GEL Laboratories LLC
a member of The GEL Group INC

2040 Savage Road | Charleston, SC 29407
843.556.8171
gel.com

April 07, 2025

Ms. Heather Medley
Central Plateau Cleanup Company
200 East / MO-277 / 108
PO Box 1600
Richland, Washington 99352

Re: SAF W25-003
Work Order: 713762
SDG: GEL-CF713762

Dear Ms. Medley:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) received on March 08, 2025 at Cape Fear Analytical. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4505.

Sincerely,

Heather Shaffer

Heather Shaffer
Project Manager

Purchase Order: 901852 - 7H
Chain of Custody: W25-003-076, W25-003-077, W25-003-078, W25-003-079 and W25-003-080
Enclosures

Table of Contents

Case Narrative.....1

Data Review Qualifier Definitions.....4

Laboratory Certifications.....7

Subcontract Data - Cape Fear Analytical.....9

High Resolution Dioxins and Furans Analysis..20

Case Narrative.....21

Sample Data Summary.....25

Quality Control Summary.....32

Case Narrative

General Narrative
for
Central Plateau Cleanup Company (89223)
SAF W25-003
SDG: GEL-CF713762

April 07, 2025

Laboratory Identification:

The GEL Group, Inc.

Summary

Sample receipt

The sample(s) were shipped direct to Cape Fear Analytical in Wilmington, NC and received on March 08, 2025, for analysis. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

Items of Note All efforts were made by the lab to meet any short hold times. Samples that were analyzed outside of the initial hold time but still within 2X hold time will be noted in the lab case narrative.

Sample Identification
The laboratory received the following samples:

Laboratory Identification	Sample Description
713762001	B4L399
713762002	B4L3C5
713762003	B4L3D6
713762004	B4L2X9
713762005	B4L375

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package

The enclosed data package contains the following sections: General Narrative, Chain of Custody and Supporting Documentation, and data from the following fractions: Subcontract Lab3.

We certify that this package is in compliance with the Analytical Laboratory Services for Central Plateau Cleanup Company Statement of Work, both technically and for completeness, including a full description of, explanation of, and corrective actions for, any and all deviations, from either the analyses requested or the case narrative requested. Release of the data contained in this data package deliverable has been authorized by the Laboratory Analytical Manager (or designee) and the laboratory's client services representative as verified by their signatures on this report.

Heather Shaffer
Project Manager

GEL Laboratories LLC 2040 Savage Road | Charleston, SC 29407 843.556.8171 gel.com

Data Review Qualifier Definitions

GEL LABORATORIES LLC
2040 Savage Road Charleston, SC 29407 (843) 556-8171

Project Specific Qualifier Definitions for GEL Client Code: CPRC

Qualifier	Qualifier Definition	Department	Fraction
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.		
J	Value is estimated		
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, the difference is >70%.	Organics	
C	Analyte has been confirmed by GC/MS analysis	Organics	Pesticide
B	The target analyte was detected in the associated blank.	Organics	
E	Concentration of the target analyte exceeds the instrument calibration range	Organics	
A	The TIC is a suspected aldol-condensation product	Organics	Semi-Volatile
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier		
N	Metals--The Matrix spike sample recovery is not within specified control limits	Inorganics	
*	A quality control analyte recovery is outside of specified acceptance criteria		
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor	Organics	Semi-Volatile
H	Analytical holding time was exceeded		
**	Analyte is a surrogate compound	Organics	
<	Result is less than value reported		
>	Result is greater than value reported		
UI	Gamma Spectroscopy--Uncertain identification	Radiological	
BD	Results are either below the MDC or tracer recovery is low	Radiological	
h	Preparation or preservation holding time was exceeded		
R	Sample results are rejected		
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.	General Chemistry	General Chem
d	5-day BOD--The 2:1 depletion requirement was not met for this sample	General Chemistry	
B	Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL	Inorganics	Metals
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.		
D	Results are reported from a diluted aliquot of the sample	Organics	
N/A	RPD or %Recovery limits do not apply.		
ND	Analyte concentration is not detected above the detection limit		
E	%difference of sample and SD is >10%. Sample concentration must meet flagging criteria	Inorganics	Metals
M	M if above MDC and less than LLD	Radiological	
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier		
FA	Failed analysis.	Radiological	Bioassay
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range	General Chemistry	General Chem
JNX	Non Calibrated Compound	Organics	Volatile
UJ	Compound cannot be extracted	Organics	Semi-Volatile

Project Specific Qualifier Definitions for GEL Client Code: CPRC

Qualifier	Qualifier Definition	Department	Fraction
UJ	Gamma Spectroscopy--Uncertain identification	Radiological	Rad
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.		
K	Analyte present. Reported value may be biased high. Actual value is expected to be lower.	Radiological	
UL	Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.	Radiological	
L	Analyte present. Reported value may be biased low. Actual value is expected to be higher.	Radiological	
FB	Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies	Inorganics	Metals
N1	See case narrative		
Y	Other specific qualifiers were required to properly define the results. Consult case narrative.	Inorganics	
Y	QC Samples were not spiked with this compound	Organics	
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.	General Chemistry	General Chem
Y	Other specific qualifiers were required to properly define the results. Consult case narrative.	Radiological	Rad
**	Analyte is a Tracer compound	Radiological	
B	The target analyte was detected in the associated blank.	General Chemistry	
N	Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor	Organics	Volatile
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes	General Chemistry	General Chem
M	REMP Result > MDC/CL and < RDL	Radiological	
I	Analyte does not meet the Ion Abundance Ratio and should be considered an estimated concentration.	Organics	LC-MS/MS
FG	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier	Organics	LC-MS/MS
XG	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier	Organics	LC-MS/MS
G	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier	Organics	LC-MS/MS
x	Subaliquot was taken. See Case Narrative for details.		

