GEL Laboratories LLC
a member of The GEL Group INC

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

April 04, 2025

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

Re: SAF I25-012
Work Order: 712285
SDG: GEL712285

Dear Ms. Medley:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 06, 2025. 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: I25-012-024, I25-012-025, I25-012-028, I25-012-030 and I25-012-055
Enclosures

problem solved

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Case Narrative

General Narrative
for
Central Plateau Cleanup Company (89223)
SAF I25-012
SDG: GEL712285

April 04, 2025

Laboratory Identification:

GEL Laboratories, LLC.

Summary

Sample receipt

The sample(s) arrived at GEL Laboratories, LLC, Charleston, South Carolina on March 06, 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
712285001	B4KXT2
712285002	B4KY36
712285003	B4KXP5
712285004	B4KXP6
712285005	B4KXR8

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: Radiochemistry.

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

Radiochemistry
Technical Case Narrative
Central Plateau Cleanup Company
SDG #: GEL712285
Work Order #: 712285

SMR_UISO_AEA

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Duplication Criteria between QC Sample and Duplicate Sample
The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

Sample	Analyte	Value
1206041149 (B4KXR5DUP)	Uranium-233/234	RPD 30.9* (0.00%-20.00%) RER 1.74 (0-2)

Technical Information

Recounts
Sample 1206041149 (B4KXR5DUP) was recounted due to high relative percent difference/relative error ratio. The recount is reported.

SMR_AM241_AEA

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

SMR_PUISO_AEA

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Sample Re-prep/Re-analysis
Samples were reprepped due to low carrier/tracer yield. The re-analysis is being reported.

SMR_I129LOWLEVEL_RAD

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

SMR_COMMON_GEA + SB-125CS-134K-40

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

SMR_SR_RAD_GPC

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

SMR_PU241_LSC

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

RDL Met
The blank (See Below) did not meet the detection limit due to keeping the blank volume consistent with the other sample aliquots.

Sample	Analyte	Value
1206054842 (MB)	Plutonium-241	Result 0.106 < MDA 25.2 > RDL 25 pCi/L

Samples (See Below) did not meet the detection limits due to the small sample aliquots used. The aliquots were reduced due to the matrix of the samples. The samples were counted the maximum count time in order to achieve the lowest possible MDAs.

Sample	Analyte	Value
1206054843 (B4KXR5DUP)	Plutonium-241	Result -14.8 < MDA 25.3 > RDL 25 pCi/L
712285002 (B4KY36)	Plutonium-241	Result -14.9 < MDA 26.5 > RDL 25 pCi/L
712285003 (B4KXP5)	Plutonium-241	Result -12 < MDA 30.2 > RDL 25 pCi/L
712285004 (B4KXP6)	Plutonium-241	Result -5.88 < MDA 27 > RDL 25 pCi/L
712285005 (B4KXR8)	Plutonium-241	Result -10.7 < MDA 28.5 > RDL 25 pCi/L

Technical Information

Sample Re-prep/Re-analysis
Samples were reprepped due to low carrier/tracer yield. The re-analysis is being reported.

SMR_SE79_LSC

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report

met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

SMR_C14_LSC

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Miscellaneous Information

Additional Comments
The matrix spike, 1206031044 (B4KXY9MS), aliquot was reduced to conserve sample volume.

SMR_TC99_LSC

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

SMR_TRITIUM_LSC

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Miscellaneous Information

Additional Comments
The matrix spike, 1206035263 (Non SDG 711614001MS), aliquot was reduced to conserve sample volume.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Chain of Custody and Supporting Documentation

Central Plateau Cleanup Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

712285

C.O.C. # **I25-012-024**

PAGE 1 OF 1

Collector:	Rick Crabtree/CPCCo	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	I25-012	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	901852
Project Title:	AEA, March 2025	**Logbook No.:**	HNF-N-506 -144	**Ice Chest No.:**	GWS 133
Shipped To (Lab):	GEL Laboratories, LLC	**Method of Shipment:**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7725 0307 5113
Protocol:	SURV	**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
B4KXP5	N	W	MAR 0 5 2025	0650	2x1-L G/P	SMR_AM241_AEA; SMR_PU241_LSC; SMR_PUISO_AEA; SMR_UISO_AEA	6 Months	HNO3 to pH <2
B4KXP5	N	W			1x250-mL G/P	SMR_C14_LSC	6 Months	None
B4KXP5	N	W			1x500-mL G/P	SMR_COMMON_GEA; SMR_SB-125CS-134K-40_GEA	6 Months	HNO3 to pH <2
B4KXP5	N	W			1x250-mL G/P	SMR_SE79_LSC	6 Months	HNO3 to pH <2
B4KXP5	N	W			1x250-mL G/P	SMR_TC99_LSC	6 Months	HNO3 to pH <2
B4KXP5	N	W	MAR 0 5 2025		1x250-mL G/P	SMR_TRITIUM_LSC	6 Months	None

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Rick Crabtree/CPCCo		0953 MAR 0 5 2025	Troy Bacor CPCC	Troy Bacon	0953 MAR 0 5 2025
Troy Bacor CPCC	Troy Bacon	MAR 0 5 2025 1400	FEDEX		
		FedEx	Stacy Boone		MAR 06 2025 1000

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:

Printed On 12/31/2024 **FSR ID =** FSR153864 Report Format: 02/29/2024

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Central Plateau Cleanup Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 712285	C.O.C. # I25-012-025 PAGE 1 OF 1

Collector:	Rick Crabtree/CPCCo	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	I25-012	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	901852
Project Title:	AEA, March 2025	**Logbook No.:**	HNF-N-506 -JW	**Ice Chest No.:**	GWS-133
Shipped To (Lab):	GEL Laboratories, LLC	**Method of Shipment:**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	772503075113
Protocol:	SURV	**Priority:**	30 Days	**Offsite Property No.:**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** Contains Radioactive Material at concentrations that are not regulated for transportation by 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
B4KXP6	N	W	MAR 05 2025	0939	2x1-L G/P	SMR_AM241_AEA; SMR_PU241_LSC; SMR_PUISO_AEA; SMR_UISO_AEA	6 Months	HNO3 to pH <2
B4KXP6	N	W			1x250-mL G/P	SMR_C14_LSC	6 Months	None
B4KXP6	N	W			1x500-mL G/P	SMR_COMMON_GEA; SMR_SB-125CS-134K-40_GEA	6 Months	HNO3 to pH <2
B4KXP6	N	W			1x250-mL G/P	SMR_SE79_LSC	6 Months	HNO3 to pH <2
B4KXP6	N	W			1x250-mL G/P	SMR_TC99_LSC	6 Months	HNO3 to pH <2
B4KXP6	N	W	MAR 05 2025		1x250-mL G/P	SMR_TRITIUM_LSC	6 Months	None

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Rick Crabtree/CPCCo	Rick Crabtree	MAR 05 2025 0953	Troy Bacon CPCC	Troy Bacon	MAR 05 2025 0953
Troy Bacon CPCC	Troy Bacon	MAR 05 2025 1400 FedEx	FEDEX Stacy Boone	Stacy Boone	MAR 06 2025 1000

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:

Printed On 12/31/2024 **FSR ID =** FSR153827 Report Format: 02/29/2024

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Doc: GEL712285

Central Plateau Cleanup Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

712285

C.O.C. # **I25-012-028**

PAGE 1 OF 1

Collector:	Rick Crabtree/CPCCo	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	I25-012	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	901852
Project Title:	AEA, March 2025	**Logbook No.:**	HNF-N-506 -144	**Ice Chest No.:**	GWS-133
Shipped To (Lab):	GEL Laboratories, LLC	**Method of Shipment:**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7725 0307 5113
Protocol:	SURV	**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
B4KXR8	N	W	MAR 0 5 2025	0845	2x1-L G/P	SMR_AM241_AEA; SMR_PU241_LSC; SMR_PUISO_AEA; SMR_UISO_AEA	6 Months	HNO3 to pH <2
B4KXR8	N	W	↓	↓	1x4-L G/P	SMR_I129LOWLEVEL_RAD	6 Months	None
B4KXR8	N	W	↓	↓	1x250-mL G/P	SMR_TC99_LSC	6 Months	HNO3 to pH <2

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Rick Crabtree/CPCCo	0953	MAR 0 5 2025	Troy Bacon CPCC	0953	MAR 0 5 2025
Troy Bacon CPCC	Troy Bacon	MAR 0 5 2025 1400	FEDEX		
	FedEx		Stacy Boone	MAR 0 6 2025	1000

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:

Printed On 12/31/2024 **FSR ID = FSR153830** Report Format: 02/29/2024

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100 lbs

712285

Central Plateau Cleanup Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I25-012-030**

PAGE 1 OF 1

Collector:	Anthony Noggles / CPCC	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	I25-012	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	901852
Project Title:	AEA, March 2025	**Logbook No.:**	HNF-N-506 -148/32	**Ice Chest No.:**	GWS-751
Shipped To (Lab):	GEL Laboratories, LLC	**Method of Shipment:**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7725 0540 8510
Protocol:	SURV	**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
B4KXT2	N	W	MAR 05 2025	0842	1x4-L G/P	SMR_I129LOWLEVEL_RAD	6 Months	None
B4KXT2	N	W	↓	↓	1x250-mL G/P	SMR_TC99_LSC	6 Months	HNO3 to pH <2

