

June 29, 2018

Weston Solutions - CO

Sample Delivery Group: L1004774
Samples Received: 06/27/2018
Project Number: 20408.012.001.0809.0
Description: Norris Labs
Site: NL
Report To: Eric Sandusky
1435 Garrison St., Ste 100
Denver, CO 80215

Entire Report Reviewed By:



Jason Romer
Technical Service Representative

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



NL-LP-01 L1004774-01 Solid

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 08:00 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Total Solids by Method 2540 G-2011 | WG1130571 | 1 | 06/27/18 13:28 | 06/27/18 13:42 | KDW |
| Mercury by Method 7471A | WG1130563 | 1 | 06/27/18 12:14 | 06/28/18 08:25 | EL |
| Metals (ICP) by Method 6010B | WG1130559 | 1 | 06/27/18 12:11 | 06/27/18 17:38 | TRB |
| Metals (ICP) by Method 6010B | WG1130559 | 5 | 06/27/18 12:11 | 06/28/18 08:30 | TRB |

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

NL-LX-02 L1004774-02 Solid

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 08:50 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Total Solids by Method 2540 G-2011 | WG1130571 | 1 | 06/27/18 13:28 | 06/27/18 13:42 | KDW |
| Mercury by Method 7471A | WG1130563 | 1 | 06/27/18 12:14 | 06/28/18 09:26 | EL |
| Metals (ICP) by Method 6010B | WG1130559 | 5 | 06/27/18 12:11 | 06/28/18 08:33 | TRB |

NL-DH-03 L1004774-03 Solid

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 09:00 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Total Solids by Method 2540 G-2011 | WG1130571 | 1 | 06/27/18 13:28 | 06/27/18 13:42 | KDW |
| Mercury by Method 7471A | WG1130563 | 1 | 06/27/18 12:14 | 06/28/18 09:29 | EL |
| Metals (ICP) by Method 6010B | WG1130559 | 1 | 06/27/18 12:11 | 06/27/18 18:08 | TRB |
| Metals (ICP) by Method 6010B | WG1130559 | 5 | 06/27/18 12:11 | 06/28/18 08:36 | TRB |

NL-HS-04 L1004774-04 Solid

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 09:30 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Total Solids by Method 2540 G-2011 | WG1130571 | 1 | 06/27/18 13:28 | 06/27/18 13:42 | KDW |
| Mercury by Method 7471A | WG1130563 | 1 | 06/27/18 12:14 | 06/28/18 09:31 | EL |
| Metals (ICP) by Method 6010B | WG1130559 | 1 | 06/27/18 12:11 | 06/27/18 18:11 | TRB |

NL-FC-05 L1004774-05 Solid

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 09:45 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Total Solids by Method 2540 G-2011 | WG1130571 | 1 | 06/27/18 13:28 | 06/27/18 13:42 | KDW |
| Mercury by Method 7471A | WG1130563 | 1 | 06/27/18 12:14 | 06/28/18 09:34 | EL |
| Metals (ICP) by Method 6010B | WG1130559 | 1 | 06/27/18 12:11 | 06/27/18 18:15 | TRB |
| Metals (ICP) by Method 6010B | WG1130559 | 5 | 06/27/18 12:11 | 06/28/18 08:39 | TRB |

NL-LB-10 L1004774-06 Solid

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 12:30 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Total Solids by Method 2540 G-2011 | WG1130571 | 1 | 06/27/18 13:28 | 06/27/18 13:42 | KDW |
| Mercury by Method 7471A | WG1130563 | 2 | 06/27/18 12:14 | 06/28/18 12:06 | EL |
| Metals (ICP) by Method 6010B | WG1130559 | 1 | 06/27/18 12:11 | 06/27/18 18:18 | TRB |
| Metals (ICP) by Method 6010B | WG1130559 | 5 | 06/27/18 12:11 | 06/28/18 08:41 | TRB |

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



NL-WS-11 L1004774-07 Solid

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 12:35 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Total Solids by Method 2540 G-2011 | WG1130571 | 1 | 06/27/18 13:28 | 06/27/18 13:42 | KDW |
| Mercury by Method 7471A | WG1130563 | 1 | 06/27/18 12:14 | 06/28/18 09:39 | EL |
| Metals (ICP) by Method 6010B | WG1130559 | 1 | 06/27/18 12:11 | 06/27/18 18:21 | TRB |
| Metals (ICP) by Method 6010B | WG1130559 | 5 | 06/27/18 12:11 | 06/28/18 08:44 | TRB |

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

NL-HB-12 L1004774-08 Solid

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 12:40 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Total Solids by Method 2540 G-2011 | WG1130571 | 1 | 06/27/18 13:28 | 06/27/18 13:42 | KDW |
| Mercury by Method 7471A | WG1130563 | 1 | 06/27/18 12:14 | 06/28/18 09:41 | EL |
| Metals (ICP) by Method 6010B | WG1130559 | 1 | 06/27/18 12:11 | 06/27/18 18:25 | TRB |
| Metals (ICP) by Method 6010B | WG1130559 | 20 | 06/27/18 12:11 | 06/28/18 14:39 | TRB |
| Metals (ICP) by Method 6010B | WG1130559 | 5 | 06/27/18 12:11 | 06/28/18 08:46 | TRB |

NL-ST-13 L1004774-09 Solid

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 13:10 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Total Solids by Method 2540 G-2011 | WG1130571 | 1 | 06/27/18 13:28 | 06/27/18 13:42 | KDW |
| Mercury by Method 7471A | WG1130563 | 20 | 06/27/18 12:14 | 06/28/18 12:08 | EL |
| Metals (ICP) by Method 6010B | WG1130559 | 1 | 06/27/18 12:11 | 06/27/18 18:28 | TRB |

NL-LP-01 L1004774-10 Waste

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 08:00 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Preparation by Method 1311 | WG1130600 | 1 | 06/27/18 13:25 | 06/27/18 13:25 | TM |
| Mercury by Method 7470A | WG1131035 | 1 | 06/28/18 08:39 | 06/29/18 08:58 | ABL |
| Metals (ICP) by Method 6010B | WG1131026 | 1 | 06/28/18 08:42 | 06/28/18 11:24 | TRB |

NL-LX-02 L1004774-11 Waste

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 08:50 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Preparation by Method 1311 | WG1130600 | 1 | 06/27/18 13:25 | 06/27/18 13:25 | TM |
| Mercury by Method 7470A | WG1131013 | 1 | 06/28/18 08:41 | 06/28/18 12:38 | ABL |
| Metals (ICP) by Method 6010B | WG1131033 | 1 | 06/28/18 08:58 | 06/28/18 12:29 | TRB |

NL-DH-03 L1004774-12 Waste

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 09:00 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Preparation by Method 1311 | WG1130600 | 1 | 06/27/18 13:25 | 06/27/18 13:25 | TM |
| Mercury by Method 7470A | WG1131013 | 1 | 06/28/18 08:41 | 06/28/18 12:41 | ABL |
| Metals (ICP) by Method 6010B | WG1131033 | 1 | 06/28/18 08:58 | 06/28/18 12:32 | TRB |

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NL-HS-04 L1004774-13 Waste

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 09:30 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Preparation by Method 1311 | WG1130600 | 1 | 06/27/18 13:25 | 06/27/18 13:25 | TM |
| Mercury by Method 7470A | WG1131013 | 1 | 06/28/18 08:41 | 06/28/18 12:43 | ABL |
| Metals (ICP) by Method 6010B | WG1131033 | 1 | 06/28/18 08:58 | 06/28/18 12:40 | TRB |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

NL-FC-05 L1004774-14 Waste

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 09:45 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Preparation by Method 1311 | WG1130600 | 1 | 06/27/18 13:25 | 06/27/18 13:25 | TM |
| Mercury by Method 7470A | WG1131013 | 1 | 06/28/18 08:41 | 06/28/18 12:46 | ABL |
| Metals (ICP) by Method 6010B | WG1131033 | 1 | 06/28/18 08:58 | 06/28/18 12:43 | TRB |

NL-LB-10 L1004774-15 Waste

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 12:30 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Preparation by Method 1311 | WG1130600 | 1 | 06/27/18 13:25 | 06/27/18 13:25 | TM |
| Mercury by Method 7470A | WG1131013 | 1 | 06/28/18 08:41 | 06/28/18 12:48 | ABL |
| Metals (ICP) by Method 6010B | WG1131033 | 1 | 06/28/18 08:58 | 06/28/18 12:46 | TRB |

NL-WS-11 L1004774-16 Waste

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 12:35 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Preparation by Method 1311 | WG1130600 | 1 | 06/27/18 13:25 | 06/27/18 13:25 | TM |
| Mercury by Method 7470A | WG1131013 | 1 | 06/28/18 08:41 | 06/28/18 12:50 | ABL |
| Metals (ICP) by Method 6010B | WG1131033 | 1 | 06/28/18 08:58 | 06/28/18 12:49 | TRB |