Laboratory Certifications

List of current GEL Certifications as of 07 April 2025

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	525-24-281-19660
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	NV-C24-00175
New Hampshire NELAP	205424
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-45
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

Subcontract Data - Cape Fear Analytical

CFA | Cape Fear Analytical LLC
an affiliate of The GEL Group INC

3306 Kitty Hawk Road, Suite 120 Wilmington, NC 28405
P 910.795.0421
www.capefearanalytical.com

April 07, 2025

Heather Shaffer
GEL Laboratories
2040 Savage Rd.
Charleston, South Carolina 29407

Re: CPRC SAF W25-003
Work Order: 23763
SDG: GEL-CF713762

Dear Heather Shaffer:

Cape Fear Analytical LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 08, 2025. This original data report has been prepared and reviewed in accordance with CFA's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at 910-795-0421.

Sincerely,

Cynde Larkins

Cynde Larkins
Project Manager

Chain of Custody: W25-003-076, W25-003-077, W25-003-078, W25-003-079 and W25-003-080
Enclosures

Central Plateau Cleanup Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST CFA WO # 23763	C.O.C. # W25-003-076 PAGE 1 OF 1

Collector: Anthony Noggles / CPCC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W25-003	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 901852
Project Title: RCRA, March 2025	**Logbook No.:** HNF-N-506 -145/84	**Ice Chest No.:** GWS-303
Shipped To (Lab): GEL-Cape Fear Analytical	**Method of Shipment:** Commercial Carrier	**Bill of Lading/Air Bill No.:** 772954337556
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservation
B4L399	N	W	MAR 0 6 2025	1001	3x1-L aG	8290_DIOXINS_GCMS_APP_5: COMMON	30/45 Days	Cool <=6C

temp. @ CFA = 2.2°C

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Anthony Noggles / CPCC		MAR 0 6 2025 1040	Kevin Hamilton / CPCC SSU-1		MAR 0 6 2025 1040
Kevin Hamilton / CPCC SSU-1		MAR 0 6 2025 1055			MAR 0 6 2025 1055
SSU-1		MAR 0 7 2025 0445	Mike Esparza / CPCC		MAR 0 7 2025 0445
Mike Esparza / CPCC		MAR 0 7 2025 1400	FEDEX		
FedEx		08 MAR 25/1016			08/MAR25/1016

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

SDG: GEL-CF713762
Printed On 12/31/2024 FSR ID = FSR153899 Report Format: 02/29/2024

GEL-CF713762 4/7/25 Rev. 0 13 of 42

GEL-CF713762

Central Plateau Cleanup Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

CFA WO #23763

C.O.C. # **W25-003-077**

PAGE 1 OF 1

Collector: Anthony Noggles / CPCC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W25-003	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 901852
Project Title: RCRA, March 2025	**Logbook No.:** HNF-N-506 -145 /SL	**Ice Chest No.:** GWS-303
Shipped To (Lab): GEL-Cape Fear Analytical	**Method of Shipment:** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7725 5433 7556
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS

N/A

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservation
B4L3C5	N	W	MAR 0 6 2025	0820	3x1-L aG	8290_DIOXINS_GCMS_APP_5: COMMON	30/45 Days	Cool <=6C

temp @ CFA = 2.2°C

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Anthony Noggles / CPCC		MAR 0 6 2025 0902	Kevin Hamilton / CPCC		MAR 0 6 2025 0902
Kevin Hamilton / CPCC		MAR 0 6 2025 0925	SSU-1		MAR 0 6 2025 0925
SSU-1		MAR 0 7 2025 0645	Mike Esparza / CPCC		MAR 0 7 2025 0645
Mike Esparza / CPCC		MAR 0 7 2025 1400			
FedEx		08MAR25/1016			08MAR25/1016

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

4/7/25

Rev. 0

Central Plateau Cleanup Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

CFA WO # 23763

C.O.C. # **W25-003-078**

PAGE 1 OF 1

Collector: Anthony Noggles / CPCC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W25-003	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 901852
Project Title: RCRA, March 2025	**Logbook No.:** HNF-N-506 -148/32	**Ice Chest No.:** EWS-303
Shipped To (Lab): GEL-Cape Fear Analytical	**Method of Shipment:** Commercial Carrier	**Bill of Lading/Air Bill No.:** 772554337550
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS

N/A

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservation
B4L3D6	N	W	MAR 05 2025	1110	3x1-L aG	8290_DIOXINS_GCMS_APP_5: COMMON	30/45 Days	Cool <=6C

temp. @ CFA = 2.2°C

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Anthony Noggles / CPCC		MAR 05 2025 1135	Bob Parks / CPCC		MAR 05 2025 1135
Bob Parks / CPCC		MAR 05 2025 1140	SSU-1		MAR 05 2025 1140
SSU-1		MAR 07 2025 0645	Mike Esparza / CPCC		MAR 07 2025 0645
Mike Esparza / CPCC		MAR 07 2025 1400	FEDEX		08MAR25/1016
FedEx		08MAR25/1016			

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

SDG: GEL-CF713762

Printed On 12/31/2024 FSR ID = FSR153831

Report Format: 02/29/2024

GEL-CF713762 4/7/25 Rev. 0 15 of 42

Central Plateau Cleanup Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

CFA WO #23763

C.O.C. # **W25-003-079**

PAGE 1 OF 1

Collector: Anthony Noggles / CPCC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W25-003	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 901852
Project Title: RCRA, March 2025	**Logbook No.:** HNF-N-506 -148132	**Ice Chest No.:** GWS-303
Shipped To (Lab): GEL-Cape Fear Analytical	**Method of Shipment:** Commercial Carrier	**Bill of Lading/Air Bill No.:** 7725543375 6
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS

N/A

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservation
B4L2X9	N	W	MAR 0 5 2025	0842	3x1-L aG	8290_DIOXINS_GCMS_APP_5: COMMON	30/45 Days	Cool <=6C

temp. @ CFA = 2.2°C

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Anthony Noggles / CPCC		MAR 0 5 2025 1010	Troy Bacon CPCC	Troy Bacon	MAR 0 5 2025 1010
Troy Bacon CPCC	Troy Bacon	MAR 0 5 2025 1105	SSU-1		MAR 0 5 2025 1105
SSU-1		MAR ~~0 5~~ 07 2025 0645	Mike Esparza / CPCC		MAR ~~0 5~~ 07 2025 0645
Mike Esparza / CPCC		MAR 0 7 2025 1400	FEDEX		08 MAR25 1016
~~Mike Esparza / CPCC~~ Fed Ex		~~07/16~~ 10:16 08MAR25 CFA COMMENTS			

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

Central Plateau Cleanup Company	CFA WO# 23763 **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** 89165	C.O.C. # **W25-003-080** PAGE 1 OF 1

Collector: Kevin Patterson / CPCC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: W25-003	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 901852
Project Title: RCRA, March 2025	**Logbook No.:** HNF-N-506 144	**Ice Chest No.:** GWS-303
Shipped To (Lab): GEL-Cape Fear Analytical	**Method of Shipment:** Commercial Carrier	**Bill of Lading/Air Bill No.:** 772554337556
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservation
B4L375	N	W	MAR 0 3 2025	1242	3x1-L aG	8290_DIOXINS_GCMS_APP_5: COMMON	30/45 Days	Cool <=6C

temp. @ CFA = 2.2°C

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Kevin Patterson / CPCC		MAR 0 3 2025 1315	Jim Lochridge/CPCC SSU-1		MAR 0 3 2025 1315
Jim Lochridge/CPCC SSU-1		MAR 0 3 2025 1320 MAR 0 7 2025 0645	Mike Esparza / CPCC		MAR 0 7 2025 0645
Mike Esparza / CPCC		MAR 0 7 2025 1430	FEDEX		08MAR25/1016
FedEx		08MAR25/1016			

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

RADIOACTIVE SHIPMENT SURVEY RECORD

CF-UD-F-075
Page 1 of 1

Radioactive Shipment Survey Record

☒ Receipt of package ☐ Shipment of package

Initials: CJ Date : 10MAR25

Client/Shipper: CPRC

DOT Label/Marking: N/A Transport Index N/A

Total Shipment Activity: 2.2e-5 µCi

Maximum Surface Radiation Reading on Package Exterior (dosed):	<0.05	mR/hr
Maximum Removable Contamination on Package Exterior (swiped):	<660	dpm/300 cm^2 Alpha
	<6600	dpm/300 cm^2 Beta

Department of Transportation Limits:

Dose rates (mrem/hr)		
Label:	On Package:	At one meter:
White-I	≤ 0.5	≤ 0.05
Yellow-II	> 0.5 but ≤ 50	> 0.05 but ≤ 1
Yellow-III	> 50 but ≤ 200	> 1 but ≤ 10
Yellow –III Exclusive use	> 200 but ≤ 1000	> 10

Removable surface contamination	
Contaminant	dpm/300 cm^2
Alpha	660
Beta/Gamma	6600

Upon receipt of package, store this paperwork with the WO folder.
When shipping a package, store this paperwork with the shipping paperwork (manifest, drum paperwork, etc.)

CAPE FEAR ANALYTICAL, LLC
3306 Kitty Hawk Road, Suite 120, Wilmington, NC 28405

SDG: GEL-CF713762 Page 16 of 40

SAMPLE RECEIPT CHECKLIST

Cape Fear Analytical

Client: CPRC	Work Order: 23763
Shipping Company: FedEx	Date/Time Received: 08MAR25 1016

Suspected Hazard Information	Yes	NA	No
Shipped as DOT Hazardous?			✓
Samples identified as Foreign Soil?			✓

DOE Site Sample Packages	Yes	NA	No*
Screened <0.5 mR/hr?	✓		
Samples < 2x background?	✓		

* Notify RSO of any responses in this column immediately.

