



**RELEASE ASSESSMENT**

Location:

**Aristocrat Angus 13-10  
40.237674,-104.657340  
Weld County, Colorado**

September 9, 2024

Ensolum Project No. 09C2407030

Prepared for:

**Civitas, LLC  
650 Southgate Drive | Windsor, CO |  
80550 Attn: Mr. Jacob Evans**

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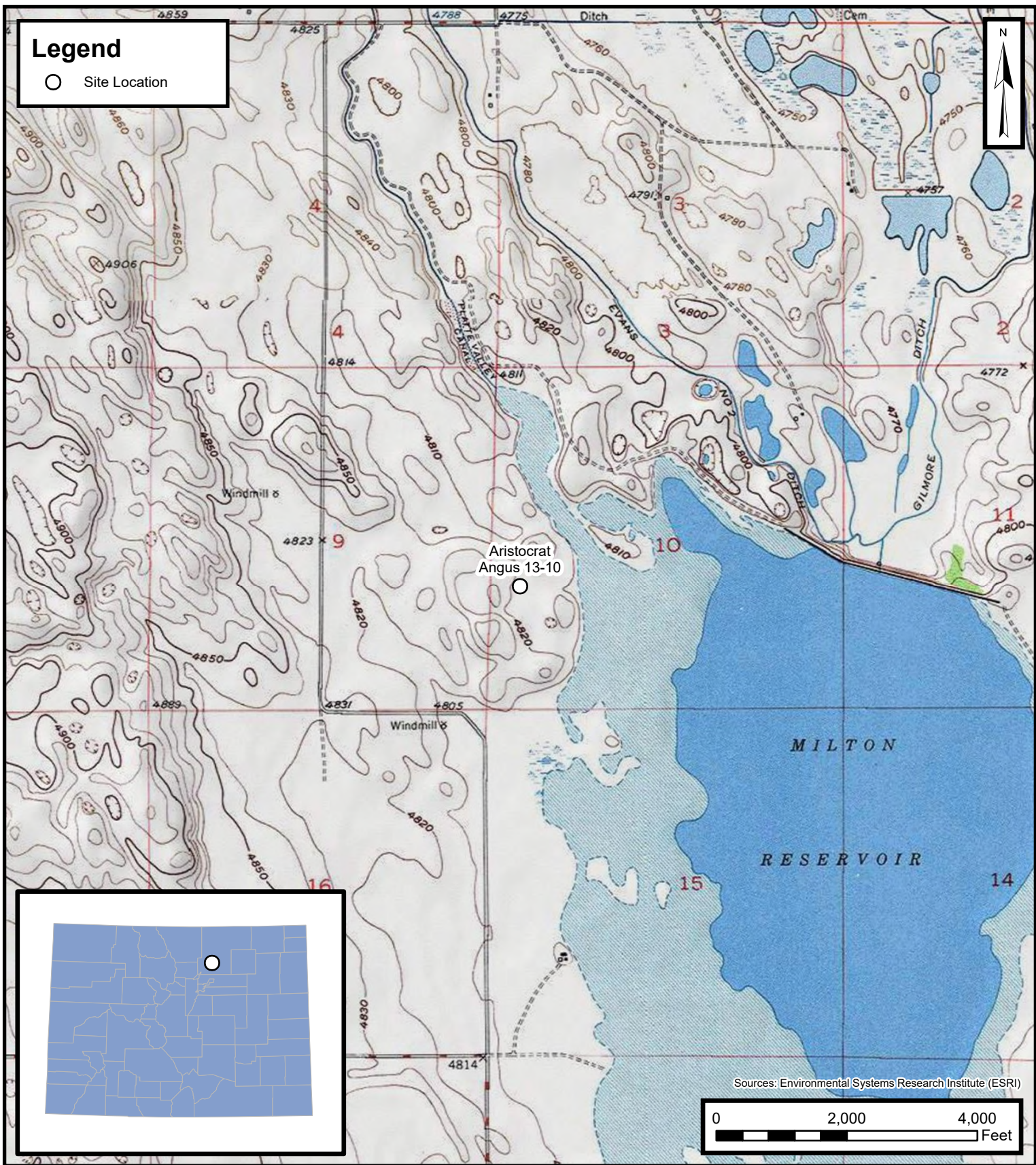
## **Appendix E: Laboratory Analytical Reports & Chain-of-Custody Documentation**

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## APPENDIX A

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## Site Location Map

Aristocrat Angus 13-10  
 CRESTONE PEAK RESOURCES OPERATING  
 NWSW Sec: 10 Twp: 3N Range: 65W  
 Weld County, Colorado

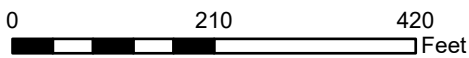
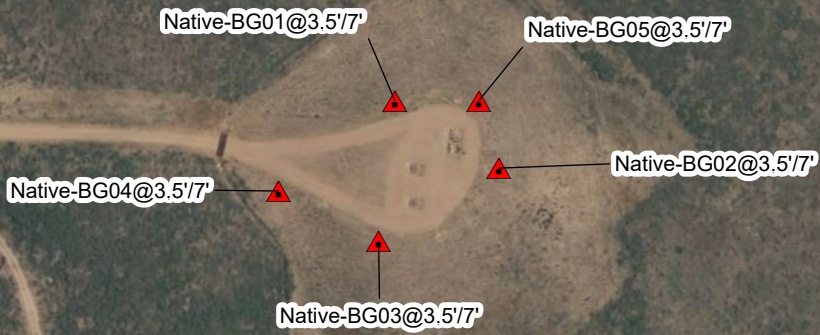
Project Number: 09C2407030

FIGURE

1

# Legend

▲ Background Soil Sample



Sources: Environmental Systems Research Institute (ESRI)

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## Background Sample Location Map

Aristocrat Angus 13-10  
CRESTONE PEAK RESOURCES OPERATING  
NWSW Sec: 10 Twp: 3N Range: 65W  
Weld County, Colorado  
Project Number: 09C2407030

FIGURE  
3

# Legend

-  Soil Sample Location - Field Screened (Collected via Trimble GPS)
-  Soil Sample Location - Exceeded ECMC Table 915-1 Soil Standards (Collected via Trimble GPS)
-  Excavation Extent

ECMC Table 915-1	
Soil Standards	
Compound	8/13/2023
1,2,4-TMB (mg/Kg)	0.0081
1,3,5-TMB (mg/Kg)	0.0087
Lead (mg/Kg)	14

Notes:  
 GPS = Global Positioning System  
 ECMC = Colorado Energy & Carbon Management Commission

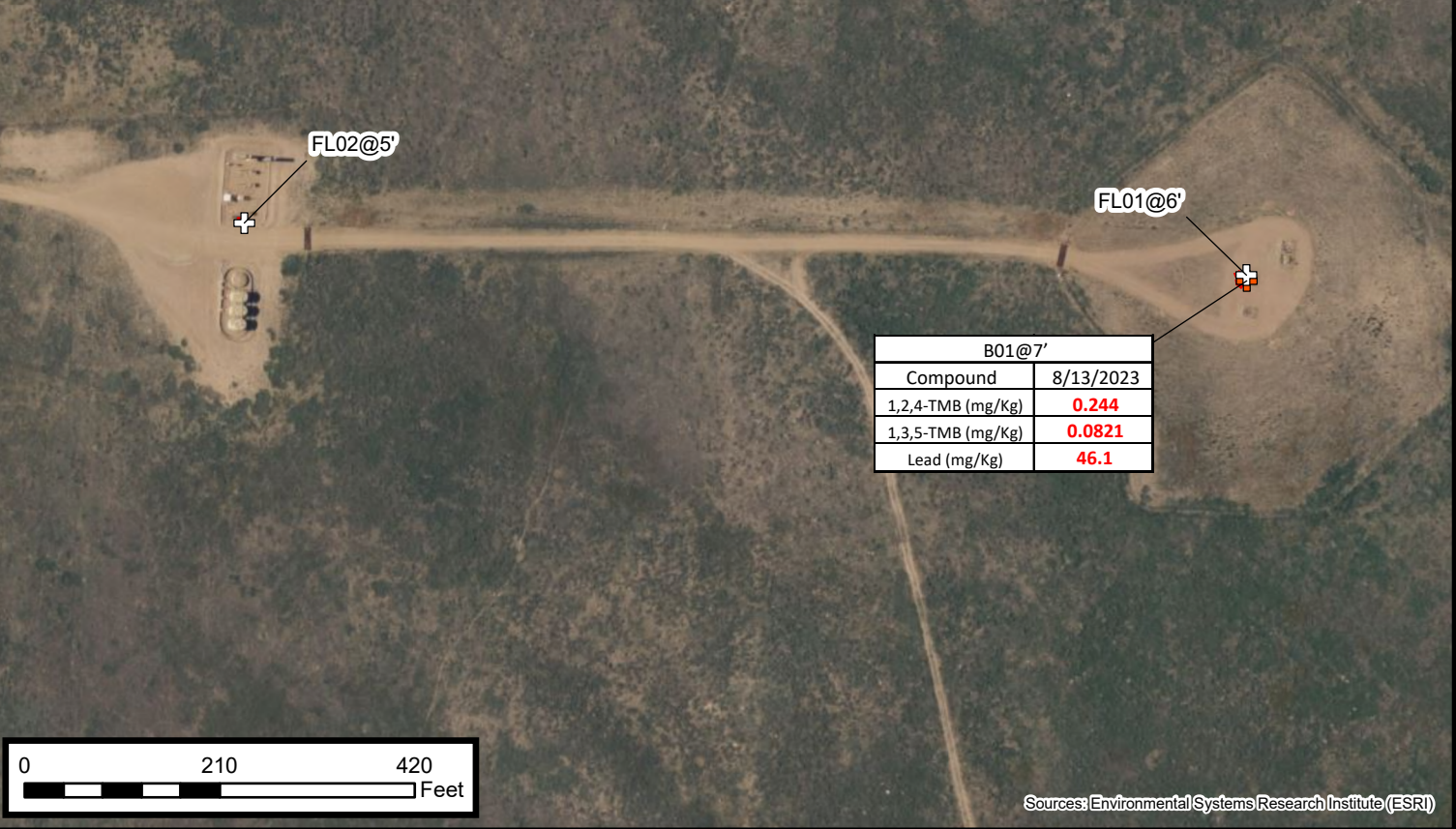
**BOLD** = Analytical result is in exceedance of ECMC Table 915-1 Residential Screening Level Concentrations

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1 Protection of Groundwater Soil Screening Level Concentrations

mg/kg – milligrams per kilograms



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Sources: Environmental Systems Research Institute (ESRI)



## Soil Sample Locations

Aristocrat Angus 13-10  
 CRESTONE PEAK RESOURCES OPERATING  
 NWSW Sec: 10 Twp: 3N Range: 65W  
 Weld County, Colorado  
 Project Number: 09C2407030

FIGURE  
**3**

## APPENDIX B

### Tables

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**TABLE 1**  
**SOIL ANALYTICAL RESULTS - VOCs**  
 Location: Aristocrat Angus 13-10  
 Operator: CRESTONE PEAK RESOURCES OPERATING  
 Weld County, Colorado  
 Ensolum Project No. 09C2407030

Soil Sample Location	Date	Depth (feet bgs)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Naphthalene (mg/Kg)	TVPH-GRO (mg/Kg)	TEPH-DRO (mg/Kg)	TEPH-ORO (mg/Kg)	1,2,4-TMB (mg/Kg)	1,3,5-TMB (mg/Kg)
<b>ECMC Organic Compounds in Soils (1)</b>			0.0026	0.69	0.78	9.9	0.0038	500			0.0081	0.0087
<b>ECMC Organic Compounds in Soils (2)</b>			1.2	490	5.8	58	2	7			30	27
<b>Soil Samples</b>												
<b>B01@7'</b>	8/13/2024	7	0.000675	0.00802	0.0206	0.185	<0.00408	10.4	22.5	61.3	<b>0.244</b>	<b>0.0821</b>
<b>FL01@6'</b>	8/13/2024	6	<0.000467	<0.00130	<0.000737	<0.000880	<0.00408	83.3	2.65	5.50	<0.00158	<0.00200
<b>FL02@5'</b>	8/13/2024	5	<0.000467	<0.00130	<0.000737	<0.000880	<0.00408	0.0253	<16.1	115	<0.00158	<0.00200

Notes:  
 VOCs = Volatile Organic Compounds  
 (1)Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations (Effective January 15, 2021)  
 (2)Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations (Effective January 15, 2021)  
 ECMC = Colorado Energy and Carbon Management Commission  
 (<) = Analytical result is less than the indicated laboratory reporting limit  
 mg/kg = milligrams per kilogram  
 TVPH - GRO = Total Volatile Petroleum Hydrocarbons - Gasoline Range Organics

