



**VIA ELECTRONIC MAIL –**

August 15, 2023

Jake Janicek  
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143 Diamond Avenue  
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**Subject:           Report of Work Completed  
                      H7 Tank Investigation  
                      Mamm Creek Field  
                      Garfield County, Colorado**

Dear Mr. Janicek:

WSP USA Inc. (WSP), on behalf of Caerus Piceance LLC (Caerus), conducted initial and subsequent investigative delineation soil sampling associated with hydrocarbon impacts identified during facility modifications at the KRK-67S92W7SENE (H7) (Facility ID: 334864) pad location (Site). Impacts were discovered on June 7, 2023, when work was being conducted at the Site under approved Remediation Project Number (RPN) 20584. Impacts to soils were visually observed by on-site personnel along the buried dumplines into the tank battery secondary containment associated with the tank battery. This document serves as a report of work completed (ROWC) which details all investigative assessment activities to date and is associated with Initial Form 27 Document Number (DN) 403475735. All initial spill report details can be referenced under Colorado Oil and Gas Conservation Commission (COGCC) Spill/Release Report (Initial) Document Number 403427356 and Spill/Release ID 484573. The Site is in the Caerus Mamm Creek area of operation in Garfield County, Colorado (Figure 1).

## **ASSESSMENT SOIL SAMPLING ACTIVITIES – H7 TANK BATTERY**

On June 21 and 22, 2023, a WSP geologist was onsite to conduct initial investigative assessment pothole characterization field soil screening and characterization sampling associated with the soil impacts beneath the buried dumplines into tank battery secondary containment. Western Slope Field Services, Inc. (WCO) of Rifle, Colorado was contracted by Caerus to provide hydro-vacuum services to assist with the investigative assessment activities immediately surrounding the tank battery. Four potholes on the outer edge of the secondary containment structure in all four cardinal directions using the hydro-vacuum truck (hydro-vac) and two additional potholes were advanced inside the secondary containment. All pothole locations were advanced to 15 feet below ground surface (bgs) or until refusal was encountered. During advancement of the potholes, soil samples were collected for field screening purposes using a hand auger at the depth intervals of 2 feet, 5 feet, 8 feet, 11 feet, and 14 feet. Two confirmation soil samples were submitted from each pothole location: the most impacted based on field screening along with the pothole terminus. The pothole soil sampling activities were conducted by a WSP geologist who inspected the soil samples for the presence or absence of petroleum hydrocarbons odor and/or staining. The soil samples were characterized by visually inspecting the confirmation soil samples and field screening the soil head space using a photoionization detector (PID) to monitor for the presence or absence of volatile organic vapors (VOCs). Field screening results are summarized below.

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**Soil Screening Summary Table - June 21 and 22, 2023**

| Sample ID                    | PID (ppm) | Staining or Odor  | Submitted for Analysis |
|------------------------------|-----------|-------------------|------------------------|
| 2023030621 – H7-(SBE)@2-3    | 61.9      | None              | No                     |
| 2023030621 – H7-(SBE)@5-6    | 17.5      | None              | No                     |
| 2023030621 – H7-(SBE)@8-9    | 51.5      | None              | Table 915-1            |
| 2023030621 – H7-(SBE)@11-12  | 19.6      | None              | Table 915-1            |
| 2023030621 – H7-(SBS)@2-3    | 55.5      | None              | Table 915-1            |
| 2023030621 – H7-(SBS)@5-6    | 15.1      | None              | No                     |
| 2023030621 – H7-(SBS)@8-9    | 49.5      | None              | Table 915-1            |
| 2023030621 – H7-(SBW)@2-3    | 54.5      | None              | Table 915-1            |
| 2023030621 – H7-(SBW)@5-6    | 2.1       | None              | No                     |
| 2023030621 – H7-(SBW)@8-9    | 1.2       | None              | No                     |
| 2023030622 – H7-(SBW)@11-12  | 17.8      | None              | Table 915-1            |
| 2023030622 – H7-(SBN)@2-3    | 5,000     | Staining and odor | No                     |
| 2023030622 – H7-(SBN)@5-6    | 5,000     | Staining and odor | No                     |
| 2023030622 – H7-(SBN)@8-9    | 5,000     | Staining and odor | Table 915-1            |
| 2023030622 – H7-(SBN)@11-12  | 845.3     | Staining and odor | No                     |
| 2023030622 – H7-(SBN)@14-15  | 2,512.2   | Staining and odor | Table 915-1            |
| 2023030622 – H7-(SB01)@2-3   | 5,000     | Staining and odor | Table 915-1            |
| 2023030622 – H7-(SB01)@5-6   | 5,000     | Staining and odor | No                     |
| 2023030622 – H7-(SB01)@8-9   | 4,255     | Staining and odor | No                     |
| 2023030622 – H7-(SB01)@11-12 | 3,567     | Staining and odor | Table 915-1            |
| 2023030622 – H7-(SB02)@2-3   | 3.9       | None              | No                     |
| 2023030622 – H7-(SB02)@5-6   | 5.6       | None              | Table 915-1            |
| 2023030622 – H7-(SB02)@8-9   | 3.1       | None              | No                     |
| 2023030622 – H7-(SB02)@11-12 | 3.0       | None              | Table 915-1            |

Key:

PID – photoionization detector

ppm – parts per million

On July 3 and 5, 2023, a WSP geologist and Colorado Drilling and Sampling (CD&S) returned to the Site to continue the delineation of the impacts associated with the tank battery dumpline release at the H7. Using a SIMCO 2800 track mounted drilling rig equipped with a solid stem auger, a total of five soil borings were advanced: one between the former tank battery, and four in each cardinal direction of the secondary containment. Prior to any drilling activities, each soil boring location was potholed to 10 feet bgs or refusal using a hydro-vac operated by WCO to ensure clearance of underground utilities. The borehole total depths ranged from 31.5 feet bgs to 32 feet bgs. All drilling oversight, soil sampling, and field soil screening activities were conducted by a WSP geologist who field screened each borehole at five-foot intervals and inspected for the presence or absence of petroleum hydrocarbons odor and/or staining. Soil was characterized utilizing the United Soil Classification System (USCS) and by visually inspecting the soil samples and field screening the soil head space using a PID to monitor for the presence or absence of VOCs. Confirmation soil samples were collected directly from the split spoon sampler at each 10-foot interval starting from the bottom of each pothole to the boring terminus. A total of three confirmation soil samples were submitted from each boring and the depth associated with each of the samples are summarized in the table below.