Air Sample Receipt Specifics	Yes	NA	No
Air sample in shipment?			

Air Witness: _____

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other(describe)
2	Custody seal/s present on cooler?	✓			Seal intact? (Yes) No
3	Chain of Custody documents included with shipment?	✓			
4	Samples requiring cold preservation within 0-6°C?	✓			Preservation Method: ice bags (loose ice) blue ice dry ice none other (describe) Temperature Blank present: Yes (No) 2.3° - 0.1 = 2.2°C
5	Aqueous samples found to have visible solids?			✓	Sample IDs, containers affected:
5	Samples requiring chemical preservation at proper pH?		✓		Sample IDs, containers affected and pH observed: If preservative added, Lot#: pH = 8 on all
7	Samples requiring preservation have no residual chlorine?	✓			Sample IDs, containers affected: If preservative added, Lot#:
8	Samples received within holding time?	✓			Sample IDs, tests affected:
9	Sample IDs on COC match IDs on containers?	✓			Sample IDs, containers affected: ✱
10	Date & time of COC match date & time on containers?	✓			Sample IDs, containers affected: ✱
11	Number of containers received match number indicated on COC?	✓			List type and number of containers / Sample IDs, containers affected: 15-1L NMAG bottles, 3per sample
12	COC form is properly signed in relinquished/received sections?	✓			

Comments:

✱ One label of the 15 samples was indecipherable. Process of elimination concluded sample is B4L3D6. Only the date stamp was legible.

Checklist performed by: Initials: CJ Date: 10MAR25

CF-UD-F-7

SDG: GEL-CF713762 Page 17 of 40

General Narrative
for
GEL Laboratories
CPRC SAF W25-003
SDG: 23763

March 10, 2025

Laboratory Identification:

Cape Fear Analytical LLC (CFA)

Summary

Sample receipt

The sample(s) arrived at Cape Fear Analytical LLC, Wilmington, North Carolina on March 08, 2025, for analysis. The samples were delivered with proper chain of custody documentation and signatures. Shipping container temperatures were checked, documented, and within specifications. All sample containers arrived without any visible signs of tampering or breakage. Appropriate sample containers were received. Sample containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Sufficient sample was received for analysis. There are no additional comments concerning sample receipt.

Items of Note Analytical tests were requested for this SDG. All sample containers received met the contractual specifications for volume requirements for the analyses requested. All containers were received intact.

Sample Identification
The laboratory received the following samples:

Laboratory Identification	Sample Description
23763001	B4L399
23763002	B4L3C5
23763003	B4L3D6
23763004	B4L2X9
23763005	B4L375

Case Narrative

Sample analyses were conducted using methodology as outlined in Cape Fear Analytical's (CFA) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package

The enclosed data package contains the following sections: General Narrative, Chain of Custody and Supporting Documentation, and data from the following fractions: High Resolution Dioxins and Furans.

We certify that this package is in compliance with the Analytical Laboratory Services for Central Plateau Cleanup Company Statement of Work, both technically and for completeness, including a full description of, explanation of, and corrective actions for, any and all deviations, from either the analyses requested or the case narrative requested. Release of the data contained in this data package deliverable has been authorized by the Laboratory Analytical Manager (or designee) and the laboratory's client services representative as verified by their signatures on this report.

Sincerely,

Cynde Larkins

Cynde Larkins
Project Manager

High Resolution Dioxins and Furans Analysis

Case Narrative

HDOX Case Narrative
GEL Laboratories (GELA)
SDG GEL-CF713762
Work Order 23763

Method/Analysis Information

Product:	**Dioxins/Furans by SW846 Method 8290A in Liquids**
Analytical Method:	SW846 8290A
Extraction Method:	SW846 3520C
Analytical Batch Number:	59616
Clean Up Batch Number:	59615
Extraction Batch Number:	59614

Sample Analysis

Samples were received within temperature requirements at 2.2 °C.
(23763001,23763002,23763003,23763004,23763005).
The following samples were analyzed using the analytical protocol as established in SW846 8290A:

Sample ID	Client ID
12039086	Method Blank (MB)
12039087	Laboratory Control Sample (LCS)
12039088	Laboratory Control Sample Duplicate (LCSD)
23763001	B4L399
23763002	B4L3C5
23763003	B4L3D6
23763004	B4L2X9
23763005	B4L375

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-002 REV# 21.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (CVS) met the acceptance criteria.

Quality Control (QC) Information

Certification Statement
The test results presented in this document are certified to meet all requirements of the analytical method, the 2009 TNI Standard and the DoD/DOE QSM. (A2LA scope No. 3014-01)

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
13C-1,2,3,4,6,7,8-HpCDF recovered marginally below acceptance criteria for sample 23763003 (B4L3D6). All detection limit, signal-to-noise and ion ratio requirements were still met. Although the HpCDF compounds are not target analytes for this SDG, the surrogates have been included for informational purposes.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery
The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement
The RPD(s) between the LCS and LCSD met the acceptance limits.

QC Sample Designation
A sample of similar matrix, not associated with this SDG, was selected for analysis as the matrix spike and matrix spike duplicate.

Technical Information

Holding Time Specifications
CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Manual Integrations
Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction. Manual integrations were required for data files in this SDG.