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 1010	Lorin Kelly CPCC		MAR 05 2025 1010
Lorin Kelly CPCC		MAR 05 2025 1400	FEDEX		
		FedEx	Shay Evans Stacy Boone		MAR 06 2025 1060

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:

Doc: GEL712285

GEL712285

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Central Plateau Cleanup Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 712285

C.O.C. # I25-012-055

PAGE 1 OF 1

Collector:	Rick Crabtree/CPCCo	**Contact/Requester:**	Karen Waters-Husted	**Telephone No.:**	509-376-4650
SAF No.:	I25-012	**Sampling Origin:**	Hanford Site	**Purchase Order/Charge Code:**	901852
Project Title:	AEA, March 2025	**Logbook No.:**	HNF-N-506 -143 /106	**Ice Chest No.:**	GWS-149
Shipped To (Lab):	GEL Laboratories, LLC	**Method of Shipment:**	Commercial Carrier	**Bill of Lading/Air Bill No.:**	7725 0194 3874
Protocol:	SURV	**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
B4KY36	N	W	MAR 0 4 2025	1421	2x1-L G/P	SMR_AM241_AEA; SMR_PU241_LSC; SMR_PUISO_AEA; SMR_UISO_AEA	6 Months	HNO3 to pH <2
B4KY36	N	W	↓	↓	1x250-mL G/P	SMR_C14_LSC	6 Months	None
B4KY36	N	W			1x500-mL G/P	SMR_COMMON_GEA; SMR_SB-125CS-134K-40_GEA	6 Months	HNO3 to pH <2
B4KY36	N	W			1x250-mL G/P	SMR_SE79_LSC	6 Months	HNO3 to pH <2
B4KY36	N	W			1x1-L G/P	SMR_SR_RAD_GPC	6 Months	HNO3 to pH <2
B4KY36	N	W	MAR 0 4 2025	1421	1x250-mL G/P	SMR_TC99_LSC	6 Months	HNO3 to pH <2

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Rick Crabtree/CPCCo		MAR 0 4 2025 1300	Mike Esparza / CPCC		MAR 0 4 2025 1500
Mike Esparza / CPCC		MAR 0 4 2025 1510	SSU-1		MAR 0 4 2025 1510
SSU-1		MAR 0 5 2025 0700	Troy Bacon CPCC	Troy Bacon	MAR 0 5 2025 0700
Troy Bacon CPCC	Troy Bacon	MAR 0 5 2025 1400	FEDEX		
FedEx			Stacy Boone Stacy Boone		MAR 0 6 2025 1000

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:

Printed On 1/22/2025 FSR ID = FSR153855 Report Format: 02/29/2024

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: CPRC | SDG/AR/COC/Work Order: 712285 | GEL PM: HS

Received By: Stacy L Boone | Date Received at GEL: March 6, 2025

Carrier (Circle Applicable): FedEx Express FedEx Ground UPS Field Services Courier Client Other:

IR Temp gun # IR4-24 Daily Calibration Performed? Y/N

Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (le radiochem only).	Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (le radiochem only).
7725 0307 5113	1 c		7725 0647 9715	1 c	
0674 9000	1 c				
0194 3874	1 c				
0540 8510	1 c				
9789 1888	1 c				

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?		/	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?	/		COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?	/		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr. Classified as: (Rad 1) Rad 2 Rad 3
D) Are there any sample hazards to document?		/	If yes, select Hazards below. PCBs Flammable Foreign Soil RCRA Asbestos Beryllium Corrosive Other:
E) Was a SDS received and reviewed by Lab Safety?		/	Circle Applicable: See additional Comments below. No additional comments needed after review.

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	/			Circle Applicable: Direct client dropoff Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	/			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	If there are samples requiring cold preservation, did they arrive within (0 < 6 °C)?	/			Preservation Method: (Wet Ice) Ice Packs Dry Ice None Other: *all temperatures recorded next to tracking numbers are in Celcius
4	Sample containers intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5	Samples requiring chemical preservation at proper pH?	/			Preserved per COC request or list Sample IDs and Containers Affected: If Preservation added, Lot#:
6	Do any samples require Volatile Analysis? (If yes, answer all three additional questions.)	/			If Yes, are Encores or Soil Kits present? Yes___ No / (If yes, take to VOA Freezer). Do liquid VOA vials contain acid preservation? Yes / No / NA___ (If unknown, select No). Are liquid VOA vials free of headspace? Yes / No___ NA___. Sample IDs and containers affected:
7	Samples received within holding time?	/			IDs and tests affected:
8	Sample IDs on COC match IDs on bottles?	/			IDs and containers affected:
9	Date & time on COC match date & time on bottles?	/			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
10	Number of containers received match number indicated on COC?	/			Circle Applicable: No container count on COC Missing Container (provide details) Other (describe)
11	Are sample containers identifiable as GEL provided by use of GEL labels?			/	
12	COC form is properly signed in relinquished/received sections?	/			Circle Applicable: Not relinquished Other (describe)

Comments:

PM (or PMA) review: Initials VVM Date 3/7/25

Continuation Form Required when selected

GL-CHL-SR-001 Rev 8

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 04 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

Radiological Analysis

Case Narrative

Radiochemistry
Technical Case Narrative
Central Plateau Cleanup Company
SDG #: GEL712285
Work Order #: 712285

Product: **SMR_UISO_AEA**
Analytical Method: UISO_AEA
Analytical Procedure: GL-RAD-A-011 REV# 29
Analytical Batch: 2767475

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285002	B4KY36
712285003	B4KXP5
712285004	B4KXP6
712285005	B4KXR8
1206041148	Method Blank (MB)
1206041149	712745001(B4KXR5) Sample Duplicate (DUP)
1206041150	Laboratory Control Sample (LCS)

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

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Duplication Criteria between QC Sample and Duplicate Sample
The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

Sample	Analyte	Value
1206041149 (B4KXR5DUP)	Uranium-233/234	RPD 30.9* (0.00%-20.00%) RER 1.74 (0-2)

Technical Information

Recounts
Sample 1206041149 (B4KXR5DUP) was recounted due to high relative percent difference/relative error ratio. The recount is reported.

Product: **SMR_AM241_AEA**
Analytical Method: AM241CMISO_AEA
Analytical Procedure: GL-RAD-A-011 REV# 29
Analytical Batch: 2773470

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285002	B4KY36
712285003	B4KXP5
712285004	B4KXP6
712285005	B4KXR8
1206053661	Method Blank (MB)
1206053662	712745001(B4KXR5) Sample Duplicate (DUP)
1206053663	Laboratory Control Sample (LCS)

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

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: **SMR_PUISO_AEA**
Analytical Method: PUISO_AEA
Analytical Procedure: GL-RAD-A-011 REV# 29
Analytical Batch: 2773986

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285002	B4KY36
712285003	B4KXP5
712285004	B4KXP6
712285005	B4KXR8
1206054839	Method Blank (MB)
1206054840	712745001(B4KXR5) Sample Duplicate (DUP)
1206054841	Laboratory Control Sample (LCS)

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

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Sample Re-prep/Re-analysis
Samples were reprepped due to low carrier/tracer yield. The re-analysis is being reported.

Product: **SMR_I129LOWLEVEL_RAD**

Analytical Method: DOE EML HASL-300,I-01 Modified
Analytical Procedure: GL-RAD-A-006 REV# 23
Analytical Batch: 2760220

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285001	B4KXT2
712285005	B4KXR8
1206025972	Method Blank (MB)
1206025973	711295001(NonSDG) Sample Duplicate (DUP)
1206025974	711295001(NonSDG) Matrix Spike (MS)
1206025975	Laboratory Control Sample (LCS)

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

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: **SMR_COMMON_GEA + SB-125CS-134K-40**
Analytical Method: GEA
Analytical Procedure: GL-RAD-A-013 REV# 29
Analytical Batch: 2766576

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285002	B4KY36
712285003	B4KXP5
712285004	B4KXP6
1206039164	Method Blank (MB)
1206039165	712745005(B4KY19) Sample Duplicate (DUP)
1206039166	Laboratory Control Sample (LCS)

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

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: **SMR_SR_RAD_GPC**
Analytical Method: SR_RAD_GPC
Analytical Procedure: GL-RAD-A-004 REV# 23
Analytical Batch: 2762565

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285002	B4KY36
1206030639	Method Blank (MB)
1206030640	712285002(B4KY36) Sample Duplicate (DUP)
1206030641	Laboratory Control Sample (LCS)

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

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: **SMR_PU241_LSC**
Analytical Method: PU241_LSC
Analytical Procedure: GL-RAD-A-035 REV# 25
Analytical Batch: 2773987

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285002	B4KY36
712285003	B4KXP5
712285004	B4KXP6
712285005	B4KXR8
1206054842	Method Blank (MB)
1206054843	712745001(B4KXR5) Sample Duplicate (DUP)
1206054844	Laboratory Control Sample (LCS)

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

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

RDL Met
The blank (See Below) did not meet the detection limit due to keeping the blank volume consistent with the other sample aliquots.

