructure. Field screening results exceeded threshold for chloride.



## Daily Site Visit Report

**20:48** Advanced BH24-18 and BH24-19 within flare deferral area and collected samples at 0, 2, and 4 feet bgs for vertical delineation.  
Advanced BH24-20 immediately north of flare deferral area and collected samples at 0 and 2 feet for horizontal delineation.  
Delineation of flare deferral area complete pending laboratory results.

**20:49** Confirmation sampling of excavation completed pending laboratory results.

### Next Steps & Recommendations

- 1 Completed JSA on arrival. On site to complete excavation and confirmation soil sampling.



# Daily Site Visit Report



## Site Photos

Viewing Direction: East



West of tank battery and containment facing east.

Viewing Direction: Northeast



Southwest of flare facing northeast. Advanced BH24-18 in deferral zone immediately southwest of flare.



## Daily Site Visit Report

**Viewing Direction: South**



North of flare facing south. Advanced BH24-19 in deferral zone along line to flare.

**Viewing Direction: South**



North of flare facing south. Advanced BH24-20 immediately north of deferral zone along line to flare.

**Viewing Direction: Northeast**



Southwest edge of excavation facing northeast over west excavation to 1 feet bgs.

**Viewing Direction: East**



Southwest edge of excavation facing east over excavations.



## Daily Site Visit Report

**Viewing Direction: South**



Northwest edge of excavation facing south over west excavation to 1 feet bgs.

**Viewing Direction: Southeast**



Northwest edge of excavation facing southeast over west excavations to 1, 2, and 4 feet bgs.

**Viewing Direction: East**



Northwest edge of excavation facing east over west excavations to 1, 2, and 4 feet bgs.

**Viewing Direction: Southwest**



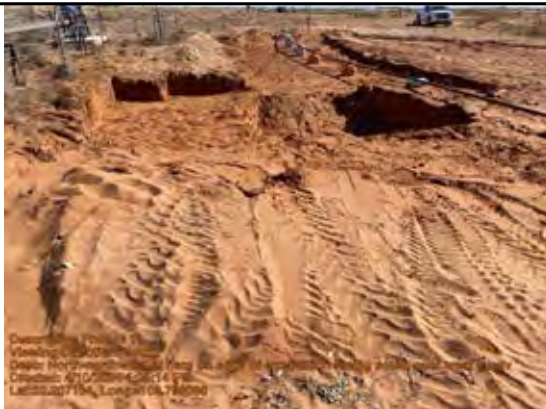
North of flare on edge of excavation facing southwest over west excavations to 1, 2, and 4 feet bgs.





## Daily Site Visit Report

**Viewing Direction: South**



North-northwest of flare on edge of excavation facing south over west excavations to 1, 2, and 4 feet bgs.

**Viewing Direction: West**



North of flare on edge of excavation facing west over west excavations to 1, 2, and 4 feet bgs.

**Viewing Direction: Northwest**



Southwest of flare on edge of excavation facing northwest over west excavations to 1 and 2 feet bgs.

**Viewing Direction: North**



Southwest of flare on edge of excavation facing north over west excavations to 1, 2, and 4 feet bgs.



## Daily Site Visit Report

**Viewing Direction: Northeast**



Southwest of flare on edge of excavation facing northeast over east excavation to 1 feet bgs.

**Viewing Direction: Northwest**



Southeast of flare facing west over east excavation to 1 feet bgs.

**Viewing Direction: North**



Southeast of flare facing north over east excavation to 1 feet bgs.

**Viewing Direction: South**



Northeast of flare on edge of excavation facing south over east excavation to 1 feet bgs.





## Daily Site Visit Report

**Viewing Direction: West**



Northeast of flare on edge of excavation facing east over east excavation to 1 feet bgs.

**Viewing Direction: Northwest**



Northeast of flare on edge of excavation facing northwest over east excavation to 1 feet bgs.

**Viewing Direction: South**



North-northeast of flare facing south over east excavation to 1 feet bgs.

**Viewing Direction: Southeast**



At pad entrance facing southeast. Spoil pile and liner removed and area graded.

## Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Lakin Pullman

**Signature:**

A handwritten signature in black ink, appearing to be 'LP', written over a horizontal line. Below the line, the word 'Signature' is printed in a small font.

## Daily Site Visit Report



Client	XTO Energy Inc. (US)	Inspection Date	5/1/2024
Site Location Name	PLU 68 Battery	API #	
Client Contact Name	Amy Ruth	Project Owner	
Client Contact Phone #	432-661-0571	Project Manager	
Project Reference #			
Unique Project ID			

### Summary of Times

Arrived at Site	5/1/2024 8:15 AM
Departed Site	5/1/2024 11:09 AM

### Field Notes

- 9:35** Arrived on site and met with Standard, XTO, and Wood reps. Discussed better communication through emails and calls regarding digging around existing lines.
- 11:04** Sampled BES24-06 & -08. Both samples screened within criteria for chlorides and TPH.
- 11:04** Samples will be jarred up for submission to lab

### Next Steps & Recommendations

1

# Daily Site Visit Report



## Site Photos

Viewing Direction: Southeast



General excavation area

Viewing Direction: North



Sampling area

Viewing Direction: West



Excavation area south of flare

Viewing Direction: North



General excavation area

## Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Angela Mohle

**Signature:**

A handwritten signature in black ink, appearing to be 'AM', written over a horizontal line.

Signature



## **APPENDIX D – Notifications**

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
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Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS  
  
Action 327636

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 327636
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2402630186
Incident Name	NAPP2402630186 PLU 68 BATTERY @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved

Location of Release Source	
Site Name	PLU 68 Battery
Date Release Discovered	01/15/2024
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,750
What is the estimated number of samples that will be gathered	35
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/01/2024
Time sampling will commence	09:00 AM
Please provide any information necessary for observers to contact samplers	scarttar@vertex.ca
Please provide any information necessary for navigation to sampling site	B-20-24S-31E 32.20688,-103.79816

**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

CONDITIONS

Action 327636

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 327636
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	3/28/2024

**District I**  
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Oil Conservation Division  
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Santa Fe, NM 87505

QUESTIONS  
  
Action 327638

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 327638
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2402630186
Incident Name	NAPP2402630186 PLU 68 BATTERY @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved

Location of Release Source	
Site Name	PLU 68 Battery
Date Release Discovered	01/15/2024
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,750
What is the estimated number of samples that will be gathered	35
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/02/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	scarttar@vertex.ca
Please provide any information necessary for navigation to sampling site	B-20-24S-31E 32.20688,-103.79816

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

CONDITIONS

Action 327638

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 327638
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	3/28/2024



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State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
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Santa Fe, NM 87505

QUESTIONS  
  
Action 327641

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 327641
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2402630186
Incident Name	NAPP2402630186 PLU 68 BATTERY @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved

Location of Release Source	
Site Name	PLU 68 Battery
Date Release Discovered	01/15/2024
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,750
What is the estimated number of samples that will be gathered	35
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/03/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	scarttar@vertex.ca
Please provide any information necessary for navigation to sampling site	B-20-24S-31E 32.20688,-103.79816

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

CONDITIONS

Action 327641

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 327641
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	3/28/2024

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State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
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Santa Fe, NM 87505

QUESTIONS  
  
Action 330423

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 330423
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2402630186
Incident Name	NAPP2402630186 PLU 68 BATTERY @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved

Location of Release Source	
Site Name	PLU 68 Battery
Date Release Discovered	01/15/2024
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	400
What is the estimated number of samples that will be gathered	2
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/09/2024
Time sampling will commence	09:00 AM
Please provide any information necessary for observers to contact samplers	SCarttar@vertex.ca
Please provide any information necessary for navigation to sampling site	B-20-24S-31E 32.20688,-103.79816

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CONDITIONS

Action 330423

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 330423
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	4/5/2024

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

QUESTIONS  
  
Action 330425

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 330425
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2402630186
Incident Name	NAPP2402630186 PLU 68 BATTERY @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved

Location of Release Source	
Site Name	PLU 68 Battery
Date Release Discovered	01/15/2024
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	400
What is the estimated number of samples that will be gathered	2
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/10/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	SCarttar@vertex.ca
Please provide any information necessary for navigation to sampling site	B-20-24S-31E 32.20688,-103.79816



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

CONDITIONS

Action 330425

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 330425
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	4/5/2024

**District I**  
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**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  
  
Action 338069

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 338069
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2402630186
Incident Name	NAPP2402630186 PLU 68 BATTERY @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved

Location of Release Source	
Site Name	PLU 68 Battery
Date Release Discovered	01/15/2024
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	05/01/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	SCarttar@vertex.ca>
Please provide any information necessary for navigation to sampling site	B-20-24S-31E 32.20688,-103.79816

**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

CONDITIONS  
  
Action 338069

CONDITIONS

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  338069
	Action Type:  [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	4/26/2024

## **APPENDIX E – Laboratory Data Reports and Chain of Custody Forms**



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 3/28/2024 4:56:10 PM

## JOB DESCRIPTION

PLU 68 Battery

## JOB NUMBER

885-834-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109



# Eurofins Albuquerque

## Job Notes

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

## Authorization



Generated  
3/28/2024 4:56:10 PM

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

Client: Vertex  
Project/Site: PLU 68 Battery

Laboratory Job ID: 885-834-1



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Definitions/Glossary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Glossary

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

Case Narrative

Client: Vertex  
Project: PLU 68 Battery

Job ID: 885-834-1

Job ID: 885-834-1Eurofins Albuquerque

Job Narrative  
885-834-1

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 3/9/2024 8:30 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 1.0°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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

HPLC/IC

Method 300\_OF\_28D\_PREC: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-1610 and analytical batch 885-1637 were outside control limits for one or more analytes. See QC Sample Results for detail. The associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-06 0'

Lab Sample ID: 885-834-1

Date Collected: 03/07/24 10:00

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/12/24 09:51	03/13/24 18:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 244			03/12/24 09:51	03/13/24 18:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/12/24 09:51	03/13/24 18:18	1
Ethylbenzene	ND		0.049	mg/Kg		03/12/24 09:51	03/13/24 18:18	1
Toluene	ND		0.049	mg/Kg		03/12/24 09:51	03/13/24 18:18	1
Xylenes, Total	ND		0.099	mg/Kg		03/12/24 09:51	03/13/24 18:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			03/12/24 09:51	03/13/24 18:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		03/12/24 14:00	03/12/24 21:08	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		03/12/24 14:00	03/12/24 21:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		69 - 147			03/12/24 14:00	03/12/24 21:08	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		03/12/24 16:30	03/13/24 01:30	20

Client Sample ID: BH24-06 2'

Lab Sample ID: 885-834-2

Date Collected: 03/07/24 10:15

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/12/24 09:51	03/13/24 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 244			03/12/24 09:51	03/13/24 19:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/12/24 09:51	03/13/24 19:24	1
Ethylbenzene	ND		0.048	mg/Kg		03/12/24 09:51	03/13/24 19:24	1
Toluene	ND		0.048	mg/Kg		03/12/24 09:51	03/13/24 19:24	1
Xylenes, Total	ND		0.096	mg/Kg		03/12/24 09:51	03/13/24 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			03/12/24 09:51	03/13/24 19:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		03/12/24 14:00	03/12/24 21:20	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		03/12/24 14:00	03/12/24 21:20	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-06 2'

Lab Sample ID: 885-834-2

Date Collected: 03/07/24 10:15

Matrix: Solid

Date Received: 03/09/24 08:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		69 - 147	03/12/24 14:00	03/12/24 21:20	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/12/24 16:30	03/13/24 01:45	20

Client Sample ID: BH24-08 0'

Lab Sample ID: 885-834-3

Date Collected: 03/07/24 11:00

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/12/24 09:51	03/13/24 20:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 244	03/12/24 09:51	03/13/24 20:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/12/24 09:51	03/13/24 20:29	1
Ethylbenzene	ND		0.049	mg/Kg		03/12/24 09:51	03/13/24 20:29	1
Toluene	ND		0.049	mg/Kg		03/12/24 09:51	03/13/24 20:29	1
Xylenes, Total	ND		0.099	mg/Kg		03/12/24 09:51	03/13/24 20:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146	03/12/24 09:51	03/13/24 20:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		03/12/24 14:00	03/12/24 21:32	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		03/12/24 14:00	03/12/24 21:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		69 - 147	03/12/24 14:00	03/12/24 21:32	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		60	mg/Kg		03/12/24 16:30	03/13/24 10:14	20

Client Sample ID: BH24-08 2'

Lab Sample ID: 885-834-4

Date Collected: 03/07/24 11:15

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/12/24 09:51	03/13/24 20:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 244	03/12/24 09:51	03/13/24 20:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/12/24 09:51	03/13/24 20:51	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-08 2'

Lab Sample ID: 885-834-4

Date Collected: 03/07/24 11:15

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.049	mg/Kg		03/12/24 09:51	03/13/24 20:51	1
Toluene	ND		0.049	mg/Kg		03/12/24 09:51	03/13/24 20:51	1
Xylenes, Total	ND		0.099	mg/Kg		03/12/24 09:51	03/13/24 20:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			03/12/24 09:51	03/13/24 20:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		03/12/24 14:00	03/12/24 21:44	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		03/12/24 14:00	03/12/24 21:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		69 - 147			03/12/24 14:00	03/12/24 21:44	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/12/24 16:30	03/13/24 03:16	20

Client Sample ID: BH24-09 0'

Lab Sample ID: 885-834-5

Date Collected: 03/07/24 11:30

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/12/24 09:51	03/13/24 21:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 244			03/12/24 09:51	03/13/24 21:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/12/24 09:51	03/13/24 21:35	1
Ethylbenzene	ND		0.048	mg/Kg		03/12/24 09:51	03/13/24 21:35	1
Toluene	ND		0.048	mg/Kg		03/12/24 09:51	03/13/24 21:35	1
Xylenes, Total	ND		0.095	mg/Kg		03/12/24 09:51	03/13/24 21:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			03/12/24 09:51	03/13/24 21:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		03/12/24 14:00	03/12/24 21:56	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		03/12/24 14:00	03/12/24 21:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		69 - 147			03/12/24 14:00	03/12/24 21:56	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		60	mg/Kg		03/12/24 16:30	03/13/24 03:31	20

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-09 2'

Lab Sample ID: 885-834-6

Date Collected: 03/07/24 11:45

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/12/24 09:51	03/13/24 21:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 244			03/12/24 09:51	03/13/24 21:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/12/24 09:51	03/13/24 21:56	1
Ethylbenzene	ND		0.048	mg/Kg		03/12/24 09:51	03/13/24 21:56	1
Toluene	ND		0.048	mg/Kg		03/12/24 09:51	03/13/24 21:56	1
Xylenes, Total	ND		0.096	mg/Kg		03/12/24 09:51	03/13/24 21:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			03/12/24 09:51	03/13/24 21:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		03/12/24 14:00	03/12/24 22:09	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		03/12/24 14:00	03/12/24 22:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		69 - 147			03/12/24 14:00	03/12/24 22:09	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/12/24 16:30	03/13/24 03:46	20

Client Sample ID: BH24-12 0'

Lab Sample ID: 885-834-7

Date Collected: 03/07/24 12:30

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/12/24 09:51	03/13/24 22:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 244			03/12/24 09:51	03/13/24 22:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/12/24 09:51	03/13/24 22:18	1
Ethylbenzene	ND		0.048	mg/Kg		03/12/24 09:51	03/13/24 22:18	1
Toluene	ND		0.048	mg/Kg		03/12/24 09:51	03/13/24 22:18	1
Xylenes, Total	ND		0.095	mg/Kg		03/12/24 09:51	03/13/24 22:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			03/12/24 09:51	03/13/24 22:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	14		9.0	mg/Kg		03/12/24 14:00	03/12/24 22:21	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		03/12/24 14:00	03/12/24 22:21	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-12 0'

Lab Sample ID: 885-834-7

Date Collected: 03/07/24 12:30

Matrix: Solid

Date Received: 03/09/24 08:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		69 - 147	03/12/24 14:00	03/12/24 22:21	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89		60	mg/Kg		03/12/24 16:30	03/13/24 04:02	20

Client Sample ID: BH24-12 2'

Lab Sample ID: 885-834-8

Date Collected: 03/07/24 12:45

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/12/24 09:51	03/13/24 22:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 244	03/12/24 09:51	03/13/24 22:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/12/24 09:51	03/13/24 22:40	1
Ethylbenzene	ND		0.049	mg/Kg		03/12/24 09:51	03/13/24 22:40	1
Toluene	ND		0.049	mg/Kg		03/12/24 09:51	03/13/24 22:40	1
Xylenes, Total	ND		0.099	mg/Kg		03/12/24 09:51	03/13/24 22:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146	03/12/24 09:51	03/13/24 22:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.6	mg/Kg		03/12/24 14:00	03/12/24 22:45	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		03/12/24 14:00	03/12/24 22:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		69 - 147	03/12/24 14:00	03/12/24 22:45	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/12/24 16:30	03/13/24 04:17	20

Client Sample ID: BH24-13 0'

Lab Sample ID: 885-834-9

Date Collected: 03/07/24 13:00

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		03/12/24 09:51	03/13/24 23:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 244	03/12/24 09:51	03/13/24 23:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/12/24 09:51	03/13/24 23:02	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-13 0'

Lab Sample ID: 885-834-9

Date Collected: 03/07/24 13:00

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.047	mg/Kg		03/12/24 09:51	03/13/24 23:02	1
Toluene	ND		0.047	mg/Kg		03/12/24 09:51	03/13/24 23:02	1
Xylenes, Total	ND		0.094	mg/Kg		03/12/24 09:51	03/13/24 23:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			03/12/24 09:51	03/13/24 23:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	22		9.6	mg/Kg		03/12/24 14:00	03/12/24 22:57	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		03/12/24 14:00	03/12/24 22:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		69 - 147			03/12/24 14:00	03/12/24 22:57	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		60	mg/Kg		03/12/24 16:30	03/13/24 04:32	20

Client Sample ID: BH24-13 2'

Lab Sample ID: 885-834-10

Date Collected: 03/07/24 13:15

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		03/12/24 09:51	03/13/24 23:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 244			03/12/24 09:51	03/13/24 23:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/12/24 09:51	03/13/24 23:24	1
Ethylbenzene	ND		0.046	mg/Kg		03/12/24 09:51	03/13/24 23:24	1
Toluene	ND		0.046	mg/Kg		03/12/24 09:51	03/13/24 23:24	1
Xylenes, Total	ND		0.092	mg/Kg		03/12/24 09:51	03/13/24 23:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			03/12/24 09:51	03/13/24 23:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		03/12/24 14:00	03/12/24 23:09	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		03/12/24 14:00	03/12/24 23:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		69 - 147			03/12/24 14:00	03/12/24 23:09	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/12/24 16:30	03/13/24 04:47	20

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-14 0'

Lab Sample ID: 885-834-11

Date Collected: 03/07/24 13:30

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		03/12/24 09:51	03/13/24 23:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 244			03/12/24 09:51	03/13/24 23:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/12/24 09:51	03/13/24 23:45	1
Ethylbenzene	ND		0.046	mg/Kg		03/12/24 09:51	03/13/24 23:45	1
Toluene	ND		0.046	mg/Kg		03/12/24 09:51	03/13/24 23:45	1
Xylenes, Total	ND		0.093	mg/Kg		03/12/24 09:51	03/13/24 23:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		39 - 146			03/12/24 09:51	03/13/24 23:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	51		9.1	mg/Kg		03/12/24 14:00	03/12/24 23:33	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		03/12/24 14:00	03/12/24 23:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		69 - 147			03/12/24 14:00	03/12/24 23:33	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	600		60	mg/Kg		03/12/24 16:30	03/13/24 05:02	20

Client Sample ID: BH24-14 2'

Lab Sample ID: 885-834-12

Date Collected: 03/07/24 13:45

Matrix: Solid

Date Received: 03/09/24 08:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/12/24 09:51	03/14/24 00:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 244			03/12/24 09:51	03/14/24 00:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/12/24 09:51	03/14/24 00:07	1
Ethylbenzene	ND		0.049	mg/Kg		03/12/24 09:51	03/14/24 00:07	1
Toluene	ND		0.049	mg/Kg		03/12/24 09:51	03/14/24 00:07	1
Xylenes, Total	ND		0.098	mg/Kg		03/12/24 09:51	03/14/24 00:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			03/12/24 09:51	03/14/24 00:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		03/12/24 14:00	03/12/24 23:45	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		03/12/24 14:00	03/12/24 23:45	1

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Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-14 2'

Date Collected: 03/07/24 13:45

Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-12

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		69 - 147	03/12/24 14:00	03/12/24 23:45	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/12/24 16:30	03/13/24 05:17	20

## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

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

Lab Sample ID: MB 885-1570/1-A

Matrix: Solid

Analysis Batch: 1717

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1570

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		03/12/24 09:51	03/13/24 15:46	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244			03/12/24 09:51	03/13/24 15:46	1

Lab Sample ID: LCS 885-1570/2-A

Matrix: Solid

Analysis Batch: 1717

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1570

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	22.7		mg/Kg		91	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	203		15 - 244				

Lab Sample ID: 885-834-1 MS

Matrix: Solid

Analysis Batch: 1717

Client Sample ID: BH24-06 0'

Prep Type: Total/NA

Prep Batch: 1570

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.9	18.7		mg/Kg		75	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	194		15 - 244						

Lab Sample ID: 885-834-1 MSD

Matrix: Solid

Analysis Batch: 1717

Client Sample ID: BH24-06 0'

Prep Type: Total/NA

Prep Batch: 1570

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.8	20.5		mg/Kg		83	70 - 130	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	200		15 - 244								

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

Lab Sample ID: MB 885-1570/1-A

Matrix: Solid

Analysis Batch: 1775

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1570

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/12/24 09:51	03/13/24 15:46	1
Ethylbenzene	ND		0.050	mg/Kg		03/12/24 09:51	03/13/24 15:46	1
Toluene	ND		0.050	mg/Kg		03/12/24 09:51	03/13/24 15:46	1

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QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

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

Lab Sample ID: MB 885-1570/1-A					Client Sample ID: Method Blank				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 1775					Prep Batch: 1570				
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Factor	
Xylenes, Total	ND		0.10	mg/Kg		03/12/24 09:51	03/13/24 15:46	1	
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Factor	
4-Bromofluorobenzene (Surr)	87		39 - 146			03/12/24 09:51	03/13/24 15:46	1	

Lab Sample ID: LCS 885-1570/3-A					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 1775					Prep Batch: 1570				
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene			1.00	0.856		mg/Kg		86	70 - 130
Ethylbenzene			1.00	0.860		mg/Kg		86	70 - 130
o-Xylene			1.00	0.864		mg/Kg		86	70 - 130
Toluene			1.00	0.861		mg/Kg		86	70 - 130
Xylenes, Total			3.00	2.59		mg/Kg		86	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		39 - 146						

Lab Sample ID: 885-834-2 MS					Client Sample ID: BH24-06 2'				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 1775					Prep Batch: 1570				
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.957	0.854		mg/Kg		89	70 - 130
Ethylbenzene	ND		0.957	0.874		mg/Kg		91	70 - 130
o-Xylene	ND		0.957	0.878		mg/Kg		92	70 - 130
Toluene	ND		0.957	0.864		mg/Kg		90	70 - 130
Xylenes, Total	ND		2.87	2.62		mg/Kg		91	70 - 130
Surrogate	%Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	86		39 - 146						

Lab Sample ID: 885-834-2 MSD							Client Sample ID: BH24-06 2'				
Matrix: Solid							Prep Type: Total/NA				
Analysis Batch: 1775							Prep Batch: 1570				
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.962	0.880		mg/Kg		91	70 - 130	3	20
Ethylbenzene	ND		0.962	0.895		mg/Kg		93	70 - 130	2	20
o-Xylene	ND		0.962	0.890		mg/Kg		92	70 - 130	1	20
Toluene	ND		0.962	0.883		mg/Kg		92	70 - 130	2	20
Xylenes, Total	ND		2.89	2.67		mg/Kg		93	70 - 130	2	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	87		39 - 146								

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

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

Lab Sample ID: MB 885-1591/1-A

Matrix: Solid

Analysis Batch: 1646

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1591

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		03/12/24 14:00	03/12/24 20:43	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		03/12/24 14:00	03/12/24 20:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		69 - 147			03/12/24 14:00	03/12/24 20:43	1

Lab Sample ID: LCS 885-1591/2-A

Matrix: Solid

Analysis Batch: 1646

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Diesel Range Organics [C10-C28]	50.0	38.8		mg/Kg		78	62 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Di-n-octyl phthalate (Surr)	94		69 - 147					

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-1587/1-A

Matrix: Solid

Analysis Batch: 1637

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1587

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		03/12/24 13:11	03/12/24 14:54	1

Lab Sample ID: LCS 885-1587/2-A

Matrix: Solid

Analysis Batch: 1637

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	15.0	14.2		mg/Kg		94	90 - 110	

Lab Sample ID: MB 885-1610/1-A

Matrix: Solid

Analysis Batch: 1637

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1610

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		03/12/24 16:30	03/12/24 22:28	1

Lab Sample ID: LCS 885-1610/2-A

Matrix: Solid

Analysis Batch: 1637

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1610

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	15.0	14.2		mg/Kg		95	90 - 110	

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QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-834-2 MS										Client Sample ID: BH24-06 2'				
Matrix: Solid										Prep Type: Total/NA				
Analysis Batch: 1637										Prep Batch: 1610				
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits					
Chloride	ND		29.9	ND		mg/Kg		NC	50 - 150					

Lab Sample ID: 885-834-2 MSD										Client Sample ID: BH24-06 2'				
Matrix: Solid										Prep Type: Total/NA				
Analysis Batch: 1637										Prep Batch: 1610				
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit			
Chloride	ND		29.9	ND		mg/Kg		NC	50 - 150	NC	20			

## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

## GC VOA

## Prep Batch: 1570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-834-1	BH24-06 0'	Total/NA	Solid	5030C	
885-834-2	BH24-06 2'	Total/NA	Solid	5030C	
885-834-3	BH24-08 0'	Total/NA	Solid	5030C	
885-834-4	BH24-08 2'	Total/NA	Solid	5030C	
885-834-5	BH24-09 0'	Total/NA	Solid	5030C	
885-834-6	BH24-09 2'	Total/NA	Solid	5030C	
885-834-7	BH24-12 0'	Total/NA	Solid	5030C	
885-834-8	BH24-12 2'	Total/NA	Solid	5030C	
885-834-9	BH24-13 0'	Total/NA	Solid	5030C	
885-834-10	BH24-13 2'	Total/NA	Solid	5030C	
885-834-11	BH24-14 0'	Total/NA	Solid	5030C	
885-834-12	BH24-14 2'	Total/NA	Solid	5030C	
MB 885-1570/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-1570/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-1570/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-834-1 MS	BH24-06 0'	Total/NA	Solid	5030C	
885-834-1 MSD	BH24-06 0'	Total/NA	Solid	5030C	
885-834-2 MS	BH24-06 2'	Total/NA	Solid	5030C	
885-834-2 MSD	BH24-06 2'	Total/NA	Solid	5030C	

## Analysis Batch: 1717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-834-1	BH24-06 0'	Total/NA	Solid	8015D	1570
885-834-2	BH24-06 2'	Total/NA	Solid	8015D	1570
885-834-3	BH24-08 0'	Total/NA	Solid	8015D	1570
885-834-4	BH24-08 2'	Total/NA	Solid	8015D	1570
885-834-5	BH24-09 0'	Total/NA	Solid	8015D	1570
885-834-6	BH24-09 2'	Total/NA	Solid	8015D	1570
885-834-7	BH24-12 0'	Total/NA	Solid	8015D	1570
885-834-8	BH24-12 2'	Total/NA	Solid	8015D	1570
885-834-9	BH24-13 0'	Total/NA	Solid	8015D	1570
885-834-10	BH24-13 2'	Total/NA	Solid	8015D	1570
885-834-11	BH24-14 0'	Total/NA	Solid	8015D	1570
885-834-12	BH24-14 2'	Total/NA	Solid	8015D	1570
MB 885-1570/1-A	Method Blank	Total/NA	Solid	8015D	1570
LCS 885-1570/2-A	Lab Control Sample	Total/NA	Solid	8015D	1570
885-834-1 MS	BH24-06 0'	Total/NA	Solid	8015D	1570
885-834-1 MSD	BH24-06 0'	Total/NA	Solid	8015D	1570

## Analysis Batch: 1775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-834-1	BH24-06 0'	Total/NA	Solid	8021B	1570
885-834-2	BH24-06 2'	Total/NA	Solid	8021B	1570
885-834-3	BH24-08 0'	Total/NA	Solid	8021B	1570
885-834-4	BH24-08 2'	Total/NA	Solid	8021B	1570
885-834-5	BH24-09 0'	Total/NA	Solid	8021B	1570
885-834-6	BH24-09 2'	Total/NA	Solid	8021B	1570
885-834-7	BH24-12 0'	Total/NA	Solid	8021B	1570
885-834-8	BH24-12 2'	Total/NA	Solid	8021B	1570
885-834-9	BH24-13 0'	Total/NA	Solid	8021B	1570
885-834-10	BH24-13 2'	Total/NA	Solid	8021B	1570

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

## GC VOA (Continued)

## Analysis Batch: 1775 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-834-11	BH24-14 0'	Total/NA	Solid	8021B	1570
885-834-12	BH24-14 2'	Total/NA	Solid	8021B	1570
MB 885-1570/1-A	Method Blank	Total/NA	Solid	8021B	1570
LCS 885-1570/3-A	Lab Control Sample	Total/NA	Solid	8021B	1570
885-834-2 MS	BH24-06 2'	Total/NA	Solid	8021B	1570
885-834-2 MSD	BH24-06 2'	Total/NA	Solid	8021B	1570