System Configuration
This analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
HRP601_2	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um

Sample Data Summary

Cape Fear Analytical, LLC
3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - www.capefearanalytical.com

Certificate of Analysis Report
for

GELA001 GEL Laboratories

Client SDG: GEL-CF713762 CFA Work Order: 23763

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the specified detection limit.

Review/Validation

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

Signature: **Name: Erin Suhrie**

Date: 07 APR 2025 **Title: Data Validator**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**GEL-CF713762**	**Client:**	**GELA001**	**Project:**	**CPRC00725**
Lab Sample ID:	**23763001**	**Date Collected:**	**03/06/2025 10:01**	**Matrix:**	**W**
Client Sample:	**8290 RAD Water**	**Date Received:**	**03/08/2025 10:16**		
Client ID:	**B4L399**			**Prep Basis:**	**As Received**
Batch ID:	**59616**	**Method:**	**SW846 8290A**		
Run Date:	**03/25/2025 05:55**	**Analyst:**	**KW1**	**Instrument:**	**HRP601**
Data File:	**g24mar25d_2-7**			**Dilution:**	**1**
Prep Batch:	**59614**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**19-MAR-25**	**Prep Aliquot:**	**1024 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD	U	3.98		pg/L	3.98	9.77
41903-57-5	Total TCDDs	U	3.98		pg/L	3.98	9.77
36088-22-9	Total PeCDDs	U	21.2		pg/L	21.2	48.8
34465-46-8	Total HxCDDs	U	16.0		pg/L	16.0	48.8
55722-27-5	Total TCDFs	U	3.76		pg/L	3.76	9.77
30402-15-4	Total PeCDFs	U	18.2		pg/L	18.2	48.8
55684-94-1	Total HxCDFs	U	14.9		pg/L	14.9	48.8

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1420	1950	pg/L	72.5	(40%-135%)
13C-1,2,3,7,8-PeCDD		1470	1950	pg/L	75.5	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1280	1950	pg/L	65.7	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1300	1950	pg/L	66.3	(40%-135%)
13C-OCDD		2400	3910	pg/L	61.4	(40%-135%)
13C-2,3,7,8-TCDF		1320	1950	pg/L	67.5	(40%-135%)
13C-1,2,3,7,8-PeCDF		1190	1950	pg/L	60.9	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1160	1950	pg/L	59.2	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1140	1950	pg/L	58.5	(40%-135%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**GEL-CF713762**	**Client:**	**GELA001**	**Project:**	**CPRC00725**
Lab Sample ID:	**23763002**	**Date Collected:**	**03/06/2025 08:20**	**Matrix:**	**W**
Client Sample:	**8290 RAD Water**	**Date Received:**	**03/08/2025 10:16**		
Client ID:	**B4L3C5**			**Prep Basis:**	**As Received**
Batch ID:	**59616**	**Method:**	**SW846 8290A**		
Run Date:	**03/25/2025 06:43**	**Analyst:**	**KW1**	**Instrument:**	**HRP601**
Data File:	**g24mar25d_2-8**			**Dilution:**	**1**
Prep Batch:	**59614**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**19-MAR-25**	**Prep Aliquot:**	**1046.3 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD	U	3.90		pg/L	3.90	9.56
41903-57-5	Total TCDDs	U	3.90		pg/L	3.90	9.56
36088-22-9	Total PeCDDs	U	20.8		pg/L	20.8	47.8
34465-46-8	Total HxCDDs	U	15.6		pg/L	15.6	47.8
55722-27-5	Total TCDFs	U	3.68		pg/L	3.68	9.56
30402-15-4	Total PeCDFs	U	17.8		pg/L	17.8	47.8
55684-94-1	Total HxCDFs	U	14.6		pg/L	14.6	47.8

