

January 27, 2026

Revised Report

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Civitas - CO

Sample Delivery Group: L1925339  
Samples Received: 12/06/2025  
Project Number: 203724474 TASK 100.0  
Description: Antelope P-T-17HZ  
Site: 42673  
Report To: Civitas - Stantec  
6855 W. 118th Ave  
Broomfield, CO 80020

Entire Report Reviewed By:












Mandi Edwards  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

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# TABLE OF CONTENTS

<b>Cp: Cover Page</b>	<b>1</b>	
<b>Tc: Table of Contents</b>	<b>2</b>	
<b>Ss: Sample Summary</b>	<b>3</b>	
<b>Cn: Case Narrative</b>	<b>5</b>	
<b>Sr: Sample Results</b>	<b>7</b>	
<b>BG01@6 L1925339-01</b>	<b>7</b>	
<b>BG02@5 L1925339-02</b>	<b>8</b>	
<b>BG03@4 L1925339-03</b>	<b>9</b>	
<b>BG04@3 L1925339-04</b>	<b>10</b>	
<b>BG05@3 L1925339-05</b>	<b>11</b>	
<b>Qc: Quality Control Summary</b>	<b>12</b>	
<b>Total Solids by Method 2540 G-2011</b>	<b>12</b>	
<b>Wet Chemistry by Method 7199</b>	<b>14</b>	
<b>Wet Chemistry by Method 9045D (S-1.10)</b>	<b>16</b>	
<b>Wet Chemistry by Method 9050AMod (S-1.20)</b>	<b>17</b>	
<b>Metals (ICP) by Method 6010D (S-7.10)</b>	<b>18</b>	
<b>Metals (ICPMS) by Method 6020B</b>	<b>19</b>	
<b>Gl: Glossary of Terms</b>	<b>21</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>22</b>	
<b>Sc: Sample Chain of Custody</b>	<b>23</b>	

# SAMPLE SUMMARY

## BG01@6 L1925339-01

Collected by: Sam O'Boyle  
 Collected date/time: 12/05/25 08:00  
 Received date/time: 12/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2654809	1	12/10/25 18:34	12/10/25 18:34	NMM	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG2654063	1	12/09/25 05:03	12/09/25 05:09	MT	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2654494	1	12/09/25 21:32	12/11/25 14:40	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D (S-1.10)	WG2655492	1	12/10/25 10:51	12/10/25 14:12	AL	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod (S-1.20)	WG2655518	1	12/10/25 19:01	12/10/25 22:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D (S-7.10)	WG2654789	1	12/09/25 13:10	12/09/25 16:50	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2653829	1	12/09/25 07:49	12/19/25 01:28	KHT	Mt. Juliet, TN



## BG02@5 L1925339-02

Collected by: Sam O'Boyle  
 Collected date/time: 12/05/25 08:20  
 Received date/time: 12/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2654809	1	12/10/25 18:36	12/10/25 18:36	NMM	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG2654063	1	12/09/25 05:03	12/09/25 05:09	MT	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2654494	1	12/09/25 21:32	12/11/25 14:51	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D (S-1.10)	WG2655492	1	12/10/25 10:51	12/10/25 14:12	AL	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod (S-1.20)	WG2655518	1	12/10/25 19:01	12/10/25 22:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D (S-7.10)	WG2654789	1	12/09/25 13:10	12/09/25 16:53	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2653829	1	12/09/25 07:49	12/19/25 01:31	KHT	Mt. Juliet, TN

## BG03@4 L1925339-03

Collected by: Sam O'Boyle  
 Collected date/time: 12/05/25 08:30  
 Received date/time: 12/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2654809	1	12/10/25 18:38	12/10/25 18:38	NMM	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG2654063	1	12/09/25 05:03	12/09/25 05:09	MT	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2654494	1	12/09/25 21:32	12/11/25 15:02	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D (S-1.10)	WG2655492	1	12/10/25 10:51	12/10/25 14:12	AL	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod (S-1.20)	WG2655518	1	12/10/25 19:01	12/10/25 22:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D (S-7.10)	WG2654789	1	12/09/25 13:10	12/09/25 16:56	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2653829	1	12/09/25 07:49	12/19/25 01:34	KHT	Mt. Juliet, TN