## GC Semi VOA

## Prep Batch: 1591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-834-1	BH24-06 0'	Total/NA	Solid	SHAKE	
885-834-2	BH24-06 2'	Total/NA	Solid	SHAKE	
885-834-3	BH24-08 0'	Total/NA	Solid	SHAKE	
885-834-4	BH24-08 2'	Total/NA	Solid	SHAKE	
885-834-5	BH24-09 0'	Total/NA	Solid	SHAKE	
885-834-6	BH24-09 2'	Total/NA	Solid	SHAKE	
885-834-7	BH24-12 0'	Total/NA	Solid	SHAKE	
885-834-8	BH24-12 2'	Total/NA	Solid	SHAKE	
885-834-9	BH24-13 0'	Total/NA	Solid	SHAKE	
885-834-10	BH24-13 2'	Total/NA	Solid	SHAKE	
885-834-11	BH24-14 0'	Total/NA	Solid	SHAKE	
885-834-12	BH24-14 2'	Total/NA	Solid	SHAKE	
MB 885-1591/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-1591/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 1646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-834-1	BH24-06 0'	Total/NA	Solid	8015D	1591
885-834-2	BH24-06 2'	Total/NA	Solid	8015D	1591
885-834-3	BH24-08 0'	Total/NA	Solid	8015D	1591
885-834-4	BH24-08 2'	Total/NA	Solid	8015D	1591
885-834-5	BH24-09 0'	Total/NA	Solid	8015D	1591
885-834-6	BH24-09 2'	Total/NA	Solid	8015D	1591
885-834-7	BH24-12 0'	Total/NA	Solid	8015D	1591
885-834-8	BH24-12 2'	Total/NA	Solid	8015D	1591
885-834-9	BH24-13 0'	Total/NA	Solid	8015D	1591
885-834-10	BH24-13 2'	Total/NA	Solid	8015D	1591
885-834-11	BH24-14 0'	Total/NA	Solid	8015D	1591
885-834-12	BH24-14 2'	Total/NA	Solid	8015D	1591
MB 885-1591/1-A	Method Blank	Total/NA	Solid	8015D	1591
LCS 885-1591/2-A	Lab Control Sample	Total/NA	Solid	8015D	1591

## HPLC/IC

## Prep Batch: 1587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-1587/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-1587/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

## HPLC/IC

## Prep Batch: 1610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-834-1	BH24-06 0'	Total/NA	Solid	300_Prep	
885-834-2	BH24-06 2'	Total/NA	Solid	300_Prep	
885-834-3	BH24-08 0'	Total/NA	Solid	300_Prep	
885-834-4	BH24-08 2'	Total/NA	Solid	300_Prep	
885-834-5	BH24-09 0'	Total/NA	Solid	300_Prep	
885-834-6	BH24-09 2'	Total/NA	Solid	300_Prep	
885-834-7	BH24-12 0'	Total/NA	Solid	300_Prep	
885-834-8	BH24-12 2'	Total/NA	Solid	300_Prep	
885-834-9	BH24-13 0'	Total/NA	Solid	300_Prep	
885-834-10	BH24-13 2'	Total/NA	Solid	300_Prep	
885-834-11	BH24-14 0'	Total/NA	Solid	300_Prep	
885-834-12	BH24-14 2'	Total/NA	Solid	300_Prep	
MB 885-1610/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-1610/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-834-2 MS	BH24-06 2'	Total/NA	Solid	300_Prep	
885-834-2 MSD	BH24-06 2'	Total/NA	Solid	300_Prep	

## Analysis Batch: 1637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-834-1	BH24-06 0'	Total/NA	Solid	300.0	1610
885-834-2	BH24-06 2'	Total/NA	Solid	300.0	1610
885-834-4	BH24-08 2'	Total/NA	Solid	300.0	1610
885-834-5	BH24-09 0'	Total/NA	Solid	300.0	1610
885-834-6	BH24-09 2'	Total/NA	Solid	300.0	1610
885-834-7	BH24-12 0'	Total/NA	Solid	300.0	1610
885-834-8	BH24-12 2'	Total/NA	Solid	300.0	1610
885-834-9	BH24-13 0'	Total/NA	Solid	300.0	1610
885-834-10	BH24-13 2'	Total/NA	Solid	300.0	1610
885-834-11	BH24-14 0'	Total/NA	Solid	300.0	1610
885-834-12	BH24-14 2'	Total/NA	Solid	300.0	1610
MB 885-1587/1-A	Method Blank	Total/NA	Solid	300.0	1587
MB 885-1610/1-A	Method Blank	Total/NA	Solid	300.0	1610
LCS 885-1587/2-A	Lab Control Sample	Total/NA	Solid	300.0	1587
LCS 885-1610/2-A	Lab Control Sample	Total/NA	Solid	300.0	1610
885-834-2 MS	BH24-06 2'	Total/NA	Solid	300.0	1610
885-834-2 MSD	BH24-06 2'	Total/NA	Solid	300.0	1610

## Analysis Batch: 1697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-834-3	BH24-08 0'	Total/NA	Solid	300.0	1610

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-06 0'  
Date Collected: 03/07/24 10:00  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 18:18
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 18:18
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 21:08
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 01:30

Client Sample ID: BH24-06 2'  
Date Collected: 03/07/24 10:15  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-2  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 19:24
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 19:24
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 21:20
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 01:45

Client Sample ID: BH24-08 0'  
Date Collected: 03/07/24 11:00  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-3  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 20:29
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 20:29
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 21:32
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1697	KB	EET ALB	03/13/24 10:14

Client Sample ID: BH24-08 2'  
Date Collected: 03/07/24 11:15  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-4  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 20:51



Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

**Client Sample ID: BH24-08 2'**  
**Date Collected: 03/07/24 11:15**  
**Date Received: 03/09/24 08:30**

**Lab Sample ID: 885-834-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 20:51
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 21:44
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 03:16

**Client Sample ID: BH24-09 0'**  
**Date Collected: 03/07/24 11:30**  
**Date Received: 03/09/24 08:30**

**Lab Sample ID: 885-834-5**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 21:35
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 21:35
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 21:56
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 03:31

**Client Sample ID: BH24-09 2'**  
**Date Collected: 03/07/24 11:45**  
**Date Received: 03/09/24 08:30**

**Lab Sample ID: 885-834-6**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 21:56
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 21:56
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 22:09
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 03:46

**Client Sample ID: BH24-12 0'**  
**Date Collected: 03/07/24 12:30**  
**Date Received: 03/09/24 08:30**

**Lab Sample ID: 885-834-7**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 22:18
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 22:18

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-12 0'  
Date Collected: 03/07/24 12:30  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-7  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 22:21
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 04:02

Client Sample ID: BH24-12 2'  
Date Collected: 03/07/24 12:45  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-8  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 22:40
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 22:40
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 22:45
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 04:17

Client Sample ID: BH24-13 0'  
Date Collected: 03/07/24 13:00  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-9  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 23:02
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 23:02
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 22:57
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 04:32

Client Sample ID: BH24-13 2'  
Date Collected: 03/07/24 13:15  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-10  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 23:24
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 23:24
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 23:09

Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Client Sample ID: BH24-13 2'  
Date Collected: 03/07/24 13:15  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-10  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 04:47

Client Sample ID: BH24-14 0'  
Date Collected: 03/07/24 13:30  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-11  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/13/24 23:45
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/13/24 23:45
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 23:33
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 05:02

Client Sample ID: BH24-14 2'  
Date Collected: 03/07/24 13:45  
Date Received: 03/09/24 08:30

Lab Sample ID: 885-834-12  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8015D		1	1717	IMR	EET ALB	03/14/24 00:07
Total/NA	Prep	5030C			1570	IMR	EET ALB	03/12/24 09:51
Total/NA	Analysis	8021B		1	1775	IMR	EET ALB	03/14/24 00:07
Total/NA	Prep	SHAKE			1591	JU	EET ALB	03/12/24 14:00
Total/NA	Analysis	8015D		1	1646	JU	EET ALB	03/12/24 23:45
Total/NA	Prep	300_Prep			1610	KB	EET ALB	03/12/24 16:30
Total/NA	Analysis	300.0		20	1637	KB	EET ALB	03/13/24 05:17

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

Accreditation/Certification Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Method Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-834-1

Method	Method Description	Protocol	Laboratory
8015D	Gasoline Range Organics (GRO) (GC)	SW846	EET ALB
8021B	Volatile Organic Compounds (GC)	SW846	EET ALB
8015D	Diesel Range Organics (DRO) (GC)	SW846	EET ALB
300.0	Anions, Ion Chromatography	EPA	EET ALB
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	EPA	EET ALB
5030C	Purge and Trap	SW846	EET ALB
SHAKE	Preparation, Shake Jar	TestAmerica SOP	EET ALB

Protocol References:

- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TestAmerica SOP = TestAmerica, Inc., Standard Operating Procedure

Laboratory References:

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





## Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-834-1

Login Number: 834

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

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



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 4/2/2024 9:17:47 PM

## JOB DESCRIPTION

PLU 68 Battery

## JOB NUMBER

885-993-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109

# Eurofins Albuquerque

## Job Notes

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

## Authorization



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

Client: Vertex  
Project/Site: PLU 68 Battery

Laboratory Job ID: 885-993-1



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Definitions/Glossary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

Qualifiers

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex  
Project: PLU 68 Battery

Job ID: 885-993-1

Job ID: 885-993-1Eurofins Albuquerque

Job Narrative  
885-993-1

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

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

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

Receipt

The samples were received on 3/12/2024 9:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received, no Project name listed. Client contacted and provided Project name.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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

HPLC/IC

Method 300\_OF\_28D\_PREC: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-1780 and analytical batch 885-1813 were outside control limits for one or more analytes. See QC Sample Results for detail. Spike concentration was diluted out; the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

Client Sample ID: BH24-15 2ft

Lab Sample ID: 885-993-1

Date Collected: 03/08/24 10:30

Matrix: Solid

Date Received: 03/12/24 09:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/13/24 15:53	03/18/24 16:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 244			03/13/24 15:53	03/18/24 16:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/13/24 15:53	03/14/24 18:30	1
Ethylbenzene	ND		0.048	mg/Kg		03/13/24 15:53	03/14/24 18:30	1
Toluene	ND		0.048	mg/Kg		03/13/24 15:53	03/14/24 18:30	1
Xylenes, Total	ND		0.096	mg/Kg		03/13/24 15:53	03/14/24 18:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			03/13/24 15:53	03/14/24 18:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		03/14/24 14:20	03/15/24 22:24	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		03/14/24 14:20	03/15/24 22:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		69 - 147			03/14/24 14:20	03/15/24 22:24	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98		61	mg/Kg		03/15/24 11:40	03/15/24 17:33	20

Client Sample ID: BH24-15 4ft

Lab Sample ID: 885-993-2

Date Collected: 03/08/24 10:45

Matrix: Solid

Date Received: 03/12/24 09:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/13/24 15:53	03/18/24 16:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 244			03/13/24 15:53	03/18/24 16:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/13/24 15:53	03/14/24 18:52	1
Ethylbenzene	ND		0.048	mg/Kg		03/13/24 15:53	03/14/24 18:52	1
Toluene	ND		0.048	mg/Kg		03/13/24 15:53	03/14/24 18:52	1
Xylenes, Total	ND		0.096	mg/Kg		03/13/24 15:53	03/14/24 18:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		39 - 146			03/13/24 15:53	03/14/24 18:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	210		9.6	mg/Kg		03/14/24 14:20	03/15/24 22:47	1
Motor Oil Range Organics [C28-C40]	130		48	mg/Kg		03/14/24 14:20	03/15/24 22:47	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

Client Sample ID: BH24-15 4ft

Lab Sample ID: 885-993-2

Date Collected: 03/08/24 10:45

Matrix: Solid

Date Received: 03/12/24 09:05

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		69 - 147	03/14/24 14:20	03/15/24 22:47	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		60	mg/Kg		03/15/24 11:40	03/15/24 18:18	20

Client Sample ID: BH24-16 0ft

Lab Sample ID: 885-993-3

Date Collected: 03/08/24 10:00

Matrix: Solid

Date Received: 03/12/24 09:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/13/24 15:53	03/18/24 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 244	03/13/24 15:53	03/18/24 17:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/13/24 15:53	03/14/24 19:14	1
Ethylbenzene	ND		0.048	mg/Kg		03/13/24 15:53	03/14/24 19:14	1
Toluene	ND		0.048	mg/Kg		03/13/24 15:53	03/14/24 19:14	1
Xylenes, Total	ND		0.095	mg/Kg		03/13/24 15:53	03/14/24 19:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146	03/13/24 15:53	03/14/24 19:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		03/14/24 14:20	03/15/24 23:11	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		03/14/24 14:20	03/15/24 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		69 - 147	03/14/24 14:20	03/15/24 23:11	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/15/24 11:40	03/15/24 18:34	20

Client Sample ID: BH24-16 2ft

Lab Sample ID: 885-993-4

Date Collected: 03/08/24 10:15

Matrix: Solid

Date Received: 03/12/24 09:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/13/24 15:53	03/18/24 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 244	03/13/24 15:53	03/18/24 17:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/13/24 15:53	03/14/24 19:35	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

Client Sample ID: BH24-16 2ft

Lab Sample ID: 885-993-4

Date Collected: 03/08/24 10:15

Matrix: Solid

Date Received: 03/12/24 09:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.049	mg/Kg		03/13/24 15:53	03/14/24 19:35	1
Toluene	ND		0.049	mg/Kg		03/13/24 15:53	03/14/24 19:35	1
Xylenes, Total	ND		0.099	mg/Kg		03/13/24 15:53	03/14/24 19:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			03/13/24 15:53	03/14/24 19:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		03/14/24 14:20	03/15/24 23:34	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		03/14/24 14:20	03/15/24 23:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		69 - 147			03/14/24 14:20	03/15/24 23:34	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/15/24 11:40	03/15/24 18:49	20

Client Sample ID: BH24-17 0ft

Lab Sample ID: 885-993-5

Date Collected: 03/08/24 11:00

Matrix: Solid

Date Received: 03/12/24 09:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		03/13/24 15:53	03/18/24 17:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 244			03/13/24 15:53	03/18/24 17:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/13/24 15:53	03/14/24 19:57	1
Ethylbenzene	ND		0.047	mg/Kg		03/13/24 15:53	03/14/24 19:57	1
Toluene	ND		0.047	mg/Kg		03/13/24 15:53	03/14/24 19:57	1
Xylenes, Total	ND		0.094	mg/Kg		03/13/24 15:53	03/14/24 19:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			03/13/24 15:53	03/14/24 19:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		7.9	mg/Kg		03/14/24 14:20	03/15/24 23:58	1
Motor Oil Range Organics [C28-C40]	ND		39	mg/Kg		03/14/24 14:20	03/15/24 23:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		69 - 147			03/14/24 14:20	03/15/24 23:58	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		61	mg/Kg		03/15/24 11:40	03/15/24 19:04	20

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

Client Sample ID: BH24-17 2ft

Lab Sample ID: 885-993-6

Date Collected: 03/08/24 11:15

Matrix: Solid

Date Received: 03/12/24 09:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/13/24 15:53	03/18/24 18:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 244	03/13/24 15:53	03/18/24 18:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/13/24 15:53	03/14/24 20:19	1
Ethylbenzene	ND		0.049	mg/Kg		03/13/24 15:53	03/14/24 20:19	1
Toluene	ND		0.049	mg/Kg		03/13/24 15:53	03/14/24 20:19	1
Xylenes, Total	ND		0.099	mg/Kg		03/13/24 15:53	03/14/24 20:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146	03/13/24 15:53	03/14/24 20:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		03/14/24 14:20	03/16/24 00:21	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		03/14/24 14:20	03/16/24 00:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		69 - 147	03/14/24 14:20	03/16/24 00:21	1

## Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		03/15/24 11:40	03/15/24 19:49	20

Eurofins Albuquerque

## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

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

Lab Sample ID: MB 885-1670/1-A

Matrix: Solid

Analysis Batch: 1972

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1670

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		03/13/24 15:53	03/18/24 10:53	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 244			03/13/24 15:53	03/18/24 10:53	1

Lab Sample ID: LCS 885-1670/2-A

Matrix: Solid

Analysis Batch: 1972

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	21.1		mg/Kg		84	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	204		15 - 244				

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

Lab Sample ID: MB 885-1670/1-A

Matrix: Solid

Analysis Batch: 1783

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1670

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/13/24 15:53	03/14/24 12:20	1
Ethylbenzene	ND		0.050	mg/Kg		03/13/24 15:53	03/14/24 12:20	1
Toluene	ND		0.050	mg/Kg		03/13/24 15:53	03/14/24 12:20	1
Xylenes, Total	ND		0.10	mg/Kg		03/13/24 15:53	03/14/24 12:20	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			03/13/24 15:53	03/14/24 12:20	1

Lab Sample ID: LCS 885-1670/3-A

Matrix: Solid

Analysis Batch: 1783

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.857		mg/Kg		86	70 - 130
Ethylbenzene	1.00	0.863		mg/Kg		86	70 - 130
m,p-Xylene	2.00	1.73		mg/Kg		86	70 - 130
o-Xylene	1.00	0.863		mg/Kg		86	70 - 130
Toluene	1.00	0.860		mg/Kg		86	70 - 130
Xylenes, Total	3.00	2.59		mg/Kg		86	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	90		39 - 146				

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

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

Lab Sample ID: MB 885-1732/1-A

Matrix: Solid

Analysis Batch: 1807

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1732

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		03/14/24 14:20	03/15/24 15:43	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		03/14/24 14:20	03/15/24 15:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	119		69 - 147			03/14/24 14:20	03/15/24 15:43	1

Lab Sample ID: LCS 885-1732/2-A

Matrix: Solid

Analysis Batch: 1807

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1732

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	52.1		mg/Kg		104	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	103		69 - 147				

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-1780/1-A

Matrix: Solid

Analysis Batch: 1813

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1780

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		03/15/24 11:40	03/15/24 12:46	1

Lab Sample ID: LCS 885-1780/2-A

Matrix: Solid

Analysis Batch: 1813

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1780

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

Lab Sample ID: 885-993-5 MS

Matrix: Solid

Analysis Batch: 1813

Client Sample ID: BH24-17 0ft

Prep Type: Total/NA

Prep Batch: 1780

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	120		29.8	120	4	mg/Kg		-16	50 - 150

Lab Sample ID: 885-993-5 MSD

Matrix: Solid

Analysis Batch: 1813

Client Sample ID: BH24-17 0ft

Prep Type: Total/NA

Prep Batch: 1780

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
Chloride	120		29.9	143	4	mg/Kg		61	50 - 150	18 20

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-993-6 MS

Matrix: Solid

Analysis Batch: 1813

Client Sample ID: BH24-17 2ft

Prep Type: Total/NA

Prep Batch: 1780

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		29.8	ND		mg/Kg		NC	50 - 150

Lab Sample ID: 885-993-6 MSD

Matrix: Solid

Analysis Batch: 1813

Client Sample ID: BH24-17 2ft

Prep Type: Total/NA

Prep Batch: 1780

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		30.0	ND		mg/Kg		NC	50 - 150	NC	20

Lab Sample ID: MB 885-1813/4

Matrix: Solid

Analysis Batch: 1813

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/Kg			03/15/24 12:15	1

Lab Sample ID: MRL 885-1813/3

Matrix: Solid

Analysis Batch: 1813

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

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

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

## GC VOA

## Prep Batch: 1670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-993-1	BH24-15 2ft	Total/NA	Solid	5030C	
885-993-2	BH24-15 4ft	Total/NA	Solid	5030C	
885-993-3	BH24-16 0ft	Total/NA	Solid	5030C	
885-993-4	BH24-16 2ft	Total/NA	Solid	5030C	
885-993-5	BH24-17 0ft	Total/NA	Solid	5030C	
885-993-6	BH24-17 2ft	Total/NA	Solid	5030C	
MB 885-1670/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-1670/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-1670/3-A	Lab Control Sample	Total/NA	Solid	5030C	

## Analysis Batch: 1783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-993-1	BH24-15 2ft	Total/NA	Solid	8021B	1670
885-993-2	BH24-15 4ft	Total/NA	Solid	8021B	1670
885-993-3	BH24-16 0ft	Total/NA	Solid	8021B	1670
885-993-4	BH24-16 2ft	Total/NA	Solid	8021B	1670
885-993-5	BH24-17 0ft	Total/NA	Solid	8021B	1670
885-993-6	BH24-17 2ft	Total/NA	Solid	8021B	1670
MB 885-1670/1-A	Method Blank	Total/NA	Solid	8021B	1670
LCS 885-1670/3-A	Lab Control Sample	Total/NA	Solid	8021B	1670

## Analysis Batch: 1972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-993-1	BH24-15 2ft	Total/NA	Solid	8015D	1670
885-993-2	BH24-15 4ft	Total/NA	Solid	8015D	1670
885-993-3	BH24-16 0ft	Total/NA	Solid	8015D	1670
885-993-4	BH24-16 2ft	Total/NA	Solid	8015D	1670
885-993-5	BH24-17 0ft	Total/NA	Solid	8015D	1670
885-993-6	BH24-17 2ft	Total/NA	Solid	8015D	1670
MB 885-1670/1-A	Method Blank	Total/NA	Solid	8015D	1670
LCS 885-1670/2-A	Lab Control Sample	Total/NA	Solid	8015D	1670

## GC Semi VOA

## Prep Batch: 1732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-993-1	BH24-15 2ft	Total/NA	Solid	SHAKE	
885-993-2	BH24-15 4ft	Total/NA	Solid	SHAKE	
885-993-3	BH24-16 0ft	Total/NA	Solid	SHAKE	
885-993-4	BH24-16 2ft	Total/NA	Solid	SHAKE	
885-993-5	BH24-17 0ft	Total/NA	Solid	SHAKE	
885-993-6	BH24-17 2ft	Total/NA	Solid	SHAKE	
MB 885-1732/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-1732/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 1807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-993-1	BH24-15 2ft	Total/NA	Solid	8015D	1732
885-993-2	BH24-15 4ft	Total/NA	Solid	8015D	1732
885-993-3	BH24-16 0ft	Total/NA	Solid	8015D	1732
885-993-4	BH24-16 2ft	Total/NA	Solid	8015D	1732

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

## GC Semi VOA (Continued)

## Analysis Batch: 1807 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-993-5	BH24-17 0ft	Total/NA	Solid	8015D	1732
885-993-6	BH24-17 2ft	Total/NA	Solid	8015D	1732
MB 885-1732/1-A	Method Blank	Total/NA	Solid	8015D	1732
LCS 885-1732/2-A	Lab Control Sample	Total/NA	Solid	8015D	1732

## HPLC/IC

## Prep Batch: 1780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-993-1	BH24-15 2ft	Total/NA	Solid	300_Prep	
885-993-2	BH24-15 4ft	Total/NA	Solid	300_Prep	
885-993-3	BH24-16 0ft	Total/NA	Solid	300_Prep	
885-993-4	BH24-16 2ft	Total/NA	Solid	300_Prep	
885-993-5	BH24-17 0ft	Total/NA	Solid	300_Prep	
885-993-6	BH24-17 2ft	Total/NA	Solid	300_Prep	
MB 885-1780/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-1780/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-993-5 MS	BH24-17 0ft	Total/NA	Solid	300_Prep	
885-993-5 MSD	BH24-17 0ft	Total/NA	Solid	300_Prep	
885-993-6 MS	BH24-17 2ft	Total/NA	Solid	300_Prep	
885-993-6 MSD	BH24-17 2ft	Total/NA	Solid	300_Prep	

## Analysis Batch: 1813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-993-1	BH24-15 2ft	Total/NA	Solid	300.0	1780
885-993-2	BH24-15 4ft	Total/NA	Solid	300.0	1780
885-993-3	BH24-16 0ft	Total/NA	Solid	300.0	1780
885-993-4	BH24-16 2ft	Total/NA	Solid	300.0	1780
885-993-5	BH24-17 0ft	Total/NA	Solid	300.0	1780
885-993-6	BH24-17 2ft	Total/NA	Solid	300.0	1780
MB 885-1780/1-A	Method Blank	Total/NA	Solid	300.0	1780
MB 885-1813/4	Method Blank	Total/NA	Solid	300.0	
LCS 885-1780/2-A	Lab Control Sample	Total/NA	Solid	300.0	1780
MRL 885-1813/3	Lab Control Sample	Total/NA	Solid	300.0	
885-993-5 MS	BH24-17 0ft	Total/NA	Solid	300.0	1780
885-993-5 MSD	BH24-17 0ft	Total/NA	Solid	300.0	1780
885-993-6 MS	BH24-17 2ft	Total/NA	Solid	300.0	1780
885-993-6 MSD	BH24-17 2ft	Total/NA	Solid	300.0	1780

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## Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

Client Sample ID: BH24-15 2ft

Lab Sample ID: 885-993-1

Date Collected: 03/08/24 10:30

Matrix: Solid

Date Received: 03/12/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/18/24 16:22
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 18:30
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/15/24 22:24
Total/NA	Prep	300_Prep			1780	JT	EET ALB	03/15/24 11:40
Total/NA	Analysis	300.0		20	1813	MA	EET ALB	03/15/24 17:33

Client Sample ID: BH24-15 4ft

Lab Sample ID: 885-993-2

Date Collected: 03/08/24 10:45

Matrix: Solid

Date Received: 03/12/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/18/24 16:44
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 18:52
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/15/24 22:47
Total/NA	Prep	300_Prep			1780	JT	EET ALB	03/15/24 11:40
Total/NA	Analysis	300.0		20	1813	MA	EET ALB	03/15/24 18:18

Client Sample ID: BH24-16 0ft

Lab Sample ID: 885-993-3

Date Collected: 03/08/24 10:00

Matrix: Solid

Date Received: 03/12/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/18/24 17:06
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 19:14
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/15/24 23:11
Total/NA	Prep	300_Prep			1780	JT	EET ALB	03/15/24 11:40
Total/NA	Analysis	300.0		20	1813	MA	EET ALB	03/15/24 18:34

Client Sample ID: BH24-16 2ft

Lab Sample ID: 885-993-4

Date Collected: 03/08/24 10:15

Matrix: Solid

Date Received: 03/12/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/18/24 17:28

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Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

Client Sample ID: BH24-16 2ft  
Date Collected: 03/08/24 10:15  
Date Received: 03/12/24 09:05

Lab Sample ID: 885-993-4  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 19:35
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/15/24 23:34
Total/NA	Prep	300_Prep			1780	JT	EET ALB	03/15/24 11:40
Total/NA	Analysis	300.0		20	1813	MA	EET ALB	03/15/24 18:49

Client Sample ID: BH24-17 0ft  
Date Collected: 03/08/24 11:00  
Date Received: 03/12/24 09:05

Lab Sample ID: 885-993-5  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/18/24 17:49
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 19:57
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/15/24 23:58
Total/NA	Prep	300_Prep			1780	JT	EET ALB	03/15/24 11:40
Total/NA	Analysis	300.0		20	1813	MA	EET ALB	03/15/24 19:04

Client Sample ID: BH24-17 2ft  
Date Collected: 03/08/24 11:15  
Date Received: 03/12/24 09:05

Lab Sample ID: 885-993-6  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8015D		1	1972	RA	EET ALB	03/18/24 18:11
Total/NA	Prep	5030C			1670	IMR	EET ALB	03/13/24 15:53
Total/NA	Analysis	8021B		1	1783	IMR	EET ALB	03/14/24 20:19
Total/NA	Prep	SHAKE			1732	SB	EET ALB	03/14/24 14:20
Total/NA	Analysis	8015D		1	1807	JU	EET ALB	03/16/24 00:21
Total/NA	Prep	300_Prep			1780	JT	EET ALB	03/15/24 11:40
Total/NA	Analysis	300.0		20	1813	MA	EET ALB	03/15/24 19:49

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

Accreditation/Certification Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-993-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25



## Chain-of-Custody Record

Client: XTO Energy IncMailing Address: on filePhone #: 832 392 4807email or Fax#: www.leishaverrexx.ca

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)Sampler: WastewaterOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 1.6 - 0.2 = 1.4 (°C)

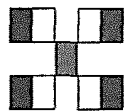
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
3/11/24	10:30	Soil	BH 24-15 2 FT	402521		
	10:45		BH 24-15 4 FT			
	10:00		BH 24-16 0 FT			
	10:15		BH 24-16 2 FT			
	11:00		BH 24-17 0 FT			
	11:15		BH 24-17 2 FT			



885-993 COC

Date	Time	Relinquished by	Via	Date	Time
3/11/24	10:15	<u>Wastewater</u>		3/11/24	10:15
3/11/24	19:00	<u>Wastewater</u>		3/12/24	09:00

Turn-Around Time:

☒ Standard ☒ Rush 5 DaysProject Name: PU 48 Battery  
- per client 3/12/24Project #: 24 E-00664Project Manager: Sanjay Capriati  
scapriati@verrexx.caHALL ENVIRONMENTAL  
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

BTX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCBs	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(S) F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			

Remarks:

## Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-993-1

Login Number: 993

List Number: 1

Creator: Cason, Cheyenne

List Source: Eurofins Albuquerque

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



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 4/18/2024 11:38:35 AM

## JOB DESCRIPTION

PLU 68 Battery

## JOB NUMBER

885-2770-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109

# Eurofins Albuquerque

## Job Notes

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

## Authorization



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4/18/2024 11:38:35 AM

Authorized for release by  
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Client: Vertex  
Project/Site: PLU 68 Battery

Laboratory Job ID: 885-2770-1



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Definitions/Glossary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Qualifiers

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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



## Case Narrative

Client: Vertex  
Project: PLU 68 Battery

Job ID: 885-2770-1

Job ID: 885-2770-1

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**Job Narrative  
885-2770-1**

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

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

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

**Receipt**

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

**Gasoline Range Organics**

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

**GC VOA**

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

**Diesel Range Organics**

Method 8015D\_DRO: The following sample was diluted due to the nature of the sample matrix: BH24-18 0' (885-2770-1). 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**

Method 300\_ORGFM\_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-78408 and 880-78408 and analytical batch 880-78452 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.