Sample	Analyte	Value
1206054842 (MB)	Plutonium-241	Result 0.106 < MDA 25.2 > RDL 25 pCi/L

Samples (See Below) did not meet the detection limits due to the small sample aliquots used. The aliquots were reduced due to the matrix of the samples. The samples were counted the maximum count time in order to achieve the lowest possible MDAs.

Sample	Analyte	Value
1206054843 (B4KXR5DUP)	Plutonium-241	Result -14.8 < MDA 25.3 > RDL 25 pCi/L
712285002 (B4KY36)	Plutonium-241	Result -14.9 < MDA 26.5 > RDL 25 pCi/L
712285003 (B4KXP5)	Plutonium-241	Result -12 < MDA 30.2 > RDL 25 pCi/L
712285004 (B4KXP6)	Plutonium-241	Result -5.88 < MDA 27 > RDL 25 pCi/L
712285005 (B4KXR8)	Plutonium-241	Result -10.7 < MDA 28.5 > RDL 25 pCi/L

Technical Information

Sample Re-prep/Re-analysis
Samples were reprepped due to low carrier/tracer yield. The re-analysis is being reported.

Product: **SMR_SE79_LSC**
Analytical Method: SE79_LSC
Analytical Procedure: GL-RAD-A-031 REV# 14
Analytical Batch: 2761705

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285002	B4KY36
712285003	B4KXP5
712285004	B4KXP6
1206028767	Method Blank (MB)
1206028768	712221003(B4KXX4) Sample Duplicate (DUP)
1206028769	Laboratory Control Sample (LCS)

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

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: **SMR_C14_LSC**
Analytical Method: C14_LSC
Analytical Procedure: GL-RAD-A-003 REV# 18
Analytical Batch: 2762730

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285002	B4KY36
712285003	B4KXP5
712285004	B4KXP6

1206031042	Method Blank (MB)
1206031043	712745003(B4KXY9) Sample Duplicate (DUP)
1206031044	712745003(B4KXY9) Matrix Spike (MS)
1206031045	Laboratory Control Sample (LCS)

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

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Preparation Information

Aliquot Reduced
1206031043 (B4KXY9DUP) and 1206031044 (B4KXY9MS) Aliquots were reduced due to limited sample volume.

Miscellaneous Information

Additional Comments
The matrix spike, 1206031044 (B4KXY9MS), aliquot was reduced to conserve sample volume.

Product: **SMR_TC99_LSC**
Analytical Method: TC99_LSC
Analytical Procedure: GL-RAD-A-059 REV# 5
Analytical Batch: 2763241

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285001	B4KXT2
712285002	B4KY36
712285003	B4KXP5
712285004	B4KXP6
712285005	B4KXR8
1206032121	Method Blank (MB)
1206032122	711631003(B4KXY6) Sample Duplicate (DUP)
1206032123	Laboratory Control Sample (LCS)

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

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: **SMR_TRITIUM_LSC**

Analytical Method: TRITIUM_LSC
Analytical Procedure: GL-RAD-A-002 REV# 24
Analytical Batch: 2764707

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
712285003	B4KXP5
712285004	B4KXP6
1206035261	Method Blank (MB)
1206035262	711614001(NonSDG) Sample Duplicate (DUP)
1206035263	711614001(NonSDG) Matrix Spike (MS)
1206035264	Laboratory Control Sample (LCS)

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

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Miscellaneous Information

Additional Comments
The matrix spike, 1206035263 (Non SDG 711614001MS), aliquot was reduced to conserve sample volume.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

CPRC003 Central Plateau Cleanup Company (89223)

Client SDG: GEL712285 GEL Work Order: 712285

The Qualifiers in this report are defined as follows:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: **Name: Kate Gellatly**

Date: 04 APR 2025 **Title: Analyst 1 PT**

Sample Data Summary

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285001	**Date Collected:**	03/05/2025 08:42	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KXT2			**Prep Basis:**	"As Received"
Batch ID:	2760220	**Method:**	DOE EML HASL-300,I-01 Mo	**SOP Ref:**	GL-RAD-A-006
Run Date:	03/27/2025 05:55	**Analyst:**	SF1	**Instrument:**	GAM05
Data File:	I712285001.CNF;1	**Aliquot:**	1.2005 L	**Count Time:**	120 min
Prep Batch:	2760220	**Prep Method:**	DOE EML HASL-300,I-01 M		
Prep Date:	03/26/2025 09:43				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
15046-84-1	Iodine-129		5.03	pCi/L	+/-2.31	2.37	1.58	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits

Comments:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285001**	**Date Collected:**	**03/05/2025 08:42**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXT2**			**Prep Basis:**	**"As Received"**
Batch ID:	**2763241**	**Method:**	**TC99_LSC**	**SOP Ref:**	**GL-RAD-A-059**
Run Date:	**03/25/2025 15:06**	**Analyst:**	**GS3**	**Instrument:**	**LSCJADE**
Data File:	**E2763241.xls**	**Aliquot:**	**100.21 mL**	**Count Time:**	**15 min**
Prep Batch:	**2763241**	**Prep Method:**	**DOE EML HASL-300, Tc-02-**		
Prep Date:	**03/19/2025 08:04**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14133-76-7	Technetium-99		31700	pCi/L	+/-246	3610	32.1	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Technetium-99m Tracer	43200	44600	CPM	96.8	(30%-105%)

Comments:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad

Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285002**	**Date Collected:**	**03/04/2025 14:21**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KY36**			**Prep Basis:**	**"As Received"**
Batch ID:	**2767475**	**Method:**	**UISO_AEA**	**SOP Ref:**	**GL-RAD-A-011**
Run Date:	**03/28/2025 08:23**	**Analyst:**	**KG3**	**Instrument:**	**1007**
Data File:	**S0712285002_UU.1A.gcnf**	**Aliquot:**	**0.40059 L**	**Count Time:**	**240 min**
Prep Batch:	**2767475**	**Prep Method:**	**DOE EML HASL-300, U-02-R**		
Prep Date:	**03/25/2025 22:20**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
U-233/234 *13968-55-3/13966-29-5*	Uranium-233/234		0.995	pCi/L	+/-0.257	0.292	0.143	1.00
U-235/236 *15117-96-1/13982-70-2*	Uranium-235/236	U	0.0554	pCi/L	+/-0.0798	0.0801	0.0962	1.00
7440-61-1	Uranium-238		0.638	pCi/L	+/-0.204	0.222	0.0992	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Uranium-232 Tracer	4.50	4.89	pCi/L	91.9	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285002	**Date Collected:**	03/04/2025 14:21	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KY36			**Prep Basis:**	"As Received"
Batch ID:	2773470	**Method:**	AM241CMISO_AEA	**SOP Ref:**	GL-RAD-A-011
Run Date:	03/30/2025 15:03	**Analyst:**	KG3	**Instrument:**	1080
Data File:	S0712285002_AM.2A.gcnf	**Aliquot:**	0.10058 L	**Count Time:**	240 min
Prep Batch:	2773470	**Prep Method:**	DOE EML HASL-300, Am-05		
Prep Date:	03/28/2025 15:20				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14596-10-2	Americium-241	U	-0.0119	pCi/L	+/-0.179	0.179	0.417	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Americium-243 Tracer	19.8	20.7	pCi/L	95.7	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285002**	**Date Collected:**	**03/04/2025 14:21**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KY36**			**Prep Basis:**	**"As Received"**
Batch ID:	**2773986**	**Method:**	**PUISO_AEA**	**SOP Ref:**	**GL-RAD-A-011**
Run Date:	**04/01/2025 08:42**	**Analyst:**	**MB3**	**Instrument:**	**1068**
Data File:	**S0712285002_PU.2A.gcnf**	**Aliquot:**	**0.10153 L**	**Count Time:**	**240 min**
Prep Batch:	**2773986**	**Prep Method:**	**DOE EML HASL-300, Pu-11-**		
Prep Date:	**03/31/2025 10:32**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
13981-16-3	Plutonium-238	U	-0.0892	pCi/L	+/-0.144	0.144	0.458	1.00
OER-100-70	Plutonium-239/240	U	0.0792	pCi/L	+/-0.218	0.218	0.378	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Plutonium-242 Tracer	18.8	18.9	pCi/L	99.3	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285002**	**Date Collected:**	**03/04/2025 14:21**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KY36**			**Prep Basis:**	**"As Received"**
Batch ID:	**2773987**	**Method:**	**PU241_LSC**	**SOP Ref:**	**GL-RAD-A-035**
Run Date:	**04/02/2025 09:54**	**Analyst:**	**MB3**	**Instrument:**	**LSCOPAL**
Data File:	**PU2773987.xls**	**Aliquot:**	**0.10153 L**	**Count Time:**	**60 min**
Prep Batch:	**2773987**	**Prep Method:**	**DOE EML HASL-300, Pu-11-**		
Prep Date:	**03/31/2025 10:32**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14119-32-5	Plutonium-241	U	-14.9	pCi/L	+/-14.8	14.8	26.5	25.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Plutonium-242 Tracer	18.8	18.9	pCi/L	99.3	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285002**	**Date Collected:**	**03/04/2025 14:21**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KY36**			**Prep Basis:**	**"As Received"**
Batch ID:	**2762565**	**Method:**	**SR_RAD_GPC**	**SOP Ref:**	**GL-RAD-A-004**
Run Date:	**03/25/2025 17:24**	**Analyst:**	**HH3**	**Instrument:**	**PIC7B**
Data File:	**S2762565r2.xls**	**Aliquot:**	**303.07 mL**	**Count Time:**	**60 min**
Prep Batch:	**2762565**	**Prep Method:**	**EPA 905.0 Modified/DOE RP5**		
Prep Date:	**03/18/2025 13:25**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
10098-97-2	Strontium-90	U	-0.833	pCi/L	+/-0.760	0.760	1.58	2.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Strontium Carrier	3.60	4.10	mg	87.8	(40%-110%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285002	**Date Collected:**	03/04/2025 14:21	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KY36			**Prep Basis:**	"As Received"
Batch ID:	2766576	**Method:**	GEA	**SOP Ref:**	GL-RAD-A-013
Run Date:	03/29/2025 20:02	**Analyst:**	MXR1	**Instrument:**	GAM24
Data File:	G712285002.CNF;1	**Aliquot:**	0.4886 L	**Count Time:**	180 min
Prep Batch:	2766576	**Prep Method:**	EPA 901.1		
Prep Date:	03/26/2025 09:56				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
13966-00-2	Potassium-40	U	-22.7	pCi/L	+/-55.1	56.1	95.1	
10198-40-0	Cobalt-60	U	1.18	pCi/L	+/-3.56	3.60	7.24	
14234-35-6	Antimony-125	U	-3.49	pCi/L	+/-8.40	8.55	14.8	
13967-70-9	Cesium-134	U	-3.06	pCi/L	+/-3.35	3.64	5.73	
10045-97-3	Cesium-137	U	0.264	pCi/L	+/-4.28	4.29	6.48	15.0
14683-23-9	Europium-152	U	8.65	pCi/L	+/-9.01	9.85	17.9	
15585-10-1	Europium-154	U	6.82	pCi/L	+/-10.3	10.8	21.9	
14391-16-3	Europium-155	U	-0.331	pCi/L	+/-9.10	9.10	16.0	