**Soil Screening Summary Table - July 3 and 5, 2023**

| Sample ID                   | PID (ppm) | Staining and Odor | Submitted for Analysis |
|-----------------------------|-----------|-------------------|------------------------|
| 20230703-H7-(SB01)@10-12    | 3,360     | Staining and odor | Table 915-1            |
| 20230703-H7-(SB01)@20-22    | 4,028     | Staining and odor | Table 915-1            |
| 20230703-H7-(SB01)@30-32    | 22.4      | None              | Table 915-1            |
| 20230703-H7-(SB02)@10-12    | 7.2       | None              | Table 915-1            |
| 20230703-H7-(SB02)@20-21.5  | 2.1       | None              | Table 915-1            |
| 20230703-H7-(SB02)@30-31.5  | 8.3       | None              | Table 915-1            |
| 20230705-H7-(SB03)@10-11.5  | 2.2       | None              | Table 915-1            |
| 20230705-H7-(SB03)@20-22    | 1.1       | None              | Table 915-1            |
| 20230705-H7-(SB03)@30-31.5  | 2.3       | None              | Table 915-1            |
| 20230705-H7-(SB04)@ 10-11.5 | 0.4       | None              | Table 915-1            |
| 20230705-H7-(SB04)@ 20-21.5 | 0.5       | None              | Table 915-1            |
| 20230705-H7-(SB04)@ 30-31.5 | 0.3       | None              | Table 915-1            |
| 20230705-H7-(SB05)@ 10-11.5 | 0.5       | None              | Table 915-1            |
| 20230705-H7-(SB05)@ 20-21.5 | 0.3       | None              | Table 915-1            |
| 20230705-H7-(SB05)@ 30-31.5 | 0.3       | None              | Table 915-1            |

Key:

PID – photoionization detector

ppm – parts per million

All 27 investigative pothole and soil boring confirmation samples were collected in clean laboratory-prepared containers and submitted to Pace for COGCC Table 915-1 constituents. The investigative confirmation soil samples were evaluated under the COGCC Table 915-1 Protection of Groundwater Soil Screening Level Concentrations (PGSSLC) milligrams per kilogram (mg/kg) Risk Based (R) and Maximum Concentration Level (MCL) Based (M).

A photographic log detailing all investigative assessment activities conducted during the second quarter of 2023 are included in Enclosure A and the soil boring drill logs are included in Enclosure B. The soil boring “pothole” locations advance on June 21 and 22, 2023 and soil boring advanced on July 3 and 5, 2023 are depicted on Figure 2.

## ANALYTICAL RESULTS – H7 TANK BATTERY

Laboratory analytical results of the tank battery dumpline soil boring “pothole” soil samples collected on June 21 and 22, 2023, indicate exceedances to the COGCC Table 915-1 PGSSLC (M) for arsenic, barium, cadmium, lead, selenium, benzene, toluene, ethylbenzene, total xylenes and exceedances in the COGCC Table 915-1 PGSSLC (R) for chromium (VI), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene. Additionally, laboratory analytical results indicate exceedances of COGCC Table 915-1 Cleanup Concentrations (CCs) for total petroleum hydrocarbons (TPH) and pH. The documented exceedances for each confirmation sample are summarized in the table below.



### Summary of Confirmation Soil Exceedances – June 21 and 22, 2023

| Confirmation Soil Sample ID    | COGCC Table 915-1 Contaminants of Concern | Units | COGCC Protection of Groundwater Soil Screening Level Concentrations | Confirmation Soil Sample Concentration |
|--------------------------------|-------------------------------------------|-------|---------------------------------------------------------------------|----------------------------------------|
| <b>20230621-H7-(SBE)@8-9</b>   | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>6.09</b>                            |
|                                | Barium                                    | mg/kg | 82 (M)                                                              | <b>168</b>                             |
|                                | Selenium                                  | mg/kg | 0.26 (M)                                                            | <b>0.359</b>                           |
| <b>20230621-H7-(SBE)@11-12</b> | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>7.32</b>                            |
|                                | Barium                                    | mg/kg | 82 (M)                                                              | <b>162</b>                             |
|                                | Selenium                                  | mg/kg | 0.26 (M)                                                            | <b>0.324</b>                           |
| <b>20230621-H7-(SBS)@2-3</b>   | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>5.60</b>                            |
|                                | Barium                                    | mg/kg | 82 (M)                                                              | <b>185</b>                             |
|                                | Selenium                                  | mg/kg | 0.026 (M)                                                           | <b>0.609</b>                           |
|                                | Chromium (VI)                             | mg/kg | 0.00067 (R)                                                         | <b>0.326</b>                           |
| <b>20230621-H7-(SBS)@8-9</b>   | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>5.42</b>                            |
|                                | Barium                                    | mg/kg | 82 (M)                                                              | <b>494</b>                             |
|                                | Selenium                                  | mg/kg | 0.026 (M)                                                           | <b>0.404</b>                           |
| <b>20230621-H7-(SBW)@2-3</b>   | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>5.18</b>                            |
|                                | Barium                                    | mg/kg | 82 (M)                                                              | <b>1,390</b>                           |
|                                | Selenium                                  | mg/kg | 0.026 (M)                                                           | <b>0.486</b>                           |
| <b>20230621-H7-(SBW)@11-12</b> | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>6.09</b>                            |
|                                | Barium                                    | mg/kg | 82 (M)                                                              | <b>168</b>                             |
|                                | Selenium                                  | mg/kg | 0.026 (M)                                                           | <b>0.359</b>                           |
| <b>20230622-H7-(SBN)@8-9</b>   | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>5.33</b>                            |
|                                | Barium                                    | mg/kg | 82 (M)                                                              | <b>207</b>                             |
|                                | Cadmium                                   | mg/kg | 0.38 (M)                                                            | <b>0.382</b>                           |
|                                | Lead                                      | mg/kg | 14 (M)                                                              | <b>98.43</b>                           |
|                                | Selenium                                  | mg/kg | 0.26 (M)                                                            | <b>0.332</b>                           |
|                                | TPH                                       | mg/kg | 500                                                                 | <b>2,090.3</b>                         |
|                                | Ethylbenzene                              | mg/kg | 0.78 (M)                                                            | <b>2.50</b>                            |
|                                | Total Xylenes                             | mg/kg | 9.9 (M)                                                             | <b>62.2</b>                            |
|                                | 1,2,4-trimethylbenzene                    | mg/kg | 0.0081 (R)                                                          | <b>26.6</b>                            |
|                                | 1,3,5-trimethylbenzene                    | mg/kg | 0.0087 (R)                                                          | <b>26.8</b>                            |
|                                | 1-methylnaphthalene                       | mg/kg | 0.006 (R)                                                           | <b>0.565</b>                           |
|                                | 2-methylnaphthalene                       | mg/kg | 0.019 (R)                                                           | <b>1.53</b>                            |
|                                | Naphthalene                               | mg/kg | 0.0038 (R)                                                          | <b>0.803</b>                           |
| <b>20230622-H7-(SBN)@14-15</b> | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>9.75</b>                            |
|                                | Barium                                    | mg/kg | 82 (M)                                                              | <b>275</b>                             |
|                                | Selenium                                  | mg/kg | 0.26 (M)                                                            | <b>0.387</b>                           |
|                                | TPH                                       | mg/kg | 500                                                                 | <b>1,665.8</b>                         |
|                                | Benzene                                   | mg/kg | 0.0026 (M)                                                          | <b>0.0580</b>                          |
|                                | Toluene                                   | mg/kg | 0.69 (M)                                                            | <b>5.34</b>                            |
|                                | Ethylbenzene                              | mg/kg | 0.78 (M)                                                            | <b>4.11</b>                            |
|                                | Total Xylenes                             | mg/kg | 9.9 (M)                                                             | <b>83.1</b>                            |
|                                | 1,2,4-trimethylbenzene                    | mg/kg | 0.0081 (R)                                                          | <b>20.8</b>                            |
|                                | 1,3,5-trimethylbenzene                    | mg/kg | 0.0087 (R)                                                          | <b>21.1</b>                            |
|                                | 1-methylnaphthalene                       | mg/kg | 0.006 (R)                                                           | <b>0.158</b>                           |
|                                | 2-methylnaphthalene                       | mg/kg | 0.019 (R)                                                           | <b>0.439</b>                           |
|                                | Naphthalene                               | mg/kg | 0.0038 (R)                                                          | <b>0.246</b>                           |