BH24-18 0' (885-2770-1), BH24-18 2' (885-2770-2), BH24-18 4' (885-2770-3), BH24-19 0' (885-2770-4), BH24-19-2 (885-2770-5), BH24-19 4' (885-2770-6), BH24-20 0' (885-2770-7), BH24-20 2' (885-2770-8), (885-2770-B-1-B MS) and (885-2770-B-1-C MSD)

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

Eurofins Albuquerque

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Client Sample ID: BH24-18 0'

Lab Sample ID: 885-2770-1

Date Collected: 04/10/24 13:50

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/12/24 11:12	04/15/24 17:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		15 - 244			04/12/24 11:12	04/15/24 17:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/15/24 17:50	1
Ethylbenzene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 17:50	1
Toluene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 17:50	1
Xylenes, Total	ND		0.097	mg/Kg		04/12/24 11:12	04/15/24 17:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 11:12	04/15/24 17:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2100		92	mg/Kg		04/12/24 15:46	04/15/24 12:58	10
Motor Oil Range Organics [C28-C40]	930		460	mg/Kg		04/12/24 15:46	04/15/24 12:58	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	0	S1- D	62 - 134			04/12/24 15:46	04/15/24 12:58	10

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10000	F1	100	mg/Kg			04/17/24 12:01	20

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Client Sample ID: BH24-18 2'

Lab Sample ID: 885-2770-2

Date Collected: 04/10/24 13:55

Matrix: Solid

Date Received: 04/12/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/12/24 11:12	04/15/24 18:13	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		15 - 244			04/12/24 11:12	04/15/24 18:13	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/12/24 11:12	04/15/24 18:13	1	
Ethylbenzene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 18:13	1	
Toluene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 18:13	1	
Xylenes, Total	ND		0.099	mg/Kg		04/12/24 11:12	04/15/24 18:13	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 11:12	04/15/24 18:13	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/12/24 15:46	04/15/24 13:23	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 15:46	04/15/24 13:23	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	102		62 - 134			04/12/24 15:46	04/15/24 13:23	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	20		5.0	mg/Kg			04/17/24 12:16	1	

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Client Sample ID: BH24-18 4'

Lab Sample ID: 885-2770-3

Date Collected: 04/10/24 14:00

Matrix: Solid

Date Received: 04/12/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/12/24 11:12	04/15/24 18:37	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		15 - 244			04/12/24 11:12	04/15/24 18:37	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/15/24 18:37	1	
Ethylbenzene	ND		0.047	mg/Kg		04/12/24 11:12	04/15/24 18:37	1	
Toluene	ND		0.047	mg/Kg		04/12/24 11:12	04/15/24 18:37	1	
Xylenes, Total	ND		0.094	mg/Kg		04/12/24 11:12	04/15/24 18:37	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 11:12	04/15/24 18:37	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		04/12/24 15:46	04/15/24 13:47	1	
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/12/24 15:46	04/15/24 13:47	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	110		62 - 134			04/12/24 15:46	04/15/24 13:47	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	23		5.0	mg/Kg			04/17/24 12:21	1	

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Client Sample ID: BH24-19 0'  
Date Collected: 04/10/24 14:05  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2770-4  
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/12/24 11:12	04/15/24 19:00	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		15 - 244			04/12/24 11:12	04/15/24 19:00	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/12/24 11:12	04/15/24 19:00	1	
Ethylbenzene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 19:00	1	
Toluene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 19:00	1	
Xylenes, Total	ND		0.099	mg/Kg		04/12/24 11:12	04/15/24 19:00	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	83		39 - 146			04/12/24 11:12	04/15/24 19:00	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	830		9.8	mg/Kg		04/12/24 15:46	04/15/24 14:11	1	
Motor Oil Range Organics [C28-C40]	430		49	mg/Kg		04/12/24 15:46	04/15/24 14:11	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	80		62 - 134			04/12/24 15:46	04/15/24 14:11	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	4300		50	mg/Kg			04/17/24 12:25	10	

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Client Sample ID: BH24-19-2  
Date Collected: 04/10/24 14:10  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2770-5  
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/12/24 11:12	04/15/24 19:24	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	127		15 - 244			04/12/24 11:12	04/15/24 19:24	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/12/24 11:12	04/15/24 19:24	1	
Ethylbenzene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 19:24	1	
Toluene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 19:24	1	
Xylenes, Total	ND		0.098	mg/Kg		04/12/24 11:12	04/15/24 19:24	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	87		39 - 146			04/12/24 11:12	04/15/24 19:24	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	44		10	mg/Kg		04/12/24 15:46	04/15/24 14:35	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/12/24 15:46	04/15/24 14:35	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	111		62 - 134			04/12/24 15:46	04/15/24 14:35	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	68		5.0	mg/Kg			04/17/24 12:30	1	



Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Client Sample ID: BH24-19 4'      Lab Sample ID: 885-2770-6  
Date Collected: 04/10/24 14:15      Matrix: Solid  
Date Received: 04/12/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/12/24 11:12	04/15/24 19:47	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	106		15 - 244			04/12/24 11:12	04/15/24 19:47	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		04/12/24 11:12	04/15/24 19:47	1	
Ethylbenzene	ND		0.046	mg/Kg		04/12/24 11:12	04/15/24 19:47	1	
Toluene	ND		0.046	mg/Kg		04/12/24 11:12	04/15/24 19:47	1	
Xylenes, Total	ND		0.093	mg/Kg		04/12/24 11:12	04/15/24 19:47	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 11:12	04/15/24 19:47	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		04/12/24 15:46	04/15/24 15:08	1	
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/12/24 15:46	04/15/24 15:08	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	111		62 - 134			04/12/24 15:46	04/15/24 15:08	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	38		5.0	mg/Kg			04/17/24 12:45	1	

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Client Sample ID: BH24-20 0'

Lab Sample ID: 885-2770-7

Date Collected: 04/10/24 14:20

Matrix: Solid

Date Received: 04/12/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/12/24 11:12	04/15/24 20:11		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		15 - 244			04/12/24 11:12	04/15/24 20:11		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/15/24 20:11		1
Ethylbenzene	ND		0.047	mg/Kg		04/12/24 11:12	04/15/24 20:11		1
Toluene	ND		0.047	mg/Kg		04/12/24 11:12	04/15/24 20:11		1
Xylenes, Total	ND		0.095	mg/Kg		04/12/24 11:12	04/15/24 20:11		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	88		39 - 146			04/12/24 11:12	04/15/24 20:11		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		04/12/24 15:46	04/15/24 15:56		1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/12/24 15:46	04/15/24 15:56		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	109		62 - 134			04/12/24 15:46	04/15/24 15:56		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	41		5.0	mg/Kg			04/17/24 12:50		1

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Client Sample ID: BH24-20 2'

Lab Sample ID: 885-2770-8

Date Collected: 04/10/24 14:25

Matrix: Solid

Date Received: 04/12/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 11:12	04/15/24 20:34	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	105		15 - 244			04/12/24 11:12	04/15/24 20:34	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/12/24 11:12	04/15/24 20:34	1	
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 11:12	04/15/24 20:34	1	
Toluene	ND		0.050	mg/Kg		04/12/24 11:12	04/15/24 20:34	1	
Xylenes, Total	ND		0.099	mg/Kg		04/12/24 11:12	04/15/24 20:34	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 11:12	04/15/24 20:34	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/12/24 15:46	04/15/24 16:20	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 15:46	04/15/24 16:20	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	97		62 - 134			04/12/24 15:46	04/15/24 16:20	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	9.1		5.0	mg/Kg			04/17/24 12:54	1	

## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

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

Lab Sample ID: MB 885-3194/1-A

Matrix: Solid

Analysis Batch: 3341

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3194

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 11:12	04/15/24 15:29	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/12/24 11:12	04/15/24 15:29	1

Lab Sample ID: LCS 885-3194/2-A

Matrix: Solid

Analysis Batch: 3341

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3194

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	26.5		mg/Kg		106	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	216		15 - 244				

Lab Sample ID: 885-2770-1 MS

Matrix: Solid

Analysis Batch: 3341

Client Sample ID: BH24-18 0'

Prep Type: Total/NA

Prep Batch: 3194

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.3	25.1		mg/Kg		103	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	220		15 - 244						

Lab Sample ID: 885-2770-1 MSD

Matrix: Solid

Analysis Batch: 3341

Client Sample ID: BH24-18 0'

Prep Type: Total/NA

Prep Batch: 3194

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.3	25.7		mg/Kg		106	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	233		15 - 244								

Lab Sample ID: MB 885-3274/1-A

Matrix: Solid

Analysis Batch: 3341

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3274

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/15/24 10:30	04/15/24 12:21	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		15 - 244			04/15/24 10:30	04/15/24 12:21	1

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QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3194/1-A  
Matrix: Solid  
Analysis Batch: 3342

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 3194

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	ND		0.025	mg/Kg		04/12/24 11:12	04/15/24 15:29	1
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 11:12	04/15/24 15:29	1
Toluene	ND		0.050	mg/Kg		04/12/24 11:12	04/15/24 15:29	1
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 11:12	04/15/24 15:29	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	84		39 - 146			04/12/24 11:12	04/15/24 15:29	1

Lab Sample ID: LCS 885-3194/3-A  
Matrix: Solid  
Analysis Batch: 3342

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 3194

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits	
		Result	Qualifier					
Benzene	1.00	0.852		mg/Kg		85	70 - 130	
Ethylbenzene	1.00	0.869		mg/Kg		87	70 - 130	
m,p-Xylene	2.00	1.76		mg/Kg		88	70 - 130	
o-Xylene	1.00	0.866		mg/Kg		87	70 - 130	
Toluene	1.00	0.856		mg/Kg		86	70 - 130	
Xylenes, Total	3.00	2.63		mg/Kg		88	70 - 130	
Surrogate	LCS LCS		Limits					
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	90		39 - 146					

Lab Sample ID: 885-2770-2 MS  
Matrix: Solid  
Analysis Batch: 3342

Client Sample ID: BH24-18 2'  
Prep Type: Total/NA  
Prep Batch: 3194

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits	
	Result	Qualifier		Result	Qualifier					
Benzene	ND		0.994	0.790		mg/Kg		79	70 - 130	
Ethylbenzene	ND		0.994	0.823		mg/Kg		83	70 - 130	
m,p-Xylene	ND		1.99	1.66		mg/Kg		83	70 - 130	
o-Xylene	ND		0.994	0.824		mg/Kg		83	70 - 130	
Toluene	ND		0.994	0.832		mg/Kg		84	70 - 130	
Xylenes, Total	ND		2.98	2.48		mg/Kg		83	70 - 130	
Surrogate	MS MS		Limits							
	%Recovery	Qualifier								
4-Bromofluorobenzene (Surr)	89		39 - 146							

Lab Sample ID: 885-2770-2 MSD  
Matrix: Solid  
Analysis Batch: 3342

Client Sample ID: BH24-18 2'  
Prep Type: Total/NA  
Prep Batch: 3194

Analyte	Sample Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits		RPD	
	Result	Qualifier		Result	Qualifier						RPD	Limit
Benzene	ND		0.991	0.815		mg/Kg		82	70 - 130		3	20
Ethylbenzene	ND		0.991	0.831		mg/Kg		84	70 - 130		1	20
m,p-Xylene	ND		1.98	1.67		mg/Kg		84	70 - 130		1	20
o-Xylene	ND		0.991	0.820		mg/Kg		83	70 - 130		0	20
Toluene	ND		0.991	0.825		mg/Kg		83	70 - 130		1	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

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

Lab Sample ID: 885-2770-2 MSD  
Matrix: Solid  
Analysis Batch: 3342

Client Sample ID: BH24-18 2'  
Prep Type: Total/NA  
Prep Batch: 3194

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Xylenes, Total	ND		2.97	2.49		mg/Kg		84	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	87		39 - 146								

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

Lab Sample ID: MB 885-3231/1-A  
Matrix: Solid  
Analysis Batch: 3333

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 3231

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/12/24 15:46	04/15/24 12:11	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/12/24 15:46	04/15/24 12:11	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac		
Di-n-octyl phthalate (Surr)	98		62 - 134	04/12/24 15:46	04/15/24 12:11	1		

Lab Sample ID: LCS 885-3231/2-A

Matrix: Solid

Analysis Batch: 3333

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3231

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	47.3		mg/Kg		95	60 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	90		62 - 134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-78408/1-A  
Matrix: Solid  
Analysis Batch: 78452

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/17/24 11:47	1

Lab Sample ID: LCS 880-78408/2-A  
Matrix: Solid  
Analysis Batch: 78452

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	253		mg/Kg		101	90 - 110		



QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-78408/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 78452											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	251		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 885-2770-1 MS				Client Sample ID: BH24-18 0'							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 78452											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	10000	F1	4980	16800	F1	mg/Kg		133	90 - 110		

Lab Sample ID: 885-2770-1 MSD				Client Sample ID: BH24-18 0'							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 78452											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10000	F1	4980	16800	F1	mg/Kg		131	90 - 110	0	20

## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

## GC VOA

## Prep Batch: 3194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2770-1	BH24-18 0'	Total/NA	Solid	5030C	
885-2770-2	BH24-18 2'	Total/NA	Solid	5030C	
885-2770-3	BH24-18 4'	Total/NA	Solid	5030C	
885-2770-4	BH24-19 0'	Total/NA	Solid	5030C	
885-2770-5	BH24-19-2	Total/NA	Solid	5030C	
885-2770-6	BH24-19 4'	Total/NA	Solid	5030C	
885-2770-7	BH24-20 0'	Total/NA	Solid	5030C	
885-2770-8	BH24-20 2'	Total/NA	Solid	5030C	
MB 885-3194/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3194/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3194/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-2770-1 MS	BH24-18 0'	Total/NA	Solid	5030C	
885-2770-1 MSD	BH24-18 0'	Total/NA	Solid	5030C	
885-2770-2 MS	BH24-18 2'	Total/NA	Solid	5030C	
885-2770-2 MSD	BH24-18 2'	Total/NA	Solid	5030C	

## Prep Batch: 3274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-3274/1-A	Method Blank	Total/NA	Solid	5035	

## Analysis Batch: 3341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2770-1	BH24-18 0'	Total/NA	Solid	8015D	3194
885-2770-2	BH24-18 2'	Total/NA	Solid	8015D	3194
885-2770-3	BH24-18 4'	Total/NA	Solid	8015D	3194
885-2770-4	BH24-19 0'	Total/NA	Solid	8015D	3194
885-2770-5	BH24-19-2	Total/NA	Solid	8015D	3194
885-2770-6	BH24-19 4'	Total/NA	Solid	8015D	3194
885-2770-7	BH24-20 0'	Total/NA	Solid	8015D	3194
885-2770-8	BH24-20 2'	Total/NA	Solid	8015D	3194
MB 885-3194/1-A	Method Blank	Total/NA	Solid	8015D	3194
MB 885-3274/1-A	Method Blank	Total/NA	Solid	8015D	3274
LCS 885-3194/2-A	Lab Control Sample	Total/NA	Solid	8015D	3194
885-2770-1 MS	BH24-18 0'	Total/NA	Solid	8015D	3194
885-2770-1 MSD	BH24-18 0'	Total/NA	Solid	8015D	3194

## Analysis Batch: 3342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2770-1	BH24-18 0'	Total/NA	Solid	8021B	3194
885-2770-2	BH24-18 2'	Total/NA	Solid	8021B	3194
885-2770-3	BH24-18 4'	Total/NA	Solid	8021B	3194
885-2770-4	BH24-19 0'	Total/NA	Solid	8021B	3194
885-2770-5	BH24-19-2	Total/NA	Solid	8021B	3194
885-2770-6	BH24-19 4'	Total/NA	Solid	8021B	3194
885-2770-7	BH24-20 0'	Total/NA	Solid	8021B	3194
885-2770-8	BH24-20 2'	Total/NA	Solid	8021B	3194
MB 885-3194/1-A	Method Blank	Total/NA	Solid	8021B	3194
LCS 885-3194/3-A	Lab Control Sample	Total/NA	Solid	8021B	3194
885-2770-2 MS	BH24-18 2'	Total/NA	Solid	8021B	3194
885-2770-2 MSD	BH24-18 2'	Total/NA	Solid	8021B	3194

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QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

GC Semi VOA

Prep Batch: 3231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2770-1	BH24-18 0'	Total/NA	Solid	SHAKE	
885-2770-2	BH24-18 2'	Total/NA	Solid	SHAKE	
885-2770-3	BH24-18 4'	Total/NA	Solid	SHAKE	
885-2770-4	BH24-19 0'	Total/NA	Solid	SHAKE	
885-2770-5	BH24-19-2	Total/NA	Solid	SHAKE	
885-2770-6	BH24-19 4'	Total/NA	Solid	SHAKE	
885-2770-7	BH24-20 0'	Total/NA	Solid	SHAKE	
885-2770-8	BH24-20 2'	Total/NA	Solid	SHAKE	
MB 885-3231/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3231/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 3333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2770-1	BH24-18 0'	Total/NA	Solid	8015D	3231
885-2770-2	BH24-18 2'	Total/NA	Solid	8015D	3231
885-2770-3	BH24-18 4'	Total/NA	Solid	8015D	3231
885-2770-4	BH24-19 0'	Total/NA	Solid	8015D	3231
885-2770-5	BH24-19-2	Total/NA	Solid	8015D	3231
885-2770-6	BH24-19 4'	Total/NA	Solid	8015D	3231
885-2770-7	BH24-20 0'	Total/NA	Solid	8015D	3231
885-2770-8	BH24-20 2'	Total/NA	Solid	8015D	3231
MB 885-3231/1-A	Method Blank	Total/NA	Solid	8015D	3231
LCS 885-3231/2-A	Lab Control Sample	Total/NA	Solid	8015D	3231

HPLC/IC

Leach Batch: 78408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2770-1	BH24-18 0'	Soluble	Solid	DI Leach	
885-2770-2	BH24-18 2'	Soluble	Solid	DI Leach	
885-2770-3	BH24-18 4'	Soluble	Solid	DI Leach	
885-2770-4	BH24-19 0'	Soluble	Solid	DI Leach	
885-2770-5	BH24-19-2	Soluble	Solid	DI Leach	
885-2770-6	BH24-19 4'	Soluble	Solid	DI Leach	
885-2770-7	BH24-20 0'	Soluble	Solid	DI Leach	
885-2770-8	BH24-20 2'	Soluble	Solid	DI Leach	
MB 880-78408/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78408/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78408/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2770-1 MS	BH24-18 0'	Soluble	Solid	DI Leach	
885-2770-1 MSD	BH24-18 0'	Soluble	Solid	DI Leach	

Analysis Batch: 78452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2770-1	BH24-18 0'	Soluble	Solid	300.0	78408
885-2770-2	BH24-18 2'	Soluble	Solid	300.0	78408
885-2770-3	BH24-18 4'	Soluble	Solid	300.0	78408
885-2770-4	BH24-19 0'	Soluble	Solid	300.0	78408
885-2770-5	BH24-19-2	Soluble	Solid	300.0	78408
885-2770-6	BH24-19 4'	Soluble	Solid	300.0	78408
885-2770-7	BH24-20 0'	Soluble	Solid	300.0	78408

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QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

HPLC/IC (Continued)

Analysis Batch: 78452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2770-8	BH24-20 2'	Soluble	Solid	300.0	78408
MB 880-78408/1-A	Method Blank	Soluble	Solid	300.0	78408
LCS 880-78408/2-A	Lab Control Sample	Soluble	Solid	300.0	78408
LCSD 880-78408/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78408
885-2770-1 MS	BH24-18 0'	Soluble	Solid	300.0	78408
885-2770-1 MSD	BH24-18 0'	Soluble	Solid	300.0	78408

Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

**Client Sample ID: BH24-18 0'**  
**Date Collected: 04/10/24 13:50**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2770-1**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 17:50
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 17:50
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		10	3333	JU	EET ALB	04/15/24 12:58
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		20	78452	SMC	EET MID	04/17/24 12:01

**Client Sample ID: BH24-18 2'**  
**Date Collected: 04/10/24 13:55**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2770-2**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 18:13
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 18:13
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 13:23
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 12:16

**Client Sample ID: BH24-18 4'**  
**Date Collected: 04/10/24 14:00**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2770-3**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 18:37
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 18:37
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 13:47
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 12:21

**Client Sample ID: BH24-19 0'**  
**Date Collected: 04/10/24 14:05**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2770-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 19:00

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Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

**Client Sample ID: BH24-19 0'**  
**Date Collected: 04/10/24 14:05**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2770-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 19:00
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 14:11
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		10	78452	SMC	EET MID	04/17/24 12:25

**Client Sample ID: BH24-19-2**  
**Date Collected: 04/10/24 14:10**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2770-5**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 19:24
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 19:24
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 14:35
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 12:30

**Client Sample ID: BH24-19 4'**  
**Date Collected: 04/10/24 14:15**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2770-6**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 19:47
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 19:47
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 15:08
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 12:45

**Client Sample ID: BH24-20 0'**  
**Date Collected: 04/10/24 14:20**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2770-7**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 20:11
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 20:11

Eurofins Albuquerque



Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

**Client Sample ID: BH24-20 0'**  
**Date Collected: 04/10/24 14:20**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2770-7**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 15:56
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 12:50

**Client Sample ID: BH24-20 2'**  
**Date Collected: 04/10/24 14:25**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2770-8**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 20:34
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 20:34
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 16:20
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 12:54

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

Accreditation/Certification Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2770-1

Laboratory: Eurofins Albuquerque

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

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

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



Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2770-1

Login Number: 2770

List Source: Eurofins Albuquerque

List Number: 1

Creator: Rojas, Juan

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2770-1

Login Number: 2770

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 04/16/24 11:25 AM

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



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 4/12/2024 8:08:35 AM

## JOB DESCRIPTION

PLU 68

## JOB NUMBER

885-2417-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109



# Eurofins Albuquerque

## Job Notes

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

## Authorization



Generated  
4/12/2024 8:08:35 AM

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

Client: Vertex  
Project/Site: PLU 68

Laboratory Job ID: 885-2417-1



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Definitions/Glossary

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Glossary

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

## Case Narrative

Client: Vertex  
Project: PLU 68

Job ID: 885-2417-1

**Job ID: 885-2417-1**

**Eurofins Albuquerque**

### Job Narrative 885-2417-1

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

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

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

#### Receipt

The samples were received on 4/5/2024 7:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.1°C.

#### Gasoline Range Organics

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

#### GC VOA

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

#### Diesel Range Organics

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

#### HPLC/IC

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

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Client Sample ID: BES24-05 1'

Lab Sample ID: 885-2417-1

Date Collected: 04/02/24 09:55

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/05/24 13:05	04/09/24 11:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244			04/05/24 13:05	04/09/24 11:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/05/24 13:05	04/09/24 11:30	1
Ethylbenzene	ND		0.047	mg/Kg		04/05/24 13:05	04/09/24 11:30	1
Toluene	ND		0.047	mg/Kg		04/05/24 13:05	04/09/24 11:30	1
Xylenes, Total	ND		0.095	mg/Kg		04/05/24 13:05	04/09/24 11:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/05/24 13:05	04/09/24 11:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	18		8.9	mg/Kg		04/09/24 10:06	04/09/24 13:28	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/09/24 10:06	04/09/24 13:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	83		62 - 134			04/09/24 10:06	04/09/24 13:28	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		5.0	mg/Kg			04/11/24 04:25	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Client Sample ID: BES24-06 1'

Lab Sample ID: 885-2417-2

Date Collected: 04/02/24 10:00

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/05/24 13:05	04/09/24 12:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/05/24 13:05	04/09/24 12:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/05/24 13:05	04/09/24 12:41	1
Ethylbenzene	ND		0.047	mg/Kg		04/05/24 13:05	04/09/24 12:41	1
Toluene	ND		0.047	mg/Kg		04/05/24 13:05	04/09/24 12:41	1
Xylenes, Total	ND		0.094	mg/Kg		04/05/24 13:05	04/09/24 12:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			04/05/24 13:05	04/09/24 12:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		04/09/24 10:06	04/09/24 13:39	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/09/24 10:06	04/09/24 13:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			04/09/24 10:06	04/09/24 13:39	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	970		5.0	mg/Kg			04/11/24 04:31	1

Eurofins Albuquerque



## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Client Sample ID: BES24-07 1'

Lab Sample ID: 885-2417-3

Date Collected: 04/02/24 10:05

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/05/24 13:05	04/09/24 13:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		15 - 244			04/05/24 13:05	04/09/24 13:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/05/24 13:05	04/09/24 13:52	1
Ethylbenzene	ND		0.048	mg/Kg		04/05/24 13:05	04/09/24 13:52	1
Toluene	ND		0.048	mg/Kg		04/05/24 13:05	04/09/24 13:52	1
Xylenes, Total	ND		0.096	mg/Kg		04/05/24 13:05	04/09/24 13:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			04/05/24 13:05	04/09/24 13:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	17		9.5	mg/Kg		04/09/24 10:06	04/09/24 13:50	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/09/24 10:06	04/09/24 13:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	83		62 - 134			04/09/24 10:06	04/09/24 13:50	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		5.0	mg/Kg			04/11/24 04:38	1

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Client Sample ID: BES24-08 1'

Lab Sample ID: 885-2417-4

Date Collected: 04/02/24 10:10

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/05/24 13:05	04/09/24 14:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/05/24 13:05	04/09/24 14:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/05/24 13:05	04/09/24 14:16	1
Ethylbenzene	ND		0.048	mg/Kg		04/05/24 13:05	04/09/24 14:16	1
Toluene	ND		0.048	mg/Kg		04/05/24 13:05	04/09/24 14:16	1
Xylenes, Total	ND		0.096	mg/Kg		04/05/24 13:05	04/09/24 14:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146			04/05/24 13:05	04/09/24 14:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		04/09/24 10:06	04/09/24 14:00	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/09/24 10:06	04/09/24 14:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	116		62 - 134			04/09/24 10:06	04/09/24 14:00	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	910		5.0	mg/Kg			04/11/24 04:44	1

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Client Sample ID: BES24-09 1'

Lab Sample ID: 885-2417-5

Date Collected: 04/02/24 10:15

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/05/24 13:05	04/09/24 14:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244			04/05/24 13:05	04/09/24 14:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/05/24 13:05	04/09/24 14:39	1
Ethylbenzene	ND		0.048	mg/Kg		04/05/24 13:05	04/09/24 14:39	1
Toluene	ND		0.048	mg/Kg		04/05/24 13:05	04/09/24 14:39	1
Xylenes, Total	ND		0.097	mg/Kg		04/05/24 13:05	04/09/24 14:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		39 - 146			04/05/24 13:05	04/09/24 14:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13		9.9	mg/Kg		04/09/24 10:06	04/09/24 14:11	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/09/24 10:06	04/09/24 14:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	88		62 - 134			04/09/24 10:06	04/09/24 14:11	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		5.0	mg/Kg			04/11/24 04:50	1

Eurofins Albuquerque

Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Client Sample ID: BES24-10 1'

Lab Sample ID: 885-2417-6

Date Collected: 04/02/24 10:20

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/05/24 13:05	04/09/24 15:03		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		15 - 244			04/05/24 13:05	04/09/24 15:03		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/05/24 13:05	04/09/24 15:03		1
Ethylbenzene	ND		0.047	mg/Kg		04/05/24 13:05	04/09/24 15:03		1
Toluene	ND		0.047	mg/Kg		04/05/24 13:05	04/09/24 15:03		1
Xylenes, Total	ND		0.094	mg/Kg		04/05/24 13:05	04/09/24 15:03		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	86		39 - 146			04/05/24 13:05	04/09/24 15:03		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		04/09/24 10:06	04/09/24 14:22		1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/09/24 10:06	04/09/24 14:22		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	93		62 - 134			04/09/24 10:06	04/09/24 14:22		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	440		5.0	mg/Kg			04/11/24 04:56		1

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Client Sample ID: BES24-11 1'

Lab Sample ID: 885-2417-7

Date Collected: 04/02/24 10:25

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/05/24 13:05	04/09/24 15:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/05/24 13:05	04/09/24 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/05/24 13:05	04/09/24 15:26	1
Ethylbenzene	ND		0.050	mg/Kg		04/05/24 13:05	04/09/24 15:26	1
Toluene	ND		0.050	mg/Kg		04/05/24 13:05	04/09/24 15:26	1
Xylenes, Total	ND		0.10	mg/Kg		04/05/24 13:05	04/09/24 15:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		39 - 146			04/05/24 13:05	04/09/24 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/09/24 10:06	04/09/24 14:32	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/09/24 10:06	04/09/24 14:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	111		62 - 134			04/09/24 10:06	04/09/24 14:32	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99		2.3	mg/Kg			04/11/24 05:15	1

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

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

Lab Sample ID: MB 885-2842/1-A  
Matrix: Solid  
Analysis Batch: 3025

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 2842

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/05/24 13:05	04/09/24 11:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/05/24 13:05	04/09/24 11:07	1

Lab Sample ID: LCS 885-2842/2-A  
Matrix: Solid  
Analysis Batch: 3025

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 2842

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	27.5		mg/Kg		110	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	212		15 - 244				

Lab Sample ID: 885-2417-1 MS  
Matrix: Solid  
Analysis Batch: 3025

Client Sample ID: BES24-05 1'  
Prep Type: Total/NA  
Prep Batch: 2842

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		23.8	24.7		mg/Kg		104	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	218		15 - 244						

Lab Sample ID: 885-2417-1 MSD  
Matrix: Solid  
Analysis Batch: 3025

Client Sample ID: BES24-05 1'  
Prep Type: Total/NA  
Prep Batch: 2842

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		23.6	26.4		mg/Kg		112	70 - 130	7	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	221		15 - 244								

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

Lab Sample ID: MB 885-2842/1-A  
Matrix: Solid  
Analysis Batch: 3027

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 2842

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/05/24 13:05	04/09/24 11:07	1
Ethylbenzene	ND		0.050	mg/Kg		04/05/24 13:05	04/09/24 11:07	1
Toluene	ND		0.050	mg/Kg		04/05/24 13:05	04/09/24 11:07	1

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

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

Lab Sample ID: MB 885-2842/1-A

Matrix: Solid

Analysis Batch: 3027

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2842

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		04/05/24 13:05	04/09/24 11:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		39 - 146			04/05/24 13:05	04/09/24 11:07	1

Lab Sample ID: LCS 885-2842/3-A

Matrix: Solid

Analysis Batch: 3027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2842

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.786		mg/Kg		79	70 - 130
Ethylbenzene	1.00	0.805		mg/Kg		81	70 - 130
Toluene	1.00	0.801		mg/Kg		80	70 - 130
Xylenes, Total	3.00	2.44		mg/Kg		81	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	84		39 - 146				

Lab Sample ID: 885-2417-2 MS

Matrix: Solid

Analysis Batch: 3027

Client Sample ID: BES24-06 1'

Prep Type: Total/NA

Prep Batch: 2842

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.945	0.805		mg/Kg		85	70 - 130
Ethylbenzene	ND		0.945	0.829		mg/Kg		88	70 - 130
Toluene	ND		0.945	0.816		mg/Kg		86	70 - 130
Xylenes, Total	ND		2.84	2.51		mg/Kg		88	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	89		39 - 146						

Lab Sample ID: 885-2417-2 MSD

Matrix: Solid

Analysis Batch: 3027

Client Sample ID: BES24-06 1'

Prep Type: Total/NA

Prep Batch: 2842

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.938	0.767		mg/Kg		82	70 - 130	5	20
Ethylbenzene	ND		0.938	0.806		mg/Kg		86	70 - 130	3	20
Toluene	ND		0.938	0.785		mg/Kg		84	70 - 130	4	20
Xylenes, Total	ND		2.81	2.42		mg/Kg		86	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	88		39 - 146								

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

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

Lab Sample ID: MB 885-2948/1-A

Matrix: Solid

Analysis Batch: 2961

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2948

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/09/24 10:06	04/09/24 12:35	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/09/24 10:06	04/09/24 12:35	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			04/09/24 10:06	04/09/24 12:35	1

Lab Sample ID: LCS 885-2948/2-A

Matrix: Solid

Analysis Batch: 2961

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2948

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Diesel Range Organics [C10-C28]	50.0	43.8		mg/Kg		88	60 - 135	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Di-n-octyl phthalate (Surr)	88		62 - 134					

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-77847/1-A

Matrix: Solid

Analysis Batch: 77873

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/11/24 03:09	1

Lab Sample ID: LCS 880-77847/2-A

Matrix: Solid

Analysis Batch: 77873

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	250	254		mg/Kg		102	90 - 110	