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).
The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285002**	**Date Collected:**	**03/04/2025 14:21**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KY36**			**Prep Basis:**	**"As Received"**
Batch ID:	**2761705**	**Method:**	**SE79_LSC**	**SOP Ref:**	**GL-RAD-A-031**
Run Date:	**03/28/2025 23:57**	**Analyst:**	**CR1**	**Instrument:**	**LSCNAVY**
Data File:	**SE2761705.xls**	**Aliquot:**	**0.10026 L**	**Count Time:**	**15 min**
Prep Batch:	**2761705**	**Prep Method:**	**NERC ORD**		
Prep Date:	**03/18/2025 10:40**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
15758-45-9	Selenium-79	U	6.08	pCi/L	+/-23.3	23.3	39.9	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Selenium Carrier	16.9	20.0	mg	84.5	(40%-110%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285002	**Date Collected:**	03/04/2025 14:21	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KY36			**Prep Basis:**	"As Received"
Batch ID:	2762730	**Method:**	C14_LSC	**SOP Ref:**	GL-RAD-A-003
Run Date:	04/03/2025 14:59	**Analyst:**	MJ3	**Instrument:**	LSCMOCHA
Data File:	C2762730.xls	**Aliquot:**	100.56 mL	**Count Time:**	20 min
Prep Batch:	2762730	**Prep Method:**	EPA EERF C-01 Modified		
Prep Date:	03/20/2025 09:45				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14762-75-5	Carbon-14	U	-1.18	pCi/L	+/-17.2	17.2	30.1	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).
The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285002**	**Date Collected:**	**03/04/2025 14:21**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KY36**			**Prep Basis:**	**"As Received"**
Batch ID:	**2763241**	**Method:**	**TC99_LSC**	**SOP Ref:**	**GL-RAD-A-059**
Run Date:	**03/25/2025 15:22**	**Analyst:**	**GS3**	**Instrument:**	**LSCJADE**
Data File:	**E2763241.xls**	**Aliquot:**	**100.58 mL**	**Count Time:**	**15 min**
Prep Batch:	**2763241**	**Prep Method:**	**DOE EML HASL-300, Tc-02-**		
Prep Date:	**03/19/2025 08:04**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14133-76-7	Technetium-99	U	10.5	pCi/L	+/-19.5	19.5	33.3	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Technetium-99m Tracer	41500	44600	CPM	93	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285003**	**Date Collected:**	**03/05/2025 06:50**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP5**			**Prep Basis:**	**"As Received"**
Batch ID:	**2767475**	**Method:**	**UISO_AEA**	**SOP Ref:**	**GL-RAD-A-011**
Run Date:	**03/28/2025 08:23**	**Analyst:**	**KG3**	**Instrument:**	**1008**
Data File:	**S0712285003_UU.1A.gcnf**	**Aliquot:**	**0.40081 L**	**Count Time:**	**240 min**
Prep Batch:	**2767475**	**Prep Method:**	**DOE EML HASL-300, U-02-R**		
Prep Date:	**03/25/2025 22:20**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
U-233/234 *13968-55-3/13966-29-5*	Uranium-233/234	U	0.0269	pCi/L	+/-0.0707	0.0709	0.129	1.00
U-235/236 *15117-96-1/13982-70-2*	Uranium-235/236	U	-0.00463	pCi/L	+/-0.0399	0.0400	0.0924	1.00
7440-61-1	Uranium-238	U	-0.00686	pCi/L	+/-0.0474	0.0474	0.115	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Uranium-232 Tracer	4.36	4.89	pCi/L	89.1	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285003	**Date Collected:**	03/05/2025 06:50	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KXP5			**Prep Basis:**	"As Received"
Batch ID:	2773470	**Method:**	AM241CMISO_AEA	**SOP Ref:**	GL-RAD-A-011
Run Date:	03/30/2025 15:03	**Analyst:**	KG3	**Instrument:**	1081
Data File:	S0712285003_AM.2A.gcnf	**Aliquot:**	0.10106 L	**Count Time:**	240 min
Prep Batch:	2773470	**Prep Method:**	DOE EML HASL-300, Am-05		
Prep Date:	03/28/2025 15:20				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14596-10-2	Americium-241	U	0.0428	pCi/L	+/-0.161	0.161	0.270	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Americium-243 Tracer	21.0	20.6	pCi/L	102	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad

Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285003**	**Date Collected:**	**03/05/2025 06:50**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP5**			**Prep Basis:**	**"As Received"**
Batch ID:	**2773986**	**Method:**	**PUISO_AEA**	**SOP Ref:**	**GL-RAD-A-011**
Run Date:	**04/01/2025 08:42**	**Analyst:**	**MB3**	**Instrument:**	**1070**
Data File:	**S0712285003_PU.2A.gcnf**	**Aliquot:**	**0.10073 L**	**Count Time:**	**240 min**
Prep Batch:	**2773986**	**Prep Method:**	**DOE EML HASL-300, Pu-11-**		
Prep Date:	**03/31/2025 10:32**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
13981-16-3	Plutonium-238	U	-0.0150	pCi/L	+/-0.129	0.129	0.299	1.00
OER-100-70	Plutonium-239/240	U	-0.0149	pCi/L	+/-0.129	0.129	0.299	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Plutonium-242 Tracer	16.7	19.1	pCi/L	87.6	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285003**	**Date Collected:**	**03/05/2025 06:50**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP5**			**Prep Basis:**	**"As Received"**
Batch ID:	**2773987**	**Method:**	**PU241_LSC**	**SOP Ref:**	**GL-RAD-A-035**
Run Date:	**04/02/2025 10:56**	**Analyst:**	**MB3**	**Instrument:**	**LSCOPAL**
Data File:	**PU2773987.xls**	**Aliquot:**	**0.10073 L**	**Count Time:**	**60 min**
Prep Batch:	**2773987**	**Prep Method:**	**DOE EML HASL-300, Pu-11-**		
Prep Date:	**03/31/2025 10:32**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14119-32-5	Plutonium-241	U	-12.0	pCi/L	+/-17.0	17.0	30.2	25.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Plutonium-242 Tracer	16.7	19.1	pCi/L	87.6	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285003**	**Date Collected:**	**03/05/2025 06:50**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP5**			**Prep Basis:**	**"As Received"**
Batch ID:	**2766576**	**Method:**	**GEA**	**SOP Ref:**	**GL-RAD-A-013**
Run Date:	**03/29/2025 20:02**	**Analyst:**	**MXR1**	**Instrument:**	**GAM27**
Data File:	**G712285003.CNF;1**	**Aliquot:**	**0.4945 L**	**Count Time:**	**180 min**
Prep Batch:	**2766576**	**Prep Method:**	**EPA 901.1**		
Prep Date:	**03/26/2025 09:56**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
13966-00-2	Potassium-40	U	52.7	pCi/L	+/-30.0	30.4	56.4	
10198-40-0	Cobalt-60	U	0.210	pCi/L	+/-2.61	2.61	5.47	
14234-35-6	Antimony-125	U	-1.89	pCi/L	+/-7.01	7.07	12.9	
13967-70-9	Cesium-134	U	1.33	pCi/L	+/-2.79	2.85	5.71	
10045-97-3	Cesium-137	U	0.526	pCi/L	+/-2.67	2.68	5.19	15.0
14683-23-9	Europium-152	U	-2.92	pCi/L	+/-7.76	7.88	14.2	
15585-10-1	Europium-154	U	-0.486	pCi/L	+/-8.18	8.18	16.3	
14391-16-3	Europium-155	U	-4.01	pCi/L	+/-7.98	8.19	13.7	