## BG04@3 L1925339-04

Collected by: Sam O'Boyle  
 Collected date/time: 12/05/25 08:40  
 Received date/time: 12/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2654809	1	12/10/25 18:41	12/10/25 18:41	NMM	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG2654063	1	12/09/25 05:03	12/09/25 05:09	MT	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2654494	1	12/09/25 21:32	12/11/25 15:58	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D (S-1.10)	WG2655492	1	12/10/25 10:51	12/10/25 14:12	AL	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod (S-1.20)	WG2655518	1	12/10/25 19:01	12/10/25 22:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D (S-7.10)	WG2654789	1	12/09/25 13:10	12/09/25 16:59	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2653829	1	12/09/25 07:49	12/19/25 01:13	KHT	Mt. Juliet, TN

## BG05@3 L1925339-05

Collected by: Sam O'Boyle  
 Collected date/time: 12/05/25 08:50  
 Received date/time: 12/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2654809	1	12/10/25 18:43	12/10/25 18:43	NMM	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG2654064	1	12/09/25 06:48	12/09/25 06:55	MT	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2654494	1	12/09/25 21:32	12/11/25 16:09	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D (S-1.10)	WG2655492	1	12/10/25 10:51	12/10/25 14:12	AL	Mt. Juliet, TN

# SAMPLE SUMMARY

BG05@3 L1925339-05

Collected by: Sam O'Boyle  
 Collected date/time: 12/05/25 08:50  
 Received date/time: 12/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9050AMod (S-1.20)	WG2655518	1	12/10/25 19:01	12/10/25 22:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D (S-7.10)	WG2654789	1	12/09/25 13:10	12/09/25 17:01	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2653829	1.04	12/09/25 07:49	12/19/25 01:44	KHT	Mt. Juliet, TN

- <sup>1</sup> Cp
- <sup>2</sup> Tc
- <sup>3</sup> Ss
- <sup>4</sup> Cn
- <sup>5</sup> Sr
- <sup>6</sup> Qc
- <sup>7</sup> Gl
- <sup>8</sup> Al
- <sup>9</sup> Sc

# CASE NARRATIVE

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Mandi Edwards  
Project Manager

## Report Revision History

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Level II Report - Version 1: 12/22/25 13:55

## Project Comments

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Samples for pH in this report are out of hold time per EPA standards. The Western States Manual does not define a hold time after the Saturated Paste preparation. Pace is working with ECMC to determine hold time.

Revised to report to RDL for EDD. MLE 01/27/2026

## Wet Chemistry by Method 7199

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RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Batch	Lab Sample ID	Analytes
WG2654494	(DUP) R4313245-3	Hexavalent Chromium

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2654494	(MS) R4313245-6, L1925339-03	Hexavalent Chromium

## Metals (ICPMS) by Method 6020B

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The associated batch QC was above the established quality control range for accuracy.

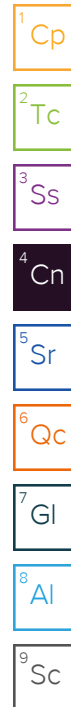
Batch	Lab Sample ID	Analytes
WG2653829	(LCS) R4316506-2, L1925339-01, 02, 03, 04, 05	Silver

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG2653829	(MS) R4316506-5, (MSD) R4316506-6, L1925339-04	Barium and Zinc

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2653829	(MSD) R4316506-6, L1925339-04	Barium



# CASE NARRATIVE

## Metals (ICPMS) by Method 6020B

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The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

Batch	Lab Sample ID	Analytes
WG2653829	L1925339-04	Zinc

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.187		1	12/10/2025 18:34	WG2654809

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.2		1	12/09/2025 05:09	<a href="#">WG2654063</a>

Wet Chemistry by Method 7199

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.206	1	12/11/2025 14:40	<a href="#">WG2654494</a>

Wet Chemistry by Method 9045D (S-1.10)

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.48		1	12/10/2025 14:12	<a href="#">WG2655492</a>

Sample Narrative:

L1925339-01 WG2655492: 7.48 at 19.1C

Wet Chemistry by Method 9050AMod (S-1.20)

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	81.5	umhos/cm		10.0	1	12/10/2025 22:20	<a href="#">WG2655518</a>

Sample Narrative:

L1925339-01 WG2655518: at 25C

Metals (ICP) by Method 6010D (S-7.10)

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		0.100	1	12/09/2025 16:50	<a href="#">WG2654789</a>