Lab Sample ID: LCSD 880-77847/3-A

Matrix: Solid

Analysis Batch: 77873

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	254		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 885-2417-6 MS

Matrix: Solid

Analysis Batch: 77873

Client Sample ID: BES24-10 1'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	440		249	661		mg/Kg		90	90 - 110	

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QC Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-2417-6 MSD						Client Sample ID: BES24-10 1'					
Matrix: Solid						Prep Type: Soluble					
Analysis Batch: 77873											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	440		249	663		mg/Kg		91	90 - 110	0	20

## QC Association Summary

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

## GC VOA

## Prep Batch: 2842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2417-1	BES24-05 1'	Total/NA	Solid	5030C	
885-2417-2	BES24-06 1'	Total/NA	Solid	5030C	
885-2417-3	BES24-07 1'	Total/NA	Solid	5030C	
885-2417-4	BES24-08 1'	Total/NA	Solid	5030C	
885-2417-5	BES24-09 1'	Total/NA	Solid	5030C	
885-2417-6	BES24-10 1'	Total/NA	Solid	5030C	
885-2417-7	BES24-11 1'	Total/NA	Solid	5030C	
MB 885-2842/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-2842/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-2842/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-2417-1 MS	BES24-05 1'	Total/NA	Solid	5030C	
885-2417-1 MSD	BES24-05 1'	Total/NA	Solid	5030C	
885-2417-2 MS	BES24-06 1'	Total/NA	Solid	5030C	
885-2417-2 MSD	BES24-06 1'	Total/NA	Solid	5030C	

## Analysis Batch: 3025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2417-1	BES24-05 1'	Total/NA	Solid	8015D	2842
885-2417-2	BES24-06 1'	Total/NA	Solid	8015D	2842
885-2417-3	BES24-07 1'	Total/NA	Solid	8015D	2842
885-2417-4	BES24-08 1'	Total/NA	Solid	8015D	2842
885-2417-5	BES24-09 1'	Total/NA	Solid	8015D	2842
885-2417-6	BES24-10 1'	Total/NA	Solid	8015D	2842
885-2417-7	BES24-11 1'	Total/NA	Solid	8015D	2842
MB 885-2842/1-A	Method Blank	Total/NA	Solid	8015D	2842
LCS 885-2842/2-A	Lab Control Sample	Total/NA	Solid	8015D	2842
885-2417-1 MS	BES24-05 1'	Total/NA	Solid	8015D	2842
885-2417-1 MSD	BES24-05 1'	Total/NA	Solid	8015D	2842

## Analysis Batch: 3027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2417-1	BES24-05 1'	Total/NA	Solid	8021B	2842
885-2417-2	BES24-06 1'	Total/NA	Solid	8021B	2842
885-2417-3	BES24-07 1'	Total/NA	Solid	8021B	2842
885-2417-4	BES24-08 1'	Total/NA	Solid	8021B	2842
885-2417-5	BES24-09 1'	Total/NA	Solid	8021B	2842
885-2417-6	BES24-10 1'	Total/NA	Solid	8021B	2842
885-2417-7	BES24-11 1'	Total/NA	Solid	8021B	2842
MB 885-2842/1-A	Method Blank	Total/NA	Solid	8021B	2842
LCS 885-2842/3-A	Lab Control Sample	Total/NA	Solid	8021B	2842
885-2417-2 MS	BES24-06 1'	Total/NA	Solid	8021B	2842
885-2417-2 MSD	BES24-06 1'	Total/NA	Solid	8021B	2842

## GC Semi VOA

## Prep Batch: 2948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2417-1	BES24-05 1'	Total/NA	Solid	SHAKE	
885-2417-2	BES24-06 1'	Total/NA	Solid	SHAKE	
885-2417-3	BES24-07 1'	Total/NA	Solid	SHAKE	
885-2417-4	BES24-08 1'	Total/NA	Solid	SHAKE	

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QC Association Summary

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

GC Semi VOA (Continued)

Prep Batch: 2948 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2417-5	BES24-09 1'	Total/NA	Solid	SHAKE	
885-2417-6	BES24-10 1'	Total/NA	Solid	SHAKE	
885-2417-7	BES24-11 1'	Total/NA	Solid	SHAKE	
MB 885-2948/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-2948/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 2961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2417-1	BES24-05 1'	Total/NA	Solid	8015D	2948
885-2417-2	BES24-06 1'	Total/NA	Solid	8015D	2948
885-2417-3	BES24-07 1'	Total/NA	Solid	8015D	2948
885-2417-4	BES24-08 1'	Total/NA	Solid	8015D	2948
885-2417-5	BES24-09 1'	Total/NA	Solid	8015D	2948
885-2417-6	BES24-10 1'	Total/NA	Solid	8015D	2948
885-2417-7	BES24-11 1'	Total/NA	Solid	8015D	2948
MB 885-2948/1-A	Method Blank	Total/NA	Solid	8015D	2948
LCS 885-2948/2-A	Lab Control Sample	Total/NA	Solid	8015D	2948

HPLC/IC

Leach Batch: 77847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2417-1	BES24-05 1'	Soluble	Solid	DI Leach	
885-2417-2	BES24-06 1'	Soluble	Solid	DI Leach	
885-2417-3	BES24-07 1'	Soluble	Solid	DI Leach	
885-2417-4	BES24-08 1'	Soluble	Solid	DI Leach	
885-2417-5	BES24-09 1'	Soluble	Solid	DI Leach	
885-2417-6	BES24-10 1'	Soluble	Solid	DI Leach	
885-2417-7	BES24-11 1'	Soluble	Solid	DI Leach	
MB 880-77847/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-77847/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-77847/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2417-6 MS	BES24-10 1'	Soluble	Solid	DI Leach	
885-2417-6 MSD	BES24-10 1'	Soluble	Solid	DI Leach	

Analysis Batch: 77873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2417-1	BES24-05 1'	Soluble	Solid	300.0	77847
885-2417-2	BES24-06 1'	Soluble	Solid	300.0	77847
885-2417-3	BES24-07 1'	Soluble	Solid	300.0	77847
885-2417-4	BES24-08 1'	Soluble	Solid	300.0	77847
885-2417-5	BES24-09 1'	Soluble	Solid	300.0	77847
885-2417-6	BES24-10 1'	Soluble	Solid	300.0	77847
885-2417-7	BES24-11 1'	Soluble	Solid	300.0	77847
MB 880-77847/1-A	Method Blank	Soluble	Solid	300.0	77847
LCS 880-77847/2-A	Lab Control Sample	Soluble	Solid	300.0	77847
LCSD 880-77847/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	77847
885-2417-6 MS	BES24-10 1'	Soluble	Solid	300.0	77847
885-2417-6 MSD	BES24-10 1'	Soluble	Solid	300.0	77847

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Lab Chronicle

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Client Sample ID: BES24-05 1'

Lab Sample ID: 885-2417-1

Date Collected: 04/02/24 09:55

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8015D		1	3025	JP	EET ALB	04/09/24 11:30
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8021B		1	3027	JP	EET ALB	04/09/24 11:30
Total/NA	Prep	SHAKE			2948	JU	EET ALB	04/09/24 10:06
Total/NA	Analysis	8015D		1	2961	PD	EET ALB	04/09/24 13:28
Soluble	Leach	DI Leach			77847	SA	EET MID	04/10/24 14:45
Soluble	Analysis	300.0		1	77873	SMC	EET MID	04/11/24 04:25

Client Sample ID: BES24-06 1'

Lab Sample ID: 885-2417-2

Date Collected: 04/02/24 10:00

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8015D		1	3025	JP	EET ALB	04/09/24 12:41
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8021B		1	3027	JP	EET ALB	04/09/24 12:41
Total/NA	Prep	SHAKE			2948	JU	EET ALB	04/09/24 10:06
Total/NA	Analysis	8015D		1	2961	PD	EET ALB	04/09/24 13:39
Soluble	Leach	DI Leach			77847	SA	EET MID	04/10/24 14:45
Soluble	Analysis	300.0		1	77873	SMC	EET MID	04/11/24 04:31

Client Sample ID: BES24-07 1'

Lab Sample ID: 885-2417-3

Date Collected: 04/02/24 10:05

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8015D		1	3025	JP	EET ALB	04/09/24 13:52
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8021B		1	3027	JP	EET ALB	04/09/24 13:52
Total/NA	Prep	SHAKE			2948	JU	EET ALB	04/09/24 10:06
Total/NA	Analysis	8015D		1	2961	PD	EET ALB	04/09/24 13:50
Soluble	Leach	DI Leach			77847	SA	EET MID	04/10/24 14:45
Soluble	Analysis	300.0		1	77873	SMC	EET MID	04/11/24 04:38

Client Sample ID: BES24-08 1'

Lab Sample ID: 885-2417-4

Date Collected: 04/02/24 10:10

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8015D		1	3025	JP	EET ALB	04/09/24 14:16



Lab Chronicle

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Client Sample ID: BES24-08 1'

Lab Sample ID: 885-2417-4

Date Collected: 04/02/24 10:10

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8021B		1	3027	JP	EET ALB	04/09/24 14:16
Total/NA	Prep	SHAKE			2948	JU	EET ALB	04/09/24 10:06
Total/NA	Analysis	8015D		1	2961	PD	EET ALB	04/09/24 14:00
Soluble	Leach	DI Leach			77847	SA	EET MID	04/10/24 14:45
Soluble	Analysis	300.0		1	77873	SMC	EET MID	04/11/24 04:44

Client Sample ID: BES24-09 1'

Lab Sample ID: 885-2417-5

Date Collected: 04/02/24 10:15

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8015D		1	3025	JP	EET ALB	04/09/24 14:39
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8021B		1	3027	JP	EET ALB	04/09/24 14:39
Total/NA	Prep	SHAKE			2948	JU	EET ALB	04/09/24 10:06
Total/NA	Analysis	8015D		1	2961	PD	EET ALB	04/09/24 14:11
Soluble	Leach	DI Leach			77847	SA	EET MID	04/10/24 14:45
Soluble	Analysis	300.0		1	77873	SMC	EET MID	04/11/24 04:50

Client Sample ID: BES24-10 1'

Lab Sample ID: 885-2417-6

Date Collected: 04/02/24 10:20

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8015D		1	3025	JP	EET ALB	04/09/24 15:03
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8021B		1	3027	JP	EET ALB	04/09/24 15:03
Total/NA	Prep	SHAKE			2948	JU	EET ALB	04/09/24 10:06
Total/NA	Analysis	8015D		1	2961	PD	EET ALB	04/09/24 14:22
Soluble	Leach	DI Leach			77847	SA	EET MID	04/10/24 14:45
Soluble	Analysis	300.0		1	77873	SMC	EET MID	04/11/24 04:56

Client Sample ID: BES24-11 1'

Lab Sample ID: 885-2417-7

Date Collected: 04/02/24 10:25

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8015D		1	3025	JP	EET ALB	04/09/24 15:26
Total/NA	Prep	5030C			2842	JP	EET ALB	04/05/24 13:05
Total/NA	Analysis	8021B		1	3027	JP	EET ALB	04/09/24 15:26

Lab Chronicle

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Client Sample ID: BES24-11 1'

Lab Sample ID: 885-2417-7

Date Collected: 04/02/24 10:25

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			2948	JU	EET ALB	04/09/24 10:06
Total/NA	Analysis	8015D		1	2961	PD	EET ALB	04/09/24 14:32
Soluble	Leach	DI Leach			77847	SA	EET MID	04/10/24 14:45
Soluble	Analysis	300.0		1	77873	SMC	EET MID	04/11/24 05:15

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



Accreditation/Certification Summary

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2417-1

Laboratory: Eurofins Albuquerque

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

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

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0		Solid	Chloride



Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2417-1

Login Number: 2417

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2417-1

Login Number: 2417  
List Number: 2  
Creator: Rodriguez, Leticia

List Source: Eurofins Midland  
List Creation: 04/10/24 01:43 PM

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





Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 4/10/2024 4:22:32 PM

## JOB DESCRIPTION

PLU 68

## JOB NUMBER

885-2411-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109

# Eurofins Albuquerque

## Job Notes

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

## Authorization



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

Client: Vertex  
Project/Site: PLU 68

Laboratory Job ID: 885-2411-1



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Definitions/Glossary

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Glossary

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

Case Narrative

Client: Vertex  
Project: PLU 68

Job ID: 885-2411-1

Job ID: 885-2411-1Eurofins Albuquerque

Job Narrative  
885-2411-1

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

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

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

Receipt

The samples were received on 4/5/2024 7:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.1°C.

Gasoline Range Organics

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

GC VOA

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

Diesel Range Organics

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

HPLC/IC

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

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-01 2'

Lab Sample ID: 885-2411-1

Date Collected: 04/03/24 09:30

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/05/24 11:52	04/08/24 20:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244			04/05/24 11:52	04/08/24 20:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/05/24 11:52	04/08/24 20:17	1
Ethylbenzene	ND		0.050	mg/Kg		04/05/24 11:52	04/08/24 20:17	1
Toluene	ND		0.050	mg/Kg		04/05/24 11:52	04/08/24 20:17	1
Xylenes, Total	ND		0.099	mg/Kg		04/05/24 11:52	04/08/24 20:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		39 - 146			04/05/24 11:52	04/08/24 20:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		04/09/24 13:26	04/09/24 16:25	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/09/24 13:26	04/09/24 16:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	107		62 - 134			04/09/24 13:26	04/09/24 16:25	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.0		5.0	mg/Kg			04/10/24 11:25	1

Eurofins Albuquerque



Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-02 2'

Lab Sample ID: 885-2411-2

Date Collected: 04/03/24 09:35

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/05/24 11:52	04/08/24 21:28		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		15 - 244			04/05/24 11:52	04/08/24 21:28		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/05/24 11:52	04/08/24 21:28		1
Ethylbenzene	ND		0.049	mg/Kg		04/05/24 11:52	04/08/24 21:28		1
Toluene	ND		0.049	mg/Kg		04/05/24 11:52	04/08/24 21:28		1
Xylenes, Total	ND		0.097	mg/Kg		04/05/24 11:52	04/08/24 21:28		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	82		39 - 146			04/05/24 11:52	04/08/24 21:28		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		04/09/24 13:26	04/09/24 16:37		1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/09/24 13:26	04/09/24 16:37		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	106		62 - 134			04/09/24 13:26	04/09/24 16:37		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	6.4		5.0	mg/Kg			04/10/24 11:40		1

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-03 2'

Lab Sample ID: 885-2411-3

Date Collected: 04/03/24 09:40

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/05/24 11:52	04/08/24 22:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/05/24 11:52	04/08/24 22:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/05/24 11:52	04/08/24 22:39	1
Ethylbenzene	ND		0.050	mg/Kg		04/05/24 11:52	04/08/24 22:39	1
Toluene	ND		0.050	mg/Kg		04/05/24 11:52	04/08/24 22:39	1
Xylenes, Total	ND		0.099	mg/Kg		04/05/24 11:52	04/08/24 22:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146			04/05/24 11:52	04/08/24 22:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/09/24 13:26	04/09/24 16:50	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/09/24 13:26	04/09/24 16:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			04/09/24 13:26	04/09/24 16:50	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		5.0	mg/Kg			04/10/24 11:45	1

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-04 2'

Lab Sample ID: 885-2411-4

Date Collected: 04/03/24 09:50

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/05/24 11:52	04/08/24 23:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/05/24 11:52	04/08/24 23:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/05/24 11:52	04/08/24 23:02	1
Ethylbenzene	ND		0.048	mg/Kg		04/05/24 11:52	04/08/24 23:02	1
Toluene	ND		0.048	mg/Kg		04/05/24 11:52	04/08/24 23:02	1
Xylenes, Total	ND		0.097	mg/Kg		04/05/24 11:52	04/08/24 23:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		39 - 146			04/05/24 11:52	04/08/24 23:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		04/09/24 13:26	04/09/24 17:02	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/09/24 13:26	04/09/24 17:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			04/09/24 13:26	04/09/24 17:02	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/10/24 11:49	1

Eurofins Albuquerque

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-39 1'

Lab Sample ID: 885-2411-5

Date Collected: 04/03/24 09:55

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/05/24 11:52	04/08/24 23:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/05/24 11:52	04/08/24 23:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/05/24 11:52	04/08/24 23:26	1
Ethylbenzene	ND		0.047	mg/Kg		04/05/24 11:52	04/08/24 23:26	1
Toluene	ND		0.047	mg/Kg		04/05/24 11:52	04/08/24 23:26	1
Xylenes, Total	ND		0.093	mg/Kg		04/05/24 11:52	04/08/24 23:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146			04/05/24 11:52	04/08/24 23:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/09/24 13:26	04/09/24 17:15	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/09/24 13:26	04/09/24 17:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			04/09/24 13:26	04/09/24 17:15	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		5.0	mg/Kg			04/10/24 11:54	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-41 1'

Lab Sample ID: 885-2411-6

Date Collected: 04/03/24 10:00

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/05/24 11:52	04/08/24 23:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/05/24 11:52	04/08/24 23:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/05/24 11:52	04/08/24 23:49	1
Ethylbenzene	ND		0.050	mg/Kg		04/05/24 11:52	04/08/24 23:49	1
Toluene	ND		0.050	mg/Kg		04/05/24 11:52	04/08/24 23:49	1
Xylenes, Total	ND		0.10	mg/Kg		04/05/24 11:52	04/08/24 23:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		39 - 146			04/05/24 11:52	04/08/24 23:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/09/24 13:26	04/09/24 17:27	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/09/24 13:26	04/09/24 17:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134			04/09/24 13:26	04/09/24 17:27	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		5.0	mg/Kg			04/10/24 12:09	1

Eurofins Albuquerque

Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-42 1'

Lab Sample ID: 885-2411-7

Date Collected: 04/03/24 10:05

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/05/24 11:52	04/09/24 00:13	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		15 - 244			04/05/24 11:52	04/09/24 00:13	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/05/24 11:52	04/09/24 00:13	1	
Ethylbenzene	ND		0.049	mg/Kg		04/05/24 11:52	04/09/24 00:13	1	
Toluene	ND		0.049	mg/Kg		04/05/24 11:52	04/09/24 00:13	1	
Xylenes, Total	ND		0.098	mg/Kg		04/05/24 11:52	04/09/24 00:13	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	84		39 - 146			04/05/24 11:52	04/09/24 00:13	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/09/24 13:26	04/09/24 17:39	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/09/24 13:26	04/09/24 17:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	106		62 - 134			04/09/24 13:26	04/09/24 17:39	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	240		5.0	mg/Kg			04/10/24 12:14	1	

Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-27 1'

Lab Sample ID: 885-2411-8

Date Collected: 04/03/24 10:10

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/05/24 11:52	04/09/24 00:36		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		15 - 244			04/05/24 11:52	04/09/24 00:36		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/05/24 11:52	04/09/24 00:36		1
Ethylbenzene	ND		0.048	mg/Kg		04/05/24 11:52	04/09/24 00:36		1
Toluene	ND		0.048	mg/Kg		04/05/24 11:52	04/09/24 00:36		1
Xylenes, Total	ND		0.096	mg/Kg		04/05/24 11:52	04/09/24 00:36		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	82		39 - 146			04/05/24 11:52	04/09/24 00:36		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	14		8.8	mg/Kg		04/09/24 13:26	04/09/24 17:52		1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/09/24 13:26	04/09/24 17:52		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	104		62 - 134			04/09/24 13:26	04/09/24 17:52		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	120		5.0	mg/Kg			04/10/24 12:19		1



## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-28 1'

Lab Sample ID: 885-2411-9

Date Collected: 04/03/24 10:15

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/05/24 11:52	04/09/24 01:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			04/05/24 11:52	04/09/24 01:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/05/24 11:52	04/09/24 01:00	1
Ethylbenzene	ND		0.050	mg/Kg		04/05/24 11:52	04/09/24 01:00	1
Toluene	ND		0.050	mg/Kg		04/05/24 11:52	04/09/24 01:00	1
Xylenes, Total	ND		0.10	mg/Kg		04/05/24 11:52	04/09/24 01:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		39 - 146			04/05/24 11:52	04/09/24 01:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	24		8.9	mg/Kg		04/09/24 13:26	04/09/24 18:04	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/09/24 13:26	04/09/24 18:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			04/09/24 13:26	04/09/24 18:04	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.0	mg/Kg			04/10/24 12:23	1

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Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-29 1'

Lab Sample ID: 885-2411-10

Date Collected: 04/03/24 10:20

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/05/24 11:52	04/09/24 01:24	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		15 - 244			04/05/24 11:52	04/09/24 01:24	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		04/05/24 11:52	04/09/24 01:24	1	
Ethylbenzene	ND		0.046	mg/Kg		04/05/24 11:52	04/09/24 01:24	1	
Toluene	ND		0.046	mg/Kg		04/05/24 11:52	04/09/24 01:24	1	
Xylenes, Total	ND		0.091	mg/Kg		04/05/24 11:52	04/09/24 01:24	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	84		39 - 146			04/05/24 11:52	04/09/24 01:24	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	22		9.8	mg/Kg		04/09/24 13:26	04/09/24 18:17	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/09/24 13:26	04/09/24 18:17	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	107		62 - 134			04/09/24 13:26	04/09/24 18:17	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	180		5.0	mg/Kg			04/10/24 12:28	1	

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-30 1'

Lab Sample ID: 885-2411-11

Date Collected: 04/03/24 10:25

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/05/24 11:52	04/09/24 02:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/05/24 11:52	04/09/24 02:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/05/24 11:52	04/09/24 02:11	1
Ethylbenzene	ND		0.049	mg/Kg		04/05/24 11:52	04/09/24 02:11	1
Toluene	ND		0.049	mg/Kg		04/05/24 11:52	04/09/24 02:11	1
Xylenes, Total	ND		0.098	mg/Kg		04/05/24 11:52	04/09/24 02:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		39 - 146			04/05/24 11:52	04/09/24 02:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		04/09/24 13:26	04/09/24 18:29	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/09/24 13:26	04/09/24 18:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	110		62 - 134			04/09/24 13:26	04/09/24 18:29	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		5.1	mg/Kg			04/10/24 12:33	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-31 1'

Lab Sample ID: 885-2411-12

Date Collected: 04/03/24 10:30

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/05/24 11:52	04/09/24 02:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/05/24 11:52	04/09/24 02:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/05/24 11:52	04/09/24 02:34	1
Ethylbenzene	ND		0.048	mg/Kg		04/05/24 11:52	04/09/24 02:34	1
Toluene	ND		0.048	mg/Kg		04/05/24 11:52	04/09/24 02:34	1
Xylenes, Total	ND		0.096	mg/Kg		04/05/24 11:52	04/09/24 02:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146			04/05/24 11:52	04/09/24 02:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		04/09/24 13:26	04/09/24 18:42	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/09/24 13:26	04/09/24 18:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	107		62 - 134			04/09/24 13:26	04/09/24 18:42	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		5.0	mg/Kg			04/10/24 12:48	1

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Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-32 1'

Lab Sample ID: 885-2411-13

Date Collected: 04/03/24 10:35

Matrix: Solid

Date Received: 04/05/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/05/24 11:52	04/09/24 02:58		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		15 - 244			04/05/24 11:52	04/09/24 02:58		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/05/24 11:52	04/09/24 02:58		1
Ethylbenzene	ND		0.049	mg/Kg		04/05/24 11:52	04/09/24 02:58		1
Toluene	ND		0.049	mg/Kg		04/05/24 11:52	04/09/24 02:58		1
Xylenes, Total	ND		0.098	mg/Kg		04/05/24 11:52	04/09/24 02:58		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	85		39 - 146			04/05/24 11:52	04/09/24 02:58		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.7	mg/Kg		04/09/24 13:26	04/09/24 18:54		1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/09/24 13:26	04/09/24 18:54		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	113		62 - 134			04/09/24 13:26	04/09/24 18:54		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	24		5.0	mg/Kg			04/10/24 12:52		1

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: WES24-01 0-4'

Lab Sample ID: 885-2411-14

Date Collected: 04/03/24 10:40

Matrix: Solid

Date Received: 04/05/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/05/24 11:52	04/09/24 03:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/05/24 11:52	04/09/24 03:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/05/24 11:52	04/09/24 03:21	1
Ethylbenzene	ND		0.047	mg/Kg		04/05/24 11:52	04/09/24 03:21	1
Toluene	ND		0.047	mg/Kg		04/05/24 11:52	04/09/24 03:21	1
Xylenes, Total	ND		0.094	mg/Kg		04/05/24 11:52	04/09/24 03:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		39 - 146			04/05/24 11:52	04/09/24 03:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/09/24 13:26	04/09/24 19:07	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/09/24 13:26	04/09/24 19:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			04/09/24 13:26	04/09/24 19:07	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1600		25	mg/Kg			04/10/24 13:26	5

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

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

Lab Sample ID: MB 885-2829/1-A  
Matrix: Solid  
Analysis Batch: 2942

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 2829

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

Lab Sample ID: LCS 885-2829/2-A  
Matrix: Solid  
Analysis Batch: 2942

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 2829

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

Lab Sample ID: 885-2411-1 MS  
Matrix: Solid  
Analysis Batch: 2942

Client Sample ID: BES24-01 2'  
Prep Type: Total/NA  
Prep Batch: 2829

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.9	27.2		mg/Kg		109	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	221		15 - 244						

Lab Sample ID: 885-2411-1 MSD  
Matrix: Solid  
Analysis Batch: 2942

Client Sample ID: BES24-01 2'  
Prep Type: Total/NA  
Prep Batch: 2829

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.9	25.5		mg/Kg		103	70 - 130	7	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	216		15 - 244								

Lab Sample ID: MB 885-2894/1-A  
Matrix: Solid  
Analysis Batch: 2942

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 2894

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

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

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

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

Matrix: Solid

Analysis Batch: 2943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2829

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/05/24 11:52	04/08/24 19:53	1
Ethylbenzene	ND		0.050	mg/Kg		04/05/24 11:52	04/08/24 19:53	1
Toluene	ND		0.050	mg/Kg		04/05/24 11:52	04/08/24 19:53	1
Xylenes, Total	ND		0.10	mg/Kg		04/05/24 11:52	04/08/24 19:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		39 - 146	04/05/24 11:52	04/08/24 19:53	1

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

Matrix: Solid

Analysis Batch: 2943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2829

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.792		mg/Kg		79	70 - 130
Ethylbenzene	1.00	0.812		mg/Kg		81	70 - 130
m,p-Xylene	2.00	1.66		mg/Kg		83	70 - 130
o-Xylene	1.00	0.808		mg/Kg		81	70 - 130
Toluene	1.00	0.809		mg/Kg		81	70 - 130

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

Lab Sample ID: 885-2411-2 MS

Matrix: Solid

Analysis Batch: 2943

Client Sample ID: BES24-02 2'

Prep Type: Total/NA

Prep Batch: 2829

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.969	0.755		mg/Kg		78	70 - 130
Ethylbenzene	ND		0.969	0.815		mg/Kg		84	70 - 130
m,p-Xylene	ND		1.94	1.67		mg/Kg		85	70 - 130
o-Xylene	ND		0.969	0.817		mg/Kg		84	70 - 130
Toluene	ND		0.969	0.798		mg/Kg		82	70 - 130

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

Lab Sample ID: 885-2411-2 MSD

Matrix: Solid

Analysis Batch: 2943

Client Sample ID: BES24-02 2'

Prep Type: Total/NA

Prep Batch: 2829

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.969	0.746		mg/Kg		77	70 - 130	1	20
Ethylbenzene	ND		0.969	0.785		mg/Kg		81	70 - 130	4	20
m,p-Xylene	ND		1.94	1.59		mg/Kg		81	70 - 130	5	20
o-Xylene	ND		0.969	0.785		mg/Kg		81	70 - 130	4	20
Toluene	ND		0.969	0.772		mg/Kg		80	70 - 130	3	20

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

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

Lab Sample ID: 885-2411-2 MSD

Matrix: Solid

Analysis Batch: 2943

Client Sample ID: BES24-02 2'

Prep Type: Total/NA

Prep Batch: 2829

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

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

Matrix: Solid

Analysis Batch: 2943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2894

Analyte	MB	MB						
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/08/24 09:02	04/08/24 11:37	1
Ethylbenzene	ND		0.050	mg/Kg		04/08/24 09:02	04/08/24 11:37	1
Toluene	ND		0.050	mg/Kg		04/08/24 09:02	04/08/24 11:37	1
Xylenes, Total	ND		0.10	mg/Kg		04/08/24 09:02	04/08/24 11:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146			04/08/24 09:02	04/08/24 11:37	1

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

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

Matrix: Solid

Analysis Batch: 2992

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2977

Analyte	MB	MB						
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/09/24 13:26	04/09/24 16:00	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/09/24 13:26	04/09/24 16:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134			04/09/24 13:26	04/09/24 16:00	1

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

Matrix: Solid

Analysis Batch: 2992

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2977

Analyte	Spike	LCS	LCS					
	Added	Result	Qualifier	Unit	D	%Rec	%Rec	Limits
Diesel Range Organics [C10-C28]	50.0	43.0		mg/Kg		86		60 - 135
Surrogate	%Recovery	Qualifier	Limits					
Di-n-octyl phthalate (Surr)	115		62 - 134					

## Method: 300.0 - Anions, Ion Chromatography

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

Matrix: Solid

Analysis Batch: 77797

Client Sample ID: Method Blank

Prep Type: Soluble

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

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

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

Matrix: Solid

Analysis Batch: 77797

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 77797

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	265		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 885-2411-1 MS

Matrix: Solid

Analysis Batch: 77797

Client Sample ID: BES24-01 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.0		249	261		mg/Kg		103	90 - 110

Lab Sample ID: 885-2411-1 MSD

Matrix: Solid

Analysis Batch: 77797

Client Sample ID: BES24-01 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5.0		249	262		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 885-2411-11 MS

Matrix: Solid

Analysis Batch: 77797

Client Sample ID: BES24-30 1'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	22		253	291		mg/Kg		106	90 - 110

Lab Sample ID: 885-2411-11 MSD

Matrix: Solid

Analysis Batch: 77797

Client Sample ID: BES24-30 1'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	22		253	291		mg/Kg		107	90 - 110	0	20

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QC Association Summary

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

GC VOA

Prep Batch: 2829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2411-1	BES24-01 2'	Total/NA	Solid	5030C	
885-2411-2	BES24-02 2'	Total/NA	Solid	5030C	
885-2411-3	BES24-03 2'	Total/NA	Solid	5030C	
885-2411-4	BES24-04 2'	Total/NA	Solid	5030C	
885-2411-5	BES24-39 1'	Total/NA	Solid	5030C	
885-2411-6	BES24-41 1'	Total/NA	Solid	5030C	
885-2411-7	BES24-42 1'	Total/NA	Solid	5030C	
885-2411-8	BES24-27 1'	Total/NA	Solid	5030C	
885-2411-9	BES24-28 1'	Total/NA	Solid	5030C	
885-2411-10	BES24-29 1'	Total/NA	Solid	5030C	
885-2411-11	BES24-30 1'	Total/NA	Solid	5030C	
885-2411-12	BES24-31 1'	Total/NA	Solid	5030C	
885-2411-13	BES24-32 1'	Total/NA	Solid	5030C	
885-2411-14	WES24-01 0-4'	Total/NA	Solid	5030C	
MB 885-2829/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-2829/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-2829/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-2411-1 MS	BES24-01 2'	Total/NA	Solid	5030C	
885-2411-1 MSD	BES24-01 2'	Total/NA	Solid	5030C	
885-2411-2 MS	BES24-02 2'	Total/NA	Solid	5030C	
885-2411-2 MSD	BES24-02 2'	Total/NA	Solid	5030C	