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1250	1910	pg/L	65.3	(40%-135%)
13C-1,2,3,7,8-PeCDD		1290	1910	pg/L	67.5	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1250	1910	pg/L	65.6	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1230	1910	pg/L	64.4	(40%-135%)
13C-OCDD		2170	3820	pg/L	56.7	(40%-135%)
13C-2,3,7,8-TCDF		1200	1910	pg/L	62.8	(40%-135%)
13C-1,2,3,7,8-PeCDF		1070	1910	pg/L	55.9	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1180	1910	pg/L	61.9	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1070	1910	pg/L	56.1	(40%-135%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**GEL-CF713762**	**Client:**	**GELA001**	**Project:**	**CPRC00725**
Lab Sample ID:	**23763003**	**Date Collected:**	**03/05/2025 11:10**	**Matrix:**	**W**
Client Sample:	**8290 RAD Water**	**Date Received:**	**03/08/2025 10:16**		
Client ID:	**B4L3D6**			**Prep Basis:**	**As Received**
Batch ID:	**59616**	**Method:**	**SW846 8290A**		
Run Date:	**03/25/2025 07:30**	**Analyst:**	**KW1**	**Instrument:**	**HRP601**
Data File:	**g24mar25d_2-9**			**Dilution:**	**1**
Prep Batch:	**59614**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**19-MAR-25**	**Prep Aliquot:**	**1020.9 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD	U	4.00		pg/L	4.00	9.80
41903-57-5	Total TCDDs	U	4.00		pg/L	4.00	9.80
36088-22-9	Total PeCDDs	U	21.3		pg/L	21.3	49.0
34465-46-8	Total HxCDDs	U	16.0		pg/L	16.0	49.0
55722-27-5	Total TCDFs	U	3.78		pg/L	3.78	9.80
30402-15-4	Total PeCDFs	U	18.3		pg/L	18.3	49.0
55684-94-1	Total HxCDFs	U	14.9		pg/L	14.9	49.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%		Acceptable Limits
13C-2,3,7,8-TCDD		1160	1960	pg/L	59.1		(40%-135%)
13C-1,2,3,7,8-PeCDD		1350	1960	pg/L	69.1		(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1170	1960	pg/L	59.7		(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1260	1960	pg/L	64.3		(40%-135%)
13C-OCDD		2380	3920	pg/L	60.7		(40%-135%)
13C-2,3,7,8-TCDF		1110	1960	pg/L	56.8		(40%-135%)
13C-1,2,3,7,8-PeCDF		1060	1960	pg/L	54.0		(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1050	1960	pg/L	53.4		(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		745	1960	pg/L	38.0	*	(40%-135%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**GEL-CF713762**	**Client:**	**GELA001**	**Project:**	**CPRC00725**
Lab Sample ID:	**23763004**	**Date Collected:**	**03/05/2025 08:42**	**Matrix:**	**W**
Client Sample:	**8290 RAD Water**	**Date Received:**	**03/08/2025 10:16**		
Client ID:	**B4L2X9**			**Prep Basis:**	**As Received**
Batch ID:	**59616**	**Method:**	**SW846 8290A**		
Run Date:	**03/25/2025 08:18**	**Analyst:**	**KW1**	**Instrument:**	**HRP601**
Data File:	**g24mar25d_2-10**			**Dilution:**	**1**
Prep Batch:	**59614**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**19-MAR-25**	**Prep Aliquot:**	**1045.3 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD	U	3.90		pg/L	3.90	9.57
41903-57-5	Total TCDDs	U	3.90		pg/L	3.90	9.57
36088-22-9	Total PeCDDs	U	20.8		pg/L	20.8	47.8
34465-46-8	Total HxCDDs	U	15.6		pg/L	15.6	47.8
55722-27-5	Total TCDFs	U	3.69		pg/L	3.69	9.57
30402-15-4	Total PeCDFs	U	17.8		pg/L	17.8	47.8
55684-94-1	Total HxCDFs	U	14.6		pg/L	14.6	47.8

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1380	1910	pg/L	72.2	(40%-135%)
13C-1,2,3,7,8-PeCDD		1460	1910	pg/L	76.2	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1260	1910	pg/L	65.7	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1320	1910	pg/L	69.0	(40%-135%)
13C-OCDD		2610	3830	pg/L	68.3	(40%-135%)
13C-2,3,7,8-TCDF		1270	1910	pg/L	66.2	(40%-135%)
13C-1,2,3,7,8-PeCDF		1180	1910	pg/L	61.5	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1130	1910	pg/L	59.2	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1140	1910	pg/L	59.4	(40%-135%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**GEL-CF713762**	**Client:**	**GELA001**	**Project:**	**CPRC00725**
Lab Sample ID:	**23763005**	**Date Collected:**	**03/03/2025 12:42**	**Matrix:**	**W**
Client Sample:	**8290 RAD Water**	**Date Received:**	**03/08/2025 10:16**		
Client ID:	**B4L375**			**Prep Basis:**	**As Received**
Batch ID:	**59616**	**Method:**	**SW846 8290A**		
Run Date:	**03/25/2025 09:05**	**Analyst:**	**KW1**	**Instrument:**	**HRP601**
Data File:	**g24mar25d_2-11**			**Dilution:**	**1**
Prep Batch:	**59614**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**19-MAR-25**	**Prep Aliquot:**	**1034.4 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD	U	3.94		pg/L	3.94	9.67
41903-57-5	Total TCDDs	U	3.94		pg/L	3.94	9.67
36088-22-9	Total PeCDDs	U	21.0		pg/L	21.0	48.3
34465-46-8	Total HxCDDs	U	15.8		pg/L	15.8	48.3
55722-27-5	Total TCDFs	U	3.73		pg/L	3.73	9.67
30402-15-4	Total PeCDFs	U	18.0		pg/L	18.0	48.3
55684-94-1	Total HxCDFs	U	14.7		pg/L	14.7	48.3

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1170	1930	pg/L	60.8	(40%-135%)
13C-1,2,3,7,8-PeCDD		1400	1930	pg/L	72.3	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1100	1930	pg/L	57.0	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1280	1930	pg/L	66.3	(40%-135%)
13C-OCDD		1950	3870	pg/L	50.3	(40%-135%)
13C-2,3,7,8-TCDF		1090	1930	pg/L	56.6	(40%-135%)
13C-1,2,3,7,8-PeCDF		1180	1930	pg/L	60.9	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		992	1930	pg/L	51.3	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1050	1930	pg/L	54.5	(40%-135%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Quality Control Summary