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285003**	**Date Collected:**	**03/05/2025 06:50**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP5**			**Prep Basis:**	**"As Received"**
Batch ID:	**2761705**	**Method:**	**SE79_LSC**	**SOP Ref:**	**GL-RAD-A-031**
Run Date:	**03/29/2025 00:12**	**Analyst:**	**CR1**	**Instrument:**	**LSCNAVY**
Data File:	**SE2761705.xls**	**Aliquot:**	**0.10019 L**	**Count Time:**	**15 min**
Prep Batch:	**2761705**	**Prep Method:**	**NERC ORD**		
Prep Date:	**03/18/2025 10:40**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
15758-45-9	Selenium-79	U	6.63	pCi/L	+/-26.3	26.3	45.1	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Selenium Carrier	15.0	20.0	mg	75	(40%-110%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285003**	**Date Collected:**	**03/05/2025 06:50**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP5**			**Prep Basis:**	**"As Received"**
Batch ID:	**2762730**	**Method:**	**C14_LSC**	**SOP Ref:**	**GL-RAD-A-003**
Run Date:	**04/03/2025 15:21**	**Analyst:**	**MJ3**	**Instrument:**	**LSCMOCHA**
Data File:	**C2762730.xls**	**Aliquot:**	**100.2 mL**	**Count Time:**	**20 min**
Prep Batch:	**2762730**	**Prep Method:**	**EPA EERF C-01 Modified**		
Prep Date:	**03/20/2025 09:45**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14762-75-5	Carbon-14	U	-1.18	pCi/L	+/-17.2	17.2	30.1	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).
The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285003**	**Date Collected:**	**03/05/2025 06:50**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP5**			**Prep Basis:**	**"As Received"**
Batch ID:	**2763241**	**Method:**	**TC99_LSC**	**SOP Ref:**	**GL-RAD-A-059**
Run Date:	**03/25/2025 15:39**	**Analyst:**	**GS3**	**Instrument:**	**LSCJADE**
Data File:	**E2763241.xls**	**Aliquot:**	**100.2 mL**	**Count Time:**	**15 min**
Prep Batch:	**2763241**	**Prep Method:**	**DOE EML HASL-300, Tc-02-**		
Prep Date:	**03/19/2025 08:04**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14133-76-7	Technetium-99	U	-44.2	pCi/L	+/-16.4	16.4	33.2	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Technetium-99m Tracer	41800	44600	CPM	93.6	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285003	**Date Collected:**	03/05/2025 06:50	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KXP5			**Prep Basis:**	"As Received"
Batch ID:	2764707	**Method:**	TRITIUM_LSC	**SOP Ref:**	GL-RAD-A-002
Run Date:	03/27/2025 09:02	**Analyst:**	MG7	**Instrument:**	LSCRUBY
Data File:	T2764707.xls	**Aliquot:**	50 mL	**Count Time:**	20 min
Prep Batch:	2764707	**Prep Method:**	EPA 906.0 Modified		
Prep Date:	03/18/2025 09:55				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
10028-17-8	Tritium	U	47.3	pCi/L	+/-115	115	211	400

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad

Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285004**	**Date Collected:**	**03/05/2025 09:39**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP6**			**Prep Basis:**	**"As Received"**
Batch ID:	**2767475**	**Method:**	**UISO_AEA**	**SOP Ref:**	**GL-RAD-A-011**
Run Date:	**03/28/2025 08:23**	**Analyst:**	**KG3**	**Instrument:**	**1009**
Data File:	**S0712285004_UU.1A.gcnf**	**Aliquot:**	**0.40078 L**	**Count Time:**	**240 min**
Prep Batch:	**2767475**	**Prep Method:**	**DOE EML HASL-300, U-02-R**		
Prep Date:	**03/25/2025 22:20**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
U-233/234 *13968-55-3/13966-29-5*	Uranium-233/234		2.44	pCi/L	+/-0.359	0.476	0.121	1.00
U-235/236 *15117-96-1/13982-70-2*	Uranium-235/236		0.108	pCi/L	+/-0.0930	0.0940	0.0919	1.00
7440-61-1	Uranium-238		1.43	pCi/L	+/-0.275	0.330	0.0993	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Uranium-232 Tracer	5.12	4.89	pCi/L	105	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285004	**Date Collected:**	03/05/2025 09:39	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KXP6			**Prep Basis:**	"As Received"
Batch ID:	2773470	**Method:**	AM241CMISO_AEA	**SOP Ref:**	GL-RAD-A-011
Run Date:	03/30/2025 15:03	**Analyst:**	KG3	**Instrument:**	1083
Data File:	S0712285004_AM.2A.gcnf	**Aliquot:**	0.10041 L	**Count Time:**	240 min
Prep Batch:	2773470	**Prep Method:**	DOE EML HASL-300, Am-05		
Prep Date:	03/28/2025 15:20				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14596-10-2	Americium-241	U	0.0792	pCi/L	+/-0.182	0.182	0.289	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Americium-243 Tracer	20.8	20.7	pCi/L	100	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285004**	**Date Collected:**	**03/05/2025 09:39**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP6**			**Prep Basis:**	**"As Received"**
Batch ID:	**2773986**	**Method:**	**PUISO_AEA**	**SOP Ref:**	**GL-RAD-A-011**
Run Date:	**04/01/2025 08:42**	**Analyst:**	**MB3**	**Instrument:**	**1084**
Data File:	**S0712285004_PU.2A.gcnf**	**Aliquot:**	**0.10336 L**	**Count Time:**	**240 min**
Prep Batch:	**2773986**	**Prep Method:**	**DOE EML HASL-300, Pu-11-**		
Prep Date:	**03/31/2025 10:32**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
13981-16-3	Plutonium-238	U	-0.0253	pCi/L	+/-0.112	0.112	0.292	1.00
OER-100-70	Plutonium-239/240	U	-0.0253	pCi/L	+/-0.112	0.112	0.292	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Plutonium-242 Tracer	17.7	18.6	pCi/L	95.3	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285004**	**Date Collected:**	**03/05/2025 09:39**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP6**			**Prep Basis:**	**"As Received"**
Batch ID:	**2773987**	**Method:**	**PU241_LSC**	**SOP Ref:**	**GL-RAD-A-035**
Run Date:	**04/02/2025 11:58**	**Analyst:**	**MB3**	**Instrument:**	**LSCOPAL**
Data File:	**PU2773987.xls**	**Aliquot:**	**0.10336 L**	**Count Time:**	**60 min**
Prep Batch:	**2773987**	**Prep Method:**	**DOE EML HASL-300, Pu-11-**		
Prep Date:	**03/31/2025 10:32**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14119-32-5	Plutonium-241	U	-5.88	pCi/L	+/-15.4	15.4	27.0	25.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Plutonium-242 Tracer	17.7	18.6	pCi/L	95.3	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285004	**Date Collected:**	03/05/2025 09:39	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KXP6			**Prep Basis:**	"As Received"
Batch ID:	2766576	**Method:**	GEA	**SOP Ref:**	GL-RAD-A-013
Run Date:	03/29/2025 20:03	**Analyst:**	MXR1	**Instrument:**	GAM29
Data File:	G712285004.CNF;1	**Aliquot:**	0.4931 L	**Count Time:**	180 min
Prep Batch:	2766576	**Prep Method:**	EPA 901.1		
Prep Date:	03/26/2025 09:56				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
13966-00-2	Potassium-40	U	23.6	pCi/L	+/-46.1	47.4	92.6	
10198-40-0	Cobalt-60	U	1.27	pCi/L	+/-3.60	3.65	7.45	
14234-35-6	Antimony-125	U	-2.17	pCi/L	+/-7.37	7.44	13.4	
13967-70-9	Cesium-134	U	0.506	pCi/L	+/-2.99	3.00	5.78	
10045-97-3	Cesium-137	U	1.63	pCi/L	+/-3.15	3.24	6.21	15.0
14683-23-9	Europium-152	U	-3.04	pCi/L	+/-7.67	7.79	13.9	
15585-10-1	Europium-154	U	8.40	pCi/L	+/-8.94	9.75	20.5	
14391-16-3	Europium-155	U	-1.91	pCi/L	+/-9.21	9.25	15.9	