Prep Batch: 2894

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

Analysis Batch: 2942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2411-1	BES24-01 2'	Total/NA	Solid	8015D	2829
885-2411-2	BES24-02 2'	Total/NA	Solid	8015D	2829
885-2411-3	BES24-03 2'	Total/NA	Solid	8015D	2829
885-2411-4	BES24-04 2'	Total/NA	Solid	8015D	2829
885-2411-5	BES24-39 1'	Total/NA	Solid	8015D	2829
885-2411-6	BES24-41 1'	Total/NA	Solid	8015D	2829
885-2411-7	BES24-42 1'	Total/NA	Solid	8015D	2829
885-2411-8	BES24-27 1'	Total/NA	Solid	8015D	2829
885-2411-9	BES24-28 1'	Total/NA	Solid	8015D	2829
885-2411-10	BES24-29 1'	Total/NA	Solid	8015D	2829
885-2411-11	BES24-30 1'	Total/NA	Solid	8015D	2829
885-2411-12	BES24-31 1'	Total/NA	Solid	8015D	2829
885-2411-13	BES24-32 1'	Total/NA	Solid	8015D	2829
885-2411-14	WES24-01 0-4'	Total/NA	Solid	8015D	2829
MB 885-2829/1-A	Method Blank	Total/NA	Solid	8015D	2829
MB 885-2894/1-A	Method Blank	Total/NA	Solid	8015D	2894
LCS 885-2829/2-A	Lab Control Sample	Total/NA	Solid	8015D	2829
885-2411-1 MS	BES24-01 2'	Total/NA	Solid	8015D	2829
885-2411-1 MSD	BES24-01 2'	Total/NA	Solid	8015D	2829

Analysis Batch: 2943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2411-1	BES24-01 2'	Total/NA	Solid	8021B	2829

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

## GC VOA (Continued)

## Analysis Batch: 2943 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2411-2	BES24-02 2'	Total/NA	Solid	8021B	2829
885-2411-3	BES24-03 2'	Total/NA	Solid	8021B	2829
885-2411-4	BES24-04 2'	Total/NA	Solid	8021B	2829
885-2411-5	BES24-39 1'	Total/NA	Solid	8021B	2829
885-2411-6	BES24-41 1'	Total/NA	Solid	8021B	2829
885-2411-7	BES24-42 1'	Total/NA	Solid	8021B	2829
885-2411-8	BES24-27 1'	Total/NA	Solid	8021B	2829
885-2411-9	BES24-28 1'	Total/NA	Solid	8021B	2829
885-2411-10	BES24-29 1'	Total/NA	Solid	8021B	2829
885-2411-11	BES24-30 1'	Total/NA	Solid	8021B	2829
885-2411-12	BES24-31 1'	Total/NA	Solid	8021B	2829
885-2411-13	BES24-32 1'	Total/NA	Solid	8021B	2829
885-2411-14	WES24-01 0-4'	Total/NA	Solid	8021B	2829
MB 885-2829/1-A	Method Blank	Total/NA	Solid	8021B	2829
MB 885-2894/1-A	Method Blank	Total/NA	Solid	8021B	2894
LCS 885-2829/3-A	Lab Control Sample	Total/NA	Solid	8021B	2829
885-2411-2 MS	BES24-02 2'	Total/NA	Solid	8021B	2829
885-2411-2 MSD	BES24-02 2'	Total/NA	Solid	8021B	2829

## GC Semi VOA

## Prep Batch: 2977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2411-1	BES24-01 2'	Total/NA	Solid	SHAKE	
885-2411-2	BES24-02 2'	Total/NA	Solid	SHAKE	
885-2411-3	BES24-03 2'	Total/NA	Solid	SHAKE	
885-2411-4	BES24-04 2'	Total/NA	Solid	SHAKE	
885-2411-5	BES24-39 1'	Total/NA	Solid	SHAKE	
885-2411-6	BES24-41 1'	Total/NA	Solid	SHAKE	
885-2411-7	BES24-42 1'	Total/NA	Solid	SHAKE	
885-2411-8	BES24-27 1'	Total/NA	Solid	SHAKE	
885-2411-9	BES24-28 1'	Total/NA	Solid	SHAKE	
885-2411-10	BES24-29 1'	Total/NA	Solid	SHAKE	
885-2411-11	BES24-30 1'	Total/NA	Solid	SHAKE	
885-2411-12	BES24-31 1'	Total/NA	Solid	SHAKE	
885-2411-13	BES24-32 1'	Total/NA	Solid	SHAKE	
885-2411-14	WES24-01 0-4'	Total/NA	Solid	SHAKE	
MB 885-2977/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-2977/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 2992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2411-1	BES24-01 2'	Total/NA	Solid	8015D	2977
885-2411-2	BES24-02 2'	Total/NA	Solid	8015D	2977
885-2411-3	BES24-03 2'	Total/NA	Solid	8015D	2977
885-2411-4	BES24-04 2'	Total/NA	Solid	8015D	2977
885-2411-5	BES24-39 1'	Total/NA	Solid	8015D	2977
885-2411-6	BES24-41 1'	Total/NA	Solid	8015D	2977
885-2411-7	BES24-42 1'	Total/NA	Solid	8015D	2977
885-2411-8	BES24-27 1'	Total/NA	Solid	8015D	2977
885-2411-9	BES24-28 1'	Total/NA	Solid	8015D	2977

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

## GC Semi VOA (Continued)

## Analysis Batch: 2992 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2411-10	BES24-29 1'	Total/NA	Solid	8015D	2977
885-2411-11	BES24-30 1'	Total/NA	Solid	8015D	2977
885-2411-12	BES24-31 1'	Total/NA	Solid	8015D	2977
885-2411-13	BES24-32 1'	Total/NA	Solid	8015D	2977
885-2411-14	WES24-01 0-4'	Total/NA	Solid	8015D	2977
MB 885-2977/1-A	Method Blank	Total/NA	Solid	8015D	2977
LCS 885-2977/2-A	Lab Control Sample	Total/NA	Solid	8015D	2977

## HPLC/IC

## Leach Batch: 77760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2411-1	BES24-01 2'	Soluble	Solid	DI Leach	
885-2411-2	BES24-02 2'	Soluble	Solid	DI Leach	
885-2411-3	BES24-03 2'	Soluble	Solid	DI Leach	
885-2411-4	BES24-04 2'	Soluble	Solid	DI Leach	
885-2411-5	BES24-39 1'	Soluble	Solid	DI Leach	
885-2411-6	BES24-41 1'	Soluble	Solid	DI Leach	
885-2411-7	BES24-42 1'	Soluble	Solid	DI Leach	
885-2411-8	BES24-27 1'	Soluble	Solid	DI Leach	
885-2411-9	BES24-28 1'	Soluble	Solid	DI Leach	
885-2411-10	BES24-29 1'	Soluble	Solid	DI Leach	
885-2411-11	BES24-30 1'	Soluble	Solid	DI Leach	
885-2411-12	BES24-31 1'	Soluble	Solid	DI Leach	
885-2411-13	BES24-32 1'	Soluble	Solid	DI Leach	
885-2411-14	WES24-01 0-4'	Soluble	Solid	DI Leach	
MB 880-77760/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-77760/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 880-77760/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2411-1 MS	BES24-01 2'	Soluble	Solid	DI Leach	
885-2411-1 MSD	BES24-01 2'	Soluble	Solid	DI Leach	
885-2411-11 MS	BES24-30 1'	Soluble	Solid	DI Leach	
885-2411-11 MSD	BES24-30 1'	Soluble	Solid	DI Leach	

## Analysis Batch: 77797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2411-1	BES24-01 2'	Soluble	Solid	300.0	77760
885-2411-2	BES24-02 2'	Soluble	Solid	300.0	77760
885-2411-3	BES24-03 2'	Soluble	Solid	300.0	77760
885-2411-4	BES24-04 2'	Soluble	Solid	300.0	77760
885-2411-5	BES24-39 1'	Soluble	Solid	300.0	77760
885-2411-6	BES24-41 1'	Soluble	Solid	300.0	77760
885-2411-7	BES24-42 1'	Soluble	Solid	300.0	77760
885-2411-8	BES24-27 1'	Soluble	Solid	300.0	77760
885-2411-9	BES24-28 1'	Soluble	Solid	300.0	77760
885-2411-10	BES24-29 1'	Soluble	Solid	300.0	77760
885-2411-11	BES24-30 1'	Soluble	Solid	300.0	77760
885-2411-12	BES24-31 1'	Soluble	Solid	300.0	77760
885-2411-13	BES24-32 1'	Soluble	Solid	300.0	77760
885-2411-14	WES24-01 0-4'	Soluble	Solid	300.0	77760
MB 880-77760/1-A	Method Blank	Soluble	Solid	300.0	77760

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QC Association Summary

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

HPLC/IC (Continued)

Analysis Batch: 77797 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-77760/2-A	Lab Control Sample	Soluble	Solid	300.0	77760
LCSD 880-77760/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	77760
885-2411-1 MS	BES24-01 2'	Soluble	Solid	300.0	77760
885-2411-1 MSD	BES24-01 2'	Soluble	Solid	300.0	77760
885-2411-11 MS	BES24-30 1'	Soluble	Solid	300.0	77760
885-2411-11 MSD	BES24-30 1'	Soluble	Solid	300.0	77760



Lab Chronicle

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-01 2'  
Date Collected: 04/03/24 09:30  
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2411-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/08/24 20:17
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/08/24 20:17
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 16:25
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 11:25

Client Sample ID: BES24-02 2'  
Date Collected: 04/03/24 09:35  
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2411-2  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/08/24 21:28
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/08/24 21:28
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 16:37
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 11:40

Client Sample ID: BES24-03 2'  
Date Collected: 04/03/24 09:40  
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2411-3  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/08/24 22:39
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/08/24 22:39
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 16:50
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 11:45

Client Sample ID: BES24-04 2'  
Date Collected: 04/03/24 09:50  
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2411-4  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/08/24 23:02

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## Lab Chronicle

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-04 2'

Lab Sample ID: 885-2411-4

Date Collected: 04/03/24 09:50

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/08/24 23:02
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 17:02
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 11:49

Client Sample ID: BES24-39 1'

Lab Sample ID: 885-2411-5

Date Collected: 04/03/24 09:55

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/08/24 23:26
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/08/24 23:26
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 17:15
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 11:54

Client Sample ID: BES24-41 1'

Lab Sample ID: 885-2411-6

Date Collected: 04/03/24 10:00

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/08/24 23:49
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/08/24 23:49
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 17:27
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 12:09

Client Sample ID: BES24-42 1'

Lab Sample ID: 885-2411-7

Date Collected: 04/03/24 10:05

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 00:13
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 00:13

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: BES24-42 1'  
Date Collected: 04/03/24 10:05  
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2411-7  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 17:39
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 12:14

Client Sample ID: BES24-27 1'  
Date Collected: 04/03/24 10:10  
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2411-8  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 00:36
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 00:36
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 17:52
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 12:19

Client Sample ID: BES24-28 1'  
Date Collected: 04/03/24 10:15  
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2411-9  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 01:00
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 01:00
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 18:04
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 12:23

Client Sample ID: BES24-29 1'  
Date Collected: 04/03/24 10:20  
Date Received: 04/05/24 07:55

Lab Sample ID: 885-2411-10  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 01:24
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 01:24
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 18:17

Lab Chronicle

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

**Client Sample ID: BES24-29 1'**  
**Date Collected: 04/03/24 10:20**  
**Date Received: 04/05/24 07:55**

**Lab Sample ID: 885-2411-10**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 12:28

**Client Sample ID: BES24-30 1'**  
**Date Collected: 04/03/24 10:25**  
**Date Received: 04/05/24 07:55**

**Lab Sample ID: 885-2411-11**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 02:11
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 02:11
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 18:29
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 12:33

**Client Sample ID: BES24-31 1'**  
**Date Collected: 04/03/24 10:30**  
**Date Received: 04/05/24 07:55**

**Lab Sample ID: 885-2411-12**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 02:34
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 02:34
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 18:42
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 12:48

**Client Sample ID: BES24-32 1'**  
**Date Collected: 04/03/24 10:35**  
**Date Received: 04/05/24 07:55**

**Lab Sample ID: 885-2411-13**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 02:58
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 02:58
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 18:54
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		1	77797	SMC	EET MID	04/10/24 12:52

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Client Sample ID: WES24-01 0-4'

Lab Sample ID: 885-2411-14

Date Collected: 04/03/24 10:40

Matrix: Solid

Date Received: 04/05/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8015D		1	2942	JP	EET ALB	04/09/24 03:21
Total/NA	Prep	5030C			2829	JP	EET ALB	04/05/24 11:52
Total/NA	Analysis	8021B		1	2943	JP	EET ALB	04/09/24 03:21
Total/NA	Prep	SHAKE			2977	JU	EET ALB	04/09/24 13:26
Total/NA	Analysis	8015D		1	2992	JU	EET ALB	04/09/24 19:07
Soluble	Leach	DI Leach			77760	SA	EET MID	04/09/24 14:40
Soluble	Analysis	300.0		5	77797	SMC	EET MID	04/10/24 13:26

Laboratory References:

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

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

Accreditation/Certification Summary

Client: Vertex  
Project/Site: PLU 68

Job ID: 885-2411-1

Laboratory: Eurofins Albuquerque

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

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

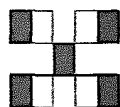
Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0		Solid	Chloride







# HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Chain-of-Custody Record				Turn-Around Time		
Client XTO Energy, Inc		<input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>5 Day</u> Project Name <u>PLU 68</u>				
Mailing Address <u>3104 E Greene St</u>		Project # <u>24E00664</u>				
Phone # <u>575 725 5001</u>		Napp2402630186; Cost Center # <u>2191851001</u>				
email or Fax#		Project Manager <b>Sally Cattar</b>				
QA/QC Package		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation) <input type="checkbox"/> Accreditation <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other _____				
<input type="checkbox"/> EDD (Type) _____ <input type="checkbox"/> On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		# of Coolers: <u>6</u> <u>10 for 131.1</u>				
Cooler Temp (including CFS)		Cooler Temp				
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
04 03 24	10 35	Soil	BES24-32 2'	1, 4oz jar	ICE	13
04 03 24	10 40	Soil	WES24-01 0-4'	1, 4oz jar	ICE	14
Date	Time	Relinquished by	Received by    Via    Date    Time			
04/04/24	10:40	mmmmmm	mmmmmm    Via    4/4/24    930			
04/04/24	10:40	mmmmmm	mmmmmm    Via    4/5/24    7:55			

if necessary samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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## Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2411-1

Login Number: 2411

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

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

## Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2411-1

Login Number: 2411

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 04/09/24 01:30 PM

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



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 4/22/2024 11:19:29 AM

## JOB DESCRIPTION

Plu 68 Battery

## JOB NUMBER

885-2776-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109

# Eurofins Albuquerque

## Job Notes

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

## Authorization



Generated  
4/22/2024 11:19:29 AM

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

Client: Vertex  
Project/Site: Plu 68 Battery

Laboratory Job ID: 885-2776-1



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Definitions/Glossary

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Qualifiers

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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



## Case Narrative

Client: Vertex  
Project: Plu 68 Battery

Job ID: 885-2776-1

**Job ID: 885-2776-1**

**Eurofins Albuquerque**

### Job Narrative 885-2776-1

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

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

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

#### Receipt

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

#### Gasoline Range Organics

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

#### GC VOA

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

#### Diesel Range Organics

Method 8015D\_DRO: Surrogate recovery for the following samples were outside the upper control limit: BES24-12 2' (885-2776-1) and BES24-24 1' (885-2776-11). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8015D\_DRO: Surrogate recovery for the following sample was outside the upper control limit: BES24-22 1' (885-2776-9). 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

Method 300\_ORGFM\_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-78412 and 880-78412 and analytical batch 880-78530 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

BES24-22 1' (885-2776-9), BES24-23 1' (885-2776-10), BES24-24 1' (885-2776-11), BES24-25 1' (885-2776-12), BES24-40 2' (885-2776-13), BES24-42 4' (885-2776-14), BES24-43 2' (885-2776-15), (885-2776-B-9-B MS) and (885-2776-B-9-C MSD)

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: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-12 2'

Lab Sample ID: 885-2776-1

Date Collected: 04/09/24 14:50

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/12/24 17:15	04/17/24 05:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/12/24 17:15	04/17/24 05:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 17:15	04/17/24 05:56	1
Ethylbenzene	ND		0.049	mg/Kg		04/12/24 17:15	04/17/24 05:56	1
Toluene	ND		0.049	mg/Kg		04/12/24 17:15	04/17/24 05:56	1
Xylenes, Total	ND		0.098	mg/Kg		04/12/24 17:15	04/17/24 05:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			04/12/24 17:15	04/17/24 05:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/16/24 11:49	04/17/24 12:41	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/16/24 11:49	04/17/24 12:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	146	S1+	62 - 134			04/16/24 11:49	04/17/24 12:41	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		5.0	mg/Kg			04/17/24 20:17	1

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## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-13 2'

Lab Sample ID: 885-2776-2

Date Collected: 04/09/24 14:55

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/12/24 17:15	04/17/24 06:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/12/24 17:15	04/17/24 06:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 17:15	04/17/24 06:18	1
Ethylbenzene	ND		0.047	mg/Kg		04/12/24 17:15	04/17/24 06:18	1
Toluene	ND		0.047	mg/Kg		04/12/24 17:15	04/17/24 06:18	1
Xylenes, Total	ND		0.094	mg/Kg		04/12/24 17:15	04/17/24 06:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			04/12/24 17:15	04/17/24 06:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		04/16/24 11:49	04/17/24 12:54	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/16/24 11:49	04/17/24 12:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	128		62 - 134			04/16/24 11:49	04/17/24 12:54	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		5.0	mg/Kg			04/17/24 20:32	1

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## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-14 2

Lab Sample ID: 885-2776-3

Date Collected: 04/09/24 15:00

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 10:19	04/17/24 12:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/16/24 10:19	04/17/24 12:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 12:29	1
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 12:29	1
Toluene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 12:29	1
Xylenes, Total	ND		0.095	mg/Kg		04/16/24 10:19	04/17/24 12:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			04/16/24 10:19	04/17/24 12:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/16/24 11:49	04/17/24 13:06	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/16/24 11:49	04/17/24 13:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		62 - 134			04/16/24 11:49	04/17/24 13:06	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		5.0	mg/Kg			04/17/24 20:37	1

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## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-15 2'

Lab Sample ID: 885-2776-4

Date Collected: 04/09/24 15:05

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 10:19	04/17/24 13:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244	04/16/24 10:19	04/17/24 13:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 13:35	1
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 13:35	1
Toluene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 13:35	1
Xylenes, Total	ND		0.096	mg/Kg		04/16/24 10:19	04/17/24 13:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146	04/16/24 10:19	04/17/24 13:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/16/24 11:49	04/17/24 13:19	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/16/24 11:49	04/17/24 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	103		62 - 134	04/16/24 11:49	04/17/24 13:19	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		5.0	mg/Kg			04/17/24 20:42	1

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## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-16 2'

Lab Sample ID: 885-2776-5

Date Collected: 04/09/24 15:10

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 10:19	04/17/24 14:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244			04/16/24 10:19	04/17/24 14:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 14:40	1
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 14:40	1
Toluene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 14:40	1
Xylenes, Total	ND		0.097	mg/Kg		04/16/24 10:19	04/17/24 14:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/16/24 10:19	04/17/24 14:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.5	mg/Kg		04/16/24 11:49	04/17/24 13:31	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/16/24 11:49	04/17/24 13:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	128		62 - 134			04/16/24 11:49	04/17/24 13:31	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.0		5.0	mg/Kg			04/17/24 20:46	1

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## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-17 2'

Lab Sample ID: 885-2776-6

Date Collected: 04/09/24 15:15

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/16/24 10:19	04/17/24 15:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/16/24 10:19	04/17/24 15:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 15:02	1
Ethylbenzene	ND		0.049	mg/Kg		04/16/24 10:19	04/17/24 15:02	1
Toluene	ND		0.049	mg/Kg		04/16/24 10:19	04/17/24 15:02	1
Xylenes, Total	ND		0.098	mg/Kg		04/16/24 10:19	04/17/24 15:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/16/24 10:19	04/17/24 15:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		04/16/24 11:49	04/17/24 13:43	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/16/24 11:49	04/17/24 13:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			04/16/24 11:49	04/17/24 13:43	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10		5.0	mg/Kg			04/17/24 20:51	1

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## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-18 2'

Lab Sample ID: 885-2776-7

Date Collected: 04/09/24 15:20

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 10:19	04/17/24 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244	04/16/24 10:19	04/17/24 15:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 15:24	1
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 15:24	1
Toluene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 15:24	1
Xylenes, Total	ND		0.097	mg/Kg		04/16/24 10:19	04/17/24 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146	04/16/24 10:19	04/17/24 15:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/16/24 11:49	04/17/24 13:56	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/16/24 11:49	04/17/24 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	117		62 - 134	04/16/24 11:49	04/17/24 13:56	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		5.0	mg/Kg			04/17/24 20:56	1

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## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-21 1'

Lab Sample ID: 885-2776-8

Date Collected: 04/09/24 14:05

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 10:19	04/17/24 15:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/16/24 10:19	04/17/24 15:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 15:46	1
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 15:46	1
Toluene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 15:46	1
Xylenes, Total	ND		0.097	mg/Kg		04/16/24 10:19	04/17/24 15:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			04/16/24 10:19	04/17/24 15:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		04/16/24 11:49	04/17/24 14:08	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/16/24 11:49	04/17/24 14:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	123		62 - 134			04/16/24 11:49	04/17/24 14:08	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	280		5.0	mg/Kg			04/17/24 21:01	1

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Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-22 1'  
Date Collected: 04/09/24 14:10  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2776-9  
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 10:19	04/17/24 16:07	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		15 - 244			04/16/24 10:19	04/17/24 16:07	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 16:07	1	
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 16:07	1	
Toluene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 16:07	1	
Xylenes, Total	ND		0.096	mg/Kg		04/16/24 10:19	04/17/24 16:07	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	89		39 - 146			04/16/24 10:19	04/17/24 16:07	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/16/24 11:49	04/18/24 14:00	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/16/24 11:49	04/18/24 14:00	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	135	S1+	62 - 134			04/16/24 11:49	04/18/24 14:00	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	190	F1	5.0	mg/Kg			04/17/24 21:40	1	

## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-23 1'

Lab Sample ID: 885-2776-10

Date Collected: 04/09/24 14:15

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 10:19	04/17/24 16:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/16/24 10:19	04/17/24 16:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 16:29	1
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 16:29	1
Toluene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 16:29	1
Xylenes, Total	ND		0.096	mg/Kg		04/16/24 10:19	04/17/24 16:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			04/16/24 10:19	04/17/24 16:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		04/16/24 11:49	04/17/24 14:33	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/16/24 11:49	04/17/24 14:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			04/16/24 11:49	04/17/24 14:33	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43		5.0	mg/Kg			04/17/24 21:54	1

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## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-24 1'

Lab Sample ID: 885-2776-11

Date Collected: 04/09/24 14:20

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/16/24 10:19	04/17/24 16:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/16/24 10:19	04/17/24 16:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 16:51	1
Ethylbenzene	ND		0.049	mg/Kg		04/16/24 10:19	04/17/24 16:51	1
Toluene	ND		0.049	mg/Kg		04/16/24 10:19	04/17/24 16:51	1
Xylenes, Total	ND		0.097	mg/Kg		04/16/24 10:19	04/17/24 16:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			04/16/24 10:19	04/17/24 16:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/16/24 11:49	04/17/24 14:46	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/16/24 11:49	04/17/24 14:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	143	S1+	62 - 134			04/16/24 11:49	04/17/24 14:46	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		5.0	mg/Kg			04/17/24 21:59	1

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## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-25 1'

Lab Sample ID: 885-2776-12

Date Collected: 04/09/24 14:25

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/16/24 10:19	04/17/24 17:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244	04/16/24 10:19	04/17/24 17:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/16/24 10:19	04/17/24 17:13	1
Ethylbenzene	ND		0.050	mg/Kg		04/16/24 10:19	04/17/24 17:13	1
Toluene	ND		0.050	mg/Kg		04/16/24 10:19	04/17/24 17:13	1
Xylenes, Total	ND		0.10	mg/Kg		04/16/24 10:19	04/17/24 17:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		39 - 146	04/16/24 10:19	04/17/24 17:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		04/16/24 11:49	04/17/24 15:49	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/16/24 11:49	04/17/24 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	131		62 - 134	04/16/24 11:49	04/17/24 15:49	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.0	mg/Kg			04/17/24 22:04	1

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## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-40 2'

Lab Sample ID: 885-2776-13

Date Collected: 04/09/24 14:45

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/16/24 10:19	04/17/24 17:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/16/24 10:19	04/17/24 17:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 17:56	1
Ethylbenzene	ND		0.049	mg/Kg		04/16/24 10:19	04/17/24 17:56	1
Toluene	ND		0.049	mg/Kg		04/16/24 10:19	04/17/24 17:56	1
Xylenes, Total	ND		0.097	mg/Kg		04/16/24 10:19	04/17/24 17:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/16/24 10:19	04/17/24 17:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	16		9.5	mg/Kg		04/16/24 11:49	04/17/24 16:02	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/16/24 11:49	04/17/24 16:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			04/16/24 11:49	04/17/24 16:02	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/17/24 22:09	1

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Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-42 4'

Lab Sample ID: 885-2776-14

Date Collected: 04/09/24 14:30

Matrix: Solid

Date Received: 04/12/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/16/24 10:19	04/17/24 18:18	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		15 - 244			04/16/24 10:19	04/17/24 18:18	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/16/24 10:19	04/17/24 18:18	1	
Ethylbenzene	ND		0.049	mg/Kg		04/16/24 10:19	04/17/24 18:18	1	
Toluene	ND		0.049	mg/Kg		04/16/24 10:19	04/17/24 18:18	1	
Xylenes, Total	ND		0.099	mg/Kg		04/16/24 10:19	04/17/24 18:18	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	87		39 - 146			04/16/24 10:19	04/17/24 18:18	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	10		9.5	mg/Kg		04/16/24 11:49	04/17/24 16:14	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/16/24 11:49	04/17/24 16:14	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	109		62 - 134			04/16/24 11:49	04/17/24 16:14	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	290		5.0	mg/Kg			04/17/24 22:23	1	

## Client Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-43 2'

Lab Sample ID: 885-2776-15

Date Collected: 04/09/24 14:40

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 10:19	04/17/24 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244	04/16/24 10:19	04/17/24 18:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 10:19	04/17/24 18:40	1
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 18:40	1
Toluene	ND		0.048	mg/Kg		04/16/24 10:19	04/17/24 18:40	1
Xylenes, Total	ND		0.096	mg/Kg		04/16/24 10:19	04/17/24 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146	04/16/24 10:19	04/17/24 18:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/16/24 11:49	04/17/24 16:27	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/16/24 11:49	04/17/24 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	110		62 - 134	04/16/24 11:49	04/17/24 16:27	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		5.0	mg/Kg			04/17/24 22:28	1

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## QC Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

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

Lab Sample ID: MB 885-3206/1-A  
Matrix: Solid  
Analysis Batch: 3430

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 3206

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		15 - 244			04/12/24 13:27	04/16/24 10:07	1

Lab Sample ID: MB 885-3240/1-A  
Matrix: Solid  
Analysis Batch: 3430

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 17:15	04/16/24 21:06	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/12/24 17:15	04/16/24 21:06	1

Lab Sample ID: LCS 885-3240/2-A  
Matrix: Solid  
Analysis Batch: 3430

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 3240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	26.9		mg/Kg		108	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	226		15 - 244				

Lab Sample ID: MB 885-3335/1-A  
Matrix: Solid  
Analysis Batch: 3503

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 3335

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/16/24 10:19	04/17/24 12:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244			04/16/24 10:19	04/17/24 12:07	1

Lab Sample ID: LCS 885-3335/2-A  
Matrix: Solid  
Analysis Batch: 3503

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 3335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	26.1		mg/Kg		104	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	228		15 - 244				

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## QC Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

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

Lab Sample ID: 885-2776-3 MS

Matrix: Solid

Analysis Batch: 3503

Client Sample ID: BES24-14 2

Prep Type: Total/NA

Prep Batch: 3335

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		23.7	25.8		mg/Kg		109	70 - 130
Surrogate	%Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	231		15 - 244						

Lab Sample ID: 885-2776-3 MSD

Matrix: Solid

Analysis Batch: 3503

Client Sample ID: BES24-14 2

Prep Type: Total/NA

Prep Batch: 3335

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		23.9	25.2		mg/Kg		105	70 - 130	2	20
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	227		15 - 244								

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

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

Matrix: Solid

Analysis Batch: 3432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3206

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Toluene	ND		0.050	mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 13:27	04/16/24 10:07	1
Surrogate	%Recovery	MB Qualifier	MB Limits					
4-Bromofluorobenzene (Surr)	97		39 - 146					
				Prepared	Analyzed	Dil Fac		
				04/12/24 13:27	04/16/24 10:07	1		

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

Matrix: Solid

Analysis Batch: 3432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3240

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 17:15	04/16/24 21:06	1
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 17:15	04/16/24 21:06	1
Toluene	ND		0.050	mg/Kg		04/12/24 17:15	04/16/24 21:06	1
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 17:15	04/16/24 21:06	1
Surrogate	%Recovery	MB Qualifier	MB Limits					
4-Bromofluorobenzene (Surr)	90		39 - 146					
				Prepared	Analyzed	Dil Fac		
				04/12/24 17:15	04/16/24 21:06	1		

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## QC Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

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

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

Matrix: Solid

Analysis Batch: 3432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3240

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

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

Lab Sample ID: MB 885-3335/1-A

Matrix: Solid

Analysis Batch: 3505

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3335

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/16/24 10:19	04/17/24 12:07	1
Ethylbenzene	ND		0.050	mg/Kg		04/16/24 10:19	04/17/24 12:07	1
Toluene	ND		0.050	mg/Kg		04/16/24 10:19	04/17/24 12:07	1
Xylenes, Total	ND		0.10	mg/Kg		04/16/24 10:19	04/17/24 12:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146	04/16/24 10:19	04/17/24 12:07	1