**TABLE 2**

**SOIL ANALYTICAL RESULTS - PAHs**

Location: Aristocrat Angus 13-10

Operator: CRESTONE PEAK RESOURCES OPERATING

Weld County, Colorado

Ensolum Project No. 09C2407030

Soil Sample Location	Date	Depth (feet bgs)	Acenaphthene (mg/Kg)	Anthracene (mg/Kg)	Benzo(a)A (mg/Kg)	Benzo(b)F (mg/Kg)	Benzo(k)F (mg/Kg)	Benzo(a)P (mg/Kg)	Chrysene (mg/Kg)	D (a,h) A (mg/Kg)	Fluoranthene (mg/Kg)	Fluorene (mg/Kg)	1,2,3-CD (mg/kg)	1-M (mg/kg)	2-M (mg/kg)	Pyrene (mg/kg)
ECMC Organic Compounds in Soils (1)			0.55	5.8	0.011	0.3	2.9	0.24	9	0.96	8.9	0.54	0.98	0.006	0.019	1.3
ECMC Organic Compounds in Soils (2)			360	1,800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180
<b>Soil Samples</b>																
<b>B01@7'</b>	8/13/2024	7	<0.00209	<0.00230	<0.00173	<0.00153	<0.00215	<0.00179	<0.00232	<0.00172	<0.00227	<0.00205	<0.00181	<0.00449	0.00494	<0.00200
<b>FL01@6'</b>	8/13/2024	6	<0.00209	<0.00230	<0.00173	<0.00153	<0.00215	<0.00179	<0.00232	<0.00172	<0.00227	<0.00205	<0.00181	<0.00449	<0.00427	<0.00200
<b>FL02@5'</b>	8/13/2024	5	<0.00209	<0.00230	<0.00173	0.00187	<0.00215	<0.00179	<0.00232	<0.00172	<0.00227	<0.00205	<0.00181	<0.00449	<0.00427	<0.00200

Notes:

PAHs = Polycyclic Aromatic Hydrocarbons

(1) Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations (Effective January 15, 2021)

(2) Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations (Effective January 15, 2021)

ECMC = Colorado Energy and Carbon Management Commission

(<) = Analytical result is less than the indicated laboratory reporting limit

mg/kg = milligrams per kilogram

Benzo(a)A = Benzo(a)Anthracene

Benzo(b)F = Benzo(b)Fluoranthene

Benzo(k)F = Benzo(k)Fluoranthene

Benzo(a)P = Benzo(a)Pyrene

D (a,h) A = Dibenz(a,h)Anthracene

1,2,3-CD = Indeno(1,2,3-cd)Pyrene

1-M = 1-Methylnaphthalene

2-M = 2-Methylnaphthalene

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations

**TABLE 3**  
**SOIL ANALYTICAL RESULTS - Metals**  
 Location: Aristocrat Angus 13-10  
 Operator: CRESTONE PEAK RESOURCES OPERATING  
 Weld County, Colorado  
 Ensolum Project No. 09C2407030

Soil Sample Location	Date	Depth (feet bgs)	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (VI) (mg/Kg)	Copper (mg/Kg)	Lead (mg/Kg)	Nickel (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Zinc (mg/Kg)
ECMC Organic Compounds in Soils (1)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
ECMC Organic Compounds in Soils (2)			0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000
<b>Soil Samples</b>												
<b>B01@7'</b>	8/13/2024	7	0.813	47.6	0.150	<0.300	14.1	<b>46.1</b>	3.61	0.836	0.210	52.0
<b>FL01@6'</b>	8/13/2024	6	0.955	35.8	0.110	<0.300	2.83	6.81	2.20	<0.764	0.160	13.0
<b>FL02@5'</b>	8/13/2024	5	1.18	43.8	0.0526	<0.300	3.67	6.62	4.07	<0.764	0.204	19.9
<b>Background Samples</b>												
<b>NATIVE-BG01@3.5'</b>	8/13/2024	3.5	0.952	38.1	0.142	<0.300	2.43	6.97	2.42	<0.764	0.211	16.1
<b>NATIVE-BG01@7'</b>	8/13/2024	7	0.863	31.1	0.0479	<0.300	1.68	3.77	2.02	0.863	0.177	9.69
<b>NATIVE-BG02@3.5'</b>	8/13/2024	3.5	0.706	34.8	0.0523	<0.300	2.27	4.75	2.40	<0.764	0.196	12.7
<b>NATIVE-BG02@7'</b>	8/13/2024	7	0.811	35.1	<0.0471	<0.300	2.02	4.93	2.50	<0.764	0.230	11.8
<b>NATIVE-BG03@3.5'</b>	8/13/2024	3.5	0.782	38.0	<0.0471	<0.300	2.03	4.29	2.75	<0.764	<0.127	11.4
<b>NATIVE-BG03@7'</b>	8/13/2024	7	1.19	43.0	0.0581	<0.300	1.97	4.22	2.66	<0.764	0.158	11.9
<b>NATIVE-BG04@3.5'</b>	8/13/2024	3.5	0.897	34.6	<0.0471	<0.300	1.80	4.23	2.40	<0.764	0.131	11.5
<b>NATIVE-BG04@7'</b>	8/13/2024	7	0.758	33.2	<0.0471	<0.300	1.71	3.60	2.26	<0.764	0.212	10.6
<b>NATIVE-BG05@3.5'</b>	8/13/2024	3.5	1.08	35.3	<0.0471	<0.300	2.07	4.96	2.59	<0.764	0.164	12.1
<b>NATIVE-BG05@7'</b>	8/13/2024	7	0.831	38.0	<0.0471	<0.300	1.73	3.87	2.31	0.823	0.177	10.7
<b>Highest Background x1.25</b>			1.48	53.7	0.177	<0.300	3.03	8.71	3.43	1.07	0.265	20.1

Notes:

(1) Standards for soil are taken from ECMC Table 915-1: Metals in Soils - Protection of Groundwater Soil Screening Level Concentrations (Effective January 15, 2021)

(2) Standards for soil are taken from ECMC Table 915-1: Metals in Soils - Residential Soil Screening Level Concentrations (Effective January 15, 2021)

ECMC = Colorado Energy and Carbon Management Commission

(<) = Analytical result is less than the indicated laboratory minimum detection limit

mg/kg = milligrams per kilogram

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Metals in Soils - Protection of Groundwater Soil Screening Level Concentrations

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Metals in Soils - Residential Soil Screening Level Concentrations

Average background concentration x1.25

*Italics* = Laboratory minimum detection limit exceeds the ECMC Table 915-1 Standard

\* Result exceeded the ECMC Table 915-1 standard, but was within site-specific 1.25x background multiplier levels

**TABLE 4**  
**SOIL ANALYTICAL RESULTS - Soil Reclamation**  
 Location: Aristocrat Angus 13-10  
 Operator: CRESTONE PEAK RESOURCES OPERATING  
 Weld County, Colorado  
 Ensolum Project No. 09C2407030

Soil Sample Location	Date	Depth (feet bgs)	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
<b>ECMC Organic Compounds in Soils (1)</b>			<b>6 - 8.3</b>	<b>&lt;6</b>	<b>&lt;4</b>	<b>2</b>
<b>Soil Samples</b>						
<b>B01@7'</b>	8/13/2024	7	7.87	0.277	0.450	<0.200
<b>FL01@6'</b>	8/13/2024	6	7.41	0.156	0.143	<0.200
<b>FL02@5'</b>	8/13/2024	5	8.03	1.27	0.497	<0.200
<b>Background Samples</b>						
<b>NATIVE-BG01@3.5'</b>	8/13/2024	3.5	7.89	0.146	0.200	<0.200
<b>NATIVE-BG01@7'</b>	8/13/2024	7	7.52	0.377	0.121	<0.200
<b>NATIVE-BG02@3.5'</b>	8/13/2024	3.5	6.63	0.130	0.761	<0.200
<b>NATIVE-BG02@7'</b>	8/13/2024	7	7.19	0.424	0.122	<0.200
<b>NATIVE-BG03@3.5'</b>	8/13/2024	3.5	7.50	0.123	0.919	<0.200
<b>NATIVE-BG03@7'</b>	8/13/2024	7	2.98	0.215	0.563	<0.200
<b>NATIVE-BG04@3.5'</b>	8/13/2024	3.5	7.01	0.0933	0.980	<0.200
<b>NATIVE-BG04@7'</b>	8/13/2024	7	6.97	0.111	0.522	<0.200
<b>NATIVE-BG05@3.5'</b>	8/13/2024	3.5	7.16	0.208	0.217	<0.200
<b>NATIVE-BG05@7'</b>	8/13/2024	7	8.04	0.288	0.118	<0.200
Highest Background			8.04	0.424	0.980	<0.200

Notes:

(1) Standards for soil are taken from ECMC Table 915-1: Soil Suitability for Reclamation (Effective January 15, 2021)

ECMC = Colorado Energy and Carbon Management Commission

(<) = Analytical result is less than the indicated laboratory reporting limit

mmhos/cm = millimhos per centimeter

mg/L = milligrams per liter

pH = Potential of Hydrogen

SAR = Sodium Adsorption Ratio

EC = Electrical Conductivity

**BOLD = Analytical result is in exceedance of ECMC Table 915-1: Soil Suitability for Reclamation Concentrations**

Highest background concentration

\* Result exceeded the ECMC Table 915-1 standard, but was within site-specific background concentrations

APPENDIX C

Decommissioning Form

---

SITE NAME: Aristocrat Angus 13-10								DATE: 8/13/2024	REM. PROJECT #:	WEATHER: 84F, Sunny
SITE DIRECTIONS: W CO Rd 39 x Beebe Draw Farms Pkwy, East 1.9 mi., South 0.6 mi., East 0.6 mi. into								CLIENT: Civitas		
LEGALS AND LAT/LONG: 40.237674,-104.657340								ENSOLUM PERSONNEL: Maxwell Buffy, Fatima Smith		
SOIL TYPES: SP - Poorly Graded Sand								SURFACE GRADIENT:		
SURROUNDING LAND USE: Rangeland								CROP:		
SOIL SAMPLING								FACILITY INFRASTRUCTURE		
Date/Time	Soil Sample ID	PID (ppm)	Visual	Olfactory	Photo? (Y/N)	USCS	Lab (Y/N)	EQUIPMENT	Quantity	
								Above Ground Storage Tank (AST)		
8/13/2024 11:58	B01@7'	6.8	No Staining	Odor	Y	SP	Y	Produced Water Vessel (PWV)		
8/13/2024 12:06	N01@5'	0.0	No Staining	No Odor	Y	SP	N	Separator (SEP)		
8/13/2024 12:07	S01@5'	0.0	No Staining	No Odor	Y	SP	N	Emission Control Device (ECD)		
8/13/2024 12:08	E01@5'	0.0	No Staining	No Odor	Y	SP	N	Dump Line (DL)		
8/13/2024 12:09	W01@5'	0.0	No Staining	No Odor	Y	SP	N	Wellhead (WH)	1	
8/13/2024 11:56	FL01@6'	0.0	No Staining	No Odor	Y	SP	Y	Flowline (FL)	1	
8/13/2024 13:39	FL02@5'	0.0	No Staining	No Odor	Y	SP	Y	FL Method of Closure	Left in place	
8/13/2024 12:38	BG01@3.5'	1.0	No Staining	No Odor	Y	SP	Y	FL Footage Removed		
8/13/2024 12:39	BG01@7'	0.6	No Staining	No Odor	Y	SP	Y	Footaged Abandoned in Place		
8/13/2024 12:42	BG02@3.5'	0.0	No Staining	No Odor	Y	SP	Y	Other:		
								Soil Loads Removed		
8/13/2024 12:50	BG03@3.5'	0.0	No Staining	No Odor	Y	SP	Y	IMPACTED SOIL IDENTIFIED? No		
8/13/2024 12:54	BG03@7'	0.0	No Staining	No Odor	Y	SP	Y	ESTIMATED VOLUME OF IMPACTS:		
8/13/2024 13:00	BG04@3.5'	0.0	No Staining	No Odor	Y	SP	Y	Date	Number	CY
8/13/2024 13:02	BG04@7'	0.0	No Staining	No Odor	Y	SP	Y			
8/13/2024 13:10	BG05@3.5'	0.0	No Staining	No Odor	Y	SP	Y			
8/13/2024 13:15	BG05@7'	0.0	No Staining	No Odor	Y	SP	Y			
								Total Removed	0	0
								Disposal Facility:		
								Groundwater Recovery		
								DATE GW ENCOUNTERED: N/A	DEPTH:	
								GROUNDWATER IN CONTACT WITH IMPACTED SOIL?		
								LNAPL OR SHEEN OBSERVED ON GW?		
GROUNDWATER SAMPLING								Date	BBLS	
Date/Time	Groundwater Sample ID	Depth Collected	Turbid?	Sheen?	Odor?	Photo?				
								Total Removed	0	
								Disposal Facility:		