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).
The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285004**	**Date Collected:**	**03/05/2025 09:39**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP6**			**Prep Basis:**	**"As Received"**
Batch ID:	**2761705**	**Method:**	**SE79_LSC**	**SOP Ref:**	**GL-RAD-A-031**
Run Date:	**03/29/2025 00:28**	**Analyst:**	**CR1**	**Instrument:**	**LSCNAVY**
Data File:	**SE2761705.xls**	**Aliquot:**	**0.10001 L**	**Count Time:**	**15 min**
Prep Batch:	**2761705**	**Prep Method:**	**NERC ORD**		
Prep Date:	**03/18/2025 10:40**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
15758-45-9	Selenium-79	U	5.00	pCi/L	+/-25.3	25.3	43.4	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Selenium Carrier	15.6	20.0	mg	78	(40%-110%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285004	**Date Collected:**	03/05/2025 09:39	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KXP6			**Prep Basis:**	"As Received"
Batch ID:	2762730	**Method:**	C14_LSC	**SOP Ref:**	GL-RAD-A-003
Run Date:	04/03/2025 15:42	**Analyst:**	MJ3	**Instrument:**	LSCMOCHA
Data File:	C2762730.xls	**Aliquot:**	100.53 mL	**Count Time:**	20 min
Prep Batch:	2762730	**Prep Method:**	EPA EERF C-01 Modified		
Prep Date:	03/20/2025 09:45				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14762-75-5	Carbon-14	U	-1.93	pCi/L	+/-17.2	17.2	30.2	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).
The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285004**	**Date Collected:**	**03/05/2025 09:39**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXP6**			**Prep Basis:**	**"As Received"**
Batch ID:	**2763241**	**Method:**	**TC99_LSC**	**SOP Ref:**	**GL-RAD-A-059**
Run Date:	**03/25/2025 15:55**	**Analyst:**	**GS3**	**Instrument:**	**LSCJADE**
Data File:	**E2763241.xls**	**Aliquot:**	**100.43 mL**	**Count Time:**	**15 min**
Prep Batch:	**2763241**	**Prep Method:**	**DOE EML HASL-300, Tc-02-**		
Prep Date:	**03/19/2025 08:04**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14133-76-7	Technetium-99		156	pCi/L	+/-24.8	30.5	31.7	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Technetium-99m Tracer	43600	44600	CPM	97.7	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285004	**Date Collected:**	03/05/2025 09:39	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KXP6			**Prep Basis:**	"As Received"
Batch ID:	2764707	**Method:**	TRITIUM_LSC	**SOP Ref:**	GL-RAD-A-002
Run Date:	03/27/2025 09:24	**Analyst:**	MG7	**Instrument:**	LSCRUBY
Data File:	T2764707.xls	**Aliquot:**	50 mL	**Count Time:**	20 min
Prep Batch:	2764707	**Prep Method:**	EPA 906.0 Modified		
Prep Date:	03/18/2025 09:55				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
10028-17-8	Tritium		21700	pCi/L	+/-997	4310	215	400

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285005**	**Date Collected:**	**03/05/2025 08:45**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXR8**			**Prep Basis:**	**"As Received"**
Batch ID:	**2767475**	**Method:**	**UISO_AEA**	**SOP Ref:**	**GL-RAD-A-011**
Run Date:	**03/28/2025 08:23**	**Analyst:**	**KG3**	**Instrument:**	**1010**
Data File:	**S0712285005_UU.1A.gcnf**	**Aliquot:**	**0.40218 L**	**Count Time:**	**240 min**
Prep Batch:	**2767475**	**Prep Method:**	**DOE EML HASL-300, U-02-R**		
Prep Date:	**03/25/2025 22:20**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
U-233/234 *13968-55-3/13966-29-5*	Uranium-233/234		11.1	pCi/L	+/-0.913	1.85	0.168	1.00
U-235/236 *15117-96-1/13982-70-2*	Uranium-235/236		1.00	pCi/L	+/-0.308	0.341	0.115	1.00
7440-61-1	Uranium-238		11.5	pCi/L	+/-0.928	1.91	0.118	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Uranium-232 Tracer	3.50	4.87	pCi/L	71.8	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285005	**Date Collected:**	03/05/2025 08:45	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KXR8			**Prep Basis:**	"As Received"
Batch ID:	2773470	**Method:**	AM241CMISO_AEA	**SOP Ref:**	GL-RAD-A-011
Run Date:	03/30/2025 15:03	**Analyst:**	KG3	**Instrument:**	1084
Data File:	S0712285005_AM.2A.gcnf	**Aliquot:**	0.10028 L	**Count Time:**	240 min
Prep Batch:	2773470	**Prep Method:**	DOE EML HASL-300, Am-05		
Prep Date:	03/28/2025 15:20				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14596-10-2	Americium-241	U	0.192	pCi/L	+/-0.276	0.277	0.333	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Americium-243 Tracer	15.7	20.7	pCi/L	75.5	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad

Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285005**	**Date Collected:**	**03/05/2025 08:45**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXR8**			**Prep Basis:**	**"As Received"**
Batch ID:	**2773986**	**Method:**	**PUISO_AEA**	**SOP Ref:**	**GL-RAD-A-011**
Run Date:	**04/01/2025 08:42**	**Analyst:**	**MB3**	**Instrument:**	**1085**
Data File:	**S0712285005_PU.2A.gcnf**	**Aliquot:**	**0.10138 L**	**Count Time:**	**240 min**
Prep Batch:	**2773986**	**Prep Method:**	**DOE EML HASL-300, Pu-11-**		
Prep Date:	**03/31/2025 10:32**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
13981-16-3	Plutonium-238	U	0.0613	pCi/L	+/-0.209	0.210	0.388	1.00
OER-100-70	Plutonium-239/240	U	0.0471	pCi/L	+/-0.211	0.211	0.413	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Plutonium-242 Tracer	17.3	19.0	pCi/L	91.1	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285005**	**Date Collected:**	**03/05/2025 08:45**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXR8**			**Prep Basis:**	**"As Received"**
Batch ID:	**2773987**	**Method:**	**PU241_LSC**	**SOP Ref:**	**GL-RAD-A-035**
Run Date:	**04/02/2025 13:00**	**Analyst:**	**MB3**	**Instrument:**	**LSCOPAL**
Data File:	**PU2773987.xls**	**Aliquot:**	**0.10138 L**	**Count Time:**	**60 min**
Prep Batch:	**2773987**	**Prep Method:**	**DOE EML HASL-300, Pu-11-**		
Prep Date:	**03/31/2025 10:32**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14119-32-5	Plutonium-241	U	-10.7	pCi/L	+/-16.1	16.1	28.5	25.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Plutonium-242 Tracer	17.3	19.0	pCi/L	91.1	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	GEL712285	**Client:**	CPRC003	**Project:**	CPRC0I25012
Lab Sample ID:	712285005	**Date Collected:**	03/05/2025 08:45	**Matrix:**	WATER
		Date Received:	03/06/2025 10:00		
Client ID:	B4KXR8			**Prep Basis:**	"As Received"
Batch ID:	2760220	**Method:**	DOE EML HASL-300,I-01 Mo	**SOP Ref:**	GL-RAD-A-006
Run Date:	03/27/2025 05:55	**Analyst:**	SF1	**Instrument:**	XRAY6
Data File:	I712285005.CNF;1	**Aliquot:**	1.2289 L	**Count Time:**	120 min
Prep Batch:	2760220	**Prep Method:**	DOE EML HASL-300,I-01 M		
Prep Date:	03/26/2025 09:43				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
15046-84-1	Iodine-129		2.03	pCi/L	+/-0.912	0.934	0.597	1.00

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL712285**	**Client:**	**CPRC003**	**Project:**	**CPRC0I25012**
Lab Sample ID:	**712285005**	**Date Collected:**	**03/05/2025 08:45**	**Matrix:**	**WATER**
		Date Received:	**03/06/2025 10:00**		
Client ID:	**B4KXR8**			**Prep Basis:**	**"As Received"**
Batch ID:	**2763241**	**Method:**	**TC99_LSC**	**SOP Ref:**	**GL-RAD-A-059**
Run Date:	**03/25/2025 16:49**	**Analyst:**	**GS3**	**Instrument:**	**LSCJADE**
Data File:	**E2763241.xls**	**Aliquot:**	**100.23 mL**	**Count Time:**	**15 min**
Prep Batch:	**2763241**	**Prep Method:**	**DOE EML HASL-300, Tc-02-**		
Prep Date:	**03/19/2025 08:04**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
14133-76-7	Technetium-99		1110	pCi/L	+/-50.0	136	32.7	50.0

Surrogate/Tracer recovery	Result	Nominal	Units	Recovery%	Acceptable Limits
Technetium-99m Tracer	42400	44600	CPM	95	(30%-105%)

Comments:

U Analyzed for but not detected above the MDL, MDA, MDC or LOD.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The MDC is a sample specific MDC.