Metals (ICPMS) by Method 6020B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Arsenic	3.80		0.103	1	12/19/2025 01:28	<a href="#">WG2653829</a>
Barium	63.8		10.3	1	12/19/2025 01:28	<a href="#">WG2653829</a>
Cadmium	ND		0.103	1	12/19/2025 01:28	<a href="#">WG2653829</a>
Copper	ND		10.3	1	12/19/2025 01:28	<a href="#">WG2653829</a>
Lead	ND		10.3	1	12/19/2025 01:28	<a href="#">WG2653829</a>
Nickel	ND		10.3	1	12/19/2025 01:28	<a href="#">WG2653829</a>
Selenium	0.335		0.103	1	12/19/2025 01:28	<a href="#">WG2653829</a>
Silver	ND	<a href="#">J4</a>	0.514	1	12/19/2025 01:28	<a href="#">WG2653829</a>
Zinc	ND		51.4	1	12/19/2025 01:28	<a href="#">WG2653829</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.143		1	12/10/2025 18:36	WG2654809

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.6		1	12/09/2025 05:09	<a href="#">WG2654063</a>

Wet Chemistry by Method 7199

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.207	1	12/11/2025 14:51	<a href="#">WG2654494</a>

Wet Chemistry by Method 9045D (S-1.10)

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.36		1	12/10/2025 14:12	<a href="#">WG2655492</a>

Sample Narrative:

L1925339-02 WG2655492: 7.36 at 18.4C

Wet Chemistry by Method 9050AMod (S-1.20)

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	76.6	umhos/cm		10.0	1	12/10/2025 22:20	<a href="#">WG2655518</a>

Sample Narrative:

L1925339-02 WG2655518: at 25C

Metals (ICP) by Method 6010D (S-7.10)

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		0.100	1	12/09/2025 16:53	<a href="#">WG2654789</a>

Metals (ICPMS) by Method 6020B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Arsenic	3.62		0.103	1	12/19/2025 01:31	<a href="#">WG2653829</a>
Barium	61.1		10.3	1	12/19/2025 01:31	<a href="#">WG2653829</a>
Cadmium	ND		0.103	1	12/19/2025 01:31	<a href="#">WG2653829</a>
Copper	ND		10.3	1	12/19/2025 01:31	<a href="#">WG2653829</a>
Lead	ND		10.3	1	12/19/2025 01:31	<a href="#">WG2653829</a>
Nickel	ND		10.3	1	12/19/2025 01:31	<a href="#">WG2653829</a>
Selenium	0.262		0.103	1	12/19/2025 01:31	<a href="#">WG2653829</a>
Silver	ND	<a href="#">J4</a>	0.517	1	12/19/2025 01:31	<a href="#">WG2653829</a>
Zinc	ND		51.7	1	12/19/2025 01:31	<a href="#">WG2653829</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.0970		1	12/10/2025 18:38	WG2654809

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.2		1	12/09/2025 05:09	<a href="#">WG2654063</a>

Wet Chemistry by Method 7199

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND	<a href="#">J6</a>	0.208	1	12/11/2025 15:02	<a href="#">WG2654494</a>

Wet Chemistry by Method 9045D (S-1.10)

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.01		1	12/10/2025 14:12	<a href="#">WG2655492</a>

Sample Narrative:

L1925339-03 WG2655492: 7.01 at 18.9C

Wet Chemistry by Method 9050AMod (S-1.20)

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	64.0	umhos/cm		10.0	1	12/10/2025 22:20	<a href="#">WG2655518</a>

Sample Narrative:

L1925339-03 WG2655518: at 25C

Metals (ICP) by Method 6010D (S-7.10)

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		0.100	1	12/09/2025 16:56	<a href="#">WG2654789</a>

Metals (ICPMS) by Method 6020B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.34		0.104	1	12/19/2025 01:34	<a href="#">WG2653829</a>
Barium	51.4		10.4	1	12/19/2025 01:34	<a href="#">WG2653829</a>
Cadmium	ND		0.104	1	12/19/2025 01:34	<a href="#">WG2653829</a>
Copper	ND		10.4	1	12/19/2025 01:34	<a href="#">WG2653829</a>
Lead	ND		10.4	1	12/19/2025 01:34	<a href="#">WG2653829</a>
Nickel	ND		10.4	1	12/19/2025 01:34	<a href="#">WG2653829</a>
Selenium	0.281		0.104	1	12/19/2025 01:34	<a href="#">WG2653829</a>
Silver	ND	<a href="#">J4</a>	0.520	1	12/19/2025 01:34	<a href="#">WG2653829</a>
Zinc	ND		52.0	1	12/19/2025 01:34	<a href="#">WG2653829</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.120		1	12/10/2025 18:41	WG2654809