## APPENDIX D

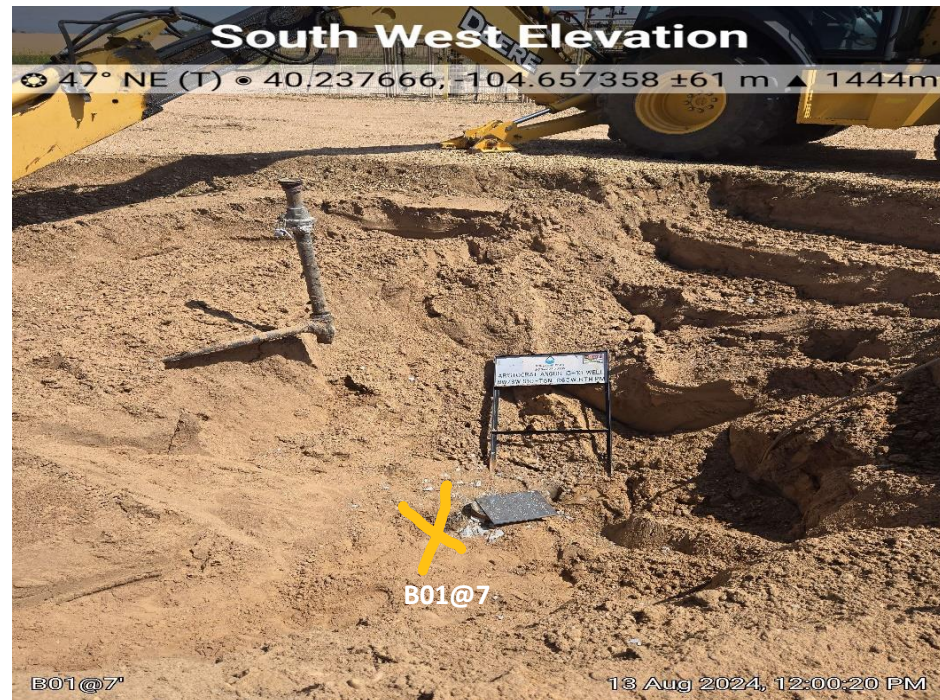
### Photo Log

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**Photographic Log**

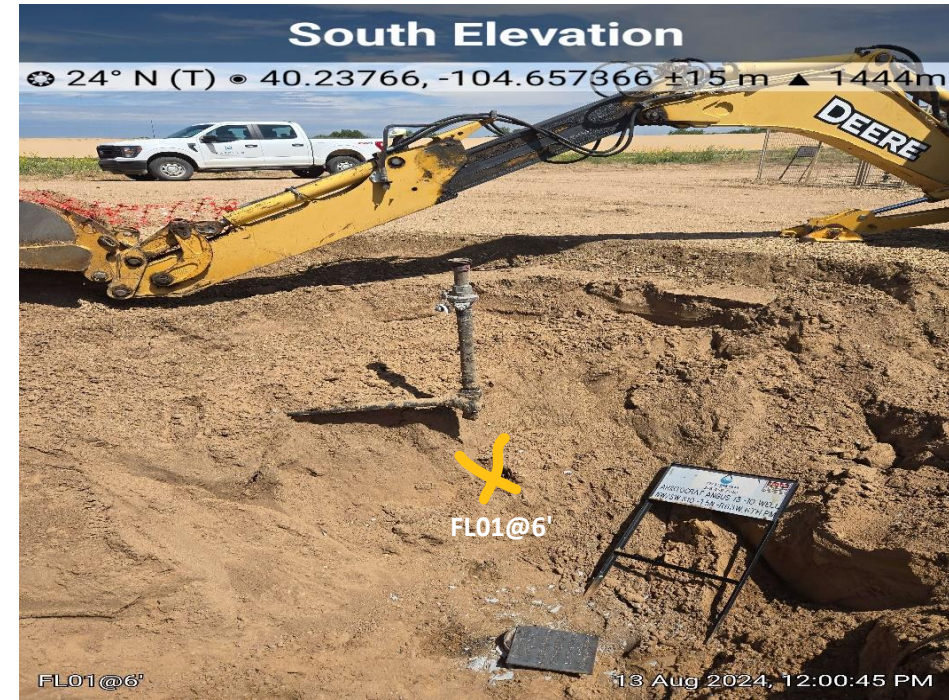
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Site Name: Aristocrat Angus 13-10



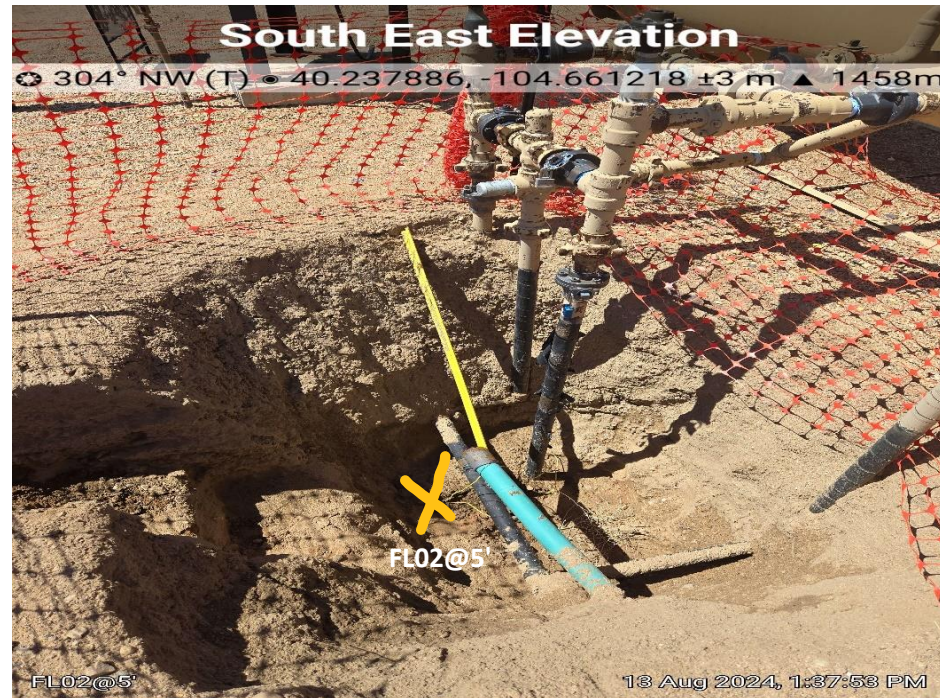
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Date: 8/13/2024