Cape Fear Analytical LLC **Report Date: April 7, 2025**

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: GEL-CF713762

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12039088	LCSD for batch 59614	13C-2,3,7,8-TCDD		70.5	(40%-135%)
		13C-1,2,3,7,8-PeCDD		75.0	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		67.9	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		66.7	(40%-135%)
		13C-OCDD		59.6	(40%-135%)
		13C-2,3,7,8-TCDF		68.4	(40%-135%)
		13C-1,2,3,7,8-PeCDF		60.9	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		63.0	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		59.1	(40%-135%)
12039086	MB for batch 59614	13C-2,3,7,8-TCDD		65.6	(40%-135%)
		13C-1,2,3,7,8-PeCDD		73.5	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		62.3	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		62.3	(40%-135%)
		13C-OCDD		57.0	(40%-135%)
		13C-2,3,7,8-TCDF		62.6	(40%-135%)
		13C-1,2,3,7,8-PeCDF		57.8	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		57.3	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		54.0	(40%-135%)
23763001	B4L399	13C-2,3,7,8-TCDD		72.5	(40%-135%)
		13C-1,2,3,7,8-PeCDD		75.5	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		65.7	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		66.3	(40%-135%)
		13C-OCDD		61.4	(40%-135%)
		13C-2,3,7,8-TCDF		67.5	(40%-135%)
		13C-1,2,3,7,8-PeCDF		60.9	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		59.2	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		58.5	(40%-135%)
23763002	B4L3C5	13C-2,3,7,8-TCDD		65.3	(40%-135%)
		13C-1,2,3,7,8-PeCDD		67.5	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		65.6	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		64.4	(40%-135%)
		13C-OCDD		56.7	(40%-135%)
		13C-2,3,7,8-TCDF		62.8	(40%-135%)
		13C-1,2,3,7,8-PeCDF		55.9	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		61.9	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		56.1	(40%-135%)
23763003	B4L3D6	13C-2,3,7,8-TCDD		59.1	(40%-135%)
		13C-1,2,3,7,8-PeCDD		69.1	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		59.7	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		64.3	(40%-135%)
		13C-OCDD		60.7	(40%-135%)
		13C-2,3,7,8-TCDF		56.8	(40%-135%)
		13C-1,2,3,7,8-PeCDF		54.0	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		53.4	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		38.0 *	(40%-135%)
23763004	B4L2X9	13C-2,3,7,8-TCDD		72.2	(40%-135%)
		13C-1,2,3,7,8-PeCDD		76.2	(40%-135%)

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: GEL-CF713762

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
23763004	B4L2X9	13C-1,2,3,6,7,8-HxCDD		65.7	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		69.0	(40%-135%)
		13C-OCDD		68.3	(40%-135%)
		13C-2,3,7,8-TCDF		66.2	(40%-135%)
		13C-1,2,3,7,8-PeCDF		61.5	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		59.2	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		59.4	(40%-135%)
23763005	B4L375	13C-2,3,7,8-TCDD		60.8	(40%-135%)
		13C-1,2,3,7,8-PeCDD		72.3	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		57.0	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		66.3	(40%-135%)
		13C-OCDD		50.3	(40%-135%)
		13C-2,3,7,8-TCDF		56.6	(40%-135%)
		13C-1,2,3,7,8-PeCDF		60.9	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		51.3	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		54.5	(40%-135%)
12039087	LCS for batch 59614	13C-2,3,7,8-TCDD		59.7	(40%-135%)
		13C-1,2,3,7,8-PeCDD		75.3	(40%-135%)
		13C-1,2,3,6,7,8-HxCDD		60.7	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDD		69.7	(40%-135%)
		13C-OCDD		65.0	(40%-135%)
		13C-2,3,7,8-TCDF		57.0	(40%-135%)
		13C-1,2,3,7,8-PeCDF		58.8	(40%-135%)
		13C-1,2,3,6,7,8-HxCDF		53.2	(40%-135%)
		13C-1,2,3,4,6,7,8-HpCDF		56.9	(40%-135%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: GEL-CF713762 **Sample Type:** Laboratory Control Sample
Client ID: LCS for batch 59614 **Matrix:** WATER
Lab Sample ID: 12039087
Instrument: HRP601 **Analysis Date:** 03/26/2025 11:29 **Dilution:** 1
Analyst: KW1 **Prep Batch ID:** 59614
Batch ID: 59616

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	200	200	100	70-130

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: GEL-CF713762 **Sample Type:** Laboratory Control Sample Duplicate
Client ID: LCSD for batch 59614 **Matrix:** WATER
Lab Sample ID: 12039088
Instrument: HRP601 **Analysis Date:** 03/25/2025 01:57 **Dilution:** 1
Analyst: KW1 **Prep Batch ID:** 59614
Batch ID: 59616

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD	2,3,7,8-TCDD	200	210	105	70-130	5.08	0-20

Cape Fear Analytical LLC **Report Date:** April 7, 2025

Method Blank Summary

SDG Number:	**GEL-CF713762**	**Client:**	**GELA001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 59614**	**Instrument ID:**	**HRP601**	**Data File:**	**g24mar25d_2-3**
Lab Sample ID:	**12039086**	**Prep Date:**	**19-MAR-25**	**Analyzed:**	**03/25/25 02:45**
Column:					