Lab Sample ID: LCS 885-3335/3-A

Matrix: Solid

Analysis Batch: 3505

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.962		mg/Kg		96	70 - 130
Ethylbenzene	1.00	0.973		mg/Kg		97	70 - 130
m,p-Xylene	2.00	1.95		mg/Kg		98	70 - 130
o-Xylene	1.00	0.977		mg/Kg		98	70 - 130
Toluene	1.00	0.960		mg/Kg		96	70 - 130
Xylenes, Total	3.00	2.93		mg/Kg		98	70 - 130

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

Lab Sample ID: 885-2776-4 MS

Matrix: Solid

Analysis Batch: 3505

Client Sample ID: BES24-15 2'

Prep Type: Total/NA

Prep Batch: 3335

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.958	0.972		mg/Kg		101	70 - 130
Ethylbenzene	ND		0.958	0.981		mg/Kg		102	70 - 130
m,p-Xylene	ND		1.92	1.96		mg/Kg		103	70 - 130
o-Xylene	ND		0.958	0.985		mg/Kg		103	70 - 130
Toluene	ND		0.958	0.974		mg/Kg		102	70 - 130

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## QC Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

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

Lab Sample ID: 885-2776-4 MS

Matrix: Solid

Analysis Batch: 3505

Client Sample ID: BES24-15 2'

Prep Type: Total/NA

Prep Batch: 3335

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Xylenes, Total	ND		2.87	2.95		mg/Kg		103	70 - 130
		MS			MS				
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	89		39 - 146						

Lab Sample ID: 885-2776-4 MSD

Matrix: Solid

Analysis Batch: 3505

Client Sample ID: BES24-15 2'

Prep Type: Total/NA

Prep Batch: 3335

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.953	0.984		mg/Kg		103	70 - 130	1	20
Ethylbenzene	ND		0.953	0.990		mg/Kg		104	70 - 130	1	20
m,p-Xylene	ND		1.91	1.98		mg/Kg		104	70 - 130	1	20
o-Xylene	ND		0.953	0.991		mg/Kg		104	70 - 130	1	20
Toluene	ND		0.953	0.985		mg/Kg		103	70 - 130	1	20
Xylenes, Total	ND		2.86	2.97		mg/Kg		104	70 - 130	1	20
		MSD			MSD						
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	88		39 - 146								

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

Lab Sample ID: MB 885-3340/1-A

Matrix: Solid

Analysis Batch: 3484

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3340

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/16/24 11:49	04/17/24 16:58	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/16/24 11:49	04/17/24 16:58	1
		MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	129		62 - 134			04/16/24 11:49	04/17/24 16:58	1

Lab Sample ID: LCS 885-3340/2-A

Matrix: Solid

Analysis Batch: 3484

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	63.7		mg/Kg		127	60 - 135
		LCS	LCS				
Surrogate	%Recovery	Qualifier	Limits				
Di-n-octyl phthalate (Surr)	127		62 - 134				

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## QC Sample Results

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-78411/1-A

Matrix: Solid

Analysis Batch: 78519

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/17/24 18:36	1

Lab Sample ID: LCS 880-78411/2-A

Matrix: Solid

Analysis Batch: 78519

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-78411/3-A

Matrix: Solid

Analysis Batch: 78519

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	254		mg/Kg		101	90 - 110	0	20

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

Matrix: Solid

Analysis Batch: 78530

Client Sample ID: Method Blank

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 78530

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 78530

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	256		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 885-2776-9 MS

Matrix: Solid

Analysis Batch: 78530

Client Sample ID: BES24-22 1'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	190	F1	249	472	F1	mg/Kg		112	90 - 110

Lab Sample ID: 885-2776-9 MSD

Matrix: Solid

Analysis Batch: 78530

Client Sample ID: BES24-22 1'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	190	F1	249	472	F1	mg/Kg		112	90 - 110	0	20

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## QC Association Summary

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

## GC VOA

## Prep Batch: 3206

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

## Prep Batch: 3240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-1	BES24-12 2'	Total/NA	Solid	5030C	
885-2776-2	BES24-13 2'	Total/NA	Solid	5030C	
MB 885-3240/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3240/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3240/3-A	Lab Control Sample	Total/NA	Solid	5030C	

## Prep Batch: 3335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-3	BES24-14 2	Total/NA	Solid	5030C	
885-2776-4	BES24-15 2'	Total/NA	Solid	5030C	
885-2776-5	BES24-16 2'	Total/NA	Solid	5030C	
885-2776-6	BES24-17 2'	Total/NA	Solid	5030C	
885-2776-7	BES24-18 2'	Total/NA	Solid	5030C	
885-2776-8	BES24-21 1'	Total/NA	Solid	5030C	
885-2776-9	BES24-22 1'	Total/NA	Solid	5030C	
885-2776-10	BES24-23 1'	Total/NA	Solid	5030C	
885-2776-11	BES24-24 1'	Total/NA	Solid	5030C	
885-2776-12	BES24-25 1'	Total/NA	Solid	5030C	
885-2776-13	BES24-40 2'	Total/NA	Solid	5030C	
885-2776-14	BES24-42 4'	Total/NA	Solid	5030C	
885-2776-15	BES24-43 2'	Total/NA	Solid	5030C	
MB 885-3335/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3335/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3335/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-2776-3 MS	BES24-14 2	Total/NA	Solid	5030C	
885-2776-3 MSD	BES24-14 2	Total/NA	Solid	5030C	
885-2776-4 MS	BES24-15 2'	Total/NA	Solid	5030C	
885-2776-4 MSD	BES24-15 2'	Total/NA	Solid	5030C	

## Analysis Batch: 3430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-1	BES24-12 2'	Total/NA	Solid	8015D	3240
885-2776-2	BES24-13 2'	Total/NA	Solid	8015D	3240
MB 885-3206/1-A	Method Blank	Total/NA	Solid	8015D	3206
MB 885-3240/1-A	Method Blank	Total/NA	Solid	8015D	3240
LCS 885-3240/2-A	Lab Control Sample	Total/NA	Solid	8015D	3240

## Analysis Batch: 3432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-1	BES24-12 2'	Total/NA	Solid	8021B	3240
885-2776-2	BES24-13 2'	Total/NA	Solid	8021B	3240
MB 885-3206/1-A	Method Blank	Total/NA	Solid	8021B	3206
MB 885-3240/1-A	Method Blank	Total/NA	Solid	8021B	3240
LCS 885-3240/3-A	Lab Control Sample	Total/NA	Solid	8021B	3240

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## QC Association Summary

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

## GC VOA

## Analysis Batch: 3503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-3	BES24-14 2	Total/NA	Solid	8015D	3335
885-2776-4	BES24-15 2'	Total/NA	Solid	8015D	3335
885-2776-5	BES24-16 2'	Total/NA	Solid	8015D	3335
885-2776-6	BES24-17 2'	Total/NA	Solid	8015D	3335
885-2776-7	BES24-18 2'	Total/NA	Solid	8015D	3335
885-2776-8	BES24-21 1'	Total/NA	Solid	8015D	3335
885-2776-9	BES24-22 1'	Total/NA	Solid	8015D	3335
885-2776-10	BES24-23 1'	Total/NA	Solid	8015D	3335
885-2776-11	BES24-24 1'	Total/NA	Solid	8015D	3335
885-2776-12	BES24-25 1'	Total/NA	Solid	8015D	3335
885-2776-13	BES24-40 2'	Total/NA	Solid	8015D	3335
885-2776-14	BES24-42 4'	Total/NA	Solid	8015D	3335
885-2776-15	BES24-43 2'	Total/NA	Solid	8015D	3335
MB 885-3335/1-A	Method Blank	Total/NA	Solid	8015D	3335
LCS 885-3335/2-A	Lab Control Sample	Total/NA	Solid	8015D	3335
885-2776-3 MS	BES24-14 2	Total/NA	Solid	8015D	3335
885-2776-3 MSD	BES24-14 2	Total/NA	Solid	8015D	3335

## Analysis Batch: 3505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-3	BES24-14 2	Total/NA	Solid	8021B	3335
885-2776-4	BES24-15 2'	Total/NA	Solid	8021B	3335
885-2776-5	BES24-16 2'	Total/NA	Solid	8021B	3335
885-2776-6	BES24-17 2'	Total/NA	Solid	8021B	3335
885-2776-7	BES24-18 2'	Total/NA	Solid	8021B	3335
885-2776-8	BES24-21 1'	Total/NA	Solid	8021B	3335
885-2776-9	BES24-22 1'	Total/NA	Solid	8021B	3335
885-2776-10	BES24-23 1'	Total/NA	Solid	8021B	3335
885-2776-11	BES24-24 1'	Total/NA	Solid	8021B	3335
885-2776-12	BES24-25 1'	Total/NA	Solid	8021B	3335
885-2776-13	BES24-40 2'	Total/NA	Solid	8021B	3335
885-2776-14	BES24-42 4'	Total/NA	Solid	8021B	3335
885-2776-15	BES24-43 2'	Total/NA	Solid	8021B	3335
MB 885-3335/1-A	Method Blank	Total/NA	Solid	8021B	3335
LCS 885-3335/3-A	Lab Control Sample	Total/NA	Solid	8021B	3335
885-2776-4 MS	BES24-15 2'	Total/NA	Solid	8021B	3335
885-2776-4 MSD	BES24-15 2'	Total/NA	Solid	8021B	3335

## GC Semi VOA

## Prep Batch: 3340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-1	BES24-12 2'	Total/NA	Solid	SHAKE	
885-2776-2	BES24-13 2'	Total/NA	Solid	SHAKE	
885-2776-3	BES24-14 2	Total/NA	Solid	SHAKE	
885-2776-4	BES24-15 2'	Total/NA	Solid	SHAKE	
885-2776-5	BES24-16 2'	Total/NA	Solid	SHAKE	
885-2776-6	BES24-17 2'	Total/NA	Solid	SHAKE	
885-2776-7	BES24-18 2'	Total/NA	Solid	SHAKE	
885-2776-8	BES24-21 1'	Total/NA	Solid	SHAKE	
885-2776-9	BES24-22 1'	Total/NA	Solid	SHAKE	

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## QC Association Summary

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

## GC Semi VOA (Continued)

## Prep Batch: 3340 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-10	BES24-23 1'	Total/NA	Solid	SHAKE	
885-2776-11	BES24-24 1'	Total/NA	Solid	SHAKE	
885-2776-12	BES24-25 1'	Total/NA	Solid	SHAKE	
885-2776-13	BES24-40 2'	Total/NA	Solid	SHAKE	
885-2776-14	BES24-42 4'	Total/NA	Solid	SHAKE	
885-2776-15	BES24-43 2'	Total/NA	Solid	SHAKE	
MB 885-3340/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3340/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 3463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-1	BES24-12 2'	Total/NA	Solid	8015D	3340
885-2776-2	BES24-13 2'	Total/NA	Solid	8015D	3340
885-2776-3	BES24-14 2	Total/NA	Solid	8015D	3340
885-2776-4	BES24-15 2'	Total/NA	Solid	8015D	3340
885-2776-5	BES24-16 2'	Total/NA	Solid	8015D	3340
885-2776-6	BES24-17 2'	Total/NA	Solid	8015D	3340
885-2776-7	BES24-18 2'	Total/NA	Solid	8015D	3340
885-2776-8	BES24-21 1'	Total/NA	Solid	8015D	3340
885-2776-10	BES24-23 1'	Total/NA	Solid	8015D	3340
885-2776-11	BES24-24 1'	Total/NA	Solid	8015D	3340
885-2776-12	BES24-25 1'	Total/NA	Solid	8015D	3340
885-2776-13	BES24-40 2'	Total/NA	Solid	8015D	3340
885-2776-14	BES24-42 4'	Total/NA	Solid	8015D	3340
885-2776-15	BES24-43 2'	Total/NA	Solid	8015D	3340

## Analysis Batch: 3484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-3340/1-A	Method Blank	Total/NA	Solid	8015D	3340
LCS 885-3340/2-A	Lab Control Sample	Total/NA	Solid	8015D	3340

## Analysis Batch: 3571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-9	BES24-22 1'	Total/NA	Solid	8015D	3340

## HPLC/IC

## Leach Batch: 78411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-1	BES24-12 2'	Soluble	Solid	DI Leach	
885-2776-2	BES24-13 2'	Soluble	Solid	DI Leach	
885-2776-3	BES24-14 2	Soluble	Solid	DI Leach	
885-2776-4	BES24-15 2'	Soluble	Solid	DI Leach	
885-2776-5	BES24-16 2'	Soluble	Solid	DI Leach	
885-2776-6	BES24-17 2'	Soluble	Solid	DI Leach	
885-2776-7	BES24-18 2'	Soluble	Solid	DI Leach	
885-2776-8	BES24-21 1'	Soluble	Solid	DI Leach	
MB 880-78411/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78411/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78411/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

## HPLC/IC

## Leach Batch: 78412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-9	BES24-22 1'	Soluble	Solid	DI Leach	
885-2776-10	BES24-23 1'	Soluble	Solid	DI Leach	
885-2776-11	BES24-24 1'	Soluble	Solid	DI Leach	
885-2776-12	BES24-25 1'	Soluble	Solid	DI Leach	
885-2776-13	BES24-40 2'	Soluble	Solid	DI Leach	
885-2776-14	BES24-42 4'	Soluble	Solid	DI Leach	
885-2776-15	BES24-43 2'	Soluble	Solid	DI Leach	
MB 880-78412/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78412/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78412/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2776-9 MS	BES24-22 1'	Soluble	Solid	DI Leach	
885-2776-9 MSD	BES24-22 1'	Soluble	Solid	DI Leach	

## Analysis Batch: 78519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-1	BES24-12 2'	Soluble	Solid	300.0	78411
885-2776-2	BES24-13 2'	Soluble	Solid	300.0	78411
885-2776-3	BES24-14 2	Soluble	Solid	300.0	78411
885-2776-4	BES24-15 2'	Soluble	Solid	300.0	78411
885-2776-5	BES24-16 2'	Soluble	Solid	300.0	78411
885-2776-6	BES24-17 2'	Soluble	Solid	300.0	78411
885-2776-7	BES24-18 2'	Soluble	Solid	300.0	78411
885-2776-8	BES24-21 1'	Soluble	Solid	300.0	78411
MB 880-78411/1-A	Method Blank	Soluble	Solid	300.0	78411
LCS 880-78411/2-A	Lab Control Sample	Soluble	Solid	300.0	78411
LCSD 880-78411/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78411

## Analysis Batch: 78530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2776-9	BES24-22 1'	Soluble	Solid	300.0	78412
885-2776-10	BES24-23 1'	Soluble	Solid	300.0	78412
885-2776-11	BES24-24 1'	Soluble	Solid	300.0	78412
885-2776-12	BES24-25 1'	Soluble	Solid	300.0	78412
885-2776-13	BES24-40 2'	Soluble	Solid	300.0	78412
885-2776-14	BES24-42 4'	Soluble	Solid	300.0	78412
885-2776-15	BES24-43 2'	Soluble	Solid	300.0	78412
MB 880-78412/1-A	Method Blank	Soluble	Solid	300.0	78412
LCS 880-78412/2-A	Lab Control Sample	Soluble	Solid	300.0	78412
LCSD 880-78412/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78412
885-2776-9 MS	BES24-22 1'	Soluble	Solid	300.0	78412
885-2776-9 MSD	BES24-22 1'	Soluble	Solid	300.0	78412

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## Lab Chronicle

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-12 2'

Lab Sample ID: 885-2776-1

Date Collected: 04/09/24 14:50

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 05:56
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 05:56
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 12:41
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 20:17

Client Sample ID: BES24-13 2'

Lab Sample ID: 885-2776-2

Date Collected: 04/09/24 14:55

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/17/24 06:18
Total/NA	Prep	5030C			3240	JP	EET ALB	04/12/24 17:15
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/17/24 06:18
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 12:54
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 20:32

Client Sample ID: BES24-14 2

Lab Sample ID: 885-2776-3

Date Collected: 04/09/24 15:00

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 12:29
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 12:29
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 13:06
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 20:37

Client Sample ID: BES24-15 2'

Lab Sample ID: 885-2776-4

Date Collected: 04/09/24 15:05

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 13:35

Eurofins Albuquerque

## Lab Chronicle

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-15 2'

Lab Sample ID: 885-2776-4

Date Collected: 04/09/24 15:05

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 13:35
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 13:19
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 20:42

Client Sample ID: BES24-16 2'

Lab Sample ID: 885-2776-5

Date Collected: 04/09/24 15:10

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 14:40
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 14:40
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 13:31
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 20:46

Client Sample ID: BES24-17 2'

Lab Sample ID: 885-2776-6

Date Collected: 04/09/24 15:15

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 15:02
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 15:02
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 13:43
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 20:51

Client Sample ID: BES24-18 2'

Lab Sample ID: 885-2776-7

Date Collected: 04/09/24 15:20

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 15:24
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 15:24

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## Lab Chronicle

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-18 2'

Lab Sample ID: 885-2776-7

Date Collected: 04/09/24 15:20

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 13:56
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 20:56

Client Sample ID: BES24-21 1'

Lab Sample ID: 885-2776-8

Date Collected: 04/09/24 14:05

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 15:46
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 15:46
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 14:08
Soluble	Leach	DI Leach			78411	SA	EET MID	04/16/24 14:50
Soluble	Analysis	300.0		1	78519	SMC	EET MID	04/17/24 21:01

Client Sample ID: BES24-22 1'

Lab Sample ID: 885-2776-9

Date Collected: 04/09/24 14:10

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 16:07
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 16:07
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3571	JU	EET ALB	04/18/24 14:00
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		1	78530	SMC	EET MID	04/17/24 21:40

Client Sample ID: BES24-23 1'

Lab Sample ID: 885-2776-10

Date Collected: 04/09/24 14:15

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 16:29
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 16:29
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 14:33

Eurofins Albuquerque



Lab Chronicle

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

**Client Sample ID: BES24-23 1'**  
**Date Collected: 04/09/24 14:15**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2776-10**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		1	78530	SMC	EET MID	04/17/24 21:54

**Client Sample ID: BES24-24 1'**  
**Date Collected: 04/09/24 14:20**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2776-11**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 16:51
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 16:51
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 14:46
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		1	78530	SMC	EET MID	04/17/24 21:59

**Client Sample ID: BES24-25 1'**  
**Date Collected: 04/09/24 14:25**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2776-12**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 17:13
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 17:13
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 15:49
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		1	78530	SMC	EET MID	04/17/24 22:04

**Client Sample ID: BES24-40 2'**  
**Date Collected: 04/09/24 14:45**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2776-13**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 17:56
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 17:56
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 16:02
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		1	78530	SMC	EET MID	04/17/24 22:09

Lab Chronicle

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Client Sample ID: BES24-42 4'  
Date Collected: 04/09/24 14:30  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2776-14  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 18:18
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 18:18
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 16:14
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		1	78530	SMC	EET MID	04/17/24 22:23

Client Sample ID: BES24-43 2'  
Date Collected: 04/09/24 14:40  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2776-15  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/17/24 18:40
Total/NA	Prep	5030C			3335	JP	EET ALB	04/16/24 10:19
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/17/24 18:40
Total/NA	Prep	SHAKE			3340	DH	EET ALB	04/16/24 11:49
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 16:27
Soluble	Leach	DI Leach			78412	SA	EET MID	04/16/24 14:52
Soluble	Analysis	300.0		1	78530	SMC	EET MID	04/17/24 22:28

Laboratory References:

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

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

Accreditation/Certification Summary

Client: Vertex  
Project/Site: Plu 68 Battery

Job ID: 885-2776-1

Laboratory: Eurofins Albuquerque

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

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

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







Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2776-1

Login Number: 2776  
List Number: 1  
Creator: Rojas, Juan

List Source: Eurofins Albuquerque

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2776-1

Login Number: 2776  
List Number: 2  
Creator: Vasquez, Julisa

List Source: Eurofins Midland  
List Creation: 04/17/24 12:03 PM

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





Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 4/18/2024 11:36:27 AM

## JOB DESCRIPTION

PLU 68 Battery

## JOB NUMBER

885-2772-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109

# Eurofins Albuquerque

## Job Notes

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

## Authorization



Generated  
4/18/2024 11:36:27 AM

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

Client: Vertex  
Project/Site: PLU 68 Battery

Laboratory Job ID: 885-2772-1



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Definitions/Glossary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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

## Case Narrative

Client: Vertex  
Project: PLU 68 Battery

Job ID: 885-2772-1

Job ID: 885-2772-1

Eurofins Albuquerque

**Job Narrative**  
**885-2772-1**

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

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

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

**Receipt**

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

**Gasoline Range Organics**

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

**GC VOA**

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

**Diesel Range Organics**

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

**HPLC/IC**

Method 300\_ORGFM\_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-78408 and analytical batch 880-78452 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

BES24-19 2' (885-2772-1) and BES24-20 2' (885-2772-2)

Method 300\_ORGFM\_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-78410 and analytical batch 880-78517 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

WES24-05 0-1' (885-2772-13), WES24-06 0-1' (885-2772-14), WES24-07 1-2' (885-2772-15), WES24-08 0-2' (885-2772-16), WES24-09 1-2' (885-2772-17), WES24-10 0-1' (885-2772-18), WES24-11 0-2' (885-2772-19), WES24-12 0-1' (885-2772-20), WES24-13 0-1' (885-2772-21), WES24-14 0-2' (885-2772-22), (885-2772-B-13-B MS) and (885-2772-B-13-C MSD)

Method 300\_ORGFM\_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-78410 and analytical batch 880-78517 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

WES24-15 0-2' (885-2772-23), WES24-16 1-2' (885-2772-24), (885-2772-B-23-B MS) and (885-2772-B-23-C MSD)

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: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-19 2'

Lab Sample ID: 885-2772-1

Date Collected: 04/10/24 13:50

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/12/24 11:12	04/15/24 20:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		15 - 244	04/12/24 11:12	04/15/24 20:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/15/24 20:58	1
Ethylbenzene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 20:58	1
Toluene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 20:58	1
Xylenes, Total	ND		0.098	mg/Kg		04/12/24 11:12	04/15/24 20:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146	04/12/24 11:12	04/15/24 20:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	14		9.8	mg/Kg		04/12/24 15:46	04/15/24 16:44	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 15:46	04/15/24 16:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	117		62 - 134	04/12/24 15:46	04/15/24 16:44	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		5.0	mg/Kg			04/17/24 12:59	1

Eurofins Albuquerque

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-20 2'

Lab Sample ID: 885-2772-2

Date Collected: 04/10/24 13:55

Matrix: Solid

Date Received: 04/12/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/12/24 11:12	04/15/24 21:21	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		15 - 244			04/12/24 11:12	04/15/24 21:21	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/15/24 21:21	1	
Ethylbenzene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 21:21	1	
Toluene	ND		0.049	mg/Kg		04/12/24 11:12	04/15/24 21:21	1	
Xylenes, Total	ND		0.098	mg/Kg		04/12/24 11:12	04/15/24 21:21	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	84		39 - 146			04/12/24 11:12	04/15/24 21:21	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	11		8.6	mg/Kg		04/12/24 15:46	04/15/24 17:08	1	
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/12/24 15:46	04/15/24 17:08	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	125		62 - 134			04/12/24 15:46	04/15/24 17:08	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			04/17/24 13:04	1	



## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-26 1'

Lab Sample ID: 885-2772-3

Date Collected: 04/10/24 12:00

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 11:12	04/15/24 22:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		15 - 244			04/12/24 11:12	04/15/24 22:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/15/24 22:31	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 11:12	04/15/24 22:31	1
Toluene	ND		0.048	mg/Kg		04/12/24 11:12	04/15/24 22:31	1
Xylenes, Total	ND		0.097	mg/Kg		04/12/24 11:12	04/15/24 22:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			04/12/24 11:12	04/15/24 22:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/12/24 15:46	04/15/24 17:32	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/12/24 15:46	04/15/24 17:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			04/12/24 15:46	04/15/24 17:32	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66		5.0	mg/Kg			04/17/24 13:09	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-33 1'

Lab Sample ID: 885-2772-4

Date Collected: 04/10/24 12:05

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 11:12	04/15/24 22:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244	04/12/24 11:12	04/15/24 22:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/15/24 22:55	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 11:12	04/15/24 22:55	1
Toluene	ND		0.048	mg/Kg		04/12/24 11:12	04/15/24 22:55	1
Xylenes, Total	ND		0.097	mg/Kg		04/12/24 11:12	04/15/24 22:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		39 - 146	04/12/24 11:12	04/15/24 22:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.5	mg/Kg		04/12/24 15:46	04/15/24 17:56	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/12/24 15:46	04/15/24 17:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	111		62 - 134	04/12/24 15:46	04/15/24 17:56	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		5.0	mg/Kg			04/17/24 13:24	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-34 1'

Lab Sample ID: 885-2772-5

Date Collected: 04/10/24 12:10

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/12/24 11:12	04/15/24 23:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/12/24 11:12	04/15/24 23:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/12/24 11:12	04/15/24 23:18	1
Ethylbenzene	ND		0.047	mg/Kg		04/12/24 11:12	04/15/24 23:18	1
Toluene	ND		0.047	mg/Kg		04/12/24 11:12	04/15/24 23:18	1
Xylenes, Total	ND		0.094	mg/Kg		04/12/24 11:12	04/15/24 23:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146			04/12/24 11:12	04/15/24 23:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		04/12/24 15:46	04/15/24 18:20	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/12/24 15:46	04/15/24 18:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			04/12/24 15:46	04/15/24 18:20	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		5.0	mg/Kg			04/17/24 13:29	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-35 1'

Lab Sample ID: 885-2772-6

Date Collected: 04/10/24 12:15

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 11:12	04/15/24 23:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 244			04/12/24 11:12	04/15/24 23:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/15/24 23:42	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 11:12	04/15/24 23:42	1
Toluene	ND		0.048	mg/Kg		04/12/24 11:12	04/15/24 23:42	1
Xylenes, Total	ND		0.096	mg/Kg		04/12/24 11:12	04/15/24 23:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 11:12	04/15/24 23:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		04/12/24 15:46	04/15/24 18:44	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 15:46	04/15/24 18:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			04/12/24 15:46	04/15/24 18:44	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		5.0	mg/Kg			04/17/24 13:43	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-36 1'

Lab Sample ID: 885-2772-7

Date Collected: 04/10/24 12:20

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 11:12	04/16/24 00:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/12/24 11:12	04/16/24 00:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/16/24 00:05	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 11:12	04/16/24 00:05	1
Toluene	ND		0.048	mg/Kg		04/12/24 11:12	04/16/24 00:05	1
Xylenes, Total	ND		0.095	mg/Kg		04/12/24 11:12	04/16/24 00:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		39 - 146			04/12/24 11:12	04/16/24 00:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		04/12/24 15:46	04/15/24 19:08	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/12/24 15:46	04/15/24 19:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			04/12/24 15:46	04/15/24 19:08	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		5.0	mg/Kg			04/17/24 13:48	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-37 1'

Lab Sample ID: 885-2772-8

Date Collected: 04/10/24 12:25

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 11:12	04/16/24 00:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		15 - 244			04/12/24 11:12	04/16/24 00:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/16/24 00:29	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 11:12	04/16/24 00:29	1
Toluene	ND		0.048	mg/Kg		04/12/24 11:12	04/16/24 00:29	1
Xylenes, Total	ND		0.096	mg/Kg		04/12/24 11:12	04/16/24 00:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/12/24 11:12	04/16/24 00:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		04/12/24 15:46	04/15/24 19:32	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/12/24 15:46	04/15/24 19:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			04/12/24 15:46	04/15/24 19:32	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		5.0	mg/Kg			04/17/24 13:53	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-38 2'

Lab Sample ID: 885-2772-9

Date Collected: 04/10/24 12:30

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/12/24 11:12	04/16/24 00:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		15 - 244			04/12/24 11:12	04/16/24 00:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/16/24 00:52	1
Ethylbenzene	ND		0.047	mg/Kg		04/12/24 11:12	04/16/24 00:52	1
Toluene	ND		0.047	mg/Kg		04/12/24 11:12	04/16/24 00:52	1
Xylenes, Total	ND		0.095	mg/Kg		04/12/24 11:12	04/16/24 00:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			04/12/24 11:12	04/16/24 00:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/12/24 15:46	04/15/24 19:56	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 15:46	04/15/24 19:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			04/12/24 15:46	04/15/24 19:56	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		5.0	mg/Kg			04/17/24 13:58	1

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Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-02 1-4'  
Date Collected: 04/10/24 13:30  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-10  
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/12/24 11:12	04/16/24 01:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		15 - 244			04/12/24 11:12	04/16/24 01:16	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		04/12/24 11:12	04/16/24 01:16	1	
Ethylbenzene	ND		0.046	mg/Kg		04/12/24 11:12	04/16/24 01:16	1	
Toluene	ND		0.046	mg/Kg		04/12/24 11:12	04/16/24 01:16	1	
Xylenes, Total	ND		0.093	mg/Kg		04/12/24 11:12	04/16/24 01:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 11:12	04/16/24 01:16	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/12/24 15:46	04/15/24 20:20	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 15:46	04/15/24 20:20	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	97		62 - 134			04/12/24 15:46	04/15/24 20:20	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	180		5.0	mg/Kg			04/17/24 14:02	1	

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-03 2-4'

Lab Sample ID: 885-2772-11

Date Collected: 04/10/24 13:35

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 11:12	04/16/24 01:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 244			04/12/24 11:12	04/16/24 01:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 11:12	04/16/24 01:39	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 11:12	04/16/24 01:39	1
Toluene	ND		0.048	mg/Kg		04/12/24 11:12	04/16/24 01:39	1
Xylenes, Total	ND		0.096	mg/Kg		04/12/24 11:12	04/16/24 01:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 11:12	04/16/24 01:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13		8.9	mg/Kg		04/12/24 15:46	04/15/24 20:44	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/12/24 15:46	04/15/24 20:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			04/12/24 15:46	04/15/24 20:44	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	240		5.0	mg/Kg			04/17/24 14:07	1

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Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-04 1-2'  
Date Collected: 04/10/24 13:40  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-12  
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/12/24 11:12	04/16/24 02:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 244			04/12/24 11:12	04/16/24 02:03	1
Method: SW846 8021B - Volatile Organic Compounds (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/12/24 11:12	04/16/24 02:03	1
Ethylbenzene	ND		0.046	mg/Kg		04/12/24 11:12	04/16/24 02:03	1
Toluene	ND		0.046	mg/Kg		04/12/24 11:12	04/16/24 02:03	1
Xylenes, Total	ND		0.092	mg/Kg		04/12/24 11:12	04/16/24 02:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 11:12	04/16/24 02:03	1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		04/12/24 15:46	04/15/24 21:08	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/12/24 15:46	04/15/24 21:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			04/12/24 15:46	04/15/24 21:08	1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		5.0	mg/Kg			04/17/24 14:12	1