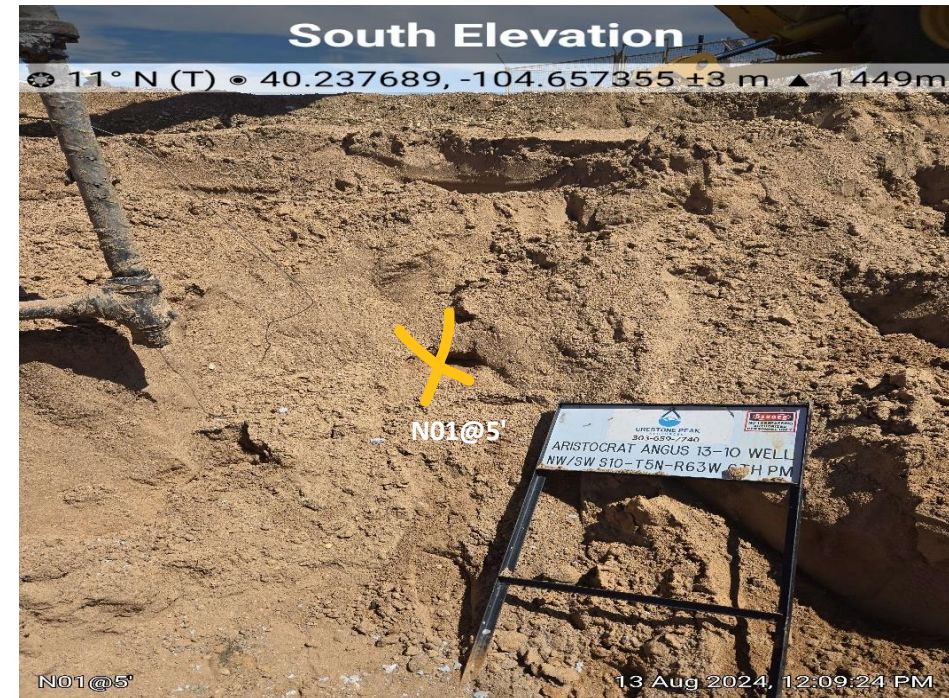
Photograph # 2

Date: 8/13/2024



Photograph # 3

Date: 8/13/2024



Photograph # 4

Date: 8/13/2024

**Photographic Log**

Operator: Crestone Peak Resources Operating

Site Name: Aristocrat Angus 13-10



Photograph # 5

Date: 8/13/2024



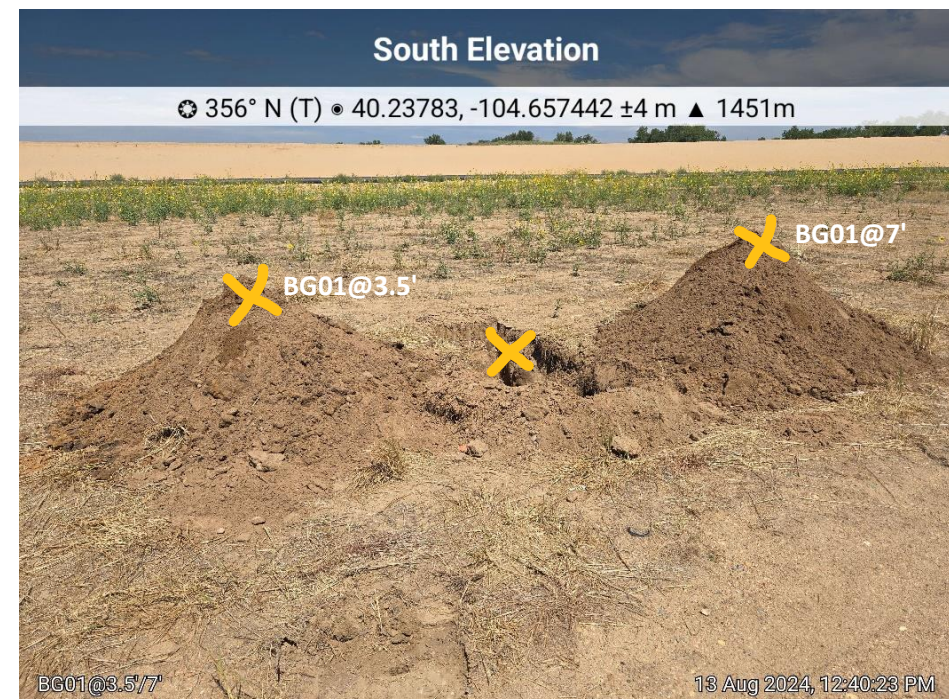
Photograph # 6

Date: 8/13/2024



Photograph # 7

Date: 8/13/2024



Photograph # 8

Date: 8/13/2024

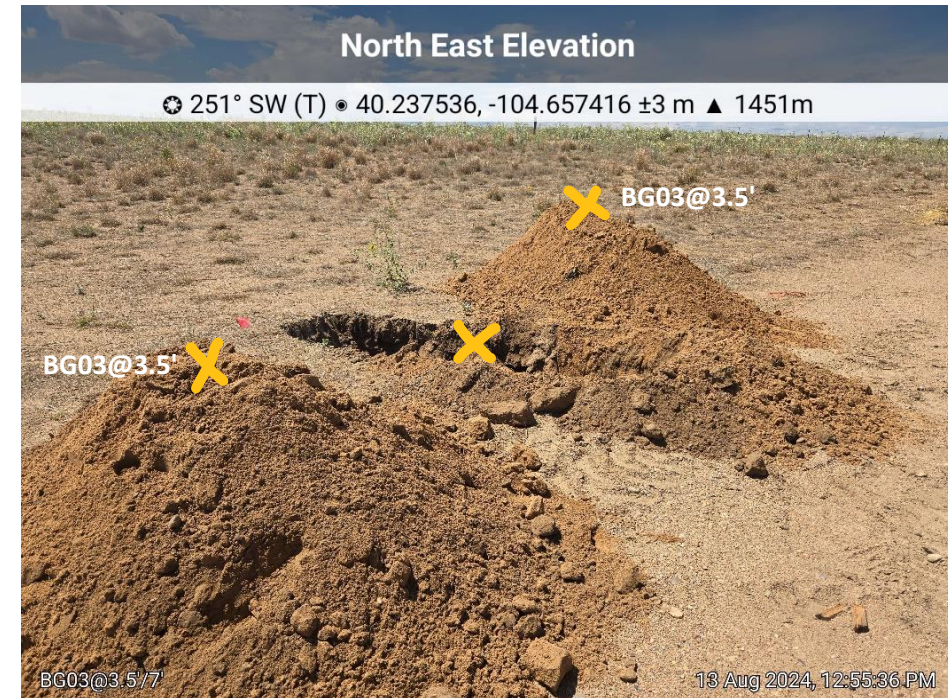
**Photographic Log**

Operator: Crestone Peak Resources Operating  
Site Name: Aristocrat Angus 13-10



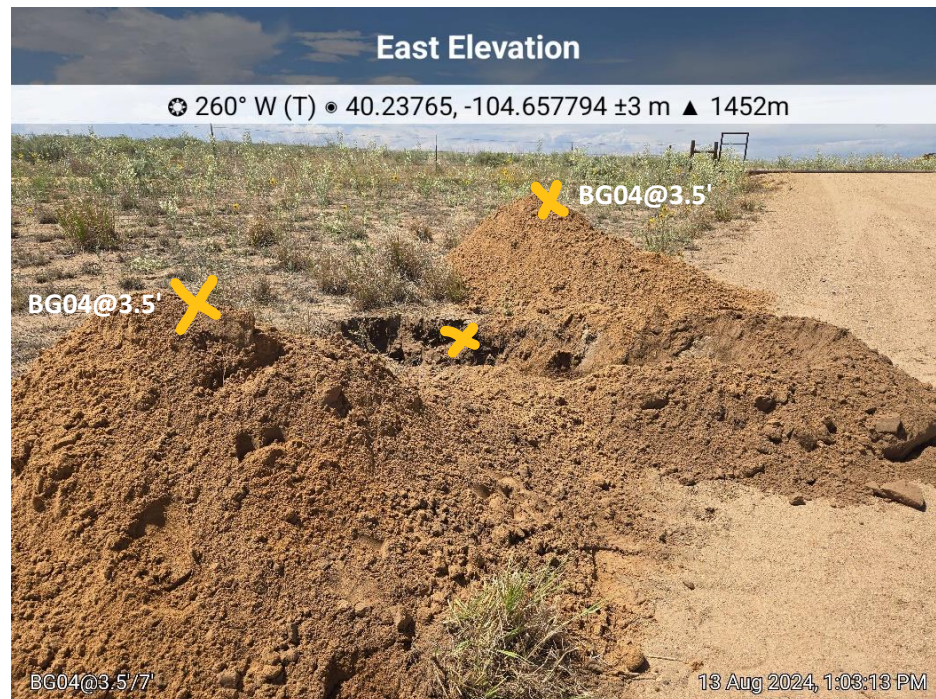
Photograph # 9

Date: 8/13/2024



Photograph # 10

Date: 8/13/2024



Photograph # 11

Date: 8/13/2024



Photograph # 12

Date: 8/13/2024

## APPENDIX E


### Laboratory Analytical Reports & Chain-of-Custody Documentation

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**Civitas - CO**

Sample Delivery Group: L1767380  
Samples Received: 08/14/2024  
Project Number:  
Description: Aristocrat Angus 13-10  
  
Report To: Jacob Evans  
6855 W. 118th Ave  
Broomfield, CO 80020

Entire Report Reviewed By:



Chris Ward  
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**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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<b>NATIVE BG02 @ 3.5' L1767380-03</b>	<b>9</b>
<b>NATIVE BG02 @ 7' L1767380-04</b>	<b>10</b>
<b>NATIVE BG03 @ 3.5' L1767380-05</b>	<b>11</b>
<b>NATIVE BG03 @ 7' L1767380-06</b>	<b>12</b>
<b>NATIVE BG04 @ 3.5' L1767380-07</b>	<b>13</b>
<b>NATIVE BG04 @ 7' L1767380-08</b>	<b>14</b>
<b>NATIVE BG05 @ 3.5' L1767380-09</b>	<b>15</b>
<b>NATIVE BG05 @ 7' L1767380-10</b>	<b>16</b>
<b>B01 @ 7' L1767380-11</b>	<b>17</b>
<b>FL01 @ 6' L1767380-12</b>	<b>19</b>
<b>FL02 @ 5' L1767380-13</b>	<b>21</b>
<b>Qc: Quality Control Summary</b>	<b>23</b>
<b>Wet Chemistry by Method 7199</b>	<b>23</b>
<b>Wet Chemistry by Method 9045D</b>	<b>26</b>
<b>Wet Chemistry by Method 9050AMod</b>	<b>28</b>
<b>Metals (ICP) by Method 6010B</b>	<b>30</b>
<b>Metals (ICP) by Method 6010B-NE493 Ch 2</b>	<b>32</b>
<b>Metals (ICPMS) by Method 6020</b>	<b>35</b>
<b>Volatile Organic Compounds (GC) by Method 8015D/GRO</b>	<b>37</b>
<b>Volatile Organic Compounds (GC/MS) by Method 8260B</b>	<b>39</b>
<b>Semi-Volatile Organic Compounds (GC) by Method 8015M</b>	<b>41</b>
<b>Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM</b>	<b>42</b>
<b>Gl: Glossary of Terms</b>	<b>44</b>
<b>Al: Accreditations &amp; Locations</b>	<b>45</b>
<b>Sc: Sample Chain of Custody</b>	<b>46</b>

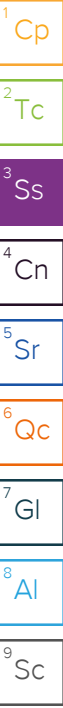
<sup>1</sup> Cp
<sup>2</sup> Tc
<sup>3</sup> Ss
<sup>4</sup> Cn
<sup>5</sup> Sr
<sup>6</sup> Qc
<sup>7</sup> Gl
<sup>8</sup> Al
<sup>9</sup> Sc

# SAMPLE SUMMARY

## NATIVE BG01 @ 3.5' L1767380-01 Solid

Collected by Max Buffy      Collected date/time 08/13/24 12:38      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:34	08/21/24 11:34	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344709	1	08/20/24 20:56	08/21/24 22:57	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 15:37	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350606	1	08/27/24 10:18	08/27/24 16:09	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353847	5	08/30/24 15:37	09/05/24 12:18	SJM	Mt. Juliet, TN



## NATIVE BG01 @ 7' L1767380-02 Solid

Collected by Max Buffy      Collected date/time 08/13/24 12:39      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:39	08/21/24 11:39	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344709	1	08/20/24 20:56	08/21/24 23:08	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 15:39	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350606	1	08/27/24 10:18	08/27/24 16:11	ZSA	Mt. Juliet, TN

## NATIVE BG02 @ 3.5' L1767380-03 Solid

Collected by Max Buffy      Collected date/time 08/13/24 12:42      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:40	08/21/24 11:40	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344709	1	08/20/24 20:56	08/21/24 23:18	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 15:35	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350606	1	08/27/24 10:18	08/27/24 16:12	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353847	5	08/30/24 15:37	09/05/24 12:42	SJM	Mt. Juliet, TN

## NATIVE BG02 @ 7' L1767380-04 Solid

Collected by Max Buffy      Collected date/time 08/13/24 12:45      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:42	08/21/24 11:42	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344709	1	08/20/24 20:56	08/21/24 23:29	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 15:45	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350606	1	08/27/24 10:18	08/27/24 16:14	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353847	5	08/30/24 15:37	09/05/24 12:45	SJM	Mt. Juliet, TN

## NATIVE BG03 @ 3.5' L1767380-05 Solid

Collected by Max Buffy      Collected date/time 08/13/24 12:50      Received date/time 08/14/24 09:00

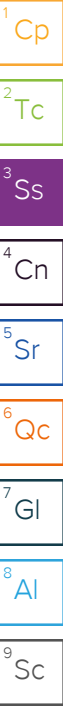
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:44	08/21/24 11:44	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344709	1	08/20/24 20:56	08/21/24 23:39	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345154	1	08/20/24 08:04	08/20/24 23:11	MAP	Mt. Juliet, TN

# SAMPLE SUMMARY

## NATIVE BG03 @ 3.5' L1767380-05 Solid

Collected by Max Buffy      Collected date/time 08/13/24 12:50      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350606	1	08/27/24 10:18	08/27/24 16:19	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2355662	5	09/06/24 14:05	09/06/24 23:46	JPD	Mt. Juliet, TN



## NATIVE BG03 @ 7' L1767380-06 Solid

Collected by Max Buffy      Collected date/time 08/13/24 12:54      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346281	1	08/21/24 02:00	08/21/24 02:00	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344713	1	08/20/24 20:55	08/21/24 14:48	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347265	1	08/21/24 09:23	08/21/24 10:14	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347269	1	08/21/24 09:22	08/21/24 12:00	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 15:47	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2346285	5	08/20/24 11:58	08/20/24 20:26	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353847	5	08/30/24 15:37	09/05/24 12:48	SJM	Mt. Juliet, TN

## NATIVE BG04 @ 3.5' L1767380-07 Solid

Collected by Max Buffy      Collected date/time 08/13/24 13:00      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:45	08/21/24 11:45	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344713	1	08/20/24 20:55	08/21/24 14:58	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 15:49	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350606	1	08/27/24 10:18	08/27/24 16:21	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353847	5	08/30/24 15:37	09/05/24 12:52	SJM	Mt. Juliet, TN

## NATIVE BG04 @ 7' L1767380-08 Solid

Collected by Max Buffy      Collected date/time 08/13/24 13:02      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:47	08/21/24 11:47	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344713	1	08/20/24 20:55	08/21/24 15:19	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 15:56	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350606	1	08/27/24 10:18	08/27/24 16:23	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353847	5	08/30/24 15:37	09/05/24 12:55	SJM	Mt. Juliet, TN

## NATIVE BG05 @ 3.5' L1767380-09 Solid

Collected by Max Buffy      Collected date/time 08/13/24 13:10      Received date/time 08/14/24 09:00

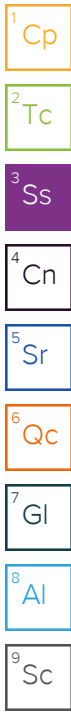
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:49	08/21/24 11:49	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344713	1	08/20/24 20:55	08/21/24 15:30	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 15:57	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350612	1	08/27/24 08:31	08/28/24 11:04	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353847	5	08/30/24 15:37	09/05/24 12:58	SJM	Mt. Juliet, TN

# SAMPLE SUMMARY

## NATIVE BG05 @ 7' L1767380-10 Solid

Collected by Max Buffy      Collected date/time 08/13/24 13:15      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:50	08/21/24 11:50	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344713	1	08/20/24 20:55	08/21/24 15:40	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 15:59	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350612	1	08/27/24 08:31	08/28/24 11:06	DJS	Mt. Juliet, TN



## B01 @ 7' L1767380-11 Solid

Collected by Max Buffy      Collected date/time 08/13/24 11:58      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:52	08/21/24 11:52	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2349565	1	08/26/24 12:49	08/27/24 02:59	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 16:09	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350612	1	08/27/24 08:31	08/28/24 11:08	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2348044	25	08/16/24 11:52	08/22/24 19:50	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2346696	1	08/16/24 11:52	08/20/24 22:32	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2347788	1	08/22/24 07:42	08/23/24 05:19	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2347780	1	08/22/24 09:38	08/23/24 07:47	JRM	Mt. Juliet, TN

## FL01 @ 6' L1767380-12 Solid

Collected by Max Buffy      Collected date/time 08/13/24 11:56      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:54	08/21/24 11:54	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2349565	1	08/26/24 12:49	08/27/24 03:17	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 16:11	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350612	1	08/27/24 08:31	08/28/24 11:09	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353847	5	08/30/24 15:37	09/05/24 13:02	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2346152	1	08/16/24 11:52	08/20/24 03:19	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2345245	1	08/16/24 11:52	08/17/24 18:36	WHS	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2347788	1	08/22/24 07:42	08/23/24 10:48	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2347780	1	08/22/24 09:38	08/23/24 08:06	JRM	Mt. Juliet, TN

## FL02 @ 5' L1767380-13 Solid

Collected by Max Buffy      Collected date/time 08/13/24 13:39      Received date/time 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346275	1	08/21/24 11:59	08/21/24 11:59	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2349565	1	08/26/24 12:49	08/27/24 03:24	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347339	1	08/21/24 10:02	08/21/24 11:03	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347344	1	08/21/24 10:06	08/21/24 14:17	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2345150	1	08/20/24 07:18	08/20/24 16:12	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2350612	1	08/27/24 08:31	08/28/24 11:14	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353847	5	08/30/24 15:37	09/05/24 13:05	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2346152	1	08/16/24 11:52	08/20/24 03:54	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2345245	1	08/16/24 11:52	08/17/24 18:55	WHS	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2347788	10	08/22/24 07:42	08/23/24 08:48	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2347780	1	08/22/24 09:38	08/23/24 08:26	JRM	Mt. Juliet, TN

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. 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.