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 59614	12039087	g24mar25d_5-7	03/26/25	1129
02	LCSD for batch 59614	12039088	g24mar25d_2-2	03/25/25	0157
03	B4L399	23763001	g24mar25d_2-7	03/25/25	0555
04	B4L3C5	23763002	g24mar25d_2-8	03/25/25	0643
05	B4L3D6	23763003	g24mar25d_2-9	03/25/25	0730
06	B4L2X9	23763004	g24mar25d_2-10	03/25/25	0818
07	B4L375	23763005	g24mar25d_2-11	03/25/25	0905

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number: GEL-CF713762 **Client:** GELA001 **Project:** CPRC00725
Lab Sample ID: 12039086 **Matrix:** WATER
Client Sample: QC for batch 59614
Client ID: MB for batch 59614 **Prep Basis:** As Received
Batch ID: 59616 **Method:** SW846 8290A
Run Date: 03/25/2025 02:45 **Analyst:** KW1 **Instrument:** HRP601
Data File: g24mar25d_2-3 **Dilution:** 1
Prep Batch: 59614 **Prep Method:** SW846 3520C
Prep Date: 19-MAR-25 **Prep Aliquot:** 1000 mL

CAS No.	Parmname	Qual	Result	EMPC	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD	U	4.08		pg/L	4.08	10.0
41903-57-5	Total TCDDs	U	4.08		pg/L	4.08	10.0
36088-22-9	Total PeCDDs	U	21.7		pg/L	21.7	50.0
34465-46-8	Total HxCDDs	U	16.3		pg/L	16.3	50.0
55722-27-5	Total TCDFs	U	3.85		pg/L	3.85	10.0
30402-15-4	Total PeCDFs	U	18.6		pg/L	18.6	50.0
55684-94-1	Total HxCDFs	U	15.2		pg/L	15.2	50.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1310	2000	pg/L	65.6	(40%-135%)
13C-1,2,3,7,8-PeCDD		1470	2000	pg/L	73.5	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1250	2000	pg/L	62.3	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1250	2000	pg/L	62.3	(40%-135%)
13C-OCDD		2280	4000	pg/L	57.0	(40%-135%)
13C-2,3,7,8-TCDF		1250	2000	pg/L	62.6	(40%-135%)
13C-1,2,3,7,8-PeCDF		1160	2000	pg/L	57.8	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1150	2000	pg/L	57.3	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1080	2000	pg/L	54.0	(40%-135%)

Comments:
U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**GEL-CF713762**	**Client:**	**GELA001**	**Project:**	**CPRC00725**
Lab Sample ID:	**12039087**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 59614**				
Client ID:	**LCS for batch 59614**			**Prep Basis:**	**As Received**
Batch ID:	**59616**	**Method:**	**SW846 8290A**		
Run Date:	**03/26/2025 11:29**	**Analyst:**	**KW1**	**Instrument:**	**HRP601**
Data File:	**g24mar25d_5-7**			**Dilution:**	**1**
Prep Batch:	**59614**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**19-MAR-25**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD		200		pg/L	4.08	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1190	2000	pg/L	59.7	(40%-135%)
13C-1,2,3,7,8-PeCDD		1510	2000	pg/L	75.3	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1210	2000	pg/L	60.7	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1390	2000	pg/L	69.7	(40%-135%)
13C-OCDD		2600	4000	pg/L	65.0	(40%-135%)
13C-2,3,7,8-TCDF		1140	2000	pg/L	57.0	(40%-135%)
13C-1,2,3,7,8-PeCDF		1180	2000	pg/L	58.8	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1060	2000	pg/L	53.2	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1140	2000	pg/L	56.9	(40%-135%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number: GEL-CF713762 **Client:** GELA001 **Project:** CPRC00725
Lab Sample ID: 12039088 **Matrix:** WATER
Client Sample: QC for batch 59614
Client ID: LCSD for batch 59614 **Prep Basis:** As Received
Batch ID: 59616 **Method:** SW846 8290A
Run Date: 03/25/2025 01:57 **Analyst:** KW1 **Instrument:** HRP601
Data File: g24mar25d_2-2 **Dilution:** 1
Prep Batch: 59614 **Prep Method:** SW846 3520C
Prep Date: 19-MAR-25 **Prep Aliquot:** 1000 mL

CAS No.	Parmname	Qual	Result	EMPC	Units	MDL	PQL
1746-01-6	2,3,7,8-TCDD		210		pg/L	4.08	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1410	2000	pg/L	70.5	(40%-135%)
13C-1,2,3,7,8-PeCDD		1500	2000	pg/L	75.0	(40%-135%)
13C-1,2,3,6,7,8-HxCDD		1360	2000	pg/L	67.9	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDD		1330	2000	pg/L	66.7	(40%-135%)
13C-OCDD		2380	4000	pg/L	59.6	(40%-135%)
13C-2,3,7,8-TCDF		1370	2000	pg/L	68.4	(40%-135%)
13C-1,2,3,7,8-PeCDF		1220	2000	pg/L	60.9	(40%-135%)
13C-1,2,3,6,7,8-HxCDF		1260	2000	pg/L	63.0	(40%-135%)
13C-1,2,3,4,6,7,8-HpCDF		1180	2000	pg/L	59.1	(40%-135%)

Comments:
U **Analyte was analyzed for, but not detected above the specified detection limit.**