### Continued Summary of Confirmation Soil Exceedances – June 21 and 22, 2023

| Confirmation Soil Sample ID     | COGCC Table 915-1 Contaminants of Concern | Units | COGCC Protection of Groundwater Soil Screening Level Concentrations | Confirmation Soil Sample Concentration |
|---------------------------------|-------------------------------------------|-------|---------------------------------------------------------------------|----------------------------------------|
| <b>20230622-H7-(SB01)@2-3</b>   | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>5.80</b>                            |
|                                 | Barium                                    | mg/kg | 82 (M)                                                              | <b>176</b>                             |
|                                 | Selenium                                  | mg/kg | 0.26 (M)                                                            | <b>0.363</b>                           |
|                                 | TPH                                       | mg/kg | 500                                                                 | <b>2,663.58</b>                        |
|                                 | Benzene                                   | mg/kg | 0.0026 (M)                                                          | <b>0.0164</b>                          |
|                                 | Toluene                                   | mg/kg | 0.69 (M)                                                            | <b>1.16</b>                            |
|                                 | Ethylbenzene                              | mg/kg | 0.78 (M)                                                            | <b>4.98</b>                            |
|                                 | Total Xylenes                             | mg/kg | 9.9 (M)                                                             | <b>108</b>                             |
|                                 | 1,2,4-trimethylbenzene                    | mg/kg | 0.0081 (R)                                                          | <b>23.5</b>                            |
|                                 | 1,3,5-trimethylbenzene                    | mg/kg | 0.0087 (R)                                                          | <b>24.1</b>                            |
|                                 | 1-methylnaphthalene                       | mg/kg | 0.006 (R)                                                           | <b>0.293</b>                           |
|                                 | 2-methylnaphthalene                       | mg/kg | 0.019 (R)                                                           | <b>0.807</b>                           |
| <b>20230622-H7-(SB01)@11-12</b> | Naphthalene                               | mg/kg | 0.0038 (R)                                                          | <b>0.411</b>                           |
|                                 | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>10.9</b>                            |
|                                 | Barium                                    | mg/kg | 82 (M)                                                              | <b>309</b>                             |
|                                 | Selenium                                  | mg/kg | 0.26 (M)                                                            | <b>0.400</b>                           |
|                                 | TPH                                       | mg/kg | 500                                                                 | <b>1,806.1</b>                         |
|                                 | Benzene                                   | mg/kg | 0.0026 (M)                                                          | <b>0.0110</b>                          |
|                                 | Toluene                                   | mg/kg | 0.69 (M)                                                            | <b>0.6960</b>                          |
|                                 | Ethylbenzene                              | mg/kg | 0.78 (M)                                                            | <b>1.14</b>                            |
|                                 | Total Xylenes                             | mg/kg | 9.9 (M)                                                             | <b>25.0</b>                            |
|                                 | 1,2,4-trimethylbenzene                    | mg/kg | 0.0081 (R)                                                          | <b>11.7</b>                            |
|                                 | 1,3,5-trimethylbenzene                    | mg/kg | 0.0087 (R)                                                          | <b>11.5</b>                            |
|                                 | 1-methylnaphthalene                       | mg/kg | 0.006 (R)                                                           | <b>0.338</b>                           |
| <b>20230622-H7-(SB02)@5-6</b>   | 2-methylnaphthalene                       | mg/kg | 0.019 (R)                                                           | <b>0.920</b>                           |
|                                 | Naphthalene                               | mg/kg | 0.0038 (R)                                                          | <b>0.472</b>                           |
|                                 | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>5.76</b>                            |
|                                 | Barium                                    | mg/kg | 82 (M)                                                              | <b>194</b>                             |
| <b>20230622-H7-(SB02)@14-15</b> | Chromium (VI)                             | mg/kg | 0.00067 (R)                                                         | <b>0.266</b>                           |
|                                 | Selenium                                  | mg/kg | 0.26 (M)                                                            | <b>0.489</b>                           |
|                                 | Arsenic                                   | mg/kg | 0.29 (M)                                                            | <b>7.61</b>                            |
|                                 | Barium                                    | mg/kg | 82 (M)                                                              | <b>179</b>                             |
|                                 | Selenium                                  | mg/kg | 0.26 (M)                                                            | <b>0.289</b>                           |
|                                 | pH                                        | SU    | 6 – 8.3                                                             | <b>8.47</b>                            |

Key:

mg/kg - milligrams per kilogram

SU - standard unit

COGCC - Colorado Oil and Gas Conservation Commission

BOLD - indicates result exceeds the COGCC protection of groundwater soil screening concentration level

M-maximum containment level

R-risk based

TPH – total petroleum hydrocarbons



All other analytes were either below the laboratory method detection limit (MDL) or within the COGCC Table 915-1 PGSSLC. Laboratory analytical reports are included in Enclosure C and exceedances are summarized on Figure 3.

Laboratory analytical results of the investigative assessment soil samples collected on July 3 and 5, 2023, indicate exceedances of the COGCC Table 915-1 PGSSLC (M) for arsenic, barium, cadmium, selenium, benzene, toluene, ethylbenzene, and total xylenes and exceedances in the COGCC Table 915-1 PGSSLC (R) for chromium (VI), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene. Samples also exceeded the COGCC Table 915-1 CCs for TPH, pH, and sodium adsorption ratio (SAR).