NL-HB-12 L1004774-17 Waste

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 12:40 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Preparation by Method 1311 | WG1130600 | 1 | 06/27/18 13:25 | 06/27/18 13:25 | TM |
| Mercury by Method 7470A | WG1131035 | 1 | 06/28/18 08:39 | 06/29/18 09:05 | ABL |
| Metals (ICP) by Method 6010B | WG1131026 | 1 | 06/28/18 08:42 | 06/28/18 11:27 | TRB |

NL-ST-13 L1004774-18 Waste

| | | | Collected by | Collected date/time | Received date/time |
|------------------------------|-----------|----------|-----------------------|---------------------|--------------------|
| | | | JR | 06/22/18 13:10 | 06/27/18 08:45 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| Preparation by Method 1311 | WG1130600 | 1 | 06/27/18 13:25 | 06/27/18 13:25 | TM |
| Mercury by Method 7470A | WG1131013 | 1 | 06/28/18 08:41 | 06/29/18 08:45 | RDS |
| Metals (ICP) by Method 6010B | WG1131033 | 1 | 06/28/18 08:58 | 06/28/18 12:51 | TRB |



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 radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Jason Romer
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|--------------|--------|-----------|----------|------------------|---------------------------|
| | % | | | date / time | |
| Total Solids | 60.2 | | 1 | 06/27/2018 13:42 | WG1130571 |

¹ Cp² Tc³ Ss⁴ Cn

Mercury by Method 7471A

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|---------|--------|----------|------------------|---------------------------|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | U | | 0.00280 | 0.0200 | 1 | 06/28/2018 08:25 | WG1130563 |

⁵ Sr

Metals (ICP) by Method 6010B

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|--------|-------|----------|------------------|---------------------------|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Aluminum | 173 | | 3.50 | 10.0 | 1 | 06/27/2018 17:38 | WG1130559 |
| Antimony | U | | 0.750 | 2.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Arsenic | 3.84 | | 0.650 | 2.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Barium | 3.11 | | 0.170 | 0.500 | 1 | 06/27/2018 17:38 | WG1130559 |
| Beryllium | 0.0923 | J | 0.0700 | 0.200 | 1 | 06/27/2018 17:38 | WG1130559 |
| Cadmium | U | | 0.0700 | 0.500 | 1 | 06/27/2018 17:38 | WG1130559 |
| Calcium | 608 | | 4.63 | 100 | 1 | 06/27/2018 17:38 | WG1130559 |
| Chromium | 0.804 | J | 0.140 | 1.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Cobalt | U | | 0.230 | 1.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Copper | 3.15 | | 0.530 | 2.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Iron | 315 | | 1.41 | 10.0 | 1 | 06/27/2018 17:38 | WG1130559 |
| Lead | 4.15 | | 0.190 | 0.500 | 1 | 06/27/2018 17:38 | WG1130559 |
| Magnesium | 214 | | 1.11 | 100 | 1 | 06/27/2018 17:38 | WG1130559 |
| Manganese | 8.29 | | 0.120 | 1.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Nickel | 0.567 | J | 0.490 | 2.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Potassium | 97.8 | B J | 10.2 | 100 | 1 | 06/27/2018 17:38 | WG1130559 |
| Selenium | U | | 0.740 | 2.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Silver | U | | 0.280 | 1.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Sodium | 103000 | V | 49.2 | 500 | 5 | 06/28/2018 08:30 | WG1130559 |
| Thallium | 2.06 | | 0.650 | 2.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Vanadium | U | | 0.240 | 2.00 | 1 | 06/27/2018 17:38 | WG1130559 |
| Zinc | 6.24 | | 0.590 | 5.00 | 1 | 06/27/2018 17:38 | WG1130559 |

⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|--------------|--------|-----------|----------|----------------------|---------------------------|
| Total Solids | 80.8 | | 1 | 06/27/2018 13:42 | WG1130571 |

¹ Cp² Tc³ Ss⁴ Cn

Mercury by Method 7471A

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|---------|--------|-----------|---------|--------|----------|----------------------|---------------------------|
| Mercury | 0.884 | | 0.00280 | 0.0200 | 1 | 06/28/2018 09:26 | WG1130563 |

⁵ Sr

Metals (ICP) by Method 6010B

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|-----------|--------|-----------|-------|------|----------|----------------------|---------------------------|
| Aluminum | 2230 | | 17.5 | 50.0 | 5 | 06/28/2018 08:33 | WG1130559 |
| Antimony | 21.8 | | 3.75 | 10.0 | 5 | 06/28/2018 08:33 | WG1130559 |
| Arsenic | 48.7 | | 3.25 | 10.0 | 5 | 06/28/2018 08:33 | WG1130559 |
| Barium | 53.3 | | 0.850 | 2.50 | 5 | 06/28/2018 08:33 | WG1130559 |
| Beryllium | U | | 0.350 | 1.00 | 5 | 06/28/2018 08:33 | WG1130559 |
| Cadmium | 0.385 | J | 0.350 | 2.50 | 5 | 06/28/2018 08:33 | WG1130559 |
| Calcium | 14200 | | 23.2 | 500 | 5 | 06/28/2018 08:33 | WG1130559 |
| Chromium | 8.42 | | 0.700 | 5.00 | 5 | 06/28/2018 08:33 | WG1130559 |
| Cobalt | 23.2 | | 1.15 | 5.00 | 5 | 06/28/2018 08:33 | WG1130559 |
| Copper | 41000 | | 2.65 | 10.0 | 5 | 06/28/2018 08:33 | WG1130559 |
| Iron | 87800 | | 7.05 | 50.0 | 5 | 06/28/2018 08:33 | WG1130559 |
| Lead | 269 | | 0.950 | 2.50 | 5 | 06/28/2018 08:33 | WG1130559 |
| Magnesium | 919 | | 5.55 | 500 | 5 | 06/28/2018 08:33 | WG1130559 |
| Manganese | 87.0 | | 0.600 | 5.00 | 5 | 06/28/2018 08:33 | WG1130559 |
| Nickel | 10.9 | | 2.45 | 10.0 | 5 | 06/28/2018 08:33 | WG1130559 |
| Potassium | 2040 | | 51.2 | 500 | 5 | 06/28/2018 08:33 | WG1130559 |
| Selenium | 5.87 | J | 3.70 | 10.0 | 5 | 06/28/2018 08:33 | WG1130559 |
| Silver | 11.4 | | 1.40 | 5.00 | 5 | 06/28/2018 08:33 | WG1130559 |
| Sodium | 786 | B | 49.2 | 500 | 5 | 06/28/2018 08:33 | WG1130559 |
| Thallium | U | | 3.25 | 10.0 | 5 | 06/28/2018 08:33 | WG1130559 |
| Vanadium | 11.4 | B | 1.20 | 10.0 | 5 | 06/28/2018 08:33 | WG1130559 |
| Zinc | 75.7 | | 2.95 | 25.0 | 5 | 06/28/2018 08:33 | WG1130559 |

⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|--------------|--------|-----------|----------|----------------------|---------------------------|
| Total Solids | 99.1 | | 1 | 06/27/2018 13:42 | WG1130571 |

Mercury by Method 7471A

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|---------|--------|-----------|---------|--------|----------|----------------------|---------------------------|
| Mercury | 0.855 | | 0.00280 | 0.0200 | 1 | 06/28/2018 09:29 | WG1130563 |

Metals (ICP) by Method 6010B

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|-----------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| Aluminum | 5570 | | 3.50 | 10.0 | 1 | 06/27/2018 18:08 | WG1130559 |
| Antimony | 7.99 | | 0.750 | 2.00 | 1 | 06/27/2018 18:08 | WG1130559 |
| Arsenic | 356 | | 0.650 | 2.00 | 1 | 06/27/2018 18:08 | WG1130559 |
| Barium | 158 | | 0.170 | 0.500 | 1 | 06/27/2018 18:08 | WG1130559 |
| Beryllium | 0.685 | | 0.0700 | 0.200 | 1 | 06/27/2018 18:08 | WG1130559 |
| Cadmium | 3.03 | | 0.0700 | 0.500 | 1 | 06/27/2018 18:08 | WG1130559 |
| Calcium | 15500 | | 4.63 | 100 | 1 | 06/27/2018 18:08 | WG1130559 |
| Chromium | 22.5 | | 0.140 | 1.00 | 1 | 06/27/2018 18:08 | WG1130559 |
| Cobalt | 11.4 | | 0.230 | 1.00 | 1 | 06/27/2018 18:08 | WG1130559 |
| Copper | 236 | | 0.530 | 2.00 | 1 | 06/27/2018 18:08 | WG1130559 |
| Iron | 37000 | | 1.41 | 10.0 | 1 | 06/27/2018 18:08 | WG1130559 |
| Lead | 995 | | 0.190 | 0.500 | 1 | 06/27/2018 18:08 | WG1130559 |
| Magnesium | 7970 | | 1.11 | 100 | 1 | 06/27/2018 18:08 | WG1130559 |
| Manganese | 3150 | | 0.600 | 5.00 | 5 | 06/28/2018 08:36 | WG1130559 |
| Nickel | 59.6 | | 0.490 | 2.00 | 1 | 06/27/2018 18:08 | WG1130559 |
| Potassium | 1990 | | 10.2 | 100 | 1 | 06/27/2018 18:08 | WG1130559 |
| Selenium | 2.02 | | 0.740 | 2.00 | 1 | 06/27/2018 18:08 | WG1130559 |
| Silver | 8.97 | | 0.280 | 1.00 | 1 | 06/27/2018 18:08 | WG1130559 |
| Sodium | 180 | | 9.85 | 100 | 1 | 06/27/2018 18:08 | WG1130559 |
| Thallium | U | | 0.650 | 2.00 | 1 | 06/27/2018 18:08 | WG1130559 |
| Vanadium | 26.3 | | 0.240 | 2.00 | 1 | 06/27/2018 18:08 | WG1130559 |
| Zinc | 661 | | 0.590 | 5.00 | 1 | 06/27/2018 18:08 | WG1130559 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|--------------|--------|-----------|----------|----------------------|---------------------------|
| Total Solids | 85.0 | | 1 | 06/27/2018 13:42 | WG1130571 |

