



March 05, 2018

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

Re: CHPRC SAF X18-020  
Work Order: 443832  
SDG: GEL443832

Dear Mr. Fitzgerald:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 15, 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,

Heather Shaffer  
Project Manager

Purchase Order: 303112 - 7H  
Chain of Custody: X18-020-002 and X18-020-008  
Enclosures



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# Case Narrative

**General Narrative  
for  
CH2MHill Plateau Remediation Company  
CHPRC SAF X18-020  
SDG: GEL443832**

**March 05, 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 February 15, 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:

<b>Laboratory Identification</b>	<b>Sample Description</b>
443832001	B3H947
443832002	B3H9H0

**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: General Chemistry.

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.

MARCH 07, 2018

REV. 0

*Heather Shaffer*

Heather Shaffer  
Project Manager

**General Chemistry  
Technical Case Narrative  
CH2MHill Plateau Remediation Company (CPRC)  
SDG #: GEL443832  
Work Order #: 443832**

**Cyanide, Free**

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**

Total Cyanide analysis by EPA 335.4/SW846 9012A was not requested; therefore, ASTM 4282 Modified Free Cyanide was performed per SOP (GL-GC-E-073). 443832001 (B3H947) and 443832002 (B3H9H0).

**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		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>				C.O.C.# <b>X18-020-002</b>
		<del>443832</del> <b>443832</b> MEM 2/16/18				Page 1 of 1
<b>Collector:</b> Daniel Klug CHPRC		<b>Contact/Requester:</b> SUMNER, LC		<b>Telephone No.:</b> 376-3922		
<b>SAF No.:</b> X18-020		<b>Sampling Origin:</b> Hanford Site		<b>Purchase Order/Charge Code:</b> 303112		
<b>Project Title:</b> LOW-LEVEL CN (FREE) STUDY, FEB		<b>Logbook No.:</b> HNF-N-506 <b>98/30</b>		<b>Ice Chest No.:</b> GWS-732		
<b>Shipped To (Lab):</b> GEL Laboratories, LLC		<b>Method of Shipment:</b> Commercial Carrier		<b>Bill of Lading/Air Bill No.:</b> 771480048406		
<b>Protocol:</b> Other		<b>Priority:</b> 30 Days		<b>Offsite Property No.:</b> 9054		
<b>POSSIBLE SAMPLE HAZARDS/REMARK</b> *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.				<b>SPECIAL INSTRUCTIONS</b> N/A		

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3H947	N	W	FEB 13 2018	1307	1x500-mL aG	9014_CN (FREE): COMMON	14 Days	NaOH to pH >=12 / Cool <=6C

MARCH 07, 2018

Relinquished By: Daniel Klug CHPRC <i>D. Klug</i> Print First and Last Name      Signature FEB 13 2018 1410 Date/Time	Received By: SSU-   Print First and Last Name      Signature FEB 13 2018 1410 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
Relinquished By: SSU-1   Print First and Last Name      Signature FEB 14 2018 0715 Date/Time	Received By: Troy Bacon CHPRC <i>Troy Bacon</i> Print First and Last Name      Signature FEB 14 2018 0715 Date/Time	
Relinquished By: Troy Bacon CHPRC <i>Troy Bacon</i> Print First and Last Name      Signature FEB 14 2018 1400 Date/Time	Received By: FEDEX   Print First and Last Name      Signature Date/Time	
Relinquished By: FedEx   Print First and Last Name      Signature Date/Time	Received By: C. Tardlin <i>C. Tardlin</i> Print First and Last Name      Signature 2/15/18 0905 Date/Time	
<b>FINAL SAMPLE DISPOSITION</b> Disposal Method (e.g., Return to customer, per lab procedure, used in process):		Disposed By:      Date/Time:

REV. 0

<b>CH2M Hill Plateau Remediation Company</b>	<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b> <span style="font-size: 1.5em; color: blue;">443832</span>	C.O.C.# <b>X18-020-008</b>
		Page 1 of 1