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	12/09/2025 05:09	<a href="#">WG2654063</a>

Wet Chemistry by Method 7199

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.214	1	12/11/2025 15:58	<a href="#">WG2654494</a>

Wet Chemistry by Method 9045D (S-1.10)

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.11		1	12/10/2025 14:12	<a href="#">WG2655492</a>

Sample Narrative:

L1925339-04 WG2655492: 7.11 at 18.6C

Wet Chemistry by Method 9050AMod (S-1.20)

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	73.7	umhos/cm		10.0	1	12/10/2025 22:20	<a href="#">WG2655518</a>

Sample Narrative:

L1925339-04 WG2655518: at 25C

Metals (ICP) by Method 6010D (S-7.10)

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		0.100	1	12/09/2025 16:59	<a href="#">WG2654789</a>

Metals (ICPMS) by Method 6020B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.36		0.107	1	12/19/2025 01:13	<a href="#">WG2653829</a>
Barium	84.9	<a href="#">J3 J5</a>	10.7	1	12/19/2025 01:13	<a href="#">WG2653829</a>
Cadmium	ND		0.107	1	12/19/2025 01:13	<a href="#">WG2653829</a>
Copper	ND		10.7	1	12/19/2025 01:13	<a href="#">WG2653829</a>
Lead	ND		10.7	1	12/19/2025 01:13	<a href="#">WG2653829</a>
Nickel	ND		10.7	1	12/19/2025 01:13	<a href="#">WG2653829</a>
Selenium	0.334		0.107	1	12/19/2025 01:13	<a href="#">WG2653829</a>
Silver	ND	<a href="#">J4</a>	0.535	1	12/19/2025 01:13	<a href="#">WG2653829</a>
Zinc	ND	<a href="#">J5 O1</a>	53.5	1	12/19/2025 01:13	<a href="#">WG2653829</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.0958		1	12/10/2025 18:43	WG2654809

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0		1	12/09/2025 06:55	<a href="#">WG2654064</a>

Wet Chemistry by Method 7199

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.215	1	12/11/2025 16:09	<a href="#">WG2654494</a>

Wet Chemistry by Method 9045D (S-1.10)

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.22		1	12/10/2025 14:12	<a href="#">WG2655492</a>

Sample Narrative:

L1925339-05 WG2655492: 7.22 at 18.5C

Wet Chemistry by Method 9050AMod (S-1.20)

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	73.9	umhos/cm		10.0	1	12/10/2025 22:20	<a href="#">WG2655518</a>

Sample Narrative:

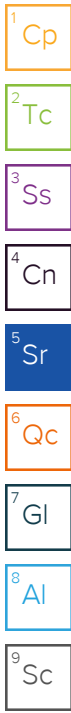
L1925339-05 WG2655518: at 25C

Metals (ICP) by Method 6010D (S-7.10)

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		0.100	1	12/09/2025 17:01	<a href="#">WG2654789</a>

Metals (ICPMS) by Method 6020B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.81		0.112	1.04	12/19/2025 01:44	<a href="#">WG2653829</a>
Barium	63.2		11.2	1.04	12/19/2025 01:44	<a href="#">WG2653829</a>
Cadmium	ND		0.112	1.04	12/19/2025 01:44	<a href="#">WG2653829</a>
Copper	ND		11.2	1.04	12/19/2025 01:44	<a href="#">WG2653829</a>
Lead	ND		11.2	1.04	12/19/2025 01:44	<a href="#">WG2653829</a>
Nickel	ND		11.2	1.04	12/19/2025 01:44	<a href="#">WG2653829</a>
Selenium	0.242		0.112	1.04	12/19/2025 01:44	<a href="#">WG2653829</a>
Silver	ND	<a href="#">J4</a>	0.559	1.04	12/19/2025 01:44	<a href="#">WG2653829</a>
Zinc	ND		55.9	1.04	12/19/2025 01:44	<a href="#">WG2653829</a>