¹ Cp² Tc

Mercury by Method 7471A

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|---------|--------|-----------|---------|--------|----------|----------------------|---------------------------|
| Mercury | 0.145 | | 0.00280 | 0.0200 | 1 | 06/28/2018 09:31 | WG1130563 |

³ Ss⁴ Cn

Metals (ICP) by Method 6010B

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|-----------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| Aluminum | 4590 | | 3.50 | 10.0 | 1 | 06/27/2018 18:11 | WG1130559 |
| Antimony | U | | 0.750 | 2.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Arsenic | 3.84 | | 0.650 | 2.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Barium | 49.9 | | 0.170 | 0.500 | 1 | 06/27/2018 18:11 | WG1130559 |
| Beryllium | 0.396 | | 0.0700 | 0.200 | 1 | 06/27/2018 18:11 | WG1130559 |
| Cadmium | 0.104 | J | 0.0700 | 0.500 | 1 | 06/27/2018 18:11 | WG1130559 |
| Calcium | 1110 | | 4.63 | 100 | 1 | 06/27/2018 18:11 | WG1130559 |
| Chromium | 12.6 | | 0.140 | 1.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Cobalt | 3.94 | | 0.230 | 1.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Copper | 8.52 | | 0.530 | 2.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Iron | 8680 | | 1.41 | 10.0 | 1 | 06/27/2018 18:11 | WG1130559 |
| Lead | 13.8 | | 0.190 | 0.500 | 1 | 06/27/2018 18:11 | WG1130559 |
| Magnesium | 1570 | | 1.11 | 100 | 1 | 06/27/2018 18:11 | WG1130559 |
| Manganese | 171 | | 0.120 | 1.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Nickel | 8.24 | | 0.490 | 2.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Potassium | 1940 | | 10.2 | 100 | 1 | 06/27/2018 18:11 | WG1130559 |
| Selenium | U | | 0.740 | 2.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Silver | U | | 0.280 | 1.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Sodium | 197 | | 9.85 | 100 | 1 | 06/27/2018 18:11 | WG1130559 |
| Thallium | U | | 0.650 | 2.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Vanadium | 13.7 | B | 0.240 | 2.00 | 1 | 06/27/2018 18:11 | WG1130559 |
| Zinc | 23.3 | | 0.590 | 5.00 | 1 | 06/27/2018 18:11 | WG1130559 |

⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|--------------|--------|-----------|----------|----------------------|---------------------------|
| Total Solids | 99.3 | | 1 | 06/27/2018 13:42 | WG1130571 |

¹ Cp² Tc

Mercury by Method 7471A

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|---------|--------|-----------|---------|--------|----------|----------------------|---------------------------|
| Mercury | 0.362 | | 0.00280 | 0.0200 | 1 | 06/28/2018 09:34 | WG1130563 |

³ Ss⁴ Cn

Metals (ICP) by Method 6010B

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|-----------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| Aluminum | 3600 | | 3.50 | 10.0 | 1 | 06/27/2018 18:15 | WG1130559 |
| Antimony | 59.1 | | 0.750 | 2.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Arsenic | 3430 | | 0.650 | 2.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Barium | 70.5 | | 0.170 | 0.500 | 1 | 06/27/2018 18:15 | WG1130559 |
| Beryllium | 0.247 | | 0.0700 | 0.200 | 1 | 06/27/2018 18:15 | WG1130559 |
| Cadmium | 4.72 | | 0.0700 | 0.500 | 1 | 06/27/2018 18:15 | WG1130559 |
| Calcium | 7300 | | 4.63 | 100 | 1 | 06/27/2018 18:15 | WG1130559 |
| Chromium | 31.8 | | 0.140 | 1.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Cobalt | 14.5 | | 0.230 | 1.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Copper | 955 | | 0.530 | 2.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Iron | 37200 | | 1.41 | 10.0 | 1 | 06/27/2018 18:15 | WG1130559 |
| Lead | 13700 | | 0.950 | 2.50 | 5 | 06/28/2018 08:39 | WG1130559 |
| Magnesium | 5010 | | 1.11 | 100 | 1 | 06/27/2018 18:15 | WG1130559 |
| Manganese | 855 | | 0.120 | 1.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Nickel | 75.2 | | 0.490 | 2.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Potassium | 1390 | | 10.2 | 100 | 1 | 06/27/2018 18:15 | WG1130559 |
| Selenium | U | | 0.740 | 2.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Silver | 62.6 | | 0.280 | 1.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Sodium | 8710 | | 9.85 | 100 | 1 | 06/27/2018 18:15 | WG1130559 |
| Thallium | U | | 0.650 | 2.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Vanadium | 13.4 | <u>B</u> | 0.240 | 2.00 | 1 | 06/27/2018 18:15 | WG1130559 |
| Zinc | 1890 | | 2.95 | 25.0 | 5 | 06/28/2018 08:39 | WG1130559 |

⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|--------------|--------|-----------|----------|----------------------|---------------------------|
| Total Solids | 98.8 | | 1 | 06/27/2018 13:42 | WG1130571 |

¹ Cp² Tc

Mercury by Method 7471A

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|---------|--------|-----------|---------|--------|----------|----------------------|---------------------------|
| Mercury | 1.09 | | 0.00560 | 0.0400 | 2 | 06/28/2018 12:06 | WG1130563 |

³ Ss⁴ Cn

Metals (ICP) by Method 6010B

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|-----------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| Aluminum | 8410 | | 3.50 | 10.0 | 1 | 06/27/2018 18:18 | WG1130559 |
| Antimony | 11.9 | | 0.750 | 2.00 | 1 | 06/27/2018 18:18 | WG1130559 |
| Arsenic | 531 | | 0.650 | 2.00 | 1 | 06/27/2018 18:18 | WG1130559 |
| Barium | 448 | | 0.170 | 0.500 | 1 | 06/27/2018 18:18 | WG1130559 |
| Beryllium | 0.594 | | 0.0700 | 0.200 | 1 | 06/27/2018 18:18 | WG1130559 |
| Cadmium | 8.84 | | 0.0700 | 0.500 | 1 | 06/27/2018 18:18 | WG1130559 |
| Calcium | 8420 | | 4.63 | 100 | 1 | 06/27/2018 18:18 | WG1130559 |
| Chromium | 79.5 | | 0.140 | 1.00 | 1 | 06/27/2018 18:18 | WG1130559 |
| Cobalt | 20.3 | | 0.230 | 1.00 | 1 | 06/27/2018 18:18 | WG1130559 |
| Copper | 521 | | 0.530 | 2.00 | 1 | 06/27/2018 18:18 | WG1130559 |
| Iron | 105000 | | 7.05 | 50.0 | 5 | 06/28/2018 08:41 | WG1130559 |
| Lead | 1840 | | 0.190 | 0.500 | 1 | 06/27/2018 18:18 | WG1130559 |
| Magnesium | 7010 | | 1.11 | 100 | 1 | 06/27/2018 18:18 | WG1130559 |
| Manganese | 555 | | 0.120 | 1.00 | 1 | 06/27/2018 18:18 | WG1130559 |
| Nickel | 53.3 | | 0.490 | 2.00 | 1 | 06/27/2018 18:18 | WG1130559 |
| Potassium | 2530 | | 10.2 | 100 | 1 | 06/27/2018 18:18 | WG1130559 |
| Selenium | 8.39 | | 0.740 | 2.00 | 1 | 06/27/2018 18:18 | WG1130559 |
| Silver | 342 | | 0.280 | 1.00 | 1 | 06/27/2018 18:18 | WG1130559 |
| Sodium | 163 | <u>B</u> | 9.85 | 100 | 1 | 06/27/2018 18:18 | WG1130559 |
| Thallium | U | | 3.25 | 10.0 | 5 | 06/28/2018 08:41 | WG1130559 |
| Vanadium | 120 | | 0.240 | 2.00 | 1 | 06/27/2018 18:18 | WG1130559 |
| Zinc | 869 | | 0.590 | 5.00 | 1 | 06/27/2018 18:18 | WG1130559 |

⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|--------------|--------|-----------|----------|----------------------|---------------------------|
| Total Solids | 98.6 | | 1 | 06/27/2018 13:42 | WG1130571 |

¹ Cp² Tc³ Ss⁴ Cn

Mercury by Method 7471A

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|---------|--------|-----------|---------|--------|----------|----------------------|---------------------------|
| Mercury | 0.374 | | 0.00280 | 0.0200 | 1 | 06/28/2018 09:39 | WG1130563 |

⁵ Sr

Metals (ICP) by Method 6010B

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|-----------|--------|---------------------|--------|-------|----------|----------------------|---------------------------|
| Aluminum | 7470 | | 3.50 | 10.0 | 1 | 06/27/2018 18:21 | WG1130559 |
| Antimony | 27.1 | | 0.750 | 2.00 | 1 | 06/27/2018 18:21 | WG1130559 |
| Arsenic | 91.3 | | 0.650 | 2.00 | 1 | 06/27/2018 18:21 | WG1130559 |
| Barium | 176 | | 0.170 | 0.500 | 1 | 06/27/2018 18:21 | WG1130559 |
| Beryllium | 1.00 | | 0.0700 | 0.200 | 1 | 06/27/2018 18:21 | WG1130559 |
| Cadmium | 2.11 | | 0.0700 | 0.500 | 1 | 06/27/2018 18:21 | WG1130559 |
| Calcium | 14000 | | 4.63 | 100 | 1 | 06/27/2018 18:21 | WG1130559 |
| Chromium | 22.0 | | 0.140 | 1.00 | 1 | 06/27/2018 18:21 | WG1130559 |
| Cobalt | 38.5 | | 0.230 | 1.00 | 1 | 06/27/2018 18:21 | WG1130559 |
| Copper | 1510 | | 0.530 | 2.00 | 1 | 06/27/2018 18:21 | WG1130559 |
| Iron | 53700 | | 7.05 | 50.0 | 5 | 06/28/2018 08:44 | WG1130559 |
| Lead | 390 | | 0.190 | 0.500 | 1 | 06/27/2018 18:21 | WG1130559 |
| Magnesium | 4650 | | 1.11 | 100 | 1 | 06/27/2018 18:21 | WG1130559 |
| Manganese | 2820 | | 0.600 | 5.00 | 5 | 06/28/2018 08:44 | WG1130559 |
| Nickel | 32.3 | | 0.490 | 2.00 | 1 | 06/27/2018 18:21 | WG1130559 |
| Potassium | 2460 | | 10.2 | 100 | 1 | 06/27/2018 18:21 | WG1130559 |
| Selenium | 2.45 | | 0.740 | 2.00 | 1 | 06/27/2018 18:21 | WG1130559 |
| Silver | 22.5 | | 0.280 | 1.00 | 1 | 06/27/2018 18:21 | WG1130559 |
| Sodium | 76.2 | B J | 9.85 | 100 | 1 | 06/27/2018 18:21 | WG1130559 |
| Thallium | U | | 3.25 | 10.0 | 5 | 06/28/2018 08:44 | WG1130559 |
| Vanadium | 30.6 | | 0.240 | 2.00 | 1 | 06/27/2018 18:21 | WG1130559 |
| Zinc | 345 | | 0.590 | 5.00 | 1 | 06/27/2018 18:21 | WG1130559 |

⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|--------------|--------|-----------|----------|----------------------|---------------------------|
| Total Solids | 69.8 | | 1 | 06/27/2018 13:42 | WG1130571 |

¹ Cp² Tc³ Ss⁴ Cn

Mercury by Method 7471A

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|---------|--------|-----------|---------|--------|----------|----------------------|---------------------------|
| Mercury | 0.0638 | | 0.00280 | 0.0200 | 1 | 06/28/2018 09:41 | WG1130563 |

⁵ Sr

Metals (ICP) by Method 6010B

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|-----------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| Aluminum | 15200 | | 3.50 | 10.0 | 1 | 06/27/2018 18:25 | WG1130559 |
| Antimony | 105 | | 0.750 | 2.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Arsenic | 124 | | 0.650 | 2.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Barium | 158 | | 0.170 | 0.500 | 1 | 06/27/2018 18:25 | WG1130559 |
| Beryllium | 0.675 | | 0.0700 | 0.200 | 1 | 06/27/2018 18:25 | WG1130559 |
| Cadmium | 2.65 | | 0.0700 | 0.500 | 1 | 06/27/2018 18:25 | WG1130559 |
| Calcium | 24900 | | 4.63 | 100 | 1 | 06/27/2018 18:25 | WG1130559 |
| Chromium | 26.1 | | 0.140 | 1.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Cobalt | 3.69 | | 0.230 | 1.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Copper | 124 | | 0.530 | 2.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Iron | 10900 | | 1.41 | 10.0 | 1 | 06/27/2018 18:25 | WG1130559 |
| Lead | 70200 | | 3.80 | 10.0 | 20 | 06/28/2018 14:39 | WG1130559 |
| Magnesium | 1980 | | 1.11 | 100 | 1 | 06/27/2018 18:25 | WG1130559 |
| Manganese | 201 | | 0.120 | 1.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Nickel | 13.0 | | 0.490 | 2.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Potassium | 4300 | | 10.2 | 100 | 1 | 06/27/2018 18:25 | WG1130559 |
| Selenium | U | | 0.740 | 2.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Silver | 0.846 | J | 0.280 | 1.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Sodium | 112000 | | 49.2 | 500 | 5 | 06/28/2018 08:46 | WG1130559 |
| Thallium | 2.38 | | 0.650 | 2.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Vanadium | 24.0 | | 0.240 | 2.00 | 1 | 06/27/2018 18:25 | WG1130559 |
| Zinc | 187 | | 0.590 | 5.00 | 1 | 06/27/2018 18:25 | WG1130559 |

⁶ Qc⁷ Gl⁸ Al⁹ Sc



Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|--------------|--------|-----------|----------|----------------------|---------------------------|
| Total Solids | 20.0 | | 1 | 06/27/2018 13:42 | WG1130571 |

Mercury by Method 7471A

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|---------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| Mercury | 5.13 | | 0.0560 | 0.400 | 20 | 06/28/2018 12:08 | WG1130563 |

Metals (ICP) by Method 6010B

| Analyte | Result | Qualifier | MDL | RDL | Dilution | Analysis date / time | Batch |
|-----------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| Aluminum | 1670 | | 3.50 | 10.0 | 1 | 06/27/2018 18:28 | WG1130559 |
| Antimony | 3.89 | | 0.750 | 2.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Arsenic | 9.17 | | 0.650 | 2.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Barium | 40.3 | | 0.170 | 0.500 | 1 | 06/27/2018 18:28 | WG1130559 |
| Beryllium | 0.0731 | J | 0.0700 | 0.200 | 1 | 06/27/2018 18:28 | WG1130559 |
| Cadmium | 1.05 | | 0.0700 | 0.500 | 1 | 06/27/2018 18:28 | WG1130559 |
| Calcium | 2330 | | 4.63 | 100 | 1 | 06/27/2018 18:28 | WG1130559 |
| Chromium | 6.66 | | 0.140 | 1.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Cobalt | 0.983 | J | 0.230 | 1.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Copper | 52.4 | | 0.530 | 2.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Iron | 2380 | | 1.41 | 10.0 | 1 | 06/27/2018 18:28 | WG1130559 |
| Lead | 66.8 | | 0.190 | 0.500 | 1 | 06/27/2018 18:28 | WG1130559 |
| Magnesium | 653 | | 1.11 | 100 | 1 | 06/27/2018 18:28 | WG1130559 |
| Manganese | 37.9 | | 0.120 | 1.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Nickel | 4.81 | | 0.490 | 2.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Potassium | 573 | | 10.2 | 100 | 1 | 06/27/2018 18:28 | WG1130559 |
| Selenium | 1.01 | J | 0.740 | 2.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Silver | 18.3 | | 0.280 | 1.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Sodium | 146 | B | 9.85 | 100 | 1 | 06/27/2018 18:28 | WG1130559 |
| Thallium | U | | 0.650 | 2.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Vanadium | 10.1 | B | 0.240 | 2.00 | 1 | 06/27/2018 18:28 | WG1130559 |
| Zinc | 112 | | 0.590 | 5.00 | 1 | 06/27/2018 18:28 | WG1130559 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|-----------------|--------|-----------|----------------------|-----------|
| TCLP Extraction | - | | 6/27/2018 1:25:12 PM | WG1130600 |
| Fluid | 2 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Initial pH | 9.10 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Final pH | 8.48 | | 6/27/2018 1:25:12 PM | WG1130600 |