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-05 0-1'

Lab Sample ID: 885-2772-13

Date Collected: 04/10/24 11:45

Matrix: Solid

Date Received: 04/12/24 07:50

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 13:27	04/16/24 10:29	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	110		15 - 244			04/12/24 13:27	04/16/24 10:29	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/12/24 13:27	04/16/24 10:29	1	
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 13:27	04/16/24 10:29	1	
Toluene	ND		0.048	mg/Kg		04/12/24 13:27	04/16/24 10:29	1	
Xylenes, Total	ND		0.096	mg/Kg		04/12/24 13:27	04/16/24 10:29	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	96		39 - 146			04/12/24 13:27	04/16/24 10:29	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		04/12/24 16:06	04/15/24 11:25	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/12/24 16:06	04/15/24 11:25	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	109		62 - 134			04/12/24 16:06	04/15/24 11:25	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	76	F1	5.0	mg/Kg			04/17/24 16:01	1	

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-06 0-1'  
Date Collected: 04/10/24 11:40  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-14  
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/12/24 13:27	04/16/24 11:34	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	113		15 - 244			04/12/24 13:27	04/16/24 11:34	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/12/24 13:27	04/16/24 11:34	1	
Ethylbenzene	ND		0.047	mg/Kg		04/12/24 13:27	04/16/24 11:34	1	
Toluene	ND		0.047	mg/Kg		04/12/24 13:27	04/16/24 11:34	1	
Xylenes, Total	ND		0.094	mg/Kg		04/12/24 13:27	04/16/24 11:34	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		39 - 146			04/12/24 13:27	04/16/24 11:34	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/12/24 16:06	04/15/24 12:02	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 16:06	04/15/24 12:02	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	101		62 - 134			04/12/24 16:06	04/15/24 12:02	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	62		5.0	mg/Kg			04/17/24 16:15	1	

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-07 1-2'

Lab Sample ID: 885-2772-15

Date Collected: 04/10/24 11:35

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/12/24 13:27	04/16/24 12:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/12/24 13:27	04/16/24 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 13:27	04/16/24 12:39	1
Ethylbenzene	ND		0.047	mg/Kg		04/12/24 13:27	04/16/24 12:39	1
Toluene	ND		0.047	mg/Kg		04/12/24 13:27	04/16/24 12:39	1
Xylenes, Total	ND		0.095	mg/Kg		04/12/24 13:27	04/16/24 12:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		39 - 146			04/12/24 13:27	04/16/24 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/12/24 16:06	04/15/24 12:14	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 16:06	04/15/24 12:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			04/12/24 16:06	04/15/24 12:14	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51		5.0	mg/Kg			04/17/24 16:20	1

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Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-08 0-2'  
Date Collected: 04/10/24 11:30  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-16  
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 13:27	04/16/24 13:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		15 - 244			04/12/24 13:27	04/16/24 13:01	1
Method: SW846 8021B - Volatile Organic Compounds (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 13:27	04/16/24 13:01	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 13:27	04/16/24 13:01	1
Toluene	ND		0.048	mg/Kg		04/12/24 13:27	04/16/24 13:01	1
Xylenes, Total	ND		0.096	mg/Kg		04/12/24 13:27	04/16/24 13:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		39 - 146			04/12/24 13:27	04/16/24 13:01	1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/12/24 16:06	04/15/24 12:27	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 16:06	04/15/24 12:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	103		62 - 134			04/12/24 16:06	04/15/24 12:27	1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33		5.0	mg/Kg			04/17/24 16:25	1



## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-09 1-2'

Lab Sample ID: 885-2772-17

Date Collected: 04/10/24 11:25

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 13:27	04/16/24 13:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		15 - 244			04/12/24 13:27	04/16/24 13:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 13:27	04/16/24 13:23	1
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 13:27	04/16/24 13:23	1
Toluene	ND		0.050	mg/Kg		04/12/24 13:27	04/16/24 13:23	1
Xylenes, Total	ND		0.099	mg/Kg		04/12/24 13:27	04/16/24 13:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		39 - 146			04/12/24 13:27	04/16/24 13:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/12/24 16:06	04/15/24 12:39	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 16:06	04/15/24 12:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			04/12/24 16:06	04/15/24 12:39	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.7		5.0	mg/Kg			04/17/24 16:30	1

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-10 0-1'

Lab Sample ID: 885-2772-18

Date Collected: 04/10/24 11:05

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/12/24 13:27	04/16/24 13:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		15 - 244			04/12/24 13:27	04/16/24 13:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 13:27	04/16/24 13:45	1
Ethylbenzene	ND		0.047	mg/Kg		04/12/24 13:27	04/16/24 13:45	1
Toluene	ND		0.047	mg/Kg		04/12/24 13:27	04/16/24 13:45	1
Xylenes, Total	ND		0.095	mg/Kg		04/12/24 13:27	04/16/24 13:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		39 - 146			04/12/24 13:27	04/16/24 13:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		04/12/24 16:06	04/15/24 12:51	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/12/24 16:06	04/15/24 12:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			04/12/24 16:06	04/15/24 12:51	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.0		5.0	mg/Kg			04/17/24 16:44	1

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Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-11 0-2'  
Date Collected: 04/10/24 11:00  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-19  
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/12/24 13:27	04/16/24 14:06	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		15 - 244			04/12/24 13:27	04/16/24 14:06	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/12/24 13:27	04/16/24 14:06	1	
Ethylbenzene	ND		0.047	mg/Kg		04/12/24 13:27	04/16/24 14:06	1	
Toluene	ND		0.047	mg/Kg		04/12/24 13:27	04/16/24 14:06	1	
Xylenes, Total	ND		0.095	mg/Kg		04/12/24 13:27	04/16/24 14:06	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	94		39 - 146			04/12/24 13:27	04/16/24 14:06	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/12/24 16:06	04/15/24 13:04	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/12/24 16:06	04/15/24 13:04	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	100		62 - 134			04/12/24 16:06	04/15/24 13:04	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	25		5.0	mg/Kg			04/17/24 16:49	1	

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-12 0-1'  
Date Collected: 04/10/24 11:10  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-20  
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 13:27	04/16/24 14:28	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		15 - 244			04/12/24 13:27	04/16/24 14:28	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/12/24 13:27	04/16/24 14:28	1	
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 13:27	04/16/24 14:28	1	
Toluene	ND		0.050	mg/Kg		04/12/24 13:27	04/16/24 14:28	1	
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 13:27	04/16/24 14:28	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	96		39 - 146			04/12/24 13:27	04/16/24 14:28	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	23		9.8	mg/Kg		04/12/24 16:06	04/15/24 13:16	1	
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/12/24 16:06	04/15/24 13:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	98		62 - 134			04/12/24 16:06	04/15/24 13:16	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	3300		25	mg/Kg			04/17/24 16:54	5	

## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-13 0-1'

Lab Sample ID: 885-2772-21

Date Collected: 04/10/24 11:15

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 13:27	04/16/24 14:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		15 - 244			04/12/24 13:27	04/16/24 14:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 13:27	04/16/24 14:50	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 13:27	04/16/24 14:50	1
Toluene	ND		0.048	mg/Kg		04/12/24 13:27	04/16/24 14:50	1
Xylenes, Total	ND		0.096	mg/Kg		04/12/24 13:27	04/16/24 14:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		39 - 146			04/12/24 13:27	04/16/24 14:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	33		9.6	mg/Kg		04/12/24 16:06	04/15/24 13:28	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/12/24 16:06	04/15/24 13:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			04/12/24 16:06	04/15/24 13:28	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1400		25	mg/Kg			04/17/24 16:59	5

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-14 0-2'

Lab Sample ID: 885-2772-22

Date Collected: 04/10/24 11:20

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/12/24 13:27	04/16/24 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		15 - 244	04/12/24 13:27	04/16/24 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/12/24 13:27	04/16/24 15:12	1
Ethylbenzene	ND		0.048	mg/Kg		04/12/24 13:27	04/16/24 15:12	1
Toluene	ND		0.048	mg/Kg		04/12/24 13:27	04/16/24 15:12	1
Xylenes, Total	ND		0.096	mg/Kg		04/12/24 13:27	04/16/24 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		39 - 146	04/12/24 13:27	04/16/24 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	220		9.6	mg/Kg		04/12/24 16:06	04/15/24 13:41	1
Motor Oil Range Organics [C28-C40]	110		48	mg/Kg		04/12/24 16:06	04/15/24 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134	04/12/24 16:06	04/15/24 13:41	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1600		25	mg/Kg			04/17/24 17:04	5

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-15 0-2'

Lab Sample ID: 885-2772-23

Date Collected: 04/10/24 13:45

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 13:27	04/16/24 15:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/12/24 13:27	04/16/24 15:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 13:27	04/16/24 15:55	1
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 13:27	04/16/24 15:55	1
Toluene	ND		0.050	mg/Kg		04/12/24 13:27	04/16/24 15:55	1
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 13:27	04/16/24 15:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		39 - 146			04/12/24 13:27	04/16/24 15:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	63		9.2	mg/Kg		04/12/24 16:06	04/15/24 13:53	1
Motor Oil Range Organics [C28-C40]	47		46	mg/Kg		04/12/24 16:06	04/15/24 13:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			04/12/24 16:06	04/15/24 13:53	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300	F1	25	mg/Kg			04/17/24 17:08	5

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## Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-16 1-2'

Lab Sample ID: 885-2772-24

Date Collected: 04/10/24 11:00

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/12/24 13:27	04/16/24 16:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/12/24 13:27	04/16/24 16:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 13:27	04/16/24 16:17	1
Ethylbenzene	ND		0.049	mg/Kg		04/12/24 13:27	04/16/24 16:17	1
Toluene	ND		0.049	mg/Kg		04/12/24 13:27	04/16/24 16:17	1
Xylenes, Total	ND		0.098	mg/Kg		04/12/24 13:27	04/16/24 16:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		39 - 146			04/12/24 13:27	04/16/24 16:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/12/24 16:06	04/15/24 14:05	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/12/24 16:06	04/15/24 14:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			04/12/24 16:06	04/15/24 14:05	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.3		5.0	mg/Kg			04/17/24 17:23	1

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QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

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

Lab Sample ID: MB 885-3194/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 3341						Prep Batch: 3194			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 11:12	04/15/24 15:29	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		15 - 244			04/12/24 11:12	04/15/24 15:29	1	

Lab Sample ID: LCS 885-3194/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 3341						Prep Batch: 3194			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]			25.0	26.5		mg/Kg		106	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	216		15 - 244						

Lab Sample ID: MB 885-3206/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 3430						Prep Batch: 3206			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 13:27	04/16/24 10:07	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	111		15 - 244			04/12/24 13:27	04/16/24 10:07	1	

Lab Sample ID: LCS 885-3206/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 3430						Prep Batch: 3206			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]			25.0	26.3		mg/Kg		105	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	229		15 - 244						

Lab Sample ID: 885-2772-13 MS						Client Sample ID: WES24-05 0-1'			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 3430						Prep Batch: 3206			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		23.9	25.4		mg/Kg		106	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	236		15 - 244						

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

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

Lab Sample ID: 885-2772-13 MSD

Matrix: Solid

Analysis Batch: 3430

Client Sample ID: WES24-05 0-1'

Prep Type: Total/NA

Prep Batch: 3206

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		23.9	25.4		mg/Kg		106	70 - 130	0	20
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	238		15 - 244								

Lab Sample ID: MB 885-3274/1-A

Matrix: Solid

Analysis Batch: 3341

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3274

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/15/24 10:30	04/15/24 12:21	1
Surrogate	%Recovery	MB Qualifier	MB Limits					
4-Bromofluorobenzene (Surr)	107		15 - 244					
						Prepared	Analyzed	Dil Fac
						04/15/24 10:30	04/15/24 12:21	1

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

Lab Sample ID: MB 885-3194/1-A

Matrix: Solid

Analysis Batch: 3342

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3194

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 11:12	04/15/24 15:29	1
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 11:12	04/15/24 15:29	1
Toluene	ND		0.050	mg/Kg		04/12/24 11:12	04/15/24 15:29	1
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 11:12	04/15/24 15:29	1
Surrogate	%Recovery	MB Qualifier	MB Limits					
4-Bromofluorobenzene (Surr)	84		39 - 146					
						Prepared	Analyzed	Dil Fac
						04/12/24 11:12	04/15/24 15:29	1

Lab Sample ID: LCS 885-3194/3-A

Matrix: Solid

Analysis Batch: 3342

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3194

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier				Limits		
Benzene			1.00	0.852		mg/Kg		85	70 - 130		
Ethylbenzene			1.00	0.869		mg/Kg		87	70 - 130		
m,p-Xylene			2.00	1.76		mg/Kg		88	70 - 130		
o-Xylene			1.00	0.866		mg/Kg		87	70 - 130		
Toluene			1.00	0.856		mg/Kg		86	70 - 130		
Xylenes, Total			3.00	2.63		mg/Kg		88	70 - 130		
Surrogate	LCS		Limits								
	%Recovery	Qualifier									
4-Bromofluorobenzene (Surr)	90		39 - 146								

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

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

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

Matrix: Solid

Analysis Batch: 3432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3206

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		39 - 146	04/12/24 13:27	04/16/24 10:07	1

Lab Sample ID: LCS 885-3206/3-A

Matrix: Solid

Analysis Batch: 3432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.968		mg/Kg		97	70 - 130
Ethylbenzene	1.00	0.969		mg/Kg		97	70 - 130
m,p-Xylene	2.00	1.94		mg/Kg		97	70 - 130
o-Xylene	1.00	0.973		mg/Kg		97	70 - 130
Toluene	1.00	0.963		mg/Kg		96	70 - 130
Xylenes, Total	3.00	2.91		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		39 - 146

Lab Sample ID: 885-2772-14 MS

Matrix: Solid

Analysis Batch: 3432

Client Sample ID: WES24-06 0-1'

Prep Type: Total/NA

Prep Batch: 3206

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.939	0.941		mg/Kg		100	70 - 130
Ethylbenzene	ND		0.939	0.938		mg/Kg		100	70 - 130
m,p-Xylene	ND		1.88	1.88		mg/Kg		100	70 - 130
o-Xylene	ND		0.939	0.942		mg/Kg		100	70 - 130
Toluene	ND		0.939	0.936		mg/Kg		100	70 - 130
Xylenes, Total	ND		2.82	2.82		mg/Kg		100	70 - 130

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

Lab Sample ID: 885-2772-14 MSD

Matrix: Solid

Analysis Batch: 3432

Client Sample ID: WES24-06 0-1'

Prep Type: Total/NA

Prep Batch: 3206

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.937	0.892		mg/Kg		95	70 - 130	5	20
Ethylbenzene	ND		0.937	0.893		mg/Kg		95	70 - 130	5	20
m,p-Xylene	ND		1.87	1.79		mg/Kg		95	70 - 130	5	20
o-Xylene	ND		0.937	0.890		mg/Kg		95	70 - 130	6	20
Toluene	ND		0.937	0.890		mg/Kg		95	70 - 130	5	20

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

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

Lab Sample ID: 885-2772-14 MSD

Matrix: Solid

Analysis Batch: 3432

Client Sample ID: WES24-06 0-1'

Prep Type: Total/NA

Prep Batch: 3206

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Xylenes, Total	ND		2.81	2.68		mg/Kg		95	70 - 130	5	20
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	95		39 - 146								

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

Lab Sample ID: MB 885-3231/1-A

Matrix: Solid

Analysis Batch: 3333

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3231

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/12/24 15:46	04/15/24 12:11	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/12/24 15:46	04/15/24 12:11	1
Surrogate	%Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac		
Di-n-octyl phthalate (Surr)	98		62 - 134	04/12/24 15:46	04/15/24 12:11	1		

Lab Sample ID: LCS 885-3231/2-A

Matrix: Solid

Analysis Batch: 3333

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3231

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	47.3		mg/Kg	-	95	60 - 135		
Surrogate		LCS %Recovery	LCS Qualifier	Limits							
Di-n-octyl phthalate (Surr)		90		62 - 134							

Lab Sample ID: 885-2772-12 MS

Matrix: Solid

Analysis Batch: 3333

Client Sample ID: WES24-04 1-2'

Prep Type: Total/NA

Prep Batch: 3231

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]	ND		44.8	44.8		mg/Kg		100	44 - 136		
Surrogate	MS %Recovery	MS Qualifier	MS Limits								
Di-n-octyl phthalate (Surr)	91		62 - 134								

Lab Sample ID: 885-2772-12 MSD

Matrix: Solid

Analysis Batch: 3333

Client Sample ID: WES24-04 1-2'

Prep Type: Total/NA

Prep Batch: 3231

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		46.2	46.3		mg/Kg		100	44 - 136	3	32

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

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

Lab Sample ID: 885-2772-12 MSD

Matrix: Solid

Analysis Batch: 3333

Client Sample ID: WES24-04 1-2'

Prep Type: Total/NA

Prep Batch: 3231

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

Lab Sample ID: MB 885-3233/1-A

Matrix: Solid

Analysis Batch: 3332

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3233

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/12/24 16:06	04/15/24 11:00	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/12/24 16:06	04/15/24 11:00	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
Di-n-octyl phthalate (Surr)	102		62 - 134			04/12/24 16:06	04/15/24 11:00	1

Lab Sample ID: LCS 885-3233/2-A

Matrix: Solid

Analysis Batch: 3332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3233

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier			Limits	
Diesel Range Organics [C10-C28]	50.0	49.0		mg/Kg		98	60 - 135
Surrogate	LCS	LCS	Limits				
	%Recovery	Qualifier					
Di-n-octyl phthalate (Surr)	109		62 - 134				

Lab Sample ID: 885-2772-13 MS

Matrix: Solid

Analysis Batch: 3332

Client Sample ID: WES24-05 0-1'

Prep Type: Total/NA

Prep Batch: 3233

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
Di-n-octyl phthalate (Surr)	53		62 - 134

Lab Sample ID: 885-2772-13 MSD

Matrix: Solid

Analysis Batch: 3332

Client Sample ID: WES24-05 0-1'

Prep Type: Total/NA

Prep Batch: 3233

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
Di-n-octyl phthalate (Surr)	49	S1-	62 - 134

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-78408/1-A

Matrix: Solid

Analysis Batch: 78452

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	ND		5.0	mg/Kg			04/17/24 11:47	1

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## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-78408/2-A  
Matrix: Solid  
Analysis Batch: 78452

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-78408/3-A  
Matrix: Solid  
Analysis Batch: 78452

Client Sample ID: Lab Control Sample Dup  
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	251		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 885-2772-3 MS  
Matrix: Solid  
Analysis Batch: 78452

Client Sample ID: BES24-26 1'  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	66		252	329		mg/Kg		104	90 - 110

Lab Sample ID: 885-2772-3 MSD  
Matrix: Solid  
Analysis Batch: 78452

Client Sample ID: BES24-26 1'  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	66		252	329		mg/Kg		104	90 - 110	0	20

Lab Sample ID: MB 880-78410/1-A  
Matrix: Solid  
Analysis Batch: 78517

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/17/24 15:46	1

Lab Sample ID: LCS 880-78410/2-A  
Matrix: Solid  
Analysis Batch: 78517

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

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

Lab Sample ID: LCSD 880-78410/3-A  
Matrix: Solid  
Analysis Batch: 78517

Client Sample ID: Lab Control Sample Dup  
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	256		mg/Kg		102	90 - 110	3	20

Lab Sample ID: 885-2772-13 MS  
Matrix: Solid  
Analysis Batch: 78517

Client Sample ID: WES24-05 0-1'  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	76	F1	250	404	F1	mg/Kg		132	90 - 110

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QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 885-2772-13 MSD										Client Sample ID: WES24-05 0-1'			
Matrix: Solid										Prep Type: Soluble			
Analysis Batch: 78517													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	76	F1	250	405	F1	mg/Kg		132	90 - 110	0	20		

Lab Sample ID: 885-2772-23 MS										Client Sample ID: WES24-15 0-2'			
Matrix: Solid										Prep Type: Soluble			
Analysis Batch: 78517													
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits				
Chloride	1300	F1	1250	2730	F1	mg/Kg		114	90 - 110				

Lab Sample ID: 885-2772-23 MSD										Client Sample ID: WES24-15 0-2'			
Matrix: Solid										Prep Type: Soluble			
Analysis Batch: 78517													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	1300	F1	1250	2700	F1	mg/Kg		111	90 - 110	1	20		

## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

## GC VOA

## Prep Batch: 3194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-1	BES24-19 2'	Total/NA	Solid	5030C	
885-2772-2	BES24-20 2'	Total/NA	Solid	5030C	
885-2772-3	BES24-26 1'	Total/NA	Solid	5030C	
885-2772-4	BES24-33 1'	Total/NA	Solid	5030C	
885-2772-5	BES24-34 1'	Total/NA	Solid	5030C	
885-2772-6	BES24-35 1'	Total/NA	Solid	5030C	
885-2772-7	BES24-36 1'	Total/NA	Solid	5030C	
885-2772-8	BES24-37 1'	Total/NA	Solid	5030C	
885-2772-9	BES24-38 2'	Total/NA	Solid	5030C	
885-2772-10	WES24-02 1-4'	Total/NA	Solid	5030C	
885-2772-11	WES24-03 2-4'	Total/NA	Solid	5030C	
885-2772-12	WES24-04 1-2'	Total/NA	Solid	5030C	
MB 885-3194/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3194/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3194/3-A	Lab Control Sample	Total/NA	Solid	5030C	

## Prep Batch: 3206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-13	WES24-05 0-1'	Total/NA	Solid	5030C	
885-2772-14	WES24-06 0-1'	Total/NA	Solid	5030C	
885-2772-15	WES24-07 1-2'	Total/NA	Solid	5030C	
885-2772-16	WES24-08 0-2'	Total/NA	Solid	5030C	
885-2772-17	WES24-09 1-2'	Total/NA	Solid	5030C	
885-2772-18	WES24-10 0-1'	Total/NA	Solid	5030C	
885-2772-19	WES24-11 0-2'	Total/NA	Solid	5030C	
885-2772-20	WES24-12 0-1'	Total/NA	Solid	5030C	
885-2772-21	WES24-13 0-1'	Total/NA	Solid	5030C	
885-2772-22	WES24-14 0-2'	Total/NA	Solid	5030C	
885-2772-23	WES24-15 0-2'	Total/NA	Solid	5030C	
885-2772-24	WES24-16 1-2'	Total/NA	Solid	5030C	
MB 885-3206/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3206/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3206/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-2772-13 MS	WES24-05 0-1'	Total/NA	Solid	5030C	
885-2772-13 MSD	WES24-05 0-1'	Total/NA	Solid	5030C	
885-2772-14 MS	WES24-06 0-1'	Total/NA	Solid	5030C	
885-2772-14 MSD	WES24-06 0-1'	Total/NA	Solid	5030C	

## Prep Batch: 3274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-3274/1-A	Method Blank	Total/NA	Solid	5035	

## Analysis Batch: 3341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-1	BES24-19 2'	Total/NA	Solid	8015D	3194
885-2772-2	BES24-20 2'	Total/NA	Solid	8015D	3194
885-2772-3	BES24-26 1'	Total/NA	Solid	8015D	3194
885-2772-4	BES24-33 1'	Total/NA	Solid	8015D	3194
885-2772-5	BES24-34 1'	Total/NA	Solid	8015D	3194
885-2772-6	BES24-35 1'	Total/NA	Solid	8015D	3194
885-2772-7	BES24-36 1'	Total/NA	Solid	8015D	3194

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

## GC VOA (Continued)

## Analysis Batch: 3341 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-8	BES24-37 1'	Total/NA	Solid	8015D	3194
885-2772-9	BES24-38 2'	Total/NA	Solid	8015D	3194
885-2772-10	WES24-02 1-4'	Total/NA	Solid	8015D	3194
885-2772-11	WES24-03 2-4'	Total/NA	Solid	8015D	3194
885-2772-12	WES24-04 1-2'	Total/NA	Solid	8015D	3194
MB 885-3194/1-A	Method Blank	Total/NA	Solid	8015D	3194
MB 885-3274/1-A	Method Blank	Total/NA	Solid	8015D	3274
LCS 885-3194/2-A	Lab Control Sample	Total/NA	Solid	8015D	3194

## Analysis Batch: 3342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-1	BES24-19 2'	Total/NA	Solid	8021B	3194
885-2772-2	BES24-20 2'	Total/NA	Solid	8021B	3194
885-2772-3	BES24-26 1'	Total/NA	Solid	8021B	3194
885-2772-4	BES24-33 1'	Total/NA	Solid	8021B	3194
885-2772-5	BES24-34 1'	Total/NA	Solid	8021B	3194
885-2772-6	BES24-35 1'	Total/NA	Solid	8021B	3194
885-2772-7	BES24-36 1'	Total/NA	Solid	8021B	3194
885-2772-8	BES24-37 1'	Total/NA	Solid	8021B	3194
885-2772-9	BES24-38 2'	Total/NA	Solid	8021B	3194
885-2772-10	WES24-02 1-4'	Total/NA	Solid	8021B	3194
885-2772-11	WES24-03 2-4'	Total/NA	Solid	8021B	3194
885-2772-12	WES24-04 1-2'	Total/NA	Solid	8021B	3194
MB 885-3194/1-A	Method Blank	Total/NA	Solid	8021B	3194
LCS 885-3194/3-A	Lab Control Sample	Total/NA	Solid	8021B	3194

## Analysis Batch: 3430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-13	WES24-05 0-1'	Total/NA	Solid	8015D	3206
885-2772-14	WES24-06 0-1'	Total/NA	Solid	8015D	3206
885-2772-15	WES24-07 1-2'	Total/NA	Solid	8015D	3206
885-2772-16	WES24-08 0-2'	Total/NA	Solid	8015D	3206
885-2772-17	WES24-09 1-2'	Total/NA	Solid	8015D	3206
885-2772-18	WES24-10 0-1'	Total/NA	Solid	8015D	3206
885-2772-19	WES24-11 0-2'	Total/NA	Solid	8015D	3206
885-2772-20	WES24-12 0-1'	Total/NA	Solid	8015D	3206
885-2772-21	WES24-13 0-1'	Total/NA	Solid	8015D	3206
885-2772-22	WES24-14 0-2'	Total/NA	Solid	8015D	3206
885-2772-23	WES24-15 0-2'	Total/NA	Solid	8015D	3206
885-2772-24	WES24-16 1-2'	Total/NA	Solid	8015D	3206
MB 885-3206/1-A	Method Blank	Total/NA	Solid	8015D	3206
LCS 885-3206/2-A	Lab Control Sample	Total/NA	Solid	8015D	3206
885-2772-13 MS	WES24-05 0-1'	Total/NA	Solid	8015D	3206
885-2772-13 MSD	WES24-05 0-1'	Total/NA	Solid	8015D	3206

## Analysis Batch: 3432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-13	WES24-05 0-1'	Total/NA	Solid	8021B	3206
885-2772-14	WES24-06 0-1'	Total/NA	Solid	8021B	3206
885-2772-15	WES24-07 1-2'	Total/NA	Solid	8021B	3206
885-2772-16	WES24-08 0-2'	Total/NA	Solid	8021B	3206

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

## GC VOA (Continued)

## Analysis Batch: 3432 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-17	WES24-09 1-2'	Total/NA	Solid	8021B	3206
885-2772-18	WES24-10 0-1'	Total/NA	Solid	8021B	3206
885-2772-19	WES24-11 0-2'	Total/NA	Solid	8021B	3206
885-2772-20	WES24-12 0-1'	Total/NA	Solid	8021B	3206
885-2772-21	WES24-13 0-1'	Total/NA	Solid	8021B	3206
885-2772-22	WES24-14 0-2'	Total/NA	Solid	8021B	3206
885-2772-23	WES24-15 0-2'	Total/NA	Solid	8021B	3206
885-2772-24	WES24-16 1-2'	Total/NA	Solid	8021B	3206
MB 885-3206/1-A	Method Blank	Total/NA	Solid	8021B	3206
LCS 885-3206/3-A	Lab Control Sample	Total/NA	Solid	8021B	3206
885-2772-14 MS	WES24-06 0-1'	Total/NA	Solid	8021B	3206
885-2772-14 MSD	WES24-06 0-1'	Total/NA	Solid	8021B	3206

## GC Semi VOA

## Prep Batch: 3231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-1	BES24-19 2'	Total/NA	Solid	SHAKE	
885-2772-2	BES24-20 2'	Total/NA	Solid	SHAKE	
885-2772-3	BES24-26 1'	Total/NA	Solid	SHAKE	
885-2772-4	BES24-33 1'	Total/NA	Solid	SHAKE	
885-2772-5	BES24-34 1'	Total/NA	Solid	SHAKE	
885-2772-6	BES24-35 1'	Total/NA	Solid	SHAKE	
885-2772-7	BES24-36 1'	Total/NA	Solid	SHAKE	
885-2772-8	BES24-37 1'	Total/NA	Solid	SHAKE	
885-2772-9	BES24-38 2'	Total/NA	Solid	SHAKE	
885-2772-10	WES24-02 1-4'	Total/NA	Solid	SHAKE	
885-2772-11	WES24-03 2-4'	Total/NA	Solid	SHAKE	
885-2772-12	WES24-04 1-2'	Total/NA	Solid	SHAKE	
MB 885-3231/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3231/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-2772-12 MS	WES24-04 1-2'	Total/NA	Solid	SHAKE	
885-2772-12 MSD	WES24-04 1-2'	Total/NA	Solid	SHAKE	

## Prep Batch: 3233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-13	WES24-05 0-1'	Total/NA	Solid	SHAKE	
885-2772-14	WES24-06 0-1'	Total/NA	Solid	SHAKE	
885-2772-15	WES24-07 1-2'	Total/NA	Solid	SHAKE	
885-2772-16	WES24-08 0-2'	Total/NA	Solid	SHAKE	
885-2772-17	WES24-09 1-2'	Total/NA	Solid	SHAKE	
885-2772-18	WES24-10 0-1'	Total/NA	Solid	SHAKE	
885-2772-19	WES24-11 0-2'	Total/NA	Solid	SHAKE	
885-2772-20	WES24-12 0-1'	Total/NA	Solid	SHAKE	
885-2772-21	WES24-13 0-1'	Total/NA	Solid	SHAKE	
885-2772-22	WES24-14 0-2'	Total/NA	Solid	SHAKE	
885-2772-23	WES24-15 0-2'	Total/NA	Solid	SHAKE	
885-2772-24	WES24-16 1-2'	Total/NA	Solid	SHAKE	
MB 885-3233/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3233/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-2772-13 MS	WES24-05 0-1'	Total/NA	Solid	SHAKE	