Method Blank (MB)

(MB) R4311756-1 12/09/25 05:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

1 Cp

2 Tc

3 Ss

L1925339-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1925339-02 12/09/25 05:09 • (DUP) R4311756-3 12/09/25 05:09

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	96.6	96.7	1	0.0271		10

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R4311756-2 12/09/25 05:09

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	90.0-110	

6 Qc

7 Gl

8 Al

9 Sc

## Method Blank (MB)

(MB) R4311841-1 12/09/25 06:55

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Total Solids	0.000			

1 Cp

2 Tc

3 Ss

## L1925347-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1925347-05 12/09/25 06:55 • (DUP) R4311841-3 12/09/25 06:55

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Total Solids	83.3	84.0	1	0.836		10

4 Cn

5 Sr

6 Qc

## Laboratory Control Sample (LCS)

(LCS) R4311841-2 12/09/25 06:55

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	100	90.0-110	

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4313245-1 12/11/25 12:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	ND		0.200	0.200

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1924911-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1924911-02 12/11/25 12:49 • (DUP) R4313245-3 12/11/25 13:00

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Hexavalent Chromium	0.645	0.433	1	39.3	P1	20

L1925357-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1925357-07 12/11/25 18:24 • (DUP) R4313245-8 12/11/25 18:36

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Hexavalent Chromium	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4313245-2 12/11/25 12:38

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	10.0	8.79	87.9	80.0-120	

L1925339-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1925339-03 12/11/25 15:02 • (MS) R4313245-4 12/11/25 15:13 • (MSD) R4313245-5 12/11/25 15:25

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Hexavalent Chromium	20.8	ND	16.4	16.8	79.0	80.9	1	75.0-125			2.43	20

L1925339-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1925339-03 12/11/25 15:02 • (MS) R4313245-6 12/11/25 15:36

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	661	ND	430	65.0	50	75.0-125	<u>J6</u>

Sample Narrative:

MS: Spike failure due to matrix. ORP check performed to confirm reductive matrix.

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1924911-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1924911-18 12/10/25 14:12 • (DUP) R4312356-2 12/10/25 14:12

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
su	su			%		%
pH	7.28	7.24	1	0.551		1

Sample Narrative:

OS: 7.28 at 19.3C  
 DUP: 7.24 at 20.1C

L1925357-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1925357-13 12/10/25 14:12 • (DUP) R4312356-3 12/10/25 14:12

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
su	su			%		%
pH	8.13	8.12	1	0.123		1

Sample Narrative:

OS: 8.13 at 18.5C  
 DUP: 8.12 at 18.7C

Laboratory Control Sample (LCS)

(LCS) R4312356-1 12/10/25 14:12

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
su	su		%	%	
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10 at 19.2C

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R4312587-1 12/10/25 22:20

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	ND		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1924911-19 Original Sample (OS) • Duplicate (DUP)

(OS) L1924911-19 12/10/25 22:20 • (DUP) R4312587-3 12/10/25 22:20

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Specific Conductance	42.0	41.7	1	0.717		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1925357-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1925357-12 12/10/25 22:20 • (DUP) R4312587-4 12/10/25 22:20

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Specific Conductance	126	125	1	0.719		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4312587-2 12/10/25 22:20

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	483	478	99.0	90.0-110	

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R4311922-1 12/09/25 16:40

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	ND		0.0199	0.100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4311922-2 12/09/25 16:42 • (LCSD) R4311922-3 12/09/25 16:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.05	1.07	105	107	80.0-120			1.95	20

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R4316506-1 12/19/25 01:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	ND		0.100	0.100
Barium	ND		10.0	10.0
Cadmium	ND		0.100	0.100
Copper	ND		10.0	10.0
Lead	ND		10.0	10.0
Nickel	ND		10.0	10.0
Selenium	ND		0.100	0.100
Silver	ND		0.500	0.500
Zinc	ND		50.0	50.0

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

Laboratory Control Sample (LCS)

(LCS) R4316506-2 12/19/25 01:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	113	113	80.0-120	
Barium	100	110	110	80.0-120	
Cadmium	100	116	116	80.0-120	
Copper	100	113	113	80.0-120	
Lead	100	108	108	80.0-120	
Nickel	100	119	119	80.0-120	
Selenium	100	111	111	80.0-120	
Silver	20.0	24.4	122	80.0-120	<u>J4</u>
Zinc	100	113	113	80.0-120	