Quality Control Data

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

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

Workorder: **712285**

Report Date: April 4, 2025

Parmname	NOM	Sample	Qual	QC	Units	QC Criteria	Range	Analyst	Date Time
Rad Alpha Spec									
Batch 2767475									
QC1206041148 MB									
Uranium-233/234			U	0.0262	pCi/L			KG3	03/28/2508:23
Uncert:				+/-0.0695					
TPU:				+/-0.0697					
Uranium-235/236			U	0.000	pCi/L				
Uncert:				+/-0.0382					
TPU:				+/-0.0383					
Uranium-238			U	0.0239	pCi/L				
Uncert:				+/-0.0630					
TPU:				+/-0.0631					
**Uranium-232 Tracer	4.87			4.26	pCi/L	REC: 87	(30%-105%)		
Uncert:				+/-0.543					
TPU:				+/-0.844					
QC1206041149 712745001 DUP									
Uranium-233/234		2.03		1.49	pCi/L				03/29/2508:58
Uncert:		+/-0.365		+/-0.340		RPD: 31*	(0%-20%)		
TPU:		+/-0.459		+/-0.404		RER: 1.74	(0-2)		
Uranium-235/236		0.0769	U	0.138	pCi/L				
Uncert:		+/-0.0907		+/-0.125		RPD: 34	(0% - 100%)		
TPU:		+/-0.0913		+/-0.127		RER: 0.765	(0-2)		
Uranium-238		1.30		1.43	pCi/L				
Uncert:		+/-0.290		+/-0.334		RPD: 10	(0%-20%)		
TPU:		+/-0.340		+/-0.393		RER: 0.509	(0-2)		
**Uranium-232 Tracer	4.90	4.12		3.75	pCi/L	REC: 77	(30%-105%)		
Uncert:		+/-0.567		+/-0.614					
TPU:		+/-0.876		+/-0.938					
QC1206041150 LCS									
Uranium-233/234				6.24	pCi/L				03/28/2508:23
Uncert:				+/-0.609					
TPU:				+/-1.04					
Uranium-235/236				0.209	pCi/L				
Uncert:				+/-0.129					
TPU:				+/-0.132					
Uranium-238	6.67			6.30	pCi/L	REC: 94.4	(80%-120%)		
Uncert:				+/-0.612					
TPU:				+/-1.04					
**Uranium-232 Tracer	4.87			4.82	pCi/L	REC: 99	(30%-105%)		
Uncert:				+/-0.549					
TPU:				+/-0.852					
Batch 2773470									
QC1206053661 MB									
Americium-241			U	0.00245	pCi/L			KG3	03/30/2515:03
Uncert:				+/-0.181					
TPU:				+/-0.182					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: **712285**

Parmname	NOM	Sample	Qual	QC	Units	QC Criteria	Range	Analyst	Date Time
Rad Alpha Spec									
Batch 2773470									
**Americium-243 Tracer	20.6			21.1	pCi/L	REC: 102	(30%-105%)		
Uncert:				+/-2.19					
TPU:				+/-3.37					
QC1206053662 712745001 DUP									
Americium-241		U -0.0752	U	0.0534	pCi/L				
Uncert:		+/-0.142		+/-0.200		RPD: 0	N/A		
TPU:		+/-0.143		+/-0.201		RER: 1.02	(0-2)		
**Americium-243 Tracer	20.6	18.0		16.7	pCi/L	REC: 81	(30%-105%)		
Uncert:		+/-2.22		+/-2.35					
TPU:		+/-3.41		+/-3.59					
QC1206053663 LCS									
Americium-241	19.2			17.6	pCi/L	REC: 91.5	(80%-120%)		03/30/2515:03
Uncert:				+/-2.07					
TPU:				+/-3.03					
**Americium-243 Tracer	20.6			19.3	pCi/L	REC: 94	(30%-105%)		
Uncert:				+/-2.23					
TPU:				+/-3.42					
Batch 2773986									
QC1206054839 MB									
Plutonium-238			U	0.0141	pCi/L			MB3	04/01/2508:42
Uncert:				+/-0.147					
TPU:				+/-0.147					
Plutonium-239/240			U	-0.0241	pCi/L				
Uncert:				+/-0.107					
TPU:				+/-0.107					
**Plutonium-242 Tracer	16.5			14.7	pCi/L	REC: 90	(30%-105%)		
Uncert:				+/-1.79					
TPU:				+/-2.68					
QC1206054840 712745001 DUP									
Plutonium-238		U 0.148	U	-0.0251	pCi/L				
Uncert:		+/-0.294		+/-0.111		RPD: 0	N/A		
TPU:		+/-0.295		+/-0.111		RER: 1.08	(0-2)		
Plutonium-239/240		U 0.0811	U	0.0146	pCi/L				
Uncert:		+/-0.340		+/-0.153		RPD: 0	N/A		
TPU:		+/-0.341		+/-0.153		RER: 0.349	(0-2)		
**Plutonium-242 Tracer	18.5	16.7		18.2	pCi/L	REC: 99	(30%-105%)		
Uncert:		+/-2.31		+/-1.93					
TPU:		+/-3.43		+/-2.91					
QC1206054841 LCS									
Plutonium-238			U	0.0482	pCi/L				04/01/2508:42
Uncert:				+/-0.135					
TPU:				+/-0.136					
Plutonium-239/240	17.5			17.4	pCi/L	REC: 99.1	(80%-120%)		
Uncert:				+/-1.80					
TPU:				+/-2.74					
**Plutonium-242 Tracer	16.5			17.2	pCi/L	REC: 104	(30%-105%)		
Uncert:				+/-1.75					
TPU:				+/-2.63					
Batch 2773987									

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Parmname	NOM	Sample	Qual	QC	Units	QC Criteria	Range	Analyst	Date Time
Rad Alpha Spec									
Batch 2773987									
QC1206054842 MB									
Plutonium-241			U	0.106	pCi/L			MB3	04/03/2500:23
	Uncert:			+/-14.5					
	TPU:			+/-14.5					
**Plutonium-242 Tracer	16.5			14.7	pCi/L	REC: 90	(30%-105%)		
	Uncert:			+/-1.79					
	TPU:			+/-2.68					
QC1206054843 712745001 DUP									
Plutonium-241		U -2.54	U	-14.8	pCi/L				04/03/2501:25
	Uncert:	+/-17.0		+/-14.1		RPD: 0	N/A		
	TPU:	+/-17.0		+/-14.1		RER: 1.08	(0-2)		
**Plutonium-242 Tracer	18.5	16.7		18.2	pCi/L	REC: 99	(30%-105%)		
	Uncert:	+/-2.31		+/-1.93					
	TPU:	+/-3.43		+/-2.91					
QC1206054844 LCS									
Plutonium-241	367			321	pCi/L	REC: 87.6	(80%-120%)		04/03/2502:27
	Uncert:			+/-24.1					
	TPU:			+/-72.2					
**Plutonium-242 Tracer	16.5			13.2	pCi/L	REC: 80	(30%-105%)		
	Uncert:			+/-1.98					
	TPU:			+/-2.93					
Rad Gamma Spec									
Batch 2760220									
QC1206025972 MB									
Iodine-129			U	0.184	pCi/L			SF1	03/27/2506:09
	Uncert:			+/-0.392					
	TPU:			+/-0.402					
QC1206025973 711295001 DUP									
Iodine-129		U 0.335	U	0.147	pCi/L				03/27/2506:23
	Uncert:	+/-0.469		+/-0.292		RPD: 0	N/A		
	TPU:	+/-0.493		+/-0.299		RER: 0.639	(0-2)		
QC1206025974 711295001 MS									
Iodine-129	39.5	U 0.335		38.1	pCi/L	REC: 95.7	(75%-125%)		03/27/2507:48
	Uncert:	+/-0.469		+/-3.84					
	TPU:	+/-0.493		+/-5.40					
QC1206025975 LCS									
Iodine-129	37.7			40.4	pCi/L	REC: 107	(80%-120%)		03/27/2507:48
	Uncert:			+/-3.74					
	TPU:			+/-5.51					
Batch 2766576									
QC1206039164 MB									
Antimony-125			U	-12.2	pCi/L			MXR1	03/29/2520:11
	Uncert:			+/-8.35					
	TPU:			+/-10.1					
Cesium-134			U	-0.388	pCi/L				
	Uncert:			+/-2.93					
	TPU:			+/-2.94					
Cesium-137			U	2.82	pCi/L				
	Uncert:			+/-3.07					