Mercury by Method 7470A

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---------|----------------|--------------|-------------|---------------|----------|-------------------------|---------------------------|
| Mercury | ND | <u>J3 J6</u> | 0.0100 | 0.20 | 1 | 06/29/2018 08:58 | WG1131035 |

Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|----------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Arsenic | 0.347 | <u>B</u> | 0.100 | 5 | 1 | 06/28/2018 11:24 | WG1131026 |
| Barium | ND | | 0.100 | 100 | 1 | 06/28/2018 11:24 | WG1131026 |
| Cadmium | ND | | 0.100 | 1 | 1 | 06/28/2018 11:24 | WG1131026 |
| Chromium | ND | | 0.100 | 5 | 1 | 06/28/2018 11:24 | WG1131026 |
| Lead | ND | | 0.100 | 5 | 1 | 06/28/2018 11:24 | WG1131026 |
| Selenium | ND | | 0.100 | 1 | 1 | 06/28/2018 11:24 | WG1131026 |
| Silver | ND | | 0.100 | 5 | 1 | 06/28/2018 11:24 | WG1131026 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|-----------------|--------|-----------|----------------------|-----------|
| TCLP Extraction | - | | 6/27/2018 1:25:12 PM | WG1130600 |
| Fluid | 1 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Initial pH | 5.00 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Final pH | 5.08 | | 6/27/2018 1:25:12 PM | WG1130600 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Mercury by Method 7470A

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Mercury | ND | | 0.0100 | 0.20 | 1 | 06/28/2018 12:38 | WG1131013 |

Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|----------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Arsenic | ND | | 0.100 | 5 | 1 | 06/28/2018 12:29 | WG1131033 |
| Barium | ND | | 0.100 | 100 | 1 | 06/28/2018 12:29 | WG1131033 |
| Cadmium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:29 | WG1131033 |
| Chromium | ND | | 0.100 | 5 | 1 | 06/28/2018 12:29 | WG1131033 |
| Lead | ND | | 0.100 | 5 | 1 | 06/28/2018 12:29 | WG1131033 |
| Selenium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:29 | WG1131033 |
| Silver | ND | | 0.100 | 5 | 1 | 06/28/2018 12:29 | WG1131033 |



Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|-----------------|--------|-----------|----------------------|-----------|
| TCLP Extraction | - | | 6/27/2018 1:25:12 PM | WG1130600 |
| Fluid | 1 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Initial pH | 7.47 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Final pH | 5.40 | | 6/27/2018 1:25:12 PM | WG1130600 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Mercury by Method 7470A

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Mercury | ND | | 0.0100 | 0.20 | 1 | 06/28/2018 12:41 | WG1131013 |

Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|----------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Arsenic | ND | | 0.100 | 5 | 1 | 06/28/2018 12:32 | WG1131033 |
| Barium | 0.699 | | 0.100 | 100 | 1 | 06/28/2018 12:32 | WG1131033 |
| Cadmium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:32 | WG1131033 |
| Chromium | ND | | 0.100 | 5 | 1 | 06/28/2018 12:32 | WG1131033 |
| Lead | 0.116 | | 0.100 | 5 | 1 | 06/28/2018 12:32 | WG1131033 |
| Selenium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:32 | WG1131033 |
| Silver | ND | | 0.100 | 5 | 1 | 06/28/2018 12:32 | WG1131033 |



Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|-----------------|--------|-----------|----------------------|-----------|
| TCLP Extraction | - | | 6/27/2018 1:25:12 PM | WG1130600 |
| Fluid | 1 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Initial pH | 8.64 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Final pH | 5.06 | | 6/27/2018 1:25:12 PM | WG1130600 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Mercury by Method 7470A

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Mercury | ND | | 0.0100 | 0.20 | 1 | 06/28/2018 12:43 | WG1131013 |

Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|----------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Arsenic | ND | | 0.100 | 5 | 1 | 06/28/2018 12:40 | WG1131033 |
| Barium | 0.682 | | 0.100 | 100 | 1 | 06/28/2018 12:40 | WG1131033 |
| Cadmium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:40 | WG1131033 |
| Chromium | ND | | 0.100 | 5 | 1 | 06/28/2018 12:40 | WG1131033 |
| Lead | 0.813 | | 0.100 | 5 | 1 | 06/28/2018 12:40 | WG1131033 |
| Selenium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:40 | WG1131033 |
| Silver | ND | | 0.100 | 5 | 1 | 06/28/2018 12:40 | WG1131033 |



Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|-----------------|--------|-----------|----------------------|-----------|
| TCLP Extraction | - | | 6/27/2018 1:25:12 PM | WG1130600 |
| Fluid | 1 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Initial pH | 8.95 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Final pH | 5.48 | | 6/27/2018 1:25:12 PM | WG1130600 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Mercury by Method 7470A

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Mercury | ND | | 0.0100 | 0.20 | 1 | 06/28/2018 12:46 | WG1131013 |

Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|----------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Arsenic | ND | | 0.100 | 5 | 1 | 06/28/2018 12:43 | WG1131033 |
| Barium | 0.426 | | 0.100 | 100 | 1 | 06/28/2018 12:43 | WG1131033 |
| Cadmium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:43 | WG1131033 |
| Chromium | ND | | 0.100 | 5 | 1 | 06/28/2018 12:43 | WG1131033 |
| Lead | 83.6 | | 0.100 | 5 | 1 | 06/28/2018 12:43 | WG1131033 |
| Selenium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:43 | WG1131033 |
| Silver | ND | | 0.100 | 5 | 1 | 06/28/2018 12:43 | WG1131033 |



Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|-----------------|--------|-----------|----------------------|-----------|
| TCLP Extraction | - | | 6/27/2018 1:25:12 PM | WG1130600 |
| Fluid | 1 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Initial pH | 8.06 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Final pH | 5.19 | | 6/27/2018 1:25:12 PM | WG1130600 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Mercury by Method 7470A

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Mercury | ND | | 0.0100 | 0.20 | 1 | 06/28/2018 12:48 | WG1131013 |

Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|----------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Arsenic | ND | | 0.100 | 5 | 1 | 06/28/2018 12:46 | WG1131033 |
| Barium | 0.628 | | 0.100 | 100 | 1 | 06/28/2018 12:46 | WG1131033 |
| Cadmium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:46 | WG1131033 |
| Chromium | ND | | 0.100 | 5 | 1 | 06/28/2018 12:46 | WG1131033 |
| Lead | 3.44 | | 0.100 | 5 | 1 | 06/28/2018 12:46 | WG1131033 |
| Selenium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:46 | WG1131033 |
| Silver | ND | | 0.100 | 5 | 1 | 06/28/2018 12:46 | WG1131033 |



Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|-----------------|--------|-----------|----------------------|-----------|
| TCLP Extraction | - | | 6/27/2018 1:25:12 PM | WG1130600 |
| Fluid | 1 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Initial pH | 7.19 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Final pH | 5.46 | | 6/27/2018 1:25:12 PM | WG1130600 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Mercury by Method 7470A

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Mercury | ND | | 0.0100 | 0.20 | 1 | 06/28/2018 12:50 | WG1131013 |

Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|----------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Arsenic | ND | | 0.100 | 5 | 1 | 06/28/2018 12:49 | WG1131033 |
| Barium | 0.870 | | 0.100 | 100 | 1 | 06/28/2018 12:49 | WG1131033 |
| Cadmium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:49 | WG1131033 |
| Chromium | ND | | 0.100 | 5 | 1 | 06/28/2018 12:49 | WG1131033 |
| Lead | ND | | 0.100 | 5 | 1 | 06/28/2018 12:49 | WG1131033 |
| Selenium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:49 | WG1131033 |
| Silver | ND | | 0.100 | 5 | 1 | 06/28/2018 12:49 | WG1131033 |



Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|-----------------|--------|-----------|----------------------|-----------|
| TCLP Extraction | - | | 6/27/2018 1:25:12 PM | WG1130600 |
| Fluid | 2 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Initial pH | 11.35 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Final pH | 5.53 | | 6/27/2018 1:25:12 PM | WG1130600 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Mercury by Method 7470A

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Mercury | ND | | 0.0100 | 0.20 | 1 | 06/29/2018 09:05 | WG1131035 |

Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|----------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Arsenic | 0.328 | <u>B</u> | 0.100 | 5 | 1 | 06/28/2018 11:27 | WG1131026 |
| Barium | 0.778 | | 0.100 | 100 | 1 | 06/28/2018 11:27 | WG1131026 |
| Cadmium | ND | | 0.100 | 1 | 1 | 06/28/2018 11:27 | WG1131026 |
| Chromium | ND | | 0.100 | 5 | 1 | 06/28/2018 11:27 | WG1131026 |
| Lead | 150 | | 0.100 | 5 | 1 | 06/28/2018 11:27 | WG1131026 |
| Selenium | ND | | 0.100 | 1 | 1 | 06/28/2018 11:27 | WG1131026 |
| Silver | ND | | 0.100 | 5 | 1 | 06/28/2018 11:27 | WG1131026 |



Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|-----------------|--------|-----------|----------------------|-----------|
| TCLP Extraction | - | | 6/27/2018 1:25:12 PM | WG1130600 |
| Fluid | 1 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Initial pH | 7.33 | | 6/27/2018 1:25:12 PM | WG1130600 |
| Final pH | 5.02 | | 6/27/2018 1:25:12 PM | WG1130600 |

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Mercury by Method 7470A

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Mercury | ND | | 0.0100 | 0.20 | 1 | 06/29/2018 08:45 | WG1131013 |

Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|----------|----------------|-----------|-------------|---------------|----------|-------------------------|---------------------------|
| Arsenic | 0.164 | <u>B</u> | 0.100 | 5 | 1 | 06/28/2018 12:51 | WG1131033 |
| Barium | 0.479 | | 0.100 | 100 | 1 | 06/28/2018 12:51 | WG1131033 |
| Cadmium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:51 | WG1131033 |
| Chromium | ND | | 0.100 | 5 | 1 | 06/28/2018 12:51 | WG1131033 |
| Lead | 0.131 | | 0.100 | 5 | 1 | 06/28/2018 12:51 | WG1131033 |
| Selenium | ND | | 0.100 | 1 | 1 | 06/28/2018 12:51 | WG1131033 |
| Silver | ND | | 0.100 | 5 | 1 | 06/28/2018 12:51 | WG1131033 |

Total Solids by Method 2540 G-2011

[L1004774-01,02,03,04,05,06,07,08,09](#)

Method Blank (MB)

(MB) R3321514-1 06/27/18 13:42

| | MB Result | <u>MB Qualifier</u> | MB MDL | MB RDL |
|--------------|-----------|---------------------|--------|--------|
| Analyte | % | | % | % |
| Total Solids | 0.00100 | | | |

L1004797-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1004797-01 06/27/18 13:42 • (DUP) R3321514-3 06/27/18 13:42

| | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|--------------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | % | % | | % | | % |
| Total Solids | 73.9 | 74.4 | 1 | 0.691 | | 5 |

Laboratory Control Sample (LCS)

(LCS) R3321514-2 06/27/18 13:42

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | <u>LCS Qualifier</u> |
|--------------|--------------|------------|----------|-------------|----------------------|
| Analyte | % | % | % | % | |
| Total Solids | 50.0 | 50.0 | 100 | 85.0-115 | |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3321684-1 06/28/18 11:45

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|---------|--------|
| Analyte | mg/l | | mg/l | mg/l |
| Mercury | U | | 0.00333 | 0.0100 |

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

(LCS) R3321684-2 06/28/18 11:47 • (LCSD) R3321684-3 06/28/18 11:50

| | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD | RPD Limits |
|---------|--------------|------------|-------------|----------|-----------|-------------|---------------|----------------|-------|------------|
| Analyte | mg/l | mg/l | mg/l | % | % | % | | | % | % |
| Mercury | 0.0300 | 0.0248 | 0.0247 | 82.7 | 82.5 | 80.0-120 | | | 0.222 | 20 |

L1003722-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1003722-01 06/28/18 11:59 • (MS) R3321684-4 06/28/18 12:02 • (MSD) R3321684-5 06/28/18 12:04

| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Mercury | 0.0300 | ND | 0.0244 | 0.0256 | 81.3 | 85.4 | 1 | 75.0-125 | | | 4.95 | 20 |

L1004457-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1004457-05 06/28/18 12:07 • (MS) R3321684-6 06/28/18 12:09 • (MSD) R3321684-7 06/28/18 12:11

| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Mercury | 0.0300 | ND | 0.0250 | 0.0234 | 83.3 | 78.0 | 1 | 75.0-125 | | | 6.65 | 20 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3321939-1 06/29/18 08:52

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|---------|--------|
| Analyte | mg/l | | mg/l | mg/l |
| Mercury | U | | 0.00333 | 0.0100 |

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3321939-4 06/29/18 11:41 • (LCSD) R3321939-5 06/29/18 11:47

| | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD | RPD Limits |
|---------|--------------|------------|-------------|----------|-----------|-------------|---------------|----------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | % | % | % | | | % | % |
| Mercury | 0.0300 | 0.0338 | 0.0327 | 113 | 109 | 80.0-120 | | | 3.41 | 20 |

L1004774-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1004774-10 06/29/18 08:58 • (MS) R3321939-2 06/29/18 09:00 • (MSD) R3321939-3 06/29/18 09:02

| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Mercury | 0.0300 | ND | 0.00868 | 0.0168 | 28.9 | 56.1 | 1 | 75.0-125 | J6 | J3 J6 | 63.9 | 20 |



Method Blank (MB)

(MB) R3321641-1 06/28/18 08:18

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|---------|--------|
| Analyte | mg/kg | | mg/kg | mg/kg |
| Mercury | U | | 0.00280 | 0.0200 |

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3321641-2 06/28/18 08:20 • (LCSD) R3321641-3 06/28/18 08:23

| | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD | RPD Limits |
|---------|--------------|------------|-------------|----------|-----------|-------------|---------------|----------------|------|------------|
| Analyte | mg/kg | mg/kg | mg/kg | % | % | % | | | % | % |
| Mercury | 0.300 | 0.266 | 0.271 | 88.5 | 90.3 | 80.0-120 | | | 1.92 | 20 |

L1004774-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1004774-01 06/28/18 08:25 • (MS) R3321641-4 06/28/18 08:28 • (MSD) R3321641-5 06/28/18 08:30

| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/kg | mg/kg | mg/kg | mg/kg | % | % | | % | | | % | % |
| Mercury | 0.300 | U | 0.262 | 0.279 | 87.4 | 93.2 | 1 | 75.0-125 | | | 6.43 | 20 |

Method Blank (MB)

(MB) R3321499-1 06/27/18 17:28

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|-----------|--------------------|--------------|-----------------|-----------------|
| Aluminum | U | | 3.50 | 10.0 |
| Antimony | U | | 0.750 | 2.00 |
| Arsenic | U | | 0.650 | 2.00 |
| Barium | U | | 0.170 | 0.500 |
| Beryllium | U | | 0.0700 | 0.200 |
| Cadmium | U | | 0.0700 | 0.500 |
| Calcium | U | | 4.63 | 100 |
| Chromium | U | | 0.140 | 1.00 |
| Cobalt | U | | 0.230 | 1.00 |
| Copper | U | | 0.530 | 2.00 |
| Iron | U | | 1.41 | 10.0 |
| Lead | 0.252 | U | 0.190 | 0.500 |
| Magnesium | 10.6 | U | 1.11 | 100 |
| Manganese | U | | 0.120 | 1.00 |
| Nickel | U | | 0.490 | 2.00 |
| Potassium | 10.5 | U | 10.2 | 100 |
| Selenium | U | | 0.740 | 2.00 |
| Silver | U | | 0.280 | 1.00 |
| Sodium | 17.8 | U | 9.85 | 100 |
| Thallium | U | | 0.650 | 2.00 |
| Vanadium | 1.53 | U | 0.240 | 2.00 |
| Zinc | U | | 0.590 | 5.00 |

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3321499-2 06/27/18 17:31 • (LCSD) R3321499-3 06/27/18 17:34

| 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 % |
|-----------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Aluminum | 1000 | 1010 | 988 | 101 | 98.8 | 80.0-120 | | | 2.30 | 20 |
| Antimony | 100 | 99.9 | 98.9 | 99.9 | 98.9 | 80.0-120 | | | 1.07 | 20 |
| Arsenic | 100 | 99.5 | 99.2 | 99.5 | 99.2 | 80.0-120 | | | 0.331 | 20 |
| Barium | 100 | 103 | 102 | 103 | 102 | 80.0-120 | | | 1.14 | 20 |
| Beryllium | 100 | 102 | 100 | 102 | 100 | 80.0-120 | | | 1.67 | 20 |
| Cadmium | 100 | 97.8 | 96.8 | 97.8 | 96.8 | 80.0-120 | | | 1.04 | 20 |
| Calcium | 1000 | 1020 | 1010 | 102 | 101 | 80.0-120 | | | 1.59 | 20 |
| Chromium | 100 | 102 | 99.9 | 102 | 99.9 | 80.0-120 | | | 2.27 | 20 |
| Cobalt | 100 | 102 | 100 | 102 | 100 | 80.0-120 | | | 2.06 | 20 |
| Copper | 100 | 100 | 98.5 | 100 | 98.5 | 80.0-120 | | | 1.71 | 20 |
| Iron | 1000 | 1000 | 1000 | 100 | 100 | 80.0-120 | | | 0.116 | 20 |