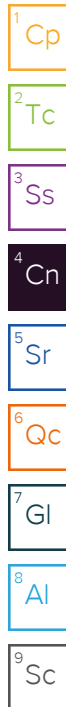


Chris Ward  
Project Manager

## Project Narrative

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The requested project specific reporting limits may be less than laboratory standard quantitation limits (PQL) but will be greater than or equal to the laboratory method detection limits (MDL). It is noted that results reported below lab standard quantitation limits (PQLs) may result in false positive/false negative values that may require additional laboratory quality assurance review, if requested. Routine laboratory procedures do not initiate a data review process for detections below the laboratory's PQL unless requested by the client.



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.146		1	08/21/2024 11:34	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 22:57	<a href="#">WG2344709</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.89	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-01 WG2347339: 7.89 at 21.5C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	200		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

L1767380-01 WG2347344: at 25C

Metals (ICP) by Method 6010B

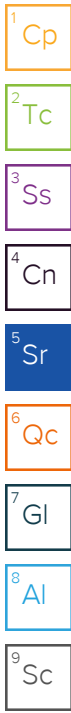
Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.952	<u>J</u>	0.518	1	08/20/2024 15:37	<a href="#">WG2345150</a>
Barium	38.1		0.400	1	08/20/2024 15:37	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 15:37	<a href="#">WG2345150</a>
Copper	2.43		0.400	1	08/20/2024 15:37	<a href="#">WG2345150</a>
Lead	6.97		0.208	1	08/20/2024 15:37	<a href="#">WG2345150</a>
Nickel	2.42		0.400	1	08/20/2024 15:37	<a href="#">WG2345150</a>
Selenium	ND		0.764	1	08/20/2024 15:37	<a href="#">WG2345150</a>
Silver	0.211	<u>B J</u>	0.127	1	08/20/2024 15:37	<a href="#">WG2345150</a>
Zinc	16.1		0.832	1	08/20/2024 15:37	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/27/2024 16:09	<a href="#">WG2350606</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.374	<u>J</u>	0.260	5	09/05/2024 12:18	<a href="#">WG2353847</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.377		1	08/21/2024 11:39	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 23:08	<a href="#">WG2344709</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.52	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-02 WG2347339: 7.52 at 21.5C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	121		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

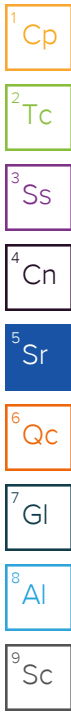
L1767380-02 WG2347344: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.863	<u>J</u>	0.518	1	08/20/2024 15:39	<a href="#">WG2345150</a>
Barium	31.1		0.400	1	08/20/2024 15:39	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 15:39	<a href="#">WG2345150</a>
Copper	1.68	<u>J</u>	0.400	1	08/20/2024 15:39	<a href="#">WG2345150</a>
Lead	3.77		0.208	1	08/20/2024 15:39	<a href="#">WG2345150</a>
Nickel	2.02		0.400	1	08/20/2024 15:39	<a href="#">WG2345150</a>
Selenium	0.863	<u>J</u>	0.764	1	08/20/2024 15:39	<a href="#">WG2345150</a>
Silver	0.177	<u>B J</u>	0.127	1	08/20/2024 15:39	<a href="#">WG2345150</a>
Zinc	9.69		0.832	1	08/20/2024 15:39	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/27/2024 16:11	<a href="#">WG2350606</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.130		1	08/21/2024 11:40	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 23:18	<a href="#">WG2344709</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	6.63	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-03 WG2347339: 6.63 at 21C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	76.1		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

L1767380-03 WG2347344: at 25C

Metals (ICP) by Method 6010B

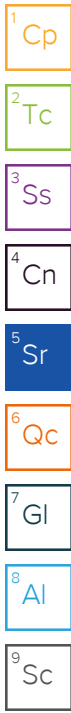
Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.706	<u>J</u>	0.518	1	08/20/2024 15:35	<a href="#">WG2345150</a>
Barium	34.8		0.400	1	08/20/2024 15:35	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 15:35	<a href="#">WG2345150</a>
Copper	2.27		0.400	1	08/20/2024 15:35	<a href="#">WG2345150</a>
Lead	4.75		0.208	1	08/20/2024 15:35	<a href="#">WG2345150</a>
Nickel	2.40		0.400	1	08/20/2024 15:35	<a href="#">WG2345150</a>
Selenium	ND		0.764	1	08/20/2024 15:35	<a href="#">WG2345150</a>
Silver	0.196	<u>B J</u>	0.127	1	08/20/2024 15:35	<a href="#">WG2345150</a>
Zinc	12.7		0.832	1	08/20/2024 15:35	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/27/2024 16:12	<a href="#">WG2350606</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.385	<u>J</u>	0.260	5	09/05/2024 12:42	<a href="#">WG2353847</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.424		1	08/21/2024 11:42	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 23:29	<a href="#">WG2344709</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.19	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-04 WG2347339: 7.19 at 21C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	122		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

L1767380-04 WG2347344: at 25C

Metals (ICP) by Method 6010B

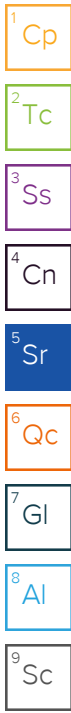
Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.811	<u>J</u>	0.518	1	08/20/2024 15:45	<a href="#">WG2345150</a>
Barium	35.1		0.400	1	08/20/2024 15:45	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 15:45	<a href="#">WG2345150</a>
Copper	2.02		0.400	1	08/20/2024 15:45	<a href="#">WG2345150</a>
Lead	4.93		0.208	1	08/20/2024 15:45	<a href="#">WG2345150</a>
Nickel	2.50		0.400	1	08/20/2024 15:45	<a href="#">WG2345150</a>
Selenium	ND		0.764	1	08/20/2024 15:45	<a href="#">WG2345150</a>
Silver	0.230	<u>B J</u>	0.127	1	08/20/2024 15:45	<a href="#">WG2345150</a>
Zinc	11.8		0.832	1	08/20/2024 15:45	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/27/2024 16:14	<a href="#">WG2350606</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.427	<u>J</u>	0.260	5	09/05/2024 12:45	<a href="#">WG2353847</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.123		1	08/21/2024 11:44	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 23:39	<a href="#">WG2344709</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.50	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-05 WG2347339: 7.5 at 21.1C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	91.9		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

L1767380-05 WG2347344: at 25C

Metals (ICP) by Method 6010B

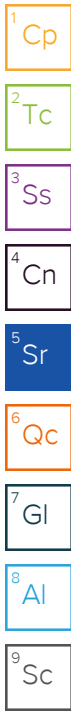
Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.782	<u>J</u>	0.518	1	08/20/2024 23:11	<a href="#">WG2345154</a>
Barium	38.0	<u>O1</u>	0.400	1	08/20/2024 23:11	<a href="#">WG2345154</a>
Cadmium	ND		0.200	1	08/20/2024 23:11	<a href="#">WG2345154</a>
Copper	2.03		0.400	1	08/20/2024 23:11	<a href="#">WG2345154</a>
Lead	4.29		0.208	1	08/20/2024 23:11	<a href="#">WG2345154</a>
Nickel	2.75		0.400	1	08/20/2024 23:11	<a href="#">WG2345154</a>
Selenium	ND		0.764	1	08/20/2024 23:11	<a href="#">WG2345154</a>
Silver	ND		0.127	1	08/20/2024 23:11	<a href="#">WG2345154</a>
Zinc	11.4		0.832	1	08/20/2024 23:11	<a href="#">WG2345154</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/27/2024 16:19	<a href="#">WG2350606</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	ND		0.260	5	09/06/2024 23:46	<a href="#">WG2355662</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.215		1	08/21/2024 02:00	WG2346281

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 14:48	<a href="#">WG2344713</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	2.98	<u>T8</u>	1	08/21/2024 10:14	<a href="#">WG2347265</a>

Sample Narrative:

L1767380-06 WG2347265: 2.98 at 21.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	563		10.0	1	08/21/2024 12:00	<a href="#">WG2347269</a>

Sample Narrative:

L1767380-06 WG2347269: at 25C

Metals (ICP) by Method 6010B

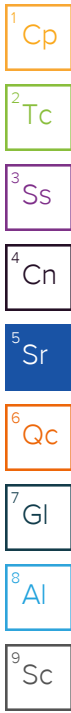
Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.19	<u>J</u>	0.518	1	08/20/2024 15:47	<a href="#">WG2345150</a>
Barium	43.0		0.400	1	08/20/2024 15:47	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 15:47	<a href="#">WG2345150</a>
Copper	1.97	<u>J</u>	0.400	1	08/20/2024 15:47	<a href="#">WG2345150</a>
Lead	4.22		0.208	1	08/20/2024 15:47	<a href="#">WG2345150</a>
Nickel	2.66		0.400	1	08/20/2024 15:47	<a href="#">WG2345150</a>
Selenium	ND		0.764	1	08/20/2024 15:47	<a href="#">WG2345150</a>
Silver	0.158	<u>B J</u>	0.127	1	08/20/2024 15:47	<a href="#">WG2345150</a>
Zinc	11.9		0.832	1	08/20/2024 15:47	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	5	08/20/2024 20:26	<a href="#">WG2346285</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.295	<u>J</u>	0.260	5	09/05/2024 12:48	<a href="#">WG2353847</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.0933		1	08/21/2024 11:45	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 14:58	<a href="#">WG2344713</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.01	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-07 WG2347339: 7.01 at 21C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	98.0		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

L1767380-07 WG2347344: at 25C

Metals (ICP) by Method 6010B

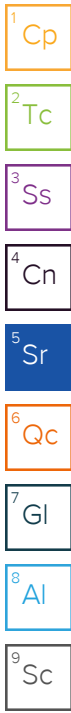
Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.897	<u>J</u>	0.518	1	08/20/2024 15:49	<a href="#">WG2345150</a>
Barium	34.6		0.400	1	08/20/2024 15:49	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 15:49	<a href="#">WG2345150</a>
Copper	1.80	<u>J</u>	0.400	1	08/20/2024 15:49	<a href="#">WG2345150</a>
Lead	4.23		0.208	1	08/20/2024 15:49	<a href="#">WG2345150</a>
Nickel	2.40		0.400	1	08/20/2024 15:49	<a href="#">WG2345150</a>
Selenium	ND		0.764	1	08/20/2024 15:49	<a href="#">WG2345150</a>
Silver	0.131	<u>B J</u>	0.127	1	08/20/2024 15:49	<a href="#">WG2345150</a>
Zinc	11.5		0.832	1	08/20/2024 15:49	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/27/2024 16:21	<a href="#">WG2350606</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.386	<u>J</u>	0.260	5	09/05/2024 12:52	<a href="#">WG2353847</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.111		1	08/21/2024 11:47	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 15:19	<a href="#">WG2344713</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	6.97	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-08 WG2347339: 6.97 at 20.5C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	52.2		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

L1767380-08 WG2347344: at 25C

Metals (ICP) by Method 6010B

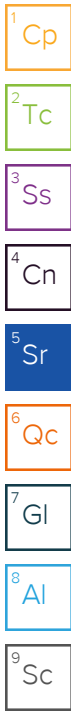
Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.758	<u>J</u>	0.518	1	08/20/2024 15:56	<a href="#">WG2345150</a>
Barium	33.2		0.400	1	08/20/2024 15:56	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 15:56	<a href="#">WG2345150</a>
Copper	1.71	<u>J</u>	0.400	1	08/20/2024 15:56	<a href="#">WG2345150</a>
Lead	3.60		0.208	1	08/20/2024 15:56	<a href="#">WG2345150</a>
Nickel	2.26		0.400	1	08/20/2024 15:56	<a href="#">WG2345150</a>
Selenium	ND		0.764	1	08/20/2024 15:56	<a href="#">WG2345150</a>
Silver	0.212	<u>B J</u>	0.127	1	08/20/2024 15:56	<a href="#">WG2345150</a>
Zinc	10.6		0.832	1	08/20/2024 15:56	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/27/2024 16:23	<a href="#">WG2350606</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.435	<u>J</u>	0.260	5	09/05/2024 12:55	<a href="#">WG2353847</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.208		1	08/21/2024 11:49	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 15:30	<a href="#">WG2344713</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.16	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-09 WG2347339: 7.16 at 20.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	217		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