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Parmname	NOM	Sample	Qual	QC	Units	QC Criteria	Range	Analyst	Date Time
Rad Gamma Spec									
Batch 2766576									
	TPU:			+/-3.33					
Cobalt-60			U	-0.0448	pCi/L				
	Uncert:			+/-2.87					
	TPU:			+/-2.87					
Europium-152			U	4.06	pCi/L				
	Uncert:			+/-8.67					
	TPU:			+/-8.87					
Europium-154			U	-2.36	pCi/L				
	Uncert:			+/-8.35					
	TPU:			+/-8.42					
Europium-155			U	-1.46	pCi/L				
	Uncert:			+/-7.85					
	TPU:			+/-7.88					
Potassium-40			U	-27.5	pCi/L				
	Uncert:			+/-47.4					
	TPU:			+/-49.1					
QC1206039165 712745005 DUP									
Antimony-125	U	9.82	U	5.78	pCi/L				03/31/2513:29
	Uncert:	+/-10.6		+/-10.4		RPD:	0	N/A	
	TPU:	+/-11.5		+/-10.7		RER:	0.503	(0-2)	
Cesium-134	U	-0.192	U	-2.15	pCi/L				
	Uncert:	+/-4.41		+/-4.05		RPD:	0	N/A	
	TPU:	+/-4.41		+/-4.17		RER:	0.632	(0-2)	
Cesium-137	U	-4.40	U	-0.0819	pCi/L				
	Uncert:	+/-4.89		+/-3.29		RPD:	0	N/A	
	TPU:	+/-5.29		+/-3.30		RER:	1.36	(0-2)	
Cobalt-60	U	-2.45	U	0.130	pCi/L				
	Uncert:	+/-3.69		+/-3.54		RPD:	0	N/A	
	TPU:	+/-3.86		+/-3.54		RER:	0.966	(0-2)	
Europium-152	U	6.61	U	-1.55	pCi/L				
	Uncert:	+/-11.6		+/-8.39		RPD:	0	N/A	
	TPU:	+/-12.0		+/-8.42		RER:	1.09	(0-2)	
Europium-154	U	5.24	U	-10.4	pCi/L				
	Uncert:	+/-12.1		+/-11.7		RPD:	0	N/A	
	TPU:	+/-12.3		+/-12.7		RER:	1.74	(0-2)	
Europium-155	U	-11.3	U	3.75	pCi/L				
	Uncert:	+/-14.0		+/-10.6		RPD:	0	N/A	
	TPU:	+/-14.9		+/-10.7		RER:	1.61	(0-2)	
Potassium-40	U	-24.6	U	-30.0	pCi/L				
	Uncert:	+/-61.2		+/-53.1		RPD:	0	N/A	
	TPU:	+/-62.2		+/-54.8		RER:	0.126	(0-2)	
QC1206039166 LCS									
Americium-241	1.08E+05			1.13E+05	pCi/L	REC:	105	(80%-120%)	03/31/2513:30
	Uncert:			+/-2120					
	TPU:			+/-12700					
Antimony-125			U	29.3	pCi/L				
	Uncert:			+/-268					
	TPU:			+/-268					
Cesium-134			U	-60.9	pCi/L				
	Uncert:			+/-90.9					

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Parmname	NOM	Sample	Qual	QC	Units	QC Criteria	Range	Analyst	Date Time
Rad Gamma Spec									
Batch 2766576									
	TPU:			+/-95.1					
Cesium-137	34900			36200	pCi/L	REC: 104	(80%-120%)		
	Uncert:			+/-644					
	TPU:			+/-3120					
Cobalt-60	13600			14300	pCi/L	REC: 105	(80%-120%)		
	Uncert:			+/-490					
	TPU:			+/-1530					
Europium-152			U	-72.1	pCi/L				
	Uncert:			+/-240					
	TPU:			+/-243					
Europium-154			U	65.1	pCi/L				
	Uncert:			+/-123					
	TPU:			+/-127					
Europium-155			U	-55.0	pCi/L				
	Uncert:			+/-255					
	TPU:			+/-256					
Potassium-40			U	198	pCi/L				
	Uncert:			+/-403					
	TPU:			+/-413					
Rad Gas Flow									
Batch 2762565									
QC1206030639 MB									
Strontium-90			U	0.586	pCi/L			HH3	03/25/2517:24
	Uncert:			+/-0.983					
	TPU:			+/-0.993					
**Strontium Carrier	4.10			3.90	mg	REC: 95	(40%-110%)		
QC1206030640 712285002 DUP									
Strontium-90	U	-0.833	U	-0.340	pCi/L				03/25/2517:24
	Uncert:	+/-0.760		+/-0.770		RPD: 0	N/A		
	TPU:	+/-0.760		+/-0.770		RER: 0.894	(0-2)		
**Strontium Carrier	4.10	3.60		4.00	mg	REC: 98	(40%-110%)		
QC1206030641 LCS									
Strontium-90	63.7			58.5	pCi/L	REC: 91.9	(80%-120%)		03/25/2517:17
	Uncert:			+/-3.09					
	TPU:			+/-13.9					
**Strontium Carrier	4.10			4.30	mg	REC: 105	(40%-110%)		
Rad Liquid Scintillation									
Batch 2761705									
QC1206028767 MB									
Selenium-79			U	2.95	pCi/L			CR1	03/29/2500:44
	Uncert:			+/-28.8					
	TPU:			+/-28.8					
**Selenium Carrier	20.0			13.5	mg	REC: 68	(40%-110%)		
QC1206028768 712221003 DUP									
Selenium-79	U	3.50	U	10.5	pCi/L				03/29/2500:59
	Uncert:	+/-21.5		+/-23.5		RPD: 0	N/A		
	TPU:	+/-21.5		+/-23.5		RER: 0.429	(0-2)		
**Selenium Carrier	20.0	18.2		16.8	mg	REC: 84	(40%-110%)		
QC1206028769 LCS									

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Parmname	NOM	Sample	Qual	QC	Units	QC Criteria	Range	Analyst	Date Time
Rad Liquid Scintillation									
Batch 2761705									
Selenium-79	258			252	pCi/L	REC: 97.9	(75%-125%)		
Uncert:				+/-33.7					
TPU:				+/-34.1					
**Selenium Carrier	20.0			14.7	mg	REC: 74	(40%-110%)		
Batch 2762730									
QC1206031042 MB									
Carbon-14			U	-0.384	pCi/L			MJ3	04/03/2518:10
Uncert:				+/-17.1					
TPU:				+/-17.1					
QC1206031043 712745003 DUP									
Carbon-14	U	5.35	U	4.35	pCi/L				04/03/2518:31
Uncert:		+/-21.6		+/-21.7		RPD: 0	N/A		
TPU:		+/-21.7		+/-21.7		RER: 0.0644	(0-2)		
QC1206031044 712745003 MS									
Carbon-14	2980 U	5.35		2790	pCi/L	REC: 93.6	(75%-125%)		04/03/2518:52
Uncert:		+/-21.6		+/-146					
TPU:		+/-21.7		+/-538					
QC1206031045 LCS									
Carbon-14	739			687	pCi/L	REC: 92.9	(80%-120%)		04/03/2519:13
Uncert:				+/-36.2					
TPU:				+/-133					
Batch 2763241									
QC1206032121 MB									
Technetium-99			U	-27.8	pCi/L			GS3	03/25/2517:56
Uncert:				+/-16.3					
TPU:				+/-16.3					
**Technetium-99m Tracer	44600			44000	CPM	REC: 99	(30%-105%)		
QC1206032122 711631003 DUP									
Technetium-99		2740		3110	pCi/L				03/25/2518:12
Uncert:		+/-73.6		+/-79.7		RPD: 12	(0%-20%)		
TPU:		+/-320		+/-361		RER: 1.48	(0-2)		
**Technetium-99m Tracer	44600	43900		42500	CPM	REC: 95	(30%-105%)		
QC1206032123 LCS									
Technetium-99	615			507	pCi/L	REC: 82.3	(80%-120%)		03/25/2518:29
Uncert:				+/-36.2					
TPU:				+/-67.9					
**Technetium-99m Tracer	44600			42300	CPM	REC: 95	(30%-105%)		
Batch 2764707									
QC1206035261 MB									
Tritium			U	43.3	pCi/L			MG7	03/27/2511:34
Uncert:				+/-115					
TPU:				+/-115					
QC1206035262 711614001 DUP									
Tritium	U	137	U	15.2	pCi/L				03/27/2511:55
Uncert:		+/-130		+/-109		RPD: 0	N/A		
TPU:		+/-133		+/-109		RER: 1.39	(0-2)		
QC1206035263 711614001 MS									
Tritium	9260 U	137		8300	pCi/L	REC: 89.6	(75%-125%)		03/27/2512:17
Uncert:		+/-130		+/-903					

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Parmname	NOM	Sample	Qual	QC	Units	QC Criteria	Range	Analyst	Date Time
Rad Liquid Scintillation									
Batch 2764707									
	TPU:	+/-133		+/-1840					
QC1206035264 LCS									
Tritium	4620			3940	pCi/L	REC: 85.2	(80%-120%)		03/27/2512:39
	Uncert:			+/-441					
	TPU:			+/-880					

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

UX	Gamma Spectroscopy--Uncertain identification
U	Analyzed for but not detected above the MDL, MDA, MDC or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
N	Spike Sample recovery is outside control limits.
Z	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
D	Results are reported from a diluted aliquot of sample.
E	Reported value is estimated due to interferences. See comment in narrative.
B	The analyte was detected in the associated method blank >/= MDC or >5% sample activity.
Y	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
O	Analyte failed to recover within LCS limits
H	Laboratory holding time exceeded before the sample was analyzed.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.