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

## GC Semi VOA (Continued)

## Prep Batch: 3233 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-13 MSD	WES24-05 0-1'	Total/NA	Solid	SHAKE	

## Analysis Batch: 3332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-13	WES24-05 0-1'	Total/NA	Solid	8015D	3233
885-2772-14	WES24-06 0-1'	Total/NA	Solid	8015D	3233
885-2772-15	WES24-07 1-2'	Total/NA	Solid	8015D	3233
885-2772-16	WES24-08 0-2'	Total/NA	Solid	8015D	3233
885-2772-17	WES24-09 1-2'	Total/NA	Solid	8015D	3233
885-2772-18	WES24-10 0-1'	Total/NA	Solid	8015D	3233
885-2772-19	WES24-11 0-2'	Total/NA	Solid	8015D	3233
885-2772-20	WES24-12 0-1'	Total/NA	Solid	8015D	3233
885-2772-21	WES24-13 0-1'	Total/NA	Solid	8015D	3233
885-2772-22	WES24-14 0-2'	Total/NA	Solid	8015D	3233
885-2772-23	WES24-15 0-2'	Total/NA	Solid	8015D	3233
885-2772-24	WES24-16 1-2'	Total/NA	Solid	8015D	3233
MB 885-3233/1-A	Method Blank	Total/NA	Solid	8015D	3233
LCS 885-3233/2-A	Lab Control Sample	Total/NA	Solid	8015D	3233
885-2772-13 MS	WES24-05 0-1'	Total/NA	Solid	8015D	3233
885-2772-13 MSD	WES24-05 0-1'	Total/NA	Solid	8015D	3233

## Analysis Batch: 3333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-1	BES24-19 2'	Total/NA	Solid	8015D	3231
885-2772-2	BES24-20 2'	Total/NA	Solid	8015D	3231
885-2772-3	BES24-26 1'	Total/NA	Solid	8015D	3231
885-2772-4	BES24-33 1'	Total/NA	Solid	8015D	3231
885-2772-5	BES24-34 1'	Total/NA	Solid	8015D	3231
885-2772-6	BES24-35 1'	Total/NA	Solid	8015D	3231
885-2772-7	BES24-36 1'	Total/NA	Solid	8015D	3231
885-2772-8	BES24-37 1'	Total/NA	Solid	8015D	3231
885-2772-9	BES24-38 2'	Total/NA	Solid	8015D	3231
885-2772-10	WES24-02 1-4'	Total/NA	Solid	8015D	3231
885-2772-11	WES24-03 2-4'	Total/NA	Solid	8015D	3231
885-2772-12	WES24-04 1-2'	Total/NA	Solid	8015D	3231
MB 885-3231/1-A	Method Blank	Total/NA	Solid	8015D	3231
LCS 885-3231/2-A	Lab Control Sample	Total/NA	Solid	8015D	3231
885-2772-12 MS	WES24-04 1-2'	Total/NA	Solid	8015D	3231
885-2772-12 MSD	WES24-04 1-2'	Total/NA	Solid	8015D	3231

## HPLC/IC

## Leach Batch: 78408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-1	BES24-19 2'	Soluble	Solid	DI Leach	
885-2772-2	BES24-20 2'	Soluble	Solid	DI Leach	
885-2772-3	BES24-26 1'	Soluble	Solid	DI Leach	
885-2772-4	BES24-33 1'	Soluble	Solid	DI Leach	
885-2772-5	BES24-34 1'	Soluble	Solid	DI Leach	
885-2772-6	BES24-35 1'	Soluble	Solid	DI Leach	
885-2772-7	BES24-36 1'	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

## HPLC/IC (Continued)

## Leach Batch: 78408 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-8	BES24-37 1'	Soluble	Solid	DI Leach	
885-2772-9	BES24-38 2'	Soluble	Solid	DI Leach	
885-2772-10	WES24-02 1-4'	Soluble	Solid	DI Leach	
885-2772-11	WES24-03 2-4'	Soluble	Solid	DI Leach	
885-2772-12	WES24-04 1-2'	Soluble	Solid	DI Leach	
MB 880-78408/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78408/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78408/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2772-3 MS	BES24-26 1'	Soluble	Solid	DI Leach	
885-2772-3 MSD	BES24-26 1'	Soluble	Solid	DI Leach	

## Leach Batch: 78410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-13	WES24-05 0-1'	Soluble	Solid	DI Leach	
885-2772-14	WES24-06 0-1'	Soluble	Solid	DI Leach	
885-2772-15	WES24-07 1-2'	Soluble	Solid	DI Leach	
885-2772-16	WES24-08 0-2'	Soluble	Solid	DI Leach	
885-2772-17	WES24-09 1-2'	Soluble	Solid	DI Leach	
885-2772-18	WES24-10 0-1'	Soluble	Solid	DI Leach	
885-2772-19	WES24-11 0-2'	Soluble	Solid	DI Leach	
885-2772-20	WES24-12 0-1'	Soluble	Solid	DI Leach	
885-2772-21	WES24-13 0-1'	Soluble	Solid	DI Leach	
885-2772-22	WES24-14 0-2'	Soluble	Solid	DI Leach	
885-2772-23	WES24-15 0-2'	Soluble	Solid	DI Leach	
885-2772-24	WES24-16 1-2'	Soluble	Solid	DI Leach	
MB 880-78410/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78410/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78410/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2772-13 MS	WES24-05 0-1'	Soluble	Solid	DI Leach	
885-2772-13 MSD	WES24-05 0-1'	Soluble	Solid	DI Leach	
885-2772-23 MS	WES24-15 0-2'	Soluble	Solid	DI Leach	
885-2772-23 MSD	WES24-15 0-2'	Soluble	Solid	DI Leach	

## Analysis Batch: 78452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-1	BES24-19 2'	Soluble	Solid	300.0	78408
885-2772-2	BES24-20 2'	Soluble	Solid	300.0	78408
885-2772-3	BES24-26 1'	Soluble	Solid	300.0	78408
885-2772-4	BES24-33 1'	Soluble	Solid	300.0	78408
885-2772-5	BES24-34 1'	Soluble	Solid	300.0	78408
885-2772-6	BES24-35 1'	Soluble	Solid	300.0	78408
885-2772-7	BES24-36 1'	Soluble	Solid	300.0	78408
885-2772-8	BES24-37 1'	Soluble	Solid	300.0	78408
885-2772-9	BES24-38 2'	Soluble	Solid	300.0	78408
885-2772-10	WES24-02 1-4'	Soluble	Solid	300.0	78408
885-2772-11	WES24-03 2-4'	Soluble	Solid	300.0	78408
885-2772-12	WES24-04 1-2'	Soluble	Solid	300.0	78408
MB 880-78408/1-A	Method Blank	Soluble	Solid	300.0	78408
LCS 880-78408/2-A	Lab Control Sample	Soluble	Solid	300.0	78408
LCSD 880-78408/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78408
885-2772-3 MS	BES24-26 1'	Soluble	Solid	300.0	78408

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## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

## HPLC/IC (Continued)

## Analysis Batch: 78452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-3 MSD	BES24-26 1'	Soluble	Solid	300.0	78408

## Analysis Batch: 78517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2772-13	WES24-05 0-1'	Soluble	Solid	300.0	78410
885-2772-14	WES24-06 0-1'	Soluble	Solid	300.0	78410
885-2772-15	WES24-07 1-2'	Soluble	Solid	300.0	78410
885-2772-16	WES24-08 0-2'	Soluble	Solid	300.0	78410
885-2772-17	WES24-09 1-2'	Soluble	Solid	300.0	78410
885-2772-18	WES24-10 0-1'	Soluble	Solid	300.0	78410
885-2772-19	WES24-11 0-2'	Soluble	Solid	300.0	78410
885-2772-20	WES24-12 0-1'	Soluble	Solid	300.0	78410
885-2772-21	WES24-13 0-1'	Soluble	Solid	300.0	78410
885-2772-22	WES24-14 0-2'	Soluble	Solid	300.0	78410
885-2772-23	WES24-15 0-2'	Soluble	Solid	300.0	78410
885-2772-24	WES24-16 1-2'	Soluble	Solid	300.0	78410
MB 880-78410/1-A	Method Blank	Soluble	Solid	300.0	78410
LCS 880-78410/2-A	Lab Control Sample	Soluble	Solid	300.0	78410
LCSD 880-78410/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78410
885-2772-13 MS	WES24-05 0-1'	Soluble	Solid	300.0	78410
885-2772-13 MSD	WES24-05 0-1'	Soluble	Solid	300.0	78410
885-2772-23 MS	WES24-15 0-2'	Soluble	Solid	300.0	78410
885-2772-23 MSD	WES24-15 0-2'	Soluble	Solid	300.0	78410

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Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-19 2'

Lab Sample ID: 885-2772-1

Date Collected: 04/10/24 13:50

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 20:58
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 20:58
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 16:44
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 12:59

Client Sample ID: BES24-20 2'

Lab Sample ID: 885-2772-2

Date Collected: 04/10/24 13:55

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 21:21
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 21:21
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 17:08
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 13:04

Client Sample ID: BES24-26 1'

Lab Sample ID: 885-2772-3

Date Collected: 04/10/24 12:00

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 22:31
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 22:31
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 17:32
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 13:09

Client Sample ID: BES24-33 1'

Lab Sample ID: 885-2772-4

Date Collected: 04/10/24 12:05

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 22:55

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Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-33 1'  
Date Collected: 04/10/24 12:05  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-4  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 22:55
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 17:56
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 13:24

Client Sample ID: BES24-34 1'  
Date Collected: 04/10/24 12:10  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-5  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 23:18
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 23:18
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 18:20
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 13:29

Client Sample ID: BES24-35 1'  
Date Collected: 04/10/24 12:15  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-6  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 23:42
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 23:42
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 18:44
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 13:43

Client Sample ID: BES24-36 1'  
Date Collected: 04/10/24 12:20  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-7  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/16/24 00:05
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/16/24 00:05

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Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: BES24-36 1'  
Date Collected: 04/10/24 12:20  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-7  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 19:08
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:46
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 13:48

Client Sample ID: BES24-37 1'  
Date Collected: 04/10/24 12:25  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-8  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/16/24 00:29
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/16/24 00:29
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 19:32
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:47
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 13:53

Client Sample ID: BES24-38 2'  
Date Collected: 04/10/24 12:30  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-9  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/16/24 00:52
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/16/24 00:52
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 19:56
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:47
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 13:58

Client Sample ID: WES24-02 1-4'  
Date Collected: 04/10/24 13:30  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-10  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/16/24 01:16
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/16/24 01:16
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 20:20

Eurofins Albuquerque

Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-02 1-4'

Lab Sample ID: 885-2772-10

Date Collected: 04/10/24 13:30

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:47
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 14:02

Client Sample ID: WES24-03 2-4'

Lab Sample ID: 885-2772-11

Date Collected: 04/10/24 13:35

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/16/24 01:39
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/16/24 01:39
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 20:44
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:47
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 14:07

Client Sample ID: WES24-04 1-2'

Lab Sample ID: 885-2772-12

Date Collected: 04/10/24 13:40

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/16/24 02:03
Total/NA	Prep	5030C			3194	JP	EET ALB	04/12/24 11:12
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/16/24 02:03
Total/NA	Prep	SHAKE			3231	DH	EET ALB	04/12/24 15:46
Total/NA	Analysis	8015D		1	3333	JU	EET ALB	04/15/24 21:08
Soluble	Leach	DI Leach			78408	SA	EET MID	04/16/24 14:47
Soluble	Analysis	300.0		1	78452	SMC	EET MID	04/17/24 14:12

Client Sample ID: WES24-05 0-1'

Lab Sample ID: 885-2772-13

Date Collected: 04/10/24 11:45

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 10:29
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 10:29
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 11:25
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 16:01

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Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-06 0-1'  
Date Collected: 04/10/24 11:40  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-14  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 11:34
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 11:34
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 12:02
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 16:15

Client Sample ID: WES24-07 1-2'  
Date Collected: 04/10/24 11:35  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-15  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 12:39
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 12:39
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 12:14
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 16:20

Client Sample ID: WES24-08 0-2'  
Date Collected: 04/10/24 11:30  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-16  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 13:01
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 13:01
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 12:27
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 16:25

Client Sample ID: WES24-09 1-2'  
Date Collected: 04/10/24 11:25  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-17  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 13:23

## Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-09 1-2'

Lab Sample ID: 885-2772-17

Date Collected: 04/10/24 11:25

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 13:23
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 12:39
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 16:30

Client Sample ID: WES24-10 0-1'

Lab Sample ID: 885-2772-18

Date Collected: 04/10/24 11:05

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 13:45
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 13:45
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 12:51
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 16:44

Client Sample ID: WES24-11 0-2'

Lab Sample ID: 885-2772-19

Date Collected: 04/10/24 11:00

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 14:06
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 14:06
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 13:04
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 16:49

Client Sample ID: WES24-12 0-1'

Lab Sample ID: 885-2772-20

Date Collected: 04/10/24 11:10

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 14:28
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 14:28

Eurofins Albuquerque



Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Client Sample ID: WES24-12 0-1'  
Date Collected: 04/10/24 11:10  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-20  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 13:16
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		5	78517	SMC	EET MID	04/17/24 16:54

Client Sample ID: WES24-13 0-1'  
Date Collected: 04/10/24 11:15  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-21  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 14:50
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 14:50
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 13:28
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		5	78517	SMC	EET MID	04/17/24 16:59

Client Sample ID: WES24-14 0-2'  
Date Collected: 04/10/24 11:20  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-22  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 15:12
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 15:12
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 13:41
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		5	78517	SMC	EET MID	04/17/24 17:04

Client Sample ID: WES24-15 0-2'  
Date Collected: 04/10/24 13:45  
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2772-23  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 15:55
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 15:55
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 13:53

Eurofins Albuquerque



Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

**Client Sample ID: WES24-15 0-2'**  
**Date Collected: 04/10/24 13:45**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2772-23**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		5	78517	SMC	EET MID	04/17/24 17:08

**Client Sample ID: WES24-16 1-2'**  
**Date Collected: 04/10/24 11:00**  
**Date Received: 04/12/24 07:50**

**Lab Sample ID: 885-2772-24**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8015D		1	3430	RA	EET ALB	04/16/24 16:17
Total/NA	Prep	5030C			3206	JP	EET ALB	04/12/24 13:27
Total/NA	Analysis	8021B		1	3432	RA	EET ALB	04/16/24 16:17
Total/NA	Prep	SHAKE			3233	SB	EET ALB	04/12/24 16:06
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 14:05
Soluble	Leach	DI Leach			78410	SA	EET MID	04/16/24 14:48
Soluble	Analysis	300.0		1	78517	SMC	EET MID	04/17/24 17:23

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

Accreditation/Certification Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-2772-1

Laboratory: Eurofins Albuquerque

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

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

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

## Chain-of-Custody Record

Client: **Vertex (Bill to XTO Energy, Inc)**

Mailing Address: **On file**

Phone #: **24E-00664**

email or Fax#: **24E-00664**

QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type) \_\_\_\_\_

Turn-Around Time: ☒ Standard ☒ Rush 5-day

Project Name: **PLU 68 Battery**

Project #: **24E-00664**

Project Manager: **Sally Carttar**

Sampler: **L. Pullman**

On Ice: ☒ Yes ☐ No **40g**

# of Coolers: **1**

Cooler Temp (including co): **4.9 ± 0.49 °C**

Analysis Request			Analysis Request	
Date	Time	Matrix	Sample Name	HEAL No.
04.10.24	13:50	Soil	BES24-19 2'	
04.10.24	13:55	Soil	BES24-20 2'	
04.10.24	12:00	Soil	BES24-26 1'	
04.10.24	12:05	Soil	BES24-33 1'	
04.10.24	12:10	Soil	BES24-34 1'	
04.10.24	12:15	Soil	BES24-35 1'	
04.10.24	12:20	Soil	BES24-36 1'	
04.10.24	12:25	Soil	BES24-37 1'	
04.10.24	12:30	Soil	BES24-38 2'	
04.10.24	13:30	Soil	WES24-02 1-4'	
04.10.24	13:35	Soil	WES24-03 2-4'	
04.10.24	13:40	Soil	WES24-04 1-2'	

TPH:8015D(GRO / DRO / MRO) ☒ X

8081 Pesticides/8082 PCB's ☒ X

EDB (Method 504.1) ☒ X

PAHs by 8310 or 8270SIMS ☒ X

RCRA 8 Metals ☒ X

Cl, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub> ☒ X

8260 (VOA) ☒ X

8270 (Semi-VOA) ☒ X

Total Coliform (Present/Absent) ☒ X

BTEX / MTBE / TMB's (8021) ☒ X

Remarks: **Direct Bill to XTO Energy, Inc.**

**NAPP2402630186**

**Cost Center # 2191851001**

**CC.Sally Carttar (scarttar@vertex.ca) for Final Report.**

Received by: **John Pullman** Date: **4/11/24** Time: **8:30**

Received by: **John Pullman** Date: **4/12/24** Time: **7:50**

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.





Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2772-1

Login Number: 2772  
List Number: 1  
Creator: McQuiston, Steven

List Source: Eurofins Albuquerque

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2772-1

Login Number: 2772  
List Number: 2  
Creator: Rodriguez, Leticia

List Source: Eurofins Midland  
List Creation: 04/16/24 11:25 AM

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





Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 5/10/2024 4:13:23 PM

## JOB DESCRIPTION

PLU 68 Battery

## JOB NUMBER

885-3833-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109



# Eurofins Albuquerque

## Job Notes

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

## Authorization



Generated  
5/10/2024 4:13:23 PM

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

Client: Vertex  
Project/Site: PLU 68 Battery

Laboratory Job ID: 885-3833-1



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Definitions/Glossary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-3833-1

Glossary

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

## Case Narrative

Client: Vertex  
Project: PLU 68 Battery

Job ID: 885-3833-1

**Job ID: 885-3833-1**

**Eurofins Albuquerque**

### Job Narrative 885-3833-1

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 5/3/2024 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 0.4°C.

#### Gasoline Range Organics

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

#### GC VOA

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

#### Diesel Range Organics

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

#### HPLC/IC

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

Eurofins Albuquerque

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-3833-1

Client Sample ID: BES24-06 1.5'      Lab Sample ID: 885-3833-1  
Date Collected: 05/01/24 10:15      Matrix: Solid  
Date Received: 05/03/24 07:30

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		05/06/24 16:05	05/09/24 05:18	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		15 - 244			05/06/24 16:05	05/09/24 05:18	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		05/06/24 16:05	05/09/24 05:18	1	
Ethylbenzene	ND		0.049	mg/Kg		05/06/24 16:05	05/09/24 05:18	1	
Toluene	ND		0.049	mg/Kg		05/06/24 16:05	05/09/24 05:18	1	
Xylenes, Total	ND		0.098	mg/Kg		05/06/24 16:05	05/09/24 05:18	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	95		39 - 146			05/06/24 16:05	05/09/24 05:18	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.5	mg/Kg		05/07/24 08:53	05/07/24 17:26	1	
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		05/07/24 08:53	05/07/24 17:26	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	107		62 - 134			05/07/24 08:53	05/07/24 17:26	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	6.3		5.0	mg/Kg			05/09/24 03:45	1	

Client Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-3833-1

Client Sample ID: BES24-08 1.5'

Lab Sample ID: 885-3833-2

Date Collected: 05/01/24 10:25

Matrix: Solid

Date Received: 05/03/24 07:30

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		05/06/24 16:05	05/09/24 05:42	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		15 - 244			05/06/24 16:05	05/09/24 05:42	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		05/06/24 16:05	05/09/24 05:42	1	
Ethylbenzene	ND		0.048	mg/Kg		05/06/24 16:05	05/09/24 05:42	1	
Toluene	ND		0.048	mg/Kg		05/06/24 16:05	05/09/24 05:42	1	
Xylenes, Total	ND		0.095	mg/Kg		05/06/24 16:05	05/09/24 05:42	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		39 - 146			05/06/24 16:05	05/09/24 05:42	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		05/07/24 08:53	05/07/24 17:39	1	
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		05/07/24 08:53	05/07/24 17:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	89		62 - 134			05/07/24 08:53	05/07/24 17:39	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	7.6		5.0	mg/Kg			05/09/24 04:02	1	

## QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-3833-1

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

Lab Sample ID: MB 885-4448/1-A

Matrix: Solid

Analysis Batch: 4672

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4448

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		05/06/24 16:05	05/08/24 16:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			05/06/24 16:05	05/08/24 16:01	1

Lab Sample ID: LCS 885-4448/3-A

Matrix: Solid

Analysis Batch: 4672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	26.0		mg/Kg		104	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	205		15 - 244				

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

Lab Sample ID: MB 885-4448/1-A

Matrix: Solid

Analysis Batch: 4673

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4448

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		05/06/24 16:05	05/08/24 16:01	1
Ethylbenzene	ND		0.050	mg/Kg		05/06/24 16:05	05/08/24 16:01	1
Toluene	ND		0.050	mg/Kg		05/06/24 16:05	05/08/24 16:01	1
Xylenes, Total	ND		0.10	mg/Kg		05/06/24 16:05	05/08/24 16:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		39 - 146			05/06/24 16:05	05/08/24 16:01	1

Lab Sample ID: LCS 885-4448/4-A

Matrix: Solid

Analysis Batch: 4673

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.986		mg/Kg		99	70 - 130
Ethylbenzene	1.00	0.938		mg/Kg		94	70 - 130
m,p-Xylene	2.00	1.90		mg/Kg		95	70 - 130
o-Xylene	1.00	0.923		mg/Kg		92	70 - 130
Toluene	1.00	0.938		mg/Kg		94	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		39 - 146				

Eurofins Albuquerque



QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-3833-1

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

Lab Sample ID: MB 885-4470/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 4522						Prep Batch: 4470			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/07/24 08:53	05/07/24 10:31	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/07/24 08:53	05/07/24 10:31	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	93		62 - 134			05/07/24 08:53	05/07/24 10:31	1	

Lab Sample ID: LCS 885-4470/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 4522						Prep Batch: 4470			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]			50.0	43.6		mg/Kg		87	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	108		62 - 134						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-80272/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Soluble			
Analysis Batch: 80306									
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	ND		5.0	mg/Kg			05/09/24 03:29	1	

Lab Sample ID: LCS 880-80272/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Soluble			
Analysis Batch: 80306									
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	264		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-80272/3-A							Client Sample ID: Lab Control Sample Dup				
Matrix: Solid							Prep Type: Soluble				
Analysis Batch: 80306											
				Spike	LCSD	LCSD			%Rec		RPD
Analyte				Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD
Chloride				250	264		mg/Kg		106	90 - 110	0

Lab Sample ID: 885-3833-1 MS							Client Sample ID: BES24-06 1.5'				
Matrix: Solid							Prep Type: Soluble				
Analysis Batch: 80306											
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	6.3		251	268		mg/Kg		104	90 - 110		

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QC Sample Results

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-3833-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-3833-1 MSD					Client Sample ID: BES24-06 1.5'							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 80306												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	6.3		251	268		mg/Kg		104	90 - 110	0	20	

## QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-3833-1

## GC VOA

## Prep Batch: 4448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3833-1	BES24-06 1.5'	Total/NA	Solid	5030C	
885-3833-2	BES24-08 1.5'	Total/NA	Solid	5030C	
MB 885-4448/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-4448/3-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-4448/4-A	Lab Control Sample	Total/NA	Solid	5030C	

## Analysis Batch: 4672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3833-1	BES24-06 1.5'	Total/NA	Solid	8015D	4448
885-3833-2	BES24-08 1.5'	Total/NA	Solid	8015D	4448
MB 885-4448/1-A	Method Blank	Total/NA	Solid	8015D	4448
LCS 885-4448/3-A	Lab Control Sample	Total/NA	Solid	8015D	4448

## Analysis Batch: 4673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3833-1	BES24-06 1.5'	Total/NA	Solid	8021B	4448
885-3833-2	BES24-08 1.5'	Total/NA	Solid	8021B	4448
MB 885-4448/1-A	Method Blank	Total/NA	Solid	8021B	4448
LCS 885-4448/4-A	Lab Control Sample	Total/NA	Solid	8021B	4448

## GC Semi VOA

## Prep Batch: 4470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3833-1	BES24-06 1.5'	Total/NA	Solid	SHAKE	
885-3833-2	BES24-08 1.5'	Total/NA	Solid	SHAKE	
MB 885-4470/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-4470/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

## Analysis Batch: 4522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3833-1	BES24-06 1.5'	Total/NA	Solid	8015D	4470
885-3833-2	BES24-08 1.5'	Total/NA	Solid	8015D	4470
MB 885-4470/1-A	Method Blank	Total/NA	Solid	8015D	4470
LCS 885-4470/2-A	Lab Control Sample	Total/NA	Solid	8015D	4470

## HPLC/IC

## Leach Batch: 80272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3833-1	BES24-06 1.5'	Soluble	Solid	DI Leach	
885-3833-2	BES24-08 1.5'	Soluble	Solid	DI Leach	
MB 880-80272/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-80272/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-80272/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-3833-1 MS	BES24-06 1.5'	Soluble	Solid	DI Leach	
885-3833-1 MSD	BES24-06 1.5'	Soluble	Solid	DI Leach	

## Analysis Batch: 80306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3833-1	BES24-06 1.5'	Soluble	Solid	300.0	80272
885-3833-2	BES24-08 1.5'	Soluble	Solid	300.0	80272

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QC Association Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-3833-1

HPLC/IC (Continued)

Analysis Batch: 80306 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-80272/1-A	Method Blank	Soluble	Solid	300.0	80272
LCS 880-80272/2-A	Lab Control Sample	Soluble	Solid	300.0	80272
LCSD 880-80272/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	80272
885-3833-1 MS	BES24-06 1.5'	Soluble	Solid	300.0	80272
885-3833-1 MSD	BES24-06 1.5'	Soluble	Solid	300.0	80272

Lab Chronicle

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-3833-1

**Client Sample ID: BES24-06 1.5'**  
**Date Collected: 05/01/24 10:15**  
**Date Received: 05/03/24 07:30**

**Lab Sample ID: 885-3833-1**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4448	JP	EET ALB	05/06/24 16:05
Total/NA	Analysis	8015D		1	4672	JP	EET ALB	05/09/24 05:18
Total/NA	Prep	5030C			4448	JP	EET ALB	05/06/24 16:05
Total/NA	Analysis	8021B		1	4673	JP	EET ALB	05/09/24 05:18
Total/NA	Prep	SHAKE			4470	PD	EET ALB	05/07/24 08:53
Total/NA	Analysis	8015D		1	4522	JU	EET ALB	05/07/24 17:26
Soluble	Leach	DI Leach			80272	SA	EET MID	05/08/24 15:03
Soluble	Analysis	300.0		1	80306	SMC	EET MID	05/09/24 03:45

**Client Sample ID: BES24-08 1.5'**  
**Date Collected: 05/01/24 10:25**  
**Date Received: 05/03/24 07:30**

**Lab Sample ID: 885-3833-2**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4448	JP	EET ALB	05/06/24 16:05
Total/NA	Analysis	8015D		1	4672	JP	EET ALB	05/09/24 05:42
Total/NA	Prep	5030C			4448	JP	EET ALB	05/06/24 16:05
Total/NA	Analysis	8021B		1	4673	JP	EET ALB	05/09/24 05:42
Total/NA	Prep	SHAKE			4470	PD	EET ALB	05/07/24 08:53
Total/NA	Analysis	8015D		1	4522	JU	EET ALB	05/07/24 17:39
Soluble	Leach	DI Leach			80272	SA	EET MID	05/08/24 15:03
Soluble	Analysis	300.0		1	80306	SMC	EET MID	05/09/24 04:02

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

Accreditation/Certification Summary

Client: Vertex  
Project/Site: PLU 68 Battery

Job ID: 885-3833-1

Laboratory: Eurofins Albuquerque

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

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

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

if necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



## Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-3833-1

Login Number: 3833

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

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	

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-3833-1

Login Number: 3833  
List Number: 2  
Creator: Vasquez, Julisa

List Source: Eurofins Midland  
List Creation: 05/08/24 01:53 PM

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

**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  
  
Action 374318

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 374318
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2402630186
Incident Name	NAPP2402630186 PLU 68 BATTERY @ 0
Incident Type	Oil Release
Incident Status	Deferral Request Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	PLU 68 Battery
Date Release Discovered	01/15/2024
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil 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	Cause: Freeze   Other (Specify)   Crude Oil   Released: 16 BBL   Recovered: 0 BBL   Lost: 16 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
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)	Frozen water line caused oil to release from flare. Pilot was off.

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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

QUESTIONS, Page 2

Action 374318

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number:
	374318
Action Type:	
[C-141] Deferral Request C-141 (C-141-v-Deferral)	

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

**Initial Response**

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Melanie Collins Title: Regulatory Analyst Email: Melanie.Collins@exxonmobil.com Date: 01/26/2024
--	---

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**Santa Fe, NM 87505**

QUESTIONS, Page 3

Action 374318

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number:
	374318
Action Type:	
[C-141] Deferral Request C-141 (C-141-v-Deferral)	

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	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	Yes

**Remediation Plan**

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

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	10000
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	3030
GRO+DRO	(EPA SW-846 Method 8015M)	2100
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	03/07/2024
On what date will (or did) the final sampling or liner inspection occur	05/01/2024
On what date will (or was) the remediation complete(d)	05/01/2024
What is the estimated surface area (in square feet) that will be reclaimed	10000
What is the estimated volume (in cubic yards) that will be reclaimed	400
What is the estimated surface area (in square feet) that will be remediated	9874
What is the estimated volume (in cubic yards) that will be remediated	360

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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**Santa Fe, NM 87505**

QUESTIONS, Page 4

Action 374318

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	374318
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**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 <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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

I hereby agree and sign off to the above statement	Name: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 08/19/2024
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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 374318

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	374318
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	Flare and associated flowlines would need to be disabled and removed.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	1894
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	3788
Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	
Enter the facility ID (f#) on which this deferral should be granted	POKER LAKE UNIT BATT 68-123-129 [fAPP2126354206]
Enter the well API (30-) on which this deferral should be granted	Not answered.
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 08/19/2024



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QUESTIONS, Page 6

Action 374318

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number:
	374318
Action Type:	
[C-141] Deferral Request C-141 (C-141-v-Deferral)	

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	338069
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/01/2024
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	No
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CONDITIONS  
  
Action 374318

CONDITIONS

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  374318
	Action Type:  [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	XTO's deferral requests final remediation for (Incident Number NAPP2402630186) until final reclamation of the well pad or major construction, whichever comes first. Vertex and XTO do not believe deferment will result in imminent risk to human health, the environment, or groundwater. The impacted soil is the area in gray on figure 2 that is limited to the area immediately around the flare where remediation would require major facility deconstruction. At this time, OCD approves this request. The Deferral Request and C-141 will be accepted for record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue.	8/30/2024