L1767380-09 WG2347344: at 25C

Metals (ICP) by Method 6010B

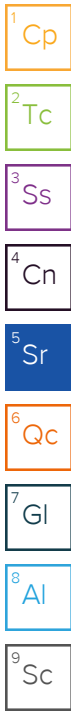
Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.08	<u>J</u>	0.518	1	08/20/2024 15:57	<a href="#">WG2345150</a>
Barium	35.3		0.400	1	08/20/2024 15:57	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 15:57	<a href="#">WG2345150</a>
Copper	2.07		0.400	1	08/20/2024 15:57	<a href="#">WG2345150</a>
Lead	4.96		0.208	1	08/20/2024 15:57	<a href="#">WG2345150</a>
Nickel	2.59		0.400	1	08/20/2024 15:57	<a href="#">WG2345150</a>
Selenium	ND		0.764	1	08/20/2024 15:57	<a href="#">WG2345150</a>
Silver	0.164	<u>B J</u>	0.127	1	08/20/2024 15:57	<a href="#">WG2345150</a>
Zinc	12.1		0.832	1	08/20/2024 15:57	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/28/2024 11:04	<a href="#">WG2350612</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.322	<u>J</u>	0.260	5	09/05/2024 12:58	<a href="#">WG2353847</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.288		1	08/21/2024 11:50	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 15:40	<a href="#">WG2344713</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.04	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-10 WG2347339: 8.04 at 20.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	118		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

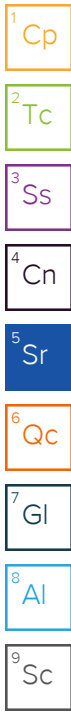
L1767380-10 WG2347344: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.831	<u>J</u>	0.518	1	08/20/2024 15:59	<a href="#">WG2345150</a>
Barium	38.0		0.400	1	08/20/2024 15:59	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 15:59	<a href="#">WG2345150</a>
Copper	1.73	<u>J</u>	0.400	1	08/20/2024 15:59	<a href="#">WG2345150</a>
Lead	3.87		0.208	1	08/20/2024 15:59	<a href="#">WG2345150</a>
Nickel	2.31		0.400	1	08/20/2024 15:59	<a href="#">WG2345150</a>
Selenium	0.823	<u>J</u>	0.764	1	08/20/2024 15:59	<a href="#">WG2345150</a>
Silver	0.177	<u>B J</u>	0.127	1	08/20/2024 15:59	<a href="#">WG2345150</a>
Zinc	10.7		0.832	1	08/20/2024 15:59	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/28/2024 11:06	<a href="#">WG2350612</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.277		1	08/21/2024 11:52	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/27/2024 02:59	<a href="#">WG2349565</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.87	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-11 WG2347339: 7.87 at 20.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	450		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

L1767380-11 WG2347344: at 25C

Metals (ICP) by Method 6010B

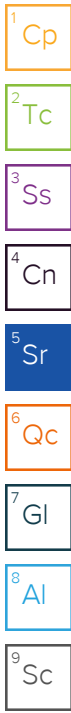
Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.813	<u>J</u>	0.518	1	08/20/2024 16:09	<a href="#">WG2345150</a>
Barium	47.6		0.400	1	08/20/2024 16:09	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 16:09	<a href="#">WG2345150</a>
Copper	14.1		0.400	1	08/20/2024 16:09	<a href="#">WG2345150</a>
Lead	46.1		0.208	1	08/20/2024 16:09	<a href="#">WG2345150</a>
Nickel	3.61		0.400	1	08/20/2024 16:09	<a href="#">WG2345150</a>
Selenium	0.836	<u>J</u>	0.764	1	08/20/2024 16:09	<a href="#">WG2345150</a>
Silver	0.210	<u>B J</u>	0.127	1	08/20/2024 16:09	<a href="#">WG2345150</a>
Zinc	52.0		0.832	1	08/20/2024 16:09	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/28/2024 11:08	<a href="#">WG2350612</a>

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	10.4		0.543	25	08/22/2024 19:50	<a href="#">WG2348044</a>
(S) a,a,a-Trifluorotoluene(FID)	106			77.0-120	08/22/2024 19:50	<a href="#">WG2348044</a>



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00200	1	08/20/2024 22:32	<a href="#">WG2346696</a>
Toluene	0.00802		0.00500	1	08/20/2024 22:32	<a href="#">WG2346696</a>
Ethylbenzene	0.0206		0.00500	1	08/20/2024 22:32	<a href="#">WG2346696</a>
Xylenes, Total	0.185		0.0100	1	08/20/2024 22:32	<a href="#">WG2346696</a>
1,2,4-Trimethylbenzene	0.244		0.00500	1	08/20/2024 22:32	<a href="#">WG2346696</a>
1,3,5-Trimethylbenzene	0.0821		0.00500	1	08/20/2024 22:32	<a href="#">WG2346696</a>
(S) Toluene-d8	104			75.0-131	08/20/2024 22:32	<a href="#">WG2346696</a>
(S) 4-Bromofluorobenzene	105			67.0-138	08/20/2024 22:32	<a href="#">WG2346696</a>
(S) 1,2-Dichloroethane-d4	98.8			70.0-130	08/20/2024 22:32	<a href="#">WG2346696</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		50.0	1	08/23/2024 05:19	<a href="#">WG2347788</a>
C28-C36 Motor Oil Range	61.3		50.0	1	08/23/2024 05:19	<a href="#">WG2347788</a>
(S) o-Terphenyl	56.1			18.0-148	08/23/2024 05:19	<a href="#">WG2347788</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Anthracene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Benzo(a)anthracene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Benzo(b)fluoranthene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Benzo(k)fluoranthene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Benzo(a)pyrene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Chrysene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Dibenz(a,h)anthracene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Fluoranthene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Fluorene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Indeno(1,2,3-cd)pyrene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
1-Methylnaphthalene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
2-Methylnaphthalene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Naphthalene	ND		0.00408	1	08/23/2024 07:47	<a href="#">WG2347780</a>
Pyrene	ND		0.00500	1	08/23/2024 07:47	<a href="#">WG2347780</a>
(S) p-Terphenyl-d14	82.4			23.0-120	08/23/2024 07:47	<a href="#">WG2347780</a>
(S) Nitrobenzene-d5	95.8			14.0-149	08/23/2024 07:47	<a href="#">WG2347780</a>
(S) 2-Fluorobiphenyl	78.8			34.0-125	08/23/2024 07:47	<a href="#">WG2347780</a>

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.156		1	08/21/2024 11:54	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/27/2024 03:17	<a href="#">WG2349565</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.41	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-12 WG2347339: 7.41 at 19.9C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	143		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

L1767380-12 WG2347344: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.955	<u>J</u>	0.518	1	08/20/2024 16:11	<a href="#">WG2345150</a>
Barium	35.8		0.400	1	08/20/2024 16:11	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 16:11	<a href="#">WG2345150</a>
Copper	2.83		0.400	1	08/20/2024 16:11	<a href="#">WG2345150</a>
Lead	6.81		0.208	1	08/20/2024 16:11	<a href="#">WG2345150</a>
Nickel	2.20		0.400	1	08/20/2024 16:11	<a href="#">WG2345150</a>
Selenium	ND		0.764	1	08/20/2024 16:11	<a href="#">WG2345150</a>
Silver	0.160	<u>B J</u>	0.127	1	08/20/2024 16:11	<a href="#">WG2345150</a>
Zinc	13.0		0.832	1	08/20/2024 16:11	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

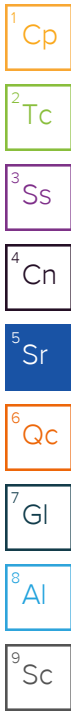
Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/28/2024 11:09	<a href="#">WG2350612</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.301	<u>J</u>	0.260	5	09/05/2024 13:02	<a href="#">WG2353847</a>

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.500	1	08/20/2024 03:19	<a href="#">WG2346152</a>
(S) a,a,a-Trifluorotoluene(FID)	83.3			77.0-120	08/20/2024 03:19	<a href="#">WG2346152</a>



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00200	1	08/17/2024 18:36	<a href="#">WG2345245</a>
Toluene	ND		0.00500	1	08/17/2024 18:36	<a href="#">WG2345245</a>
Ethylbenzene	ND		0.00500	1	08/17/2024 18:36	<a href="#">WG2345245</a>
Xylenes, Total	ND		0.0100	1	08/17/2024 18:36	<a href="#">WG2345245</a>
1,2,4-Trimethylbenzene	ND		0.00500	1	08/17/2024 18:36	<a href="#">WG2345245</a>
1,3,5-Trimethylbenzene	ND		0.00500	1	08/17/2024 18:36	<a href="#">WG2345245</a>
(S) Toluene-d8	104			75.0-131	08/17/2024 18:36	<a href="#">WG2345245</a>
(S) 4-Bromofluorobenzene	102			67.0-138	08/17/2024 18:36	<a href="#">WG2345245</a>
(S) 1,2-Dichloroethane-d4	80.4			70.0-130	08/17/2024 18:36	<a href="#">WG2345245</a>

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

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		50.0	1	08/23/2024 10:48	<a href="#">WG2347788</a>
C28-C36 Motor Oil Range	ND		50.0	1	08/23/2024 10:48	<a href="#">WG2347788</a>
(S) o-Terphenyl	58.8			18.0-148	08/23/2024 10:48	<a href="#">WG2347788</a>

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Anthracene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Benzo(a)anthracene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Benzo(b)fluoranthene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Benzo(k)fluoranthene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Benzo(a)pyrene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Chrysene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Dibenz(a,h)anthracene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Fluoranthene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Fluorene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Indeno(1,2,3-cd)pyrene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
1-Methylnaphthalene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
2-Methylnaphthalene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Naphthalene	ND		0.00408	1	08/23/2024 08:06	<a href="#">WG2347780</a>
Pyrene	ND		0.00500	1	08/23/2024 08:06	<a href="#">WG2347780</a>
(S) p-Terphenyl-d14	84.4			23.0-120	08/23/2024 08:06	<a href="#">WG2347780</a>
(S) Nitrobenzene-d5	99.5			14.0-149	08/23/2024 08:06	<a href="#">WG2347780</a>
(S) 2-Fluorobiphenyl	79.0			34.0-125	08/23/2024 08:06	<a href="#">WG2347780</a>

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.27		1	08/21/2024 11:59	WG2346275

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/27/2024 03:24	<a href="#">WG2349565</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.03	<u>T8</u>	1	08/21/2024 11:03	<a href="#">WG2347339</a>

Sample Narrative:

L1767380-13 WG2347339: 8.03 at 19.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	497		10.0	1	08/21/2024 14:17	<a href="#">WG2347344</a>

Sample Narrative:

L1767380-13 WG2347344: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.18	<u>J</u>	0.518	1	08/20/2024 16:12	<a href="#">WG2345150</a>
Barium	43.8		0.400	1	08/20/2024 16:12	<a href="#">WG2345150</a>
Cadmium	ND		0.200	1	08/20/2024 16:12	<a href="#">WG2345150</a>
Copper	3.67		0.400	1	08/20/2024 16:12	<a href="#">WG2345150</a>
Lead	6.62		0.208	1	08/20/2024 16:12	<a href="#">WG2345150</a>
Nickel	4.07		0.400	1	08/20/2024 16:12	<a href="#">WG2345150</a>
Selenium	ND		0.764	1	08/20/2024 16:12	<a href="#">WG2345150</a>
Silver	0.204	<u>B J</u>	0.127	1	08/20/2024 16:12	<a href="#">WG2345150</a>
Zinc	19.9		0.832	1	08/20/2024 16:12	<a href="#">WG2345150</a>

Metals (ICP) by Method 6010B-NE493 Ch 2

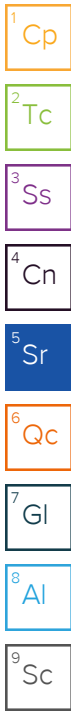
Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/28/2024 11:14	<a href="#">WG2350612</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.317	<u>J</u>	0.260	5	09/05/2024 13:05	<a href="#">WG2353847</a>

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.500	1	08/20/2024 03:54	<a href="#">WG2346152</a>
(S) a,a,a-Trifluorotoluene(FID)	81.9			77.0-120	08/20/2024 03:54	<a href="#">WG2346152</a>