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1925339-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1925339-04 12/19/25 01:13 • (MS) R4316506-5 12/19/25 01:22 • (MSD) R4316506-6 12/19/25 01:25

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	107	4.36	122	116	110	105	1.04	75.0-125			4.98	20
Barium	107	84.9	201	333	108	232	1.04	75.0-125		<u>J3 J5</u>	49.5	20
Cadmium	107	ND	119	115	111	107	1.04	75.0-125			3.81	20
Copper	107	ND	120	120	112	112	1.04	75.0-125			0.282	20
Lead	107	ND	115	113	108	106	1.04	75.0-125			1.82	20
Nickel	107	ND	128	124	119	116	1.04	75.0-125			2.83	20
Selenium	107	0.334	114	108	107	101	1.04	75.0-125			5.87	20
Silver	21.4	ND	25.4	24.5	118	114	1.04	75.0-125			3.48	20

L1925339-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1925339-04 12/19/25 01:13 • (MS) R4316506-5 12/19/25 01:22 • (MSD) R4316506-6 12/19/25 01:25

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Zinc	107	ND	148	145	139	136	1.04	75.0-125	<u>J5</u>	<u>J5</u>	2.18	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Company Name/Address:  
Civitas - CO  
6855 West 118th Avenue  
Broomfield, CO 80020

Billing Information:  
Accounts Payable  
650 Southgate Drive  
Windsor, CO 80550

Pres  
Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1



12065 Lebanon Rd Mount Juliet, TN 37122  
Phone: 615-758-5858 Alt: 800-767-5859  
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

Report to:  
Civitas 610-408-9078

Email To: chris.roy@stantec.com  
robert.hammer@stantec.com  
sam.oboyle@stantec.com

Project Description:  
**Antelope P-T-17HZ**

City/State Collected: Colorado  
Please Circle: PT (MT) ET

Client Project #  
203724474 Task 100.030

Lab Project #  
Civitas BCO - Stantec

Collected by (print):  
Sam O'Boyle

Site/Facility ID #  
REM # **42673**

P.O. #  
AFE **250761**

Collected by (signature):  
*Sam O'Boyle*

Rush? (Lab MUST Be Notified)  
 Same Day  Five Day  
 Next Day  5 Day (Rad Only)  
 Two Day  10 Day (Rad Only)  
 Three Day  STD TAT

Quote #  
Major Minor **8520-154**

Immediately Packed on Ice N  Y

Date Results Needed

No. of  
Cntrs

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Full Table 915-1	Background Table 915-1	Analysis / Container / Preservative	Chain of Custody
BG01@6	G	SS	6	12.5.25	0800	2		X		
BG02@5	↓	↓	5	↓	0820	↓		↓		-01
BG03@4	↓	↓	4	↓	0830	↓		↓		-02
BG04@3	↓	↓	3	↓	0840	↓		↓		-03
BG05@3	↓	↓	3	↓	0850	↓		↓		-04
										-05

\* Matrix:  
SS - Soil AIR - Air F - Filter  
GW - Groundwater B - Bioassay  
WW - WasteWater  
DW - Drinking Water  
OT - Other

Remarks:

Samples returned via:  
 UPS  FedEx  Courier

Tracking #

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

SW

Sample Receipt Checklist  
 COC Seal Present/Intact:  NP  Y  N  
 COC Signed/Accurate:  Y  N  
 Bottles arrive intact:  Y  N  
 Correct bottles used:  Y  N  
 Sufficient volume sent:  Y  N  
 If Applicable  
 VOA Zero Headspace:  Y  N  
 Preservation Correct/Checked:  Y  N  
 RAD Screen <0.5 mR/hr:  Y  N

Relinquished by: (Signature)  
*Sam O'Boyle*

Date: 12.5.25  
Time: 13:00

Received by: (Signature)  
*[Signature]*

Trip Blank Received: Yes/No  
HCL/MeOH  
TBR

Relinquished by: (Signature)  
*[Signature]*

Date: 12-5-25  
Time: 18:00

Received by: (Signature)  
*SWA*

Temp: *11.8* °C  
Bottles Received: *10*

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

Received for lab by: (Signature)  
*[Signature]*

Date: 12/6/26  
Time: 11:00

Hold: \_\_\_\_\_  
Condition: NCF 10