<b>Collector:</b> Daniel Klug CHPRC	<b>Contact/Requester:</b> SUMNER, LC	<b>Telephone No.:</b> 376-3922
<b>SAF No.:</b> X18-020	<b>Sampling Origin:</b> Hanford Site	<b>Purchase Order/Charge Code:</b> 303112
<b>Project Title:</b> LOW-LEVEL CN (FREE) STUDY, FEB	<b>Logbook No.:</b> HNF-N-506 <span style="font-size: 1.2em;">98/38</span>	<b>Ice Chest No.:</b> GWS-732
<b>Shipped To (Lab):</b> GEL Laboratories, LLC	<b>Method of Shipment:</b> Commercial Carrier	<b>Bill of Lading/Air Bill No.:</b> 7714 8064 8406
<b>Protocol:</b> Other	<b>Priority:</b> 30 Days	<b>Offsite Property No.:</b> 9054

**POSSIBLE SAMPLE HAZARDS/REMARK**  
 \*Contains Radioactive Material at concentrations that are not be 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
B3H9H0	N	W	FEB 13 2018	12:15	1x500-mL aG	9014_CN (FREE): COMMON	14 Days	NaOH to pH >=12 / Cool <=6C

MARCH 07, 2018

Relinquished By: Daniel Klug CHPRC <span style="font-size: 1.2em;">D.K. Klug</span> Print First and Last Name      Signature      Date/Time: FEB 13 2018 14:10	Received By: <b>SSU-1</b> Print First and Last Name      Signature      Date/Time: FEB 13 2018 14:10	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
Relinquished By: <b>SSU-1</b> Print First and Last Name      Signature      Date/Time: FEB 14 2018 07:15	Received By: Troy Bacon CHPRC <span style="font-size: 1.2em;">Troy L. Bacon</span> Print First and Last Name      Signature      Date/Time: FEB 14 2018 07:15	
Relinquished By: Troy Bacon CHPRC <span style="font-size: 1.2em;">Troy L. Bacon</span> Print First and Last Name      Signature      Date/Time: FEB 14 2018 14:00	Received By: <b>FEDEX</b> Print First and Last Name      Signature      Date/Time:	
Relinquished By: <b>FedEx</b> Print First and Last Name      Signature      Date/Time:	Received By: C. Tamplin <span style="font-size: 1.2em;">C. Tamplin</span> Print First and Last Name      Signature      Date/Time: 2/15/18 07:05	

<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:
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REV. 0

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**SAMPLE RECEIPT & REVIEW FORM**

#5

Client: <u>CPRC</u>		SDG/AR/COC/Work Order: <u>443832</u>
Received By: <u>C. Tarplin</u>		Date Received: <u>15 Feb 2018</u>
Carrier and Tracking Number		Circle Applicable: <input checked="" type="checkbox"/> FedEx Express <input type="checkbox"/> FedEx Ground <input type="checkbox"/> UPS <input type="checkbox"/> Field Services <input type="checkbox"/> Courier <input type="checkbox"/> Other <u>7714 80048406</u> <u>771482218489</u> <u>7714 83778109</u> <u>771483463299</u> <u>7714 85129455</u>
Suspected Hazard Information	Yes <input type="checkbox"/> No <input type="checkbox"/>	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____
COC/Samples marked or classified as radioactive?	<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> CPM/mR/Hr Classified as: <u>Rad 1</u> Rad 2 Rad 3
Is package, COC, and/or Samples marked HAZ?	<input checked="" type="checkbox"/>	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?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>			Preservation Method: <u>Wet Ice</u> Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius                      TEMP: <u>2C</u>
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: _____ IR4-17 Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's and Containers Affected: If Preservation added, Lot#: _____
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>			If Yes, Are Encores or Soil Kits present? Yes _____ No <input checked="" type="checkbox"/> (if yes, take to VOA Freezer) Do VOA vials contain acid preservation? Yes <input checked="" type="checkbox"/> No _____ N/A _____ (if unknown, select No) VOA vials free of headspace? Yes _____ No <input checked="" type="checkbox"/> N/A _____ Sample ID's and containers affected: <u>B3H7X7 has one vial w/ headspace</u> <u>B3H4R4 has two vials w/ headspace</u>
8 Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Sample ID's affected:
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Sample ID's affected:
12 Are sample containers identifiable as GEL provided?			<input checked="" type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials MEH Date 02/16/18 Page 1 of 1

# **Data Review Qualifier Definitions**

## 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 (Organics 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 $\geq$ 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 $\geq$ 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 $\geq$ 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 05 March 2018**