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00200	1	08/17/2024 18:55	<a href="#">WG2345245</a>
Toluene	ND		0.00500	1	08/17/2024 18:55	<a href="#">WG2345245</a>
Ethylbenzene	ND		0.00500	1	08/17/2024 18:55	<a href="#">WG2345245</a>
Xylenes, Total	ND		0.0100	1	08/17/2024 18:55	<a href="#">WG2345245</a>
1,2,4-Trimethylbenzene	ND		0.00500	1	08/17/2024 18:55	<a href="#">WG2345245</a>
1,3,5-Trimethylbenzene	ND		0.00500	1	08/17/2024 18:55	<a href="#">WG2345245</a>
(S) Toluene-d8	104			75.0-131	08/17/2024 18:55	<a href="#">WG2345245</a>
(S) 4-Bromofluorobenzene	102			67.0-138	08/17/2024 18:55	<a href="#">WG2345245</a>
(S) 1,2-Dichloroethane-d4	91.1			70.0-130	08/17/2024 18:55	<a href="#">WG2345245</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		50.0	10	08/23/2024 08:48	<a href="#">WG2347788</a>
C28-C36 Motor Oil Range	115		50.0	10	08/23/2024 08:48	<a href="#">WG2347788</a>
(S) o-Terphenyl	58.4			18.0-148	08/23/2024 08:48	<a href="#">WG2347788</a>

6 Qc

7 Gl

8 Al

9 Sc

Sample Narrative:

L1767380-13 WG2347788: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Anthracene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Benzo(a)anthracene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Benzo(b)fluoranthene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Benzo(k)fluoranthene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Benzo(a)pyrene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Chrysene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Dibenz(a,h)anthracene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Fluoranthene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Fluorene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Indeno(1,2,3-cd)pyrene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
1-Methylnaphthalene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
2-Methylnaphthalene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Naphthalene	ND		0.00408	1	08/23/2024 08:26	<a href="#">WG2347780</a>
Pyrene	ND		0.00500	1	08/23/2024 08:26	<a href="#">WG2347780</a>
(S) p-Terphenyl-d14	65.9			23.0-120	08/23/2024 08:26	<a href="#">WG2347780</a>
(S) Nitrobenzene-d5	79.5			14.0-149	08/23/2024 08:26	<a href="#">WG2347780</a>
(S) 2-Fluorobiphenyl	62.5			34.0-125	08/23/2024 08:26	<a href="#">WG2347780</a>

Method Blank (MB)

(MB) R4110021-1 08/21/24 18:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	ND		0.255	1.00

<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

L1767357-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1767357-06 08/21/24 20:30 • (DUP) R4110021-7 08/21/24 20:41

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

L1767357-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1767357-15 08/21/24 22:36 • (DUP) R4110021-8 08/21/24 22:47

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

Laboratory Control Sample (LCS)

(LCS) R4110021-2 08/21/24 18:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	10.0	10.1	101	80.0-120	

L1767357-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767357-01 08/21/24 18:35 • (MS) R4110021-3 08/21/24 18:45 • (MSD) R4110021-4 08/21/24 18:56

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Hexavalent Chromium	20.0	ND	18.2	20.0	91.2	99.9	1	75.0-125			9.04	20

L1767357-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1767357-01 08/21/24 18:35 • (MS) R4110021-5 08/21/24 19:06

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	633	ND	683	108	50	75.0-125	

Method Blank (MB)

(MB) R4109829-1 08/21/24 10:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	ND		0.255	1.00

<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

L1767359-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1767359-05 08/21/24 12:21 • (DUP) R4109829-7 08/21/24 12:32

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

L1767380-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1767380-07 08/21/24 14:58 • (DUP) R4109829-8 08/21/24 15:09

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

Laboratory Control Sample (LCS)

(LCS) R4109829-2 08/21/24 10:26

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	10.0	9.49	94.9	80.0-120	

L1767359-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767359-04 08/21/24 11:08 • (MS) R4109829-3 08/21/24 11:18 • (MSD) R4109829-4 08/21/24 11:29

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Hexavalent Chromium	20.0	ND	18.8	19.4	94.1	97.2	1	75.0-125			3.23	20

L1767359-04 Original Sample (OS) • Matrix Spike (MS)

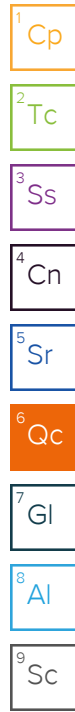
(OS) L1767359-04 08/21/24 11:08 • (MS) R4109829-5 08/21/24 11:39

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	638	ND	606	94.9	50	75.0-125	

Method Blank (MB)

(MB) R4111978-1 08/27/24 00:47

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	ND		0.255	1.00



L1767364-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1767364-11 08/27/24 01:39 • (DUP) R4111978-3 08/27/24 01:45

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

L1767773-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1767773-01 08/27/24 03:30 • (DUP) R4111978-8 08/27/24 03:36

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

Laboratory Control Sample (LCS)

(LCS) R4111978-2 08/27/24 00:55

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	10.0	9.66	96.6	80.0-120	

L1767364-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767364-15 08/27/24 02:22 • (MS) R4111978-4 08/27/24 02:28 • (MSD) R4111978-5 08/27/24 02:34

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Hexavalent Chromium	20.0	ND	20.0	20.1	99.9	101	1	75.0-125			0.726	20

L1767364-15 Original Sample (OS) • Matrix Spike (MS)

(OS) L1767364-15 08/27/24 02:22 • (MS) R4111978-6 08/27/24 02:40

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	656	ND	603	92.0	50	75.0-125	

L1767361-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1767361-03 08/21/24 10:14 • (DUP) R4109708-2 08/21/24 10:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	8.98	8.98	1	0.000		1

Sample Narrative:

OS: 8.98 at 21.2C  
DUP: 8.98 at 21.2C

L1767924-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1767924-10 08/21/24 10:14 • (DUP) R4109708-3 08/21/24 10:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	7.87	7.85	1	0.254		1

Sample Narrative:

OS: 7.87 at 20.1C  
DUP: 7.85 at 20C

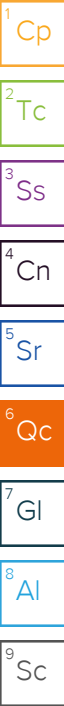
Laboratory Control Sample (LCS)

(LCS) R4109708-1 08/21/24 10:14

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

Sample Narrative:

LCS: 10 at 21.3C



L1767365-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1767365-02 08/21/24 11:03 • (DUP) R4109721-2 08/21/24 11:03

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.96	7.99	1	0.376		1

Sample Narrative:

OS: 7.96 at 22.5C  
 DUP: 7.99 at 21.9C

L1767380-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1767380-13 08/21/24 11:03 • (DUP) R4109721-3 08/21/24 11:03

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.03	8.01	1	0.249		1

Sample Narrative:

OS: 8.03 at 19.8C  
 DUP: 8.01 at 19.8C

Laboratory Control Sample (LCS)

(LCS) R4109721-1 08/21/24 11:03

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: 10.01 at 20.3C



Method Blank (MB)

(MB) R4109774-1 08/21/24 12:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Specific Conductance	ND		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1767588-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1767588-01 08/21/24 12:00 • (DUP) R4109774-3 08/21/24 12:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	1150	1140	1	0.175		20

Sample Narrative:

OS: at 25C  
DUP: at 25C

L1767924-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1767924-11 08/21/24 12:00 • (DUP) R4109774-4 08/21/24 12:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	2770	2770	1	0.000		20

Sample Narrative:

OS: at 25C  
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4109774-2 08/21/24 12:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Specific Conductance	733	750	102	85.0-115	

Sample Narrative:

LCS: at 25C

<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) R4109764-1 08/21/24 14:17

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

Sample Narrative:

BLANK: at 25C

L1767365-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1767365-04 08/21/24 14:17 • (DUP) R4109764-3 08/21/24 14:17

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	umhos/cm	umhos/cm		%		%
	286	283	1	0.950		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1767380-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1767380-12 08/21/24 14:17 • (DUP) R4109764-4 08/21/24 14:17

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	umhos/cm	umhos/cm		%		%
	143	144	1	0.279		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4109764-2 08/21/24 14:17

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Specific Conductance	umhos/cm	umhos/cm	%	%	
	733	758	103	85.0-115	

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R4109409-1 08/20/24 15:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	ND		0.518	2.00
Barium	ND		0.0852	0.500
Cadmium	ND		0.0471	0.500
Copper	ND		0.400	2.00
Lead	ND		0.208	0.500
Nickel	ND		0.132	2.00
Selenium	ND		0.764	2.00
Silver	0.151	J	0.127	1.00
Zinc	ND		0.832	5.00

<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) R4109409-2 08/20/24 15:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	98.2	98.2	80.0-120	
Barium	100	101	101	80.0-120	
Cadmium	100	101	101	80.0-120	
Copper	100	102	102	80.0-120	
Lead	100	99.0	99.0	80.0-120	
Nickel	100	98.5	98.5	80.0-120	
Selenium	100	103	103	80.0-120	
Silver	20.0	20.8	104	80.0-120	
Zinc	100	99.9	99.9	80.0-120	

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1767359-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767359-02 08/20/24 15:27 • (MS) R4109409-5 08/20/24 15:32 • (MSD) R4109409-6 08/20/24 15:34

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	4.97	92.6	88.1	87.6	83.1	1	75.0-125			4.97	20
Barium	100	304	437	416	134	113	1	75.0-125	J5		4.86	20
Cadmium	100	0.265	87.6	83.7	87.4	83.4	1	75.0-125			4.63	20
Copper	100	4.45	93.3	89.6	88.8	85.2	1	75.0-125			3.97	20
Lead	100	8.61	96.4	92.6	87.8	84.0	1	75.0-125			4.03	20
Nickel	100	7.37	93.0	89.5	85.6	82.1	1	75.0-125			3.85	20
Selenium	100	1.04	94.0	88.3	92.9	87.3	1	75.0-125			6.24	20
Silver	20.0	0.163	18.1	17.5	89.8	86.5	1	75.0-125			3.75	20
Zinc	100	27.0	114	112	86.8	84.7	1	75.0-125			1.88	20

Method Blank (MB)

(MB) R4109469-1 08/20/24 23:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	ND		0.518	2.00
Barium	ND		0.0852	0.500
Cadmium	ND		0.0471	0.500
Copper	ND		0.400	2.00
Lead	ND		0.208	0.500
Nickel	ND		0.132	2.00
Selenium	ND		0.764	2.00
Silver	ND		0.127	1.00
Zinc	ND		0.832	5.00

<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) R4109469-2 08/20/24 23:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	95.1	95.1	80.0-120	
Barium	100	97.6	97.6	80.0-120	
Cadmium	100	96.5	96.5	80.0-120	
Copper	100	97.8	97.8	80.0-120	
Lead	100	95.6	95.6	80.0-120	
Nickel	100	94.2	94.2	80.0-120	
Selenium	100	98.6	98.6	80.0-120	
Silver	20.0	19.6	98.1	80.0-120	
Zinc	100	96.0	96.0	80.0-120	

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1767380-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767380-05 08/20/24 23:11 • (MS) R4109469-5 08/20/24 23:16 • (MSD) R4109469-6 08/20/24 23:18

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	0.782	104	107	103	106	1	75.0-125			2.84	20
Barium	100	38.0	148	159	110	121	1	75.0-125			6.95	20
Cadmium	100	ND	100	104	100	104	1	75.0-125			4.05	20
Copper	100	2.03	105	110	103	108	1	75.0-125			4.52	20
Lead	100	4.29	105	111	101	106	1	75.0-125			5.03	20
Nickel	100	2.75	100	105	97.4	102	1	75.0-125			4.77	20
Selenium	100	ND	102	107	102	107	1	75.0-125			4.84	20
Silver	20.0	ND	20.4	21.2	102	106	1	75.0-125			4.24	20
Zinc	100	11.4	116	121	105	110	1	75.0-125			4.05	20

Method Blank (MB)

(MB) R4109438-1 08/20/24 19:57

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	ND		0.0167	0.200

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

(LCS) R4109438-2 08/20/24 19:58 • (LCSD) R4109438-3 08/20/24 20:00

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.11	1.08	111	108	80.0-120			2.80	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

Method Blank (MB)

(MB) R4112414-1 08/27/24 15:39

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	ND		0.0167	0.200

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

(LCS) R4112414-2 08/27/24 15:40 • (LCSD) R4112414-3 08/27/24 15:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.01	1.02	101	102	80.0-120			1.04	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

Method Blank (MB)

(MB) R4112777-1 08/28/24 10:54

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	ND		0.0167	0.200

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

(LCS) R4112777-2 08/28/24 10:56 • (LCSD) R4112777-3 08/28/24 10:58

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	1.04	105	104	80.0-120			0.594	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

Method Blank (MB)

(MB) R4115931-1 09/05/24 11:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Selenium	ND		0.180	2.50

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R4115931-2 09/05/24 11:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Selenium	100	96.9	96.9	80.0-120	