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

(LCS) R3321499-2 06/27/18 17:31 • (LCSD) R3321499-3 06/27/18 17:34

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCSD Result mg/kg | LCS Rec. % | LCSD Rec. % | Rec. Limits % | <u>LCS Qualifier</u> | <u>LCSD Qualifier</u> | RPD % | RPD Limits % |
|-----------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|----------------------|-----------------------|----------|-----------------|
| Lead | 100 | 100 | 99.3 | 100 | 99.3 | 80.0-120 | | | 1.16 | 20 |
| Magnesium | 1000 | 1020 | 1020 | 102 | 102 | 80.0-120 | | | 0.0557 | 20 |
| Manganese | 100 | 99.6 | 97.4 | 99.6 | 97.4 | 80.0-120 | | | 2.27 | 20 |
| Nickel | 100 | 103 | 101 | 103 | 101 | 80.0-120 | | | 1.43 | 20 |
| Potassium | 1000 | 1010 | 988 | 101 | 98.8 | 80.0-120 | | | 1.78 | 20 |
| Selenium | 100 | 107 | 106 | 107 | 106 | 80.0-120 | | | 1.20 | 20 |
| Silver | 20.0 | 19.4 | 19.1 | 97.0 | 95.3 | 80.0-120 | | | 1.80 | 20 |
| Sodium | 1000 | 1030 | 1010 | 103 | 101 | 80.0-120 | | | 1.64 | 20 |
| Thallium | 100 | 101 | 100 | 101 | 100 | 80.0-120 | | | 1.12 | 20 |
| Vanadium | 100 | 100 | 101 | 100 | 101 | 80.0-120 | | | 0.705 | 20 |
| Zinc | 100 | 103 | 102 | 103 | 102 | 80.0-120 | | | 1.21 | 20 |

L1004774-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1004774-01 06/27/18 17:38 • (MS) R3321499-6 06/27/18 17:48 • (MSD) R3321499-7 06/27/18 17:51

| Analyte | Spike Amount mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | <u>MS Qualifier</u> | <u>MSD Qualifier</u> | RPD % | RPD Limits % |
|-----------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|---------------------|----------------------|----------|-----------------|
| Aluminum | 1000 | 173 | 1210 | 1160 | 103 | 98.7 | 1 | 75.0-125 | | | 4.00 | 20 |
| Antimony | 100 | U | 93.5 | 99.9 | 93.5 | 99.9 | 1 | 75.0-125 | | | 6.67 | 20 |
| Arsenic | 100 | 3.84 | 101 | 107 | 97.1 | 103 | 1 | 75.0-125 | | | 5.58 | 20 |
| Barium | 100 | 3.11 | 93.8 | 98.3 | 90.7 | 95.2 | 1 | 75.0-125 | | | 4.68 | 20 |
| Beryllium | 100 | 0.0923 | 92.0 | 97.1 | 91.9 | 97.1 | 1 | 75.0-125 | | | 5.48 | 20 |
| Cadmium | 100 | U | 93.1 | 98.3 | 93.1 | 98.3 | 1 | 75.0-125 | | | 5.44 | 20 |
| Calcium | 1000 | 608 | 1530 | 1520 | 91.9 | 91.3 | 1 | 75.0-125 | | | 0.376 | 20 |
| Chromium | 100 | 0.804 | 94.5 | 99.0 | 93.7 | 98.2 | 1 | 75.0-125 | | | 4.65 | 20 |
| Cobalt | 100 | U | 99.9 | 106 | 99.9 | 106 | 1 | 75.0-125 | | | 5.44 | 20 |
| Copper | 100 | 3.15 | 95.7 | 101 | 92.6 | 97.8 | 1 | 75.0-125 | | | 5.33 | 20 |
| Iron | 1000 | 315 | 1320 | 1260 | 100 | 94.2 | 1 | 75.0-125 | | | 4.63 | 20 |
| Lead | 100 | 4.15 | 96.1 | 102 | 91.9 | 97.5 | 1 | 75.0-125 | | | 5.62 | 20 |
| Magnesium | 1000 | 214 | 1170 | 1170 | 95.5 | 95.9 | 1 | 75.0-125 | | | 0.354 | 20 |
| Manganese | 100 | 8.29 | 100 | 104 | 92.1 | 95.3 | 1 | 75.0-125 | | | 3.17 | 20 |
| Nickel | 100 | 0.567 | 100 | 106 | 99.4 | 105 | 1 | 75.0-125 | | | 5.68 | 20 |
| Potassium | 1000 | 97.8 | 1060 | 1080 | 96.1 | 98.7 | 1 | 75.0-125 | | | 2.39 | 20 |
| Selenium | 100 | U | 95.9 | 102 | 95.9 | 102 | 1 | 75.0-125 | | | 6.08 | 20 |
| Silver | 20.0 | U | 18.3 | 19.4 | 91.7 | 97.2 | 1 | 75.0-125 | | | 5.80 | 20 |
| Sodium | 1000 | 107000 | 110000 | 108000 | 297 | 141 | 1 | 75.0-125 | EV | EV | 1.43 | 20 |
| Thallium | 100 | 2.06 | 87.6 | 93.5 | 85.5 | 91.4 | 1 | 75.0-125 | | | 6.54 | 20 |
| Vanadium | 100 | U | 92.7 | 99.0 | 92.7 | 99.0 | 1 | 75.0-125 | | | 6.61 | 20 |
| Zinc | 100 | 6.24 | 102 | 107 | 95.3 | 101 | 1 | 75.0-125 | | | 5.21 | 20 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3321693-1 06/28/18 10:32

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|----------|-------------------|--------------|----------------|----------------|
| Arsenic | 0.0567 | J | 0.0333 | 0.100 |
| Barium | U | | 0.0333 | 0.100 |
| Cadmium | U | | 0.0333 | 0.100 |
| Chromium | U | | 0.0333 | 0.100 |
| Lead | U | | 0.0333 | 0.100 |
| Selenium | U | | 0.0333 | 0.100 |
| Silver | U | | 0.0333 | 0.100 |

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3321693-2 06/28/18 10:35 • (LCSD) R3321693-3 06/28/18 10:37

| 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 % |
|----------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Arsenic | 10.0 | 9.89 | 10.0 | 98.9 | 100 | 80.0-120 | | | 1.25 | 20 |
| Barium | 10.0 | 10.3 | 10.3 | 103 | 103 | 80.0-120 | | | 0.300 | 20 |
| Cadmium | 10.0 | 9.90 | 9.94 | 99.0 | 99.4 | 80.0-120 | | | 0.337 | 20 |
| Chromium | 10.0 | 10.1 | 10.1 | 101 | 101 | 80.0-120 | | | 0.562 | 20 |
| Lead | 10.0 | 10.0 | 10.1 | 100 | 101 | 80.0-120 | | | 1.14 | 20 |
| Selenium | 10.0 | 10.2 | 10.4 | 102 | 104 | 80.0-120 | | | 1.82 | 20 |
| Silver | 2.00 | 1.90 | 1.92 | 95.1 | 96.0 | 80.0-120 | | | 0.888 | 20 |

L1004770-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1004770-02 06/28/18 10:40 • (MS) R3321693-5 06/28/18 10:45 • (MSD) R3321693-6 06/28/18 10:48

| Analyte | Spike Amount mg/l | Original Result mg/l | MS Result mg/l | MSD Result mg/l | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|----------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Arsenic | 10.0 | ND | 10.6 | 10.3 | 105 | 103 | 1 | 75.0-125 | | | 2.55 | 20 |
| Barium | 10.0 | 1.84 | 12.2 | 11.9 | 104 | 101 | 1 | 75.0-125 | | | 2.78 | 20 |
| Cadmium | 10.0 | ND | 10.4 | 10.2 | 104 | 102 | 1 | 75.0-125 | | | 1.51 | 20 |
| Chromium | 10.0 | ND | 10.1 | 9.93 | 101 | 99.3 | 1 | 75.0-125 | | | 1.29 | 20 |
| Lead | 10.0 | 2.09 | 12.7 | 12.3 | 106 | 102 | 1 | 75.0-125 | | | 3.46 | 20 |
| Selenium | 10.0 | ND | 11.2 | 11.0 | 112 | 110 | 1 | 75.0-125 | | | 1.55 | 20 |
| Silver | 2.00 | ND | 2.01 | 1.96 | 100 | 98.2 | 1 | 75.0-125 | | | 2.22 | 20 |



Method Blank (MB)

(MB) R3321697-1 06/28/18 11:35

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL mg/l |
|----------|-------------------|--------------|----------------|----------------|
| Arsenic | 0.0458 | ⌵ | 0.0333 | 0.100 |
| Barium | U | | 0.0333 | 0.100 |
| Cadmium | U | | 0.0333 | 0.100 |
| Chromium | U | | 0.0333 | 0.100 |
| Lead | U | | 0.0333 | 0.100 |
| Selenium | U | | 0.0333 | 0.100 |
| Silver | U | | 0.0333 | 0.100 |