#### Summary of Confirmation Soil Exceedances– July 3 and 5, 2023

| Confirmation Soil Sample ID     | COGCC Table 915-1 Contaminants of Concern | Units    | COGCC Protection of Groundwater Soil Screening Level Concentrations | Confirmation Soil Sample Concentration |
|---------------------------------|-------------------------------------------|----------|---------------------------------------------------------------------|----------------------------------------|
| <b>20230703-H7-(SB01)@10-12</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>4.02</b>                            |
|                                 | Barium                                    | mg/kg    | 82 (M)                                                              | <b>191</b>                             |
|                                 | Cadmium                                   | mg/kg    | 0.38 (M)                                                            | <b>0.381</b>                           |
|                                 | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.395</b>                           |
|                                 | pH                                        | SU       | 6 – 8.3                                                             | <b>8.73</b>                            |
|                                 | TPH                                       | mg/kg    | 500                                                                 | <b>899.3</b>                           |
|                                 | Benzene                                   | mg/kg    | 0.0026 (M)                                                          | <b>0.0228</b>                          |
|                                 | Toluene                                   | mg/kg    | 0.69 (M)                                                            | <b>1.44</b>                            |
|                                 | Ethylbenzene                              | mg/kg    | 0.78 (M)                                                            | <b>1.41</b>                            |
|                                 | Total Xylenes                             | mg/kg    | 9.9 (M)                                                             | <b>15.2</b>                            |
|                                 | 1,2,4-trimethylbenzene                    | mg/kg    | 0.0081 (R)                                                          | <b>4.47</b>                            |
|                                 | 1,3,5-trimethylbenzene                    | mg/kg    | 0.0087 (R)                                                          | <b>3.97</b>                            |
|                                 | 1-methylnaphthalene                       | mg/kg    | 0.006 (R)                                                           | <b>0.154</b>                           |
|                                 | 2-methylnaphthalene                       | mg/kg    | 0.019 (R)                                                           | <b>0.416</b>                           |
|                                 | Naphthalene                               | mg/kg    | 0.0038 (R)                                                          | <b>0.219</b>                           |
| <b>20230703-H7-(SB01)@20-22</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>6.40</b>                            |
|                                 | Barium                                    | mg/kg    | 82 (M)                                                              | <b>141</b>                             |
|                                 | Cadmium                                   | mg/kg    | 0.38 (M)                                                            | <b>0.435</b>                           |
|                                 | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.319</b>                           |
|                                 | pH                                        | SU       | 6 – 8.3                                                             | <b>8.95</b>                            |
|                                 | SAR                                       | unitless | <6                                                                  | <b>6.27</b>                            |
|                                 | TPH                                       | mg/kg    | 500                                                                 | <b>1,545.28</b>                        |
|                                 | Benzene                                   | mg/kg    | 0.0026 (M)                                                          | <b>0.0760</b>                          |
|                                 | Toluene                                   | mg/kg    | 0.69 (M)                                                            | <b>3.32</b>                            |
|                                 | Ethylbenzene                              | mg/kg    | 0.78 (M)                                                            | <b>2.20</b>                            |
|                                 | Total Xylenes                             | mg/kg    | 9.9 (M)                                                             | <b>30.4</b>                            |
|                                 | 1,2,4-trimethylbenzene                    | mg/kg    | 0.0081 (R)                                                          | <b>8.71</b>                            |
|                                 | 1,3,5-trimethylbenzene                    | mg/kg    | 0.0087 (R)                                                          | <b>8.59</b>                            |
|                                 | 1-methylnaphthalene                       | mg/kg    | 0.006 (R)                                                           | <b>0.200</b>                           |
|                                 | 2-methylnaphthalene                       | mg/kg    | 0.019 (R)                                                           | <b>0.552</b>                           |
|                                 | Naphthalene                               | mg/kg    | 0.0038 (R)                                                          | <b>0.220</b>                           |
| <b>20230703-H7-(SB01)@30-32</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>6.40</b>                            |
|                                 | Barium                                    | mg/kg    | 82 (M)                                                              | <b>85.5</b>                            |
|                                 | Cadmium                                   | mg/kg    | 0.26 (M)                                                            | <b>0.482</b>                           |
|                                 | pH                                        | SU       | 6 – 8.3                                                             | <b>8.74</b>                            |



**Continued Summary of Confirmation Soil Exceedances– July 3 and 5, 2023**

| Confirmation Soil Sample ID       | COGCC Table 915-1 Contaminants of Concern | Units    | COGCC Protection of Groundwater Soil Screening Level Concentrations | Confirmation Soil Sample Concentration |
|-----------------------------------|-------------------------------------------|----------|---------------------------------------------------------------------|----------------------------------------|
| <b>20230703-H7-(SB02)@10-12</b>   | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>8.52</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>197</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.38 (M)                                                            | <b>0.386</b>                           |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.421</b>                           |
|                                   | pH                                        | SU       | 6 – 8.3                                                             | <b>9.24</b>                            |
|                                   | SAR                                       | unitless | <6                                                                  | <b>6.54</b>                            |
|                                   | 1,2,4-trimethylbenzene                    | mg/kg    | 0.0081 (R)                                                          | <b>0.0225</b>                          |
|                                   | 1,3,5-trimethylbenzene                    | mg/kg    | 0.0087 (R)                                                          | <b>0.0211</b>                          |
| <b>20230703-H7-(SB02)@20-21.5</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>9.01</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>150</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.38 (M)                                                            | <b>0.407</b>                           |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.371</b>                           |
|                                   | pH                                        | SU       | 6 – 8.3                                                             | <b>8.55</b>                            |
| <b>20230703-H7-(SB02)@30-31.5</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>8.30</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>151</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.26 (M)                                                            | <b>0.425</b>                           |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.389</b>                           |
|                                   | pH                                        | SU       | 6 – 8.3                                                             | <b>8.43</b>                            |
| <b>20230705-H7-(SB03)@10-11.5</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>6.18</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>190</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.26 (M)                                                            | <b>0.461</b>                           |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.385</b>                           |
|                                   | pH                                        | SU       | 6 – 8.3                                                             | <b>8.89</b>                            |
| <b>20230705-H7-(SB03)@20-21.5</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>12.1</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>141</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.26 (M)                                                            | <b>0.507</b>                           |
|                                   | Chromium (VI)                             | mg/kg    | 0.00067 (R)                                                         | <b>0.362</b>                           |
|                                   | RA-Chromium (VI)                          | mg/kg    | 0.00067 (R)                                                         | <b>&lt;0.255</b>                       |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.310</b>                           |
|                                   | pH                                        | SU       | 6 – 8.3                                                             | <b>9.17</b>                            |
|                                   | SAR                                       | Unitless | <6                                                                  | <b>6.19</b>                            |
| <b>20230705-H7-(SB03)@30-31.5</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>5.06</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>149</b>                             |
|                                   | pH                                        | SU       | 6 – 8.3                                                             | <b>8.58</b>                            |
| <b>20230705-H7-(SB04)@10-11.5</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>9.50</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>184</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.26 (M)                                                            | <b>0.384</b>                           |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.468</b>                           |
|                                   | pH                                        | SU       | 6 – 8.3                                                             | <b>9.17</b>                            |
| <b>20230705-H7-(SB04)@20-21.5</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>7.21</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>130</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.26 (M)                                                            | <b>0.686</b>                           |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.407</b>                           |



### Continued Summary of Confirmation Soil Exceedances– July 3 and 5, 2023

| Confirmation Soil Sample ID       | COGCC Table 915-1 Contaminants of Concern | Units    | COGCC Protection of Groundwater Soil Screening Level Concentrations | Confirmation Soil Sample Concentration |
|-----------------------------------|-------------------------------------------|----------|---------------------------------------------------------------------|----------------------------------------|
| <b>20230705-H7-(SB04)@30-31.5</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>6.55</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>126</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.26 (M)                                                            | <b>0.382</b>                           |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.346</b>                           |
|                                   | pH                                        | SU       | 6 – 8.3                                                             | <b>8.32</b>                            |
| <b>20230705-H7-(SB05)@10-11.5</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>8.53</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>133</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.26 (M)                                                            | <b>0.433</b>                           |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.480</b>                           |
|                                   | pH                                        | SU       | 6 – 8.3                                                             | <b>9.12</b>                            |
|                                   | 1-methylnaphthalene                       | mg/kg    | 0.006 (R)                                                           | <b>0.0331</b>                          |
|                                   | 2-methylnaphthalene                       | mg/kg    | 0.019 (R)                                                           | <b>0.119</b>                           |
| <b>20230705-H7-(SB05)@20-21.5</b> | Naphthalene                               | mg/kg    | 0.0038 (R)                                                          | <b>0.0552</b>                          |
|                                   | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>6.96</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>112</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.26 (M)                                                            | <b>0.393</b>                           |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.293</b>                           |
|                                   | pH                                        | SU       | 6 – 8.3                                                             | <b>8.36</b>                            |
|                                   | SAR                                       | Unitless | <6                                                                  | <b>6.48</b>                            |
| <b>20230705-H7-(SB05)@30-31.5</b> | Arsenic                                   | mg/kg    | 0.29 (M)                                                            | <b>10.2</b>                            |
|                                   | Barium                                    | mg/kg    | 82 (M)                                                              | <b>116</b>                             |
|                                   | Cadmium                                   | mg/kg    | 0.26 (M)                                                            | <b>0.535</b>                           |
|                                   | Selenium                                  | mg/kg    | 0.26 (M)                                                            | <b>0.491</b>                           |
|                                   | SAR                                       | Unitless | <6                                                                  | <b>6.54</b>                            |

Key:

mg/kg - milligrams per kilogram

SU - standard unit

COGCC - Colorado Oil and Gas Conservation Commission

BOLD - indicates result exceeds the COGCC protection of groundwater soil screening concentration level

M-maximum containment level

R-risk based

TPH – total petroleum hydrocarbons

All other analytes were either below the laboratory MDL or within the COGCC Table 915-1 PGSSLC. Chromium (VI) for all confirmation soil samples associated with the subsurface drilling investigation completed on July 3 and 5, 2023, were re-analyzed. All results were reported below the MDL including confirmation soil sample 20230705-H7-(SB03)@20-21.5 with an initial reported concentration of 0.362 mg/kg. Laboratory analytical reports are included in Enclosure C and exceedances are summarized on Figure 4.

## CONCLUSIONS – H7 TANK BATTERY

Based on the analytical data herein, delineation of exceedances to COGCC Table 915-1 PGSSLC (M) and (R) levels in the subsurface soils has been achieved laterally and vertically at the Site. There are remaining Table 915-1 exceedances of arsenic, barium, cadmium, lead, selenium, chromium (VI), TPH, benzene, toluene, ethylbenzene, total xylenes (BTEX), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, pH, and SAR associated with this release. Caerus is currently in the process of determining the next steps to remediate the defined hydrocarbon plume located beneath the former tank battery containment and north of



the tank containment were the dumpline corridor turns underneath the former containment. The estimated volume of impacted soil beneath the former tank battery is approximately 3,206.27 cubic yards (conservative estimate based on soil boring locations with respect to identified impacts). Prior to any future investigative sampling activities, WSP recommends that Caerus request that the Director consider relief concerning the assessment of a potential pathway to groundwater per COGCC Table 915-1 Footnote 7, and provide a determination to continue this project using Residential Soil Screening Level Concentrations (RSSLCs) based on the information provided in the COGCC Supplemental Site Investigation and Remediation Workplan Document Number (DN) 403475735 "Operator Comment" section. WSP also recommends that Caerus request a reduced analyte suite of TPH, total xylenes, and naphthalene, since all other analytes reported associated with the site investigative activities were detected with concentrations below the COGCC Table 915-1 RSSLCs or are within site-specific background concentrations observed at or nearby the Site.

Please see Figures 6 and 7 which reference site-specific background locations with respect to the Site for requesting relief of contaminant of concerns per COGCC Rule 915.e.(2).C and COGCC Table 915-1 Footnote 1 in the "Remediation Comments" and "Operator Comments" sections of DN 403475735.

Please contact us at (970) 618-4514 or (970) 658-7025 if you have any questions regarding this report or require additional information.

Kind regards,

A handwritten signature in blue ink, appearing to be 'D. Held'.

Dustin Held  
Sr. Consultant, Environmental Geologist

A handwritten signature in blue ink, appearing to be 'Parker Coit'.

Parker Coit, P.G.  
Lead Consultant, Geologist

Encl.

## FIGURES



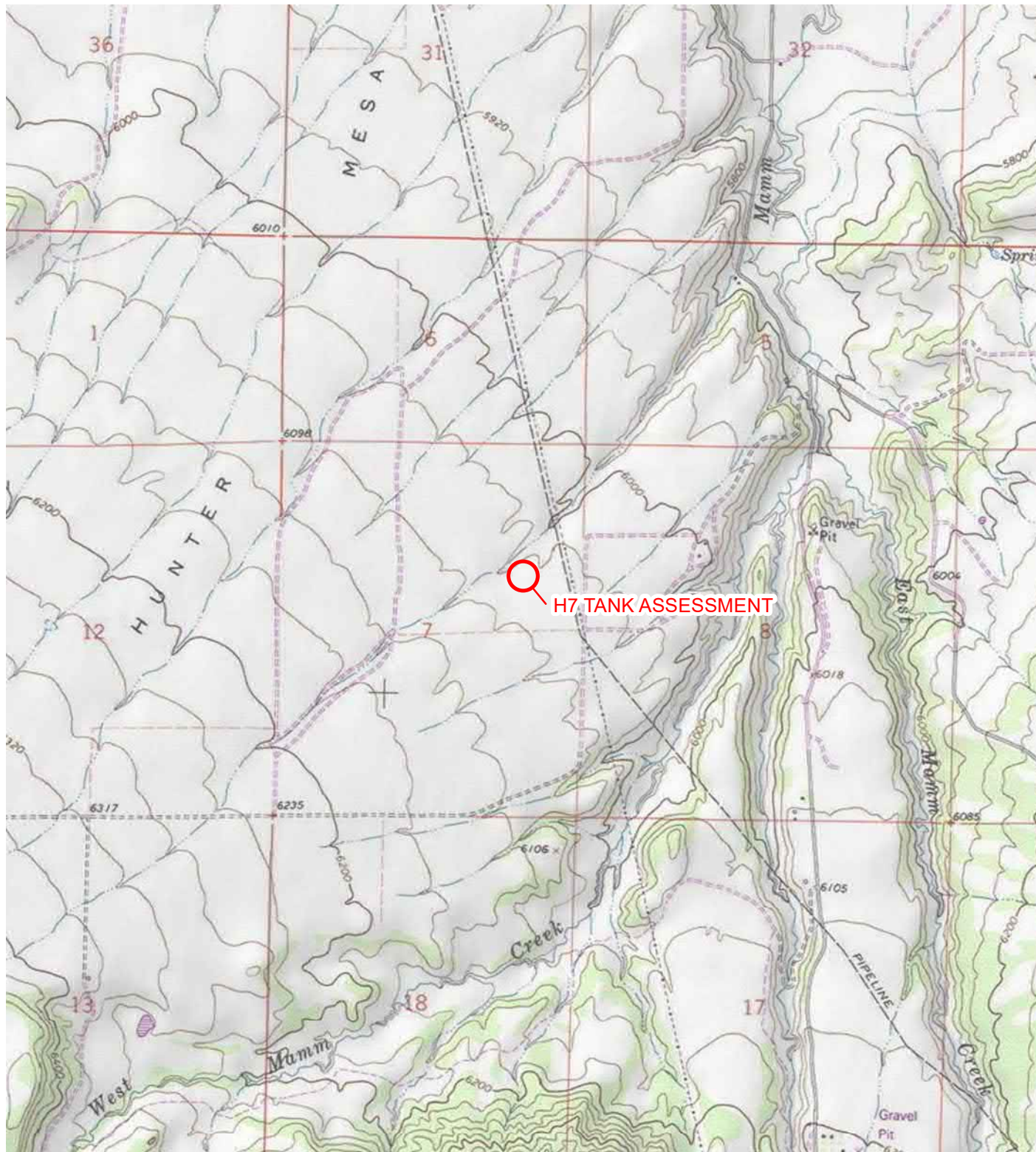
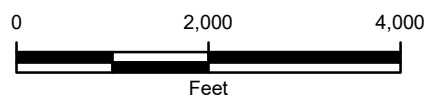


IMAGE COURTESY OF ESRI/USGS

# LEGEND

○ SITE LOCATION



COLORADO

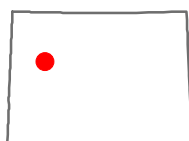
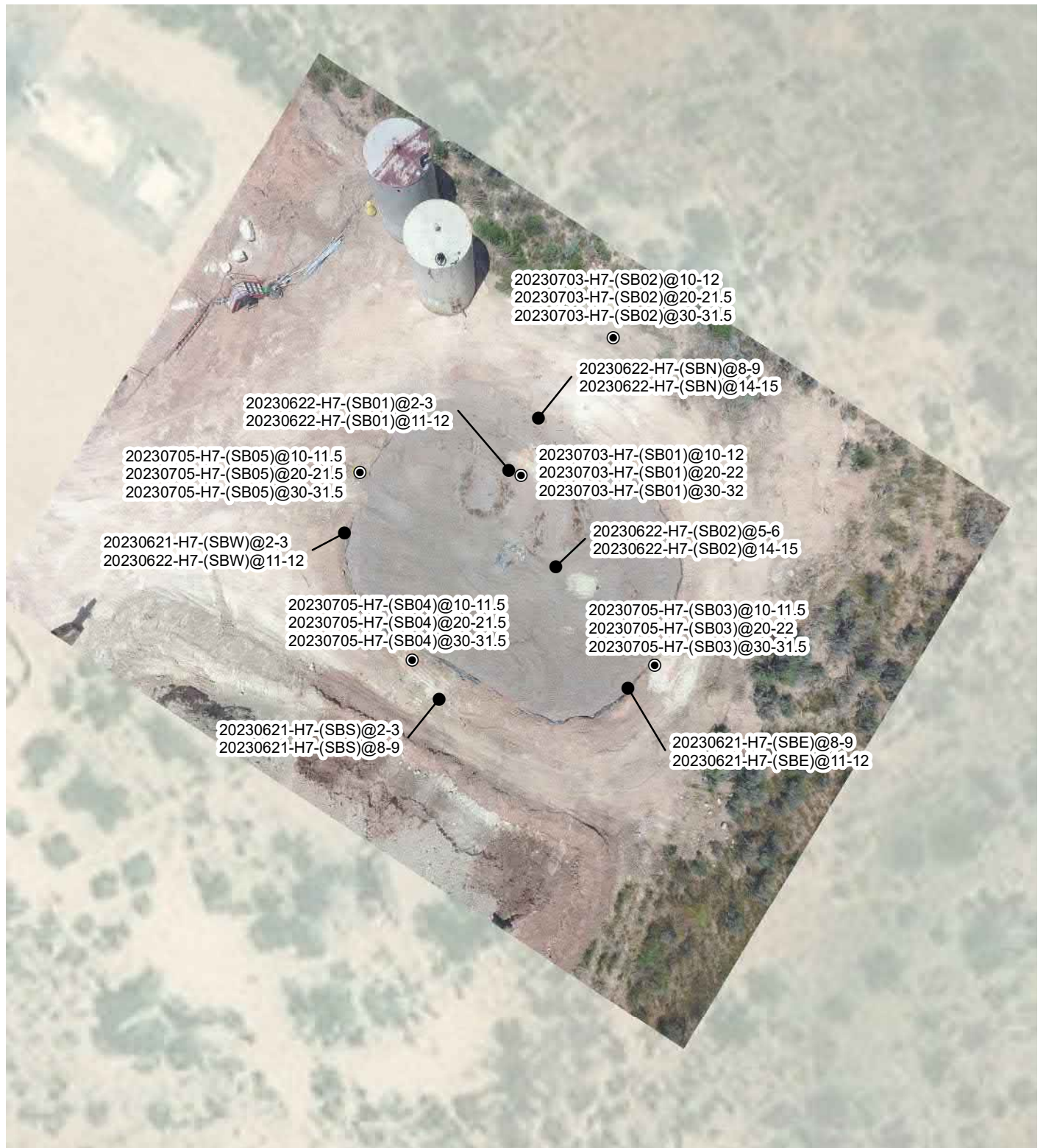


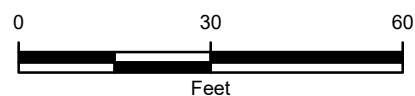
**FIGURE 1**  
**SITE LOCATION MAP**  
**H7 TANK ASSESSMENT**  
**SENE SEC 7-T7S-R92W**  
**GARFIELD COUNTY, COLORADO**  
**CAERUS PICEANCE LLC**





## LEGEND

- SOIL BORING "POTHOLE"
- ⊙ SOIL BORING

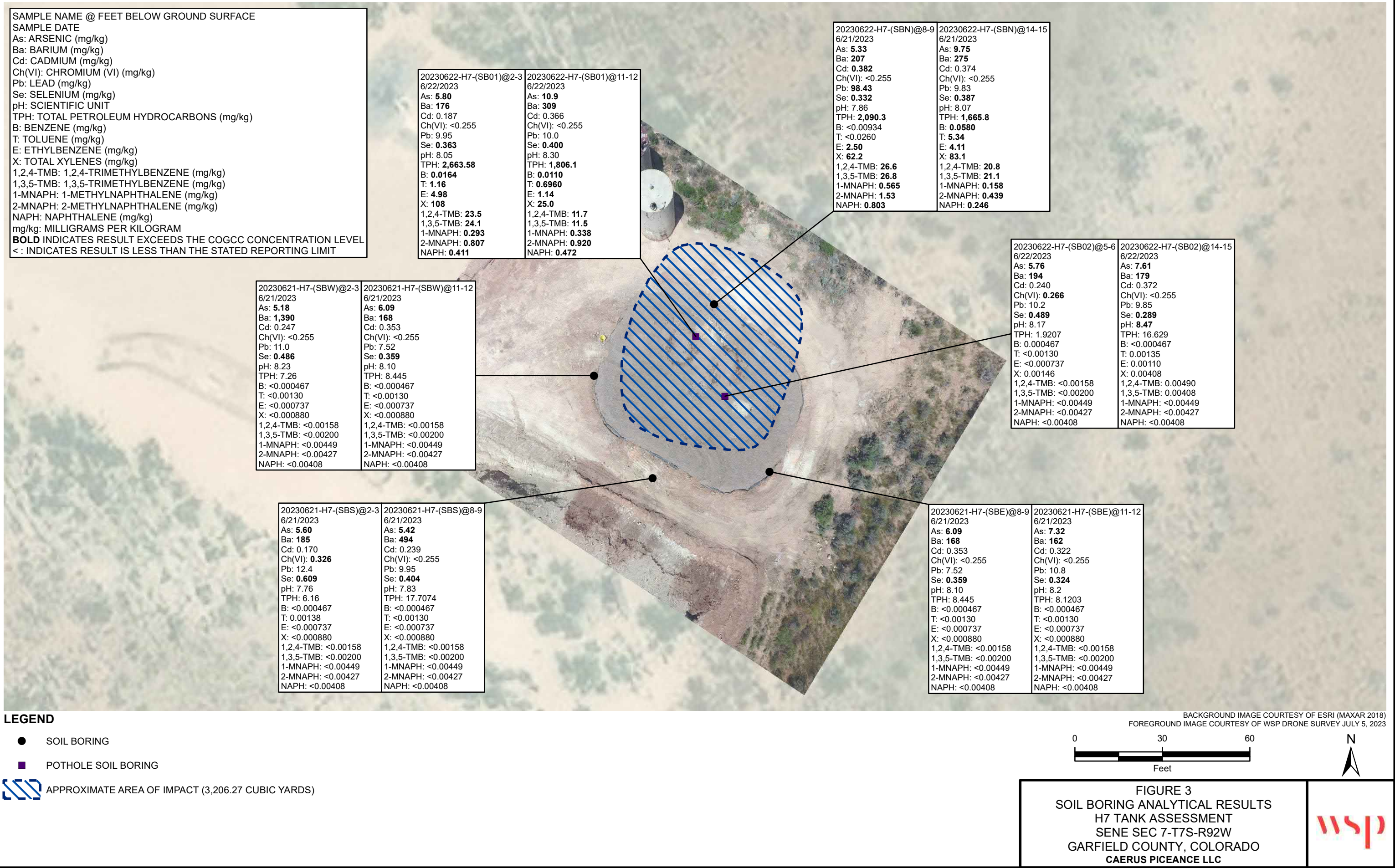


BACKGROUND IMAGE COURTESY OF ESRI (MAXAR 2018)  
FOREGROUND IMAGE COURTESY OF WSP DRONE SURVEY JULY 5, 2023

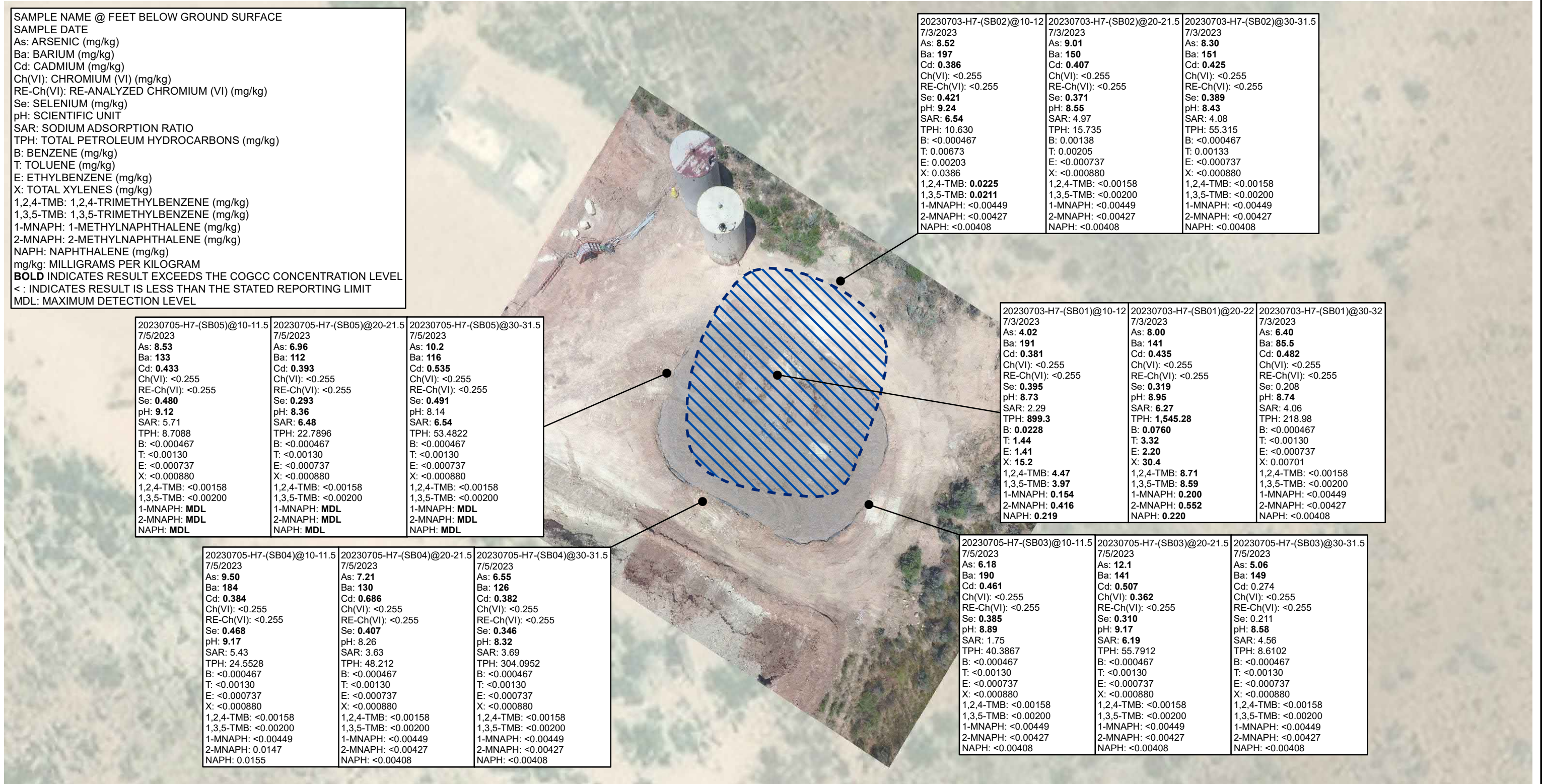
**FIGURE 2**  
**SAMPLE LOCATION MAP**  
**H7 TANK ASSESSMENT**  
**SENE SEC 7-T7S-R92W**  
**GARFIELD COUNTY, COLORADO**  
**CAERUS PICEANCE LLC**











LEGEND

- SOIL BORING
- APPROXIMATE AREA OF IMPACT (3,206.27 CUBIC YARDS)

BACKGROUND IMAGE COURTESY OF ESRI (MAXAR 2018)  
FOREGROUND IMAGE COURTESY OF WSP DRONE SURVEY JULY 5, 2023

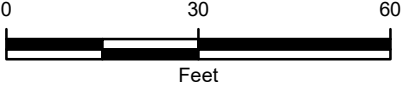


FIGURE 4  
SOIL BORING ANALYTICAL RESULTS  
H7 TANK ASSESSMENT  
SENE SEC 7-T7S-R92W  
GARFIELD COUNTY, COLORADO  
CAERUS PICEANCE LLC





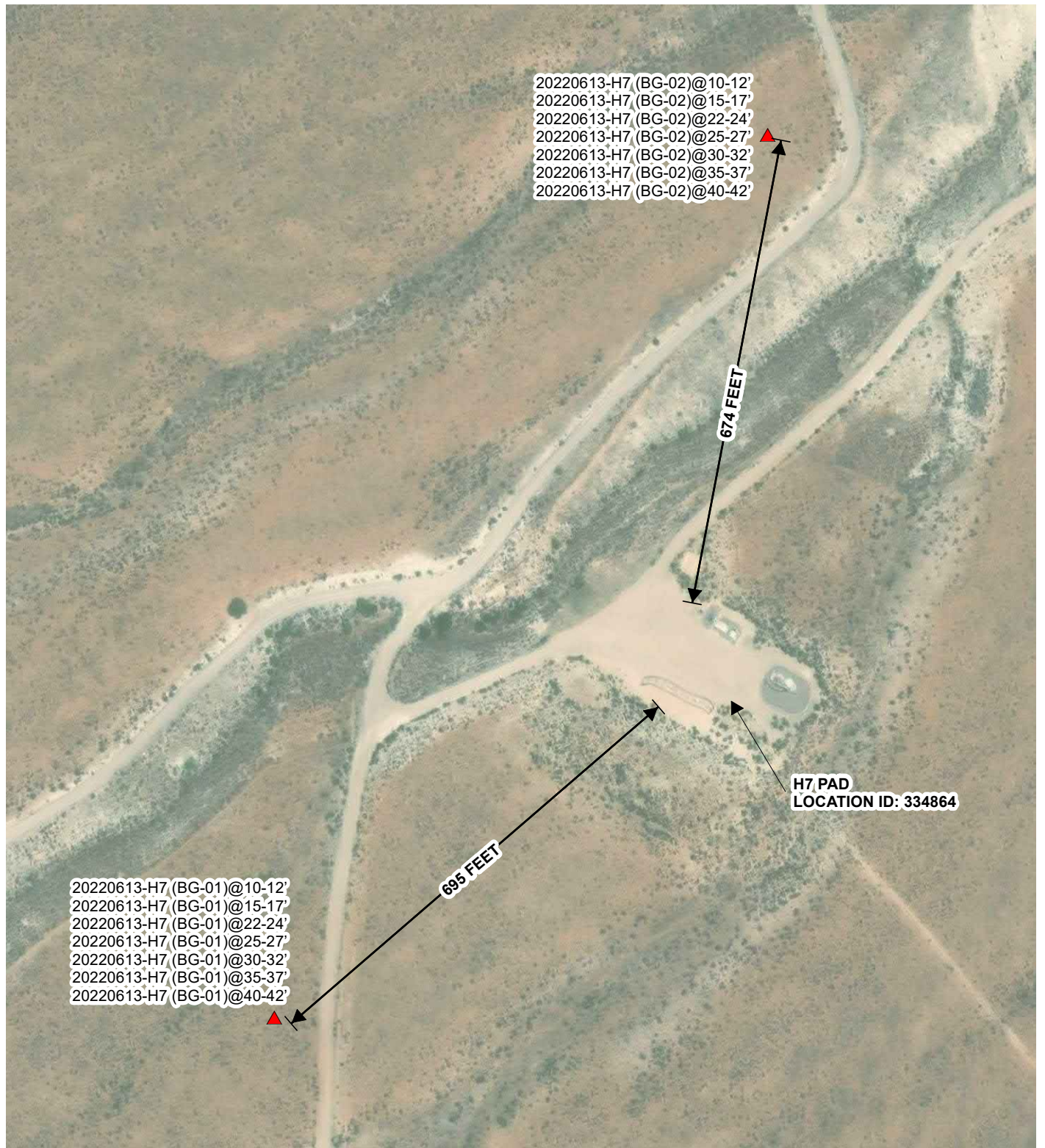


IMAGE COURTESY OF ESRI (MAXAR 2018)

## LEGEND

▲ BACKGROUND SOIL SAMPLE

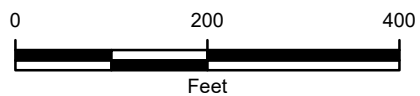


FIGURE 5  
 BACKGROUND SOIL SAMPLE LOCATION MAP  
 H7 TANK BATTERY  
 SENE SEC 7-T7S-R92W  
 GARFIELD COUNTY, COLORADO  
 CAERUS OIL AND GAS LLC