4 Cn

5 Sr

L1767359-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767359-01 09/05/24 11:55 • (MS) R4115931-5 09/05/24 12:05 • (MSD) R4115931-6 09/05/24 12:08

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Selenium	100	0.772	112	108	111	107	5	75.0-125			4.16	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4116760-1 09/06/24 22:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Selenium	ND		0.180	2.50

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R4116760-2 09/06/24 22:35

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Selenium	100	87.1	87.1	80.0-120	

4 Cn

5 Sr

L1767364-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767364-10 09/06/24 22:38 • (MS) R4116760-5 09/06/24 22:48 • (MSD) R4116760-6 09/06/24 22:51

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Selenium	100	ND	87.2	93.0	86.9	92.8	5	75.0-125			6.44	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4109474-2 08/20/24 02:21

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	ND		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	85.9			77.0-120

Laboratory Control Sample (LCS)

(LCS) R4109474-1 08/20/24 01:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.00	5.08	102	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			89.5	77.0-120	

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

Method Blank (MB)

(MB) R4110747-3 08/22/24 18:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	ND		0.543	2.50
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)	107			77.0-120

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

(LCS) R4110747-1 08/22/24 16:27 • (LCSD) R4110747-2 08/22/24 16:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.00	4.71	5.08	94.2	102	72.0-127			7.56	20
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)				111	111	77.0-120				

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

Method Blank (MB)

(MB) R4109213-1 08/17/24 13:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	ND		0.000467	0.00100
Toluene	ND		0.00130	0.00500
Ethylbenzene	ND		0.000737	0.00250
Xylenes, Total	ND		0.000880	0.00650
1,2,4-Trimethylbenzene	ND		0.00158	0.00500
1,3,5-Trimethylbenzene	ND		0.00200	0.00500
(S) Toluene-d8	103			75.0-131
(S) 4-Bromofluorobenzene	106			67.0-138
(S) 1,2-Dichloroethane-d4	100			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS)

(LCS) R4109213-2 08/17/24 15:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.108	86.4	70.0-123	
Toluene	0.125	0.104	83.2	75.0-121	
Ethylbenzene	0.125	0.107	85.6	74.0-126	
Xylenes, Total	0.375	0.316	84.3	72.0-127	
1,2,4-Trimethylbenzene	0.125	0.0902	72.2	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.0942	75.4	73.0-127	
(S) Toluene-d8			101	75.0-131	
(S) 4-Bromofluorobenzene			107	67.0-138	
(S) 1,2-Dichloroethane-d4			102	70.0-130	

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4109824-3 08/20/24 21:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	ND		0.000467	0.00100
Toluene	ND		0.00130	0.00500
Ethylbenzene	ND		0.000737	0.00250
Xylenes, Total	ND		0.000880	0.00650
1,2,4-Trimethylbenzene	ND		0.00158	0.00500
1,3,5-Trimethylbenzene	ND		0.00200	0.00500
(S) Toluene-d8	105			75.0-131
(S) 4-Bromofluorobenzene	95.4			67.0-138
(S) 1,2-Dichloroethane-d4	99.6			70.0-130

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

(LCS) R4109824-1 08/20/24 20:24 • (LCSD) R4109824-2 08/20/24 20:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.122	0.115	97.6	92.0	70.0-123			5.91	20
Toluene	0.125	0.135	0.128	108	102	75.0-121			5.32	20
Ethylbenzene	0.125	0.136	0.127	109	102	74.0-126			6.84	20
Xylenes, Total	0.375	0.417	0.397	111	106	72.0-127			4.91	20
1,2,4-Trimethylbenzene	0.125	0.149	0.140	119	112	70.0-126			6.23	20
1,3,5-Trimethylbenzene	0.125	0.148	0.142	118	114	73.0-127			4.14	20
(S) Toluene-d8				106	106	75.0-131				
(S) 4-Bromofluorobenzene				92.5	93.7	67.0-138				
(S) 1,2-Dichloroethane-d4				102	104	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4110678-1 08/23/24 03:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	ND		1.61	4.00
C28-C36 Motor Oil Range	ND		0.274	4.00
(S) o-Terphenyl	71.2			18.0-148

Laboratory Control Sample (LCS)

(LCS) R4110678-2 08/23/24 03:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	35.6	71.2	50.0-150	
(S) o-Terphenyl			71.9	18.0-148	

L1768099-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1768099-05 08/23/24 10:06 • (MS) R4110678-3 08/23/24 10:20 • (MSD) R4110678-4 08/23/24 10:34

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.8	ND	ND	ND	58.3	58.6	1	50.0-150			0.308	20
(S) o-Terphenyl					58.4	60.3		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4111286-2 08/23/24 01:17

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	ND		0.00209	0.00600
Anthracene	ND		0.00230	0.00600
Benzo(a)anthracene	ND		0.00173	0.00600
Benzo(b)fluoranthene	ND		0.00153	0.00600
Benzo(k)fluoranthene	ND		0.00215	0.00600
Benzo(a)pyrene	ND		0.00179	0.00600
Chrysene	ND		0.00232	0.00600
Dibenz(a,h)anthracene	ND		0.00172	0.00600
Fluoranthene	ND		0.00227	0.00600
Fluorene	ND		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	ND		0.00181	0.00600
1-Methylnaphthalene	ND		0.00449	0.0200
2-Methylnaphthalene	ND		0.00427	0.0200
Naphthalene	ND		0.00408	0.0200
Pyrene	ND		0.00200	0.00600
(S) p-Terphenyl-d14	90.5			23.0-120
(S) Nitrobenzene-d5	99.9			14.0-149
(S) 2-Fluorobiphenyl	84.4			34.0-125

<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

Laboratory Control Sample (LCS)

(LCS) R4111286-1 08/23/24 00:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0709	88.6	50.0-120	
Anthracene	0.0800	0.0690	86.3	50.0-126	
Benzo(a)anthracene	0.0800	0.0714	89.3	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0822	103	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0755	94.4	49.0-125	
Benzo(a)pyrene	0.0800	0.0653	81.6	42.0-120	
Chrysene	0.0800	0.0767	95.9	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0827	103	47.0-125	
Fluoranthene	0.0800	0.0766	95.8	49.0-129	
Fluorene	0.0800	0.0787	98.4	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0810	101	46.0-125	
1-Methylnaphthalene	0.0800	0.0744	93.0	51.0-121	
2-Methylnaphthalene	0.0800	0.0749	93.6	50.0-120	
Naphthalene	0.0800	0.0714	89.3	50.0-120	
Pyrene	0.0800	0.0744	93.0	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R4111286-1 08/23/24 00:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			103	23.0-120	
(S) Nitrobenzene-d5			117	14.0-149	
(S) 2-Fluorobiphenyl			97.5	34.0-125	

L1767364-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767364-14 08/23/24 03:14 • (MS) R4111286-3 08/23/24 03:33 • (MSD) R4111286-4 08/23/24 03:53

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0768	ND	0.0591	0.0600	77.0	77.7	1	14.0-127			1.51	27
Anthracene	0.0768	ND	0.0567	0.0565	73.8	73.2	1	10.0-145			0.353	30
Benzo(a)anthracene	0.0768	ND	0.0584	0.0581	76.0	75.3	1	10.0-139			0.515	30
Benzo(b)fluoranthene	0.0768	ND	0.0680	0.0667	88.5	86.4	1	10.0-140			1.93	36
Benzo(k)fluoranthene	0.0768	ND	0.0619	0.0612	80.6	79.3	1	10.0-137			1.14	31
Benzo(a)pyrene	0.0768	ND	0.0602	0.0602	78.4	78.0	1	10.0-141			0.000	31
Chrysene	0.0768	ND	0.0640	0.0644	83.3	83.4	1	10.0-145			0.623	30
Dibenz(a,h)anthracene	0.0768	ND	0.0685	0.0679	89.2	88.0	1	10.0-132			0.880	31
Fluoranthene	0.0768	ND	0.0620	0.0617	80.7	79.9	1	10.0-153			0.485	33
Fluorene	0.0768	ND	0.0629	0.0646	81.9	83.7	1	11.0-130			2.67	29
Indeno(1,2,3-cd)pyrene	0.0768	ND	0.0662	0.0670	86.2	86.8	1	10.0-137			1.20	32
1-Methylnaphthalene	0.0768	ND	0.0607	0.0624	79.0	80.8	1	10.0-142			2.76	28
2-Methylnaphthalene	0.0768	ND	0.0582	0.0604	75.8	78.2	1	10.0-137			3.71	28
Naphthalene	0.0768	ND	0.0569	0.0585	74.1	75.8	1	10.0-135			2.77	27
Pyrene	0.0768	ND	0.0630	0.0631	82.0	81.7	1	10.0-148			0.159	35
(S) p-Terphenyl-d14					89.8	91.6		23.0-120				
(S) Nitrobenzene-d5					99.4	102		14.0-149				
(S) 2-Fluorobiphenyl					82.6	85.3		34.0-125				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

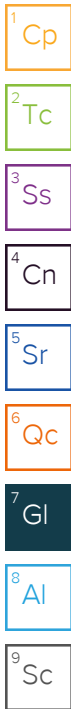
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
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.
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
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
T8	Sample(s) received past/too close to holding time expiration.



# 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 W. 118th Ave.  
 Broomfield, CO 80020

Billing Information:  
 Accounts Payable  
 650 Southgate Dr.  
 Windsor, CO 80550  
 AFE: 23498  
 jevans@civitasresources.com

Analysis / Container / Preservative									

Chain of Custody Page 2 of 2

**Pace**  
 PEOPLE ADVANCING SCIENCE

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/hubfs/pas-standard-terms.pdf>

Report to: Jacob Evans, Brandon Ferguson

Email To: bferguson@civitasresources.com  
 tlyon@ensulyn.com  
 bsulzberger@ensulyn.com

Project Description:  
 Aristocrat Angus 13-10

City/State Collected: CO  
 Please Circle: PT MT CT ET

Phone: 470 509 0947

Client Project #

Lab Project #

Collected by (print): Max Buffy

Site/Facility ID #

P.O. #

Collected by (signature): M. Buffy

**Rush?** (Lab MUST Be Notified)  
 \_\_\_ Same Day \_\_\_ Five Day  
 \_\_\_ Next Day \_\_\_ 5 Day (Rad Only)  
 \_\_\_ Two Day \_\_\_ 10 Day (Rad Only)  
 \_\_\_ Three Day

Date Results Needed: Standard TAT

Immediately Packed on Ice N \_\_\_ Y X

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs												
Native BG01 @ 3.5'	G	SS	3.5	8/13/24	1238	4	X	X										
Native BG01 @ 7'			7		1239	3	X	X										
Native BG02 @ 3.5'			3.5		1242	3	X	X										
Native BG02 @ 7'			7		1245	3	X	X										
Native BG03 @ 3.5'			3.5		1250	3	X	X										
Native BG03 @ 7'			7		1254	3	X	X										
Native BG04 @ 3'			3.5		1300	3	X	X										
Native BG04 @ 7'			7		1302	3	X	X										
Native BG05 @ 3.5'			3.5		1310	2	X	X										
Native BG05 @ 7'			7		1315	2	X	X										

pH, EL, SAR, Boron  
915 metals

SDG # L7767350  
**B218**

Acctnum:  
 Template:  
 Prelogin:  
 PM:  
 PB:  
 Shipped Via:  
 Remarks  
 Sample # (lab only)

\* 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

08142402  
 pH \_\_\_ Temp \_\_\_  
 Flow \_\_\_ Other \_\_\_

Sample Receipt Checklist

COC Seal Present/Intact: NP  N  
 COC Signed/Accurate:  N  
 Bottles arrive intact:  N  
 Correct bottles used:  N  
 Sufficient volume sent:  N

If Applicable

VOA Zero Headspace:  N  
 Preservation Correct/Checked:  N  
 RAD Screen <0.5 mR/hr:  N

Relinquished by: (Signature) M. Buffy

Date: 8/13/24  
 Time: 1525

Received by: (Signature) Sale Contino

Trip Blank Received: Yes/No  
 HCL/MeOH  
 TBR

Relinquished by: (Signature) Sale Contino

Date: 8/13/24  
 Time: 1700

Received by: (Signature) PERRA

Temp: 3.3+0.3=3.6 °C  
 EOPB  
 Bottles Received: 40

Relinquished by: (Signature) CRONER

Date: 08.14.24  
 Time: 0900

Received for lab by: (Signature) CRONER

Date: 08.14.24  
 Time: 0900

If preservation required by Login: Date/Time  
 Hold:  
 Condition: NCF / OK



U7167380

Tracking Numbers		Temperature
4047 5439 9054		3.3+0.3-3.0 EDA8
4047 5439 9048		1.5+0.3-1.8 EDA8

Name \_\_\_\_\_

Date \_\_\_\_\_