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3321697-2 06/28/18 11:38 • (LCSD) R3321697-3 06/28/18 11:40

| 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 % |
|----------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Arsenic | 10.0 | 9.76 | 9.66 | 97.6 | 96.6 | 80.0-120 | | | 1.04 | 20 |
| Barium | 10.0 | 10.1 | 10.1 | 101 | 101 | 80.0-120 | | | 0.461 | 20 |
| Cadmium | 10.0 | 9.94 | 9.87 | 99.4 | 98.7 | 80.0-120 | | | 0.654 | 20 |
| Chromium | 10.0 | 9.82 | 9.82 | 98.2 | 98.2 | 80.0-120 | | | 0.00941 | 20 |
| Lead | 10.0 | 9.97 | 9.87 | 99.7 | 98.7 | 80.0-120 | | | 1.03 | 20 |
| Selenium | 10.0 | 10.2 | 10.1 | 102 | 101 | 80.0-120 | | | 1.27 | 20 |
| Silver | 2.00 | 1.83 | 1.84 | 91.5 | 91.8 | 80.0-120 | | | 0.268 | 20 |

L1003546-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1003546-04 06/28/18 11:43 • (MS) R3321697-5 06/28/18 11:48 • (MSD) R3321697-6 06/28/18 11:51

| Analyte | Spike Amount mg/l | Original Result mg/l | MS Result mg/l | MSD Result mg/l | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|----------|----------------------|-------------------------|-------------------|--------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Arsenic | 10.0 | ND | 10.2 | 10.1 | 102 | 101 | 1 | 75.0-125 | | | 0.954 | 20 |
| Barium | 10.0 | 0.291 | 10.2 | 10.1 | 99.4 | 98.3 | 1 | 75.0-125 | | | 1.10 | 20 |
| Cadmium | 10.0 | 0.262 | 10.4 | 10.3 | 101 | 100 | 1 | 75.0-125 | | | 1.04 | 20 |
| Chromium | 10.0 | ND | 9.88 | 9.81 | 98.3 | 97.5 | 1 | 75.0-125 | | | 0.745 | 20 |
| Lead | 10.0 | 17.1 | 26.6 | 27.5 | 94.6 | 104 | 1 | 75.0-125 | | | 3.50 | 20 |
| Selenium | 10.0 | ND | 10.7 | 10.6 | 107 | 106 | 1 | 75.0-125 | | | 0.661 | 20 |
| Silver | 2.00 | ND | 1.92 | 1.90 | 95.9 | 95.1 | 1 | 75.0-125 | | | 0.793 | 20 |



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.

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. |
| U | Not detected at the Reporting Limit (or MDL where applicable). |
| 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. |
| 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. |
| E | The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL). |
| J | The identification of the analyte is acceptable; the reported value is an estimate. |
| J3 | The associated batch QC was outside the established quality control range for precision. |
| J6 | The sample matrix interfered with the ability to make any accurate determination; spike value is low. |
| V | The sample concentration is too high to evaluate accurate spike recoveries. |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* 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 ESC Lab Sciences.

State Accreditations

| | | | |
|-------------------------|-------------|-----------------------------|-------------------|
| Alabama | 40660 | Nebraska | NE-OS-15-05 |
| Alaska | 17-026 | Nevada | TN-03-2002-34 |
| Arizona | AZ0612 | New Hampshire | 2975 |
| Arkansas | 88-0469 | New Jersey–NELAP | TN002 |
| California | 2932 | New Mexico ¹ | n/a |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina ¹ | DW21704 |
| Georgia | NELAP | North Carolina ³ | 41 |
| Georgia ¹ | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio–VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN2000002 |
| Iowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LA000356 |
| Kentucky ^{1 6} | 90010 | South Carolina | 84004 |
| Kentucky ² | 16 | South Dakota | n/a |
| Louisiana | AI30792 | Tennessee ^{1 4} | 2006 |
| Louisiana ¹ | LA180010 | Texas | T 104704245-17-14 |
| Maine | TN0002 | Texas ⁵ | LAB0152 |
| Maryland | 324 | Utah | TN00003 |
| Massachusetts | M-TN003 | Vermont | VT2006 |
| Michigan | 9958 | Virginia | 460132 |
| Minnesota | 047-999-395 | Washington | C847 |
| Mississippi | TN00003 | West Virginia | 233 |
| Missouri | 340 | Wisconsin | 9980939910 |
| Montana | CERT0086 | Wyoming | A2LA |

Third Party Federal Accreditations

| | | | |
|-------------------------------|---------|---------------------|---------------|
| A2LA – ISO 17025 | 1461.01 | AIHA-LAP, LLC EMLAP | 100789 |
| A2LA – ISO 17025 ⁵ | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |
| EPA–Crypto | TN00003 | | |

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

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



Weston Solutions
1435 Garrison Street
Suite 100
Lakewood, CO 80215

Shipping Information:
Same

Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# **L1604431**
E219

Acctnum:

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Remarks

Sample # (lab only)

Report to:
Eric Sandusky

Email To:
eric.sandusky@westonsolutions.com

Project Norris Labs
Description:

City/State Montana
Collected:

Phone: 303-729-6132
Fax:

Client Project #
20408.012.001.0809.00

Lab Project #

Collected by (print):
JR

Site/Facility ID #
NL

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Quote #

Same Day _____ Five Day _____
☒ Next Day _____ 5 Day (Rad Only) _____
Two Day _____ 10 Day (Rad Only) _____
Three Day _____

Date Results Needed

No.
of
Cnts

Immediately
Packed on Ice: N _____ Y _____

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | Total Metals | TCLP | VOC 8260 | SVOC 8270 | Total Metals | | | | | | | | | | |
|-----------|-----------|----------|-------|-----------|------|--------------|------|----------|-----------|--------------|--|--|--|--|--|--|--|-------------|--|--|
| NL-LP-01 | Grab | OT | | 6-22-2018 | 0800 | 2X | X | | | | | | | | | | | | | |
| NL-LX-02 | Comp | SS | | 6-22-2018 | 0850 | 2X | X | | | | | | | | | | | | | |
| NL-DH-03 | Comp | SS | | 6-22-2018 | 0900 | 2X | X | | | | | | | | | | | | | |
| NL-HS-04 | Comp | SS | | 6-22-2018 | 0930 | 2X | X | | | | | | | | | | | | | |
| NL-FC-05 | Comp | SS | | 6-22-2018 | 0945 | 2X | X | | | | | | | | | | | | | |
| NL-SW-06 | Grab | GW | | 6-22-2018 | 0955 | 2X | X | X | X | X | | | | | | | | Limited Vol | | |
| NL-PD-07 | Grab | GW | | 6-22-2018 | 1018 | 2X | | X | X | X | | | | | | | | Limited Vol | | |
| NL-DS-08 | Grab | GW | | 6-22-2018 | 1100 | 2X | | X | X | X | | | | | | | | Limited Vol | | |
| NL-UP-09 | Grab | GW | | 6-22-2018 | 1150 | 2X | | X | X | X | | | | | | | | | | |
| NL-LB-10 | Comp | SS | | 6-22-2018 | 1230 | 1X | X | | | | | | | | | | | | | |

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:

UPS _____ FedEx ☒ Courier _____

Tracking # **7384 4199 0588 / 7136 2665 0062**

Sample Receipt Checklist

COC Seal Present/Intact: ☒ NP
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

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Trip Blank Received: ☒ No

2X MeOH
1X TBH

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: **3.6** °C Bottles Received: **24**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: **6/26/18** Time: **8:45**

Hold:

Condition:

NCE / OK

6/27/18

Jeremy W. Watkins

ESC Lab Sciences
Non-Conformance Form

| | | | |
|-------------------|------------------|---------------|----------------------|
| Login #: L1004774 | Client: WESSOLCO | Date: 6/26/18 | Evaluated by: Jeremy |
|-------------------|------------------|---------------|----------------------|

Non-Conformance (check applicable items)

| Sample Integrity | Chain of Custody Clarification | If Broken Container: |
|--------------------------------|--|--|
| Parameter(s) past holding time | x Login Clarification Needed | |
| Improper temperature | Chain of custody is incomplete | Insufficient packing material around container |
| Improper container type | Please specify Metals requested. | Insufficient packing material inside cooler |
| Improper preservation | Please specify TCLP requested. | Improper handling by carrier (FedEx / UPS / Courier) |
| Insufficient sample volume. | Received additional samples not listed on coc. | Sample was frozen |
| Sample is biphasic. | Sample ids on containers do not match ids on coc | Container lid not intact |
| Vials received with headspace. | Trip Blank not received. | If no Chain of Custody: |
| Broken container | Client did not "X" analysis. | Received by: |
| Broken container: | Chain of Custody is missing | Date/Time: |
| Sufficient sample remains | | Temp./Cont. Rec./pH: |
| | | Carrier: |
| | | Tracking# |

Login Comments:

1. What Metals?
2. What TCLP?
3. Did not receive Soil Samples. (missing cooler stuck in INDY 713626650062)

| | | | | | | |
|---------------------|-------------------------------|---|-------|------------|----------------|------------|
| Client informed by: | Call | X | Email | Voice Mail | Date: 06/26/18 | Time: 1110 |
| TSR Initials: JCR | Client Contact: Eric Sandusky | | | | | |

Login Instructions:

- 1) TAL Metals
- 2) TCLP Metals
- 3) FedEx Delivery Error – cooler will arrive tomorrow. Log the soils to a separate SDG upon arrival on 6/27

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