<b>State</b>	<b>Certification</b>
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 Radchem	10120002
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-18-13
Utah NELAP	SC000122017-25
Vermont	VT87156
Virginia NELAP	460202
Washington	C780
West Virginia	997404

# General Chem Analysis

# Case Narrative

**General Chemistry  
Technical Case Narrative  
CH2MHill Plateau Remediation Company (CPRC)  
SDG #: GEL443832  
Work Order #: 443832**

**Product:** Cyanide, Free

**Analytical Method:** 9014\_CYANIDE

**Analytical Procedure:** GL-GC-E-073 REV# 8

**Analytical Batch:** 1742513

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
443832001	B3H947
443832002	B3H9H0
1203979490	Method Blank (MB)
1203979491	Laboratory Control Sample (LCS)
1203979492	443745001(B3H9F6) Sample Duplicate (DUP)

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**

Total Cyanide analysis by EPA 335.4/SW846 9012A was not requested; therefore, ASTM 4282 Modified Free Cyanide was performed per SOP (GL-GC-E-073). 443832001 (B3H947) and 443832002 (B3H9H0).

**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: GEL443832 GEL Work Order: 443832

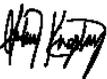
**The Qualifiers in this report are defined as follows:**

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:** Aubrey Kingsbury**Date:** 28 FEB 2018**Title:** Analyst I

# Sample Data Summary

**GEL LABORATORIES LLC**

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

**Certificate of Analysis**

Report Date: March 1, 2018

Company : CH2MHill Plateau Remediation Company  
 Address : MSIN R3-50 CHPRC  
 PO Box 1600  
 Richland, Washington 99352  
 Contact: Mr. Scot Fitzgerald  
 Project: CHPRC SAF X18-020

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Client Sample ID:	B3H947	Project:	CPRC0X18020
Sample ID:	443832001	Client ID:	CPRC001
Matrix:	WATER		
Collect Date:	13-FEB-18 13:07		
Receive Date:	15-FEB-18		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis												
9014_CN (FREE): COMMON "As Received"												
Free Cyanide	B	1.78	1.00	2.00	ug/L		1	AXH3	02/27/18	0942	1742513	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	9014_CYANIDE	

**Notes:**

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

**GEL LABORATORIES LLC**

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

**Certificate of Analysis**

Report Date: March 1, 2018

Company : CH2MHill Plateau Remediation Company  
 Address : MSIN R3-50 CHPRC  
 PO Box 1600  
 Richland, Washington 99352  
 Contact: Mr. Scot Fitzgerald  
 Project: CHPRC SAF X18-020

Client Sample ID: B3H9H0 Project: CPRC0X18020  
 Sample ID: 443832002 Client ID: CPRC001  
 Matrix: WATER  
 Collect Date: 13-FEB-18 12:15  
 Receive Date: 15-FEB-18  
 Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis												
9014_CN (FREE): COMMON "As Received"												
Free Cyanide	B	1.57	1.00	2.00	ug/L		1	AXH3	02/27/18	0942	1742513	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	9014_CYANIDE		

**Notes:**

Column headers are defined as follows:

DF: Dilution Factor                      Lc/LC: Critical Level  
 DL: Detection Limit                      PF: Prep Factor  
 MDA: Minimum Detectable Activity      RL: Reporting Limit  
 MDC: Minimum Detectable Concentration    SQL: Sample Quantitation Limit

# Quality Control Summary

**GEL LABORATORIES LLC**

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

**QC Summary**

Report Date: March 1, 2018

Page 1 of 1

CH2MHill Plateau Remediation Company

MSIN R3-50 CHPRC

PO Box 1600

Richland, Washington

Contact: Mr. Scot Fitzgerald

Workorder: 443832

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Flow Injection Analysis</b>											
Batch	1742513										
QC1203979492	443745001	DUP									
Free Cyanide		3.65		2.82	ug/L	25.8 ^		(+/-2.00)	AXH3	02/27/18	09:42
QC1203979491	LCS										
Free Cyanide	25.0			24.1	ug/L		96.3	(80%-120%)		02/27/18	09:42
QC1203979490	MB										
Free Cyanide			U	1.00	ug/L					02/27/18	09:42

**Notes:**

The Qualifiers in this report are defined as follows:

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.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance 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.

\* Indicates that a Quality Control parameter was not within specifications.

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.