GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171
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June 27, 2018

Mr. Scot Fitzgerald
CH2MHill Plateau Remediation Company
MSIN R3-50 CHPRC
PO Box 1600
Richland, Washington 99352

Re: CHCPRC SAF S18-006
Work Order: 451943
SDG: GEL451943

Dear Mr. Fitzgerald:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 07, 2018. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

Sincerely,

Anna Dupree for
Heather Shaffer
Project Manager

Purchase Order: 300071-7H
Chain of Custody: S18-006-163 and S18-006-164
Enclosures

Table of Contents

Case Narrative

General Narrative
for
CH2MHill Plateau Remediation Company
CHCPRC SAF S18-006
SDG: GEL451943

June 27, 2018

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt

The sample(s) arrived at GEL Laboratories, LLC, Charleston, South Carolina on June 07, 2018, 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
451943001	B3JC11
451943002	B3JC12

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 SOW, 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 hard copy data package 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.

Anna Dupree for
Heather Shaffer
Project Manager

Radiochemistry
Technical Case Narrative
CH2MHill Plateau Remediation Company (CPRC)
SDG #: GEL451943
Work Order #: 451943

9310_ALPHABETA_GPC: ALPHA

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

Gross Alpha/Beta Preparation Information
High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

Recounts
Samples 451943001 (B3JC11) and 451943002 (B3JC12) were recounted to verify sample results. Recounts are reported.

Miscellaneous Information

Additional Comments
The matrix spike and matrix spike duplicate, 1204047471 (Non SDG 451938003MS) and 1204047472 (Non SDG 451938003MSD), aliquots were 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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 457943	C.O.C. # S18-006-163 Page 1 of 1

Collector: Dan Woehle CHPRC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: S18-006	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: Surv, June 2018	**Logbook No.:** HNF-N-506 -97-91	**Ice Chest No.:** GWS-735
Shipped To (Lab): GEL Laboratories, LLC	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 772413885044
Protocol SURV	**Priority:** 30 Days	**Offsite Property No.:** 9524

POSSIBLE SAMPLE HAZARDS/REMARK
** ** 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	Preservative
B3JC11	N	W	JUN 0 6 2018	1059	1x1-L P	9310_ALPHABETA_GPC: Gross Alpha	6 Months	HNO3 to pH <2

Relinquished By: Dan Woehle CHPRC	Dan Woehle	JUN 0 6 2018 1230	Received By: Tim Callaway /CHPRC	Tim Callaway	JUN 0 6 2018 1230
Print First and Last Name	Signature	Date/Time	Print First and Last Name	Signature	Date/Time
Relinquished By: Tim Callaway /CHPRC	Tim Callaway	JUN 0 6 2018 1400	Received By: FEDEX		
Print First and Last Name	Signature	Date/Time	Print First and Last Name	Signature	Date/Time
Relinquished By: Fed Ex			Received By: Chakeris Tarpley GEL Laboratories	Chakeris Tarpley	6/7/18 900
Print First and Last Name	Signature	Date/Time	Print First and Last Name	Signature	Date/Time
Relinquished By:			Received By:		
Print First and Last Name	Signature	Date/Time	Print First and Last Name	Signature	Date/Time

Matrix *

S = Soil		DS = Drum Solids	
SE = Sediment		DL = Drum Liquid	
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 4/11/2018 FSR ID = FSR60553 A-6004-842 (REV 3)

June 27, 2018 Rev 0

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 451943	C.O.C. # S18-006-164 Page 1 of 1

Collector:	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650
SAF No.: S18-006	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: Surv, June 2018	**Logbook No.:** HNF-N-506	**Ice Chest No.:** GWS-735
Shipped To (Lab): GEL Laboratories, LLC	**Method of Shipment** Commercial Carrier	**Bill of Lading/Air Bill No.:** 772413885044
Protocol SURV	**Priority:** 30 Days	**Offsite Property No.:** 9524

POSSIBLE SAMPLE HAZARDS/REMARK
** ** 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	Preservative
B3JC12	N	W	JUN 06 2018	1208	1x1-L P	9310_ALPHABETA_GPC: Gross Alpha	6 Months	HNO3 to pH <2

Relinquished By: WILLIAM COLLINS CHPRC	6-6-18 1255	Received By: Tim Calloway /CHPRC	JUN 06 2018 1255
Print First and Last Name / Signature	Date/Time	Print First and Last Name / Signature	Date/Time
Relinquished By: Tim Calloway /CHPRC	JUN 06 2018 1400	Received By: FEDEX	
Print First and Last Name / Signature	Date/Time	Print First and Last Name / Signature	Date/Time
Relinquished By: Fed Ex		Received By: Chakeris Tarplin GEL Laboratories	6/7/18 400
Print First and Last Name / Signature	Date/Time	Print First and Last Name / Signature	Date/Time
Relinquished By:		Received By:	
Print First and Last Name / Signature	Date/Time	Print First and Last Name / Signature	Date/Time

Matrix *

S = Soil		DS = Drum Solids	
SE = Sediment		DL = Drum Liquid	
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 4/11/2018 FSR ID = FSR60554 A-6004-842 (REV 3)

June 27, 2018

Rev 0

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: CRC	**SDG/AR/COC/Work Order:** 457943
Received By: C. TARPLIN	**Date Received:** 06-07-2018 HS
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other 7724 1388 5044

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#:
COC/Samples marked or classified as radioactive?	✓		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 (CPM) / mR/Hr **Classified as:** (Rad 1) Rad 2 Rad 3
Is package, COC, and/or Samples marked HAZ?		✓	If yes, select Hazards below, and contact the GEL Safety Group. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: (Wet Ice) Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius **TEMP:** 1°C
4	Daily check performed and passed on IR temperature gun?	✓			**Temperature Device Serial #:** IR4-17 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	✓			If Yes, Are Encores or Soil Kits present? Yes___ No✓ (If yes, take to VOA Freezer) Do VOA vials contain acid preservation? Yes ✓ No___ N/A___ (If unknown, select No) VOA vials free of headspace? Yes___ No✓ N/A___ Sample ID's and containers affected: B3H802 5 of 5
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?				Sample ID's affected:
12	Are sample containers identifiable as GEL provided?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials QS Date 6/8/18 Page 1 of 1

GL-CHL-SR-001 Rev 5

Data Review Qualifier Definitions

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 (843) 556−8171

Report Date: 27−JUN−18

Project Specific Qualifier Definitions for GEL Client Code: CPRC

Qualifier	Qualifier Definition	Department	Fraction
U	Analyzed for but not detected above limiting criteria. Includes MDL, MDA, PQL, zero, counting error, and total analytical error.		
J	The analyte was detected at a value less than the contract required detection limit (RDL), but greater than or equal to the IDL/MDL (as appropriate).Value is estimated	Organics	
P	Aroclor target analyte with greater than 25% difference between column analyses.	Organics	
C	Analyte has been confirmed by GC/MS analysis	Organics	Pesticide
B	The analyte was detected in both the associated QC blank and in the sample.	Organics	
E	Concentration exceeds the calibration range of the instrument	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	Spike Sample recovery is outside control limits.		
*	Duplicate analysis not within control limits	Inorganics	
>	Result greater than quantifiable range or greater than upper limit of the analysis range	General Chemistry	
Z	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier		
B	The analyte was detected at a value less than the contract required detection limit (RDL), but greater than or equal to the IDL/MDL (as appropriate).	Inorganics	Metals
D	Results are reported from a diluted aliquot of sample.		
E	Reported value is estimated due to interferences. See comment in narrative.	Inorganics	Metals
M	Duplicate precision not met.	Inorganics	Metals
o	Analyte failed to recover within LCS limits (0rganics only)	Organics	
S	Reported value determined by the Method of Standard Additions (MSA)	Inorganics	
T	Spike and/or spike duplicate sample recovery is outside control limits.	Organics	
W	Post−digestion spike recovery for GFAA out of control limit. Sample absorbency < 50% of spike absorbency.	Inorganics	
B	The analyte was detected in the associated method blank >/= MDC or >5% sample activity.	Radiological	
Y	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier		
+	Correlation coefficient for Method of Standard Additions (MSA) is < 0.995	Inorganics	
B	The analyte was detected at a value less than the contract required detection limit (RDL), but greater than or equal to the IDL/MDL (as appropriate).	General Chemistry	
C	Target analyte was detected in the sample and the associated blank. The associated blank concentration is >= EQL or is > 5% of the measured concentration and/or decision level for associated samples.	Inorganics	Metals
C	Target analyte was detected in the sample and the associated blank. The associated blank concentration is >= EQL or is > 5% of the measured concentration and/or decision level for associated samples.	General Chemistry	
<	Sample is below the EPA guidance level for Reactive Releasable Cyanide and/or Reactive Releasable Sulfide	General Chemistry	
UX	Gamma Spectroscopy−−Uncertain identification	Radiological	

Laboratory Certifications

List of current GEL Certifications as of 27 June 2018

State	Certification
Alaska	17−018
Arkansas	88−0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH−0169
Delaware	SC00012
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330−15−00283, P330−15−00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho Chemistry	SC00012
Idaho Radiochemistry	SC00012
Illinois NELAP	200029
Indiana	C−SC−01
Kansas NELAP	E−10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana NELAP	03046 (AI33904)
Louisiana SDWA	LA180011
Maryland	270
Massachusetts	M−SC012
Michigan	9976
Mississippi	SC00012
Nebraska	NE−OS−26−13
Nevada	SC000122018−1
New Hampshire NELAP	205415
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R−158
Oklahoma	9904
Pennsylvania NELAP	68−00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235−18−13
Utah NELAP	SC000122018−26
Vermont	VT87156
Virginia NELAP	460202
Washington	C780
West Virginia	997404

Radiological Analysis

Case Narrative

Radiochemistry
Technical Case Narrative
CH2MHill Plateau Remediation Company (CPRC)
SDG #: GEL451943
Work Order #: 451943

Product: **9310_ALPHABETA_GPC: ALPHA**
Analytical Method: 9310_ALPHABETA_GPC
Analytical Procedure: GL-RAD-A-001 REV# 20
Analytical Batch: 1772582

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

GEL Sample ID#	Client Sample Identification
451943001	B3JC11
451943002	B3JC12
1204047469	Method Blank (MB)
1204047470	451938003(NonSDG) Sample Duplicate (DUP)
1204047471	451938003(NonSDG) Matrix Spike (MS)
1204047472	451938003(NonSDG) Matrix Spike Duplicate (MSD)
1204047473	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

Gross Alpha/Beta Preparation Information
High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

Recounts
Samples 451943001 (B3JC11) and 451943002 (B3JC12) were recounted to verify sample results. Recounts are reported.

Miscellaneous Information

Additional Comments
The matrix spike and matrix spike duplicate, 1204047471 (Non SDG 451938003MS) and 1204047472 (Non SDG 451938003MSD), aliquots were 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

CPRC001 CH2MHill Plateau Remediation Company

Client SDG: GEL451943 GEL Work Order: 451943

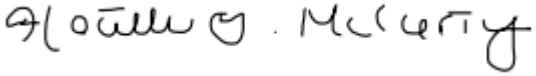
The Qualifiers in this report are defined as follows:

U Analyzed for but not detected above limiting criteria. Includes MDL, MDA, PQL, zero, counting error, and total analytical error.

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:** **Heather McCarty**

Date: **26 JUN 2018** **Title:** **Analyst II**

Sample Data Summary

Rad
Certificate of Analysis
Sample Summary

SDG Number:	**GEL451943**	**Client:**	**CPRC001**	**Project:**	**CPRC0S18006**
Lab Sample ID:	**451943001**	**Date Collected:**	**06/06/2018 10:59**	**Matrix:**	**WATER**
		Date Received:	**06/07/2018 09:00**		
Client ID:	**B3JC11**			**Prep Basis:**	**"As Received"**
Batch ID:	**1772582**	**Method:**	**9310_ALPHABETA_GPC**	**SOP Ref:**	**GL-RAD-A-001**
Run Date:	**06/20/2018 12:14**	**Analyst:**	**AXH4**	**Instrument:**	**PIC5C**
Data File:	**AB1772582r1.xls**	**Aliquot:**	**150 mL**	**Count Time:**	**80 min**
Prep Batch:	**1772582**	**Prep Method:**	**EPA 900.0/SW846 9310**		
Prep Date:	**06/18/2018 13:54**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
12587-46-1	Alpha *ALPHA*		266	pCi/L	+/-16.6	46.7	2.87	3.00

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:	**GEL451943**	**Client:**	**CPRC001**	**Project:**	**CPRC0S18006**
Lab Sample ID:	**451943002**	**Date Collected:**	**06/06/2018 12:08**	**Matrix:**	**WATER**
		Date Received:	**06/07/2018 09:00**		
Client ID:	**B3JC12**			**Prep Basis:**	**"As Received"**
Batch ID:	**1772582**	**Method:**	**9310_ALPHABETA_GPC**	**SOP Ref:**	**GL-RAD-A-001**
Run Date:	**06/20/2018 12:14**	**Analyst:**	**AXH4**	**Instrument:**	**PIC5D**
Data File:	**AB1772582r1.xls**	**Aliquot:**	**150 mL**	**Count Time:**	**100 min**
Prep Batch:	**1772582**	**Prep Method:**	**EPA 900.0/SW846 9310**		
Prep Date:	**06/18/2018 13:54**				

CAS No.	Parmname	Qual	Result	Units	Uncert	TPU	MDC	RDL
12587-46-1	Alpha *ALPHA*		394	pCi/L	+/-17.0	66.6	2.92	3.00

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.

Quality Control Summary

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

QC Summary

Client : **CH2MHill Plateau Remediation Company**
MSIN R3-50 CHPRC
PO Box 1600
Richland, Washington 99352
Contact: **Mr. Scot Fitzgerald**

Workorder: **451943**

Report Date: June 26, 2018

Parmname	NOM	Sample	Qual	QC	Units	QC Criteria	Range	Analyst	Date Time
Rad Gas Flow									
Batch 1772582									
QC1204047469 MB									
Alpha			U	-0.874	pCi/L			AXH4	06/19/1813:26
Uncert:				+/-1.01					
TPU:				+/-1.01					
QC1204047470 451938003 DUP									
Alpha		38.7		32.6	pCi/L				06/19/1813:26
Uncert:		+/-5.80		+/-5.24		RPD: 17	(0%-20%)		
TPU:		+/-8.58		+/-7.52		RER: 1.03	(0-2)		
QC1204047471 451938003 MS									
Alpha	241	38.7		278	pCi/L	REC: 99	(75%-125%)		06/19/1812:18
Uncert:		+/-5.80		+/-27.0					
TPU:		+/-8.58		+/-52.9					
QC1204047472 451938003 MSD									
Alpha	241	38.7		264	pCi/L	REC: 93	(75%-125%)		06/19/1812:18
Uncert:		+/-5.80		+/-27.1		RPD: 5	(0%-20%)		
TPU:		+/-8.58		+/-51.1		RER: 0.382	(0-2)		
QC1204047473 LCS									
Alpha	80.5			89.8	pCi/L	REC: 112	(80%-120%)		06/19/1812:18
Uncert:				+/-7.84					
TPU:				+/-16.8					

Notes:

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

The Qualifiers in this report are defined as follows:

- B The analyte was detected in the associated method blank >/= MDC or >5% sample activity.
- D Results are reported from a diluted aliquot of sample.
- N Spike Sample recovery is outside control limits.
- U Analyzed for but not detected above limiting criteria. Includes MDL, MDA, PQL, zero, counting error, and total analytical error.
- UX Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Z Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

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

QC Summary

Workorder: **451943**

Parmname	NOM	Sample	Qual	QC	Units	QC Criteria	Range	Analyst	Date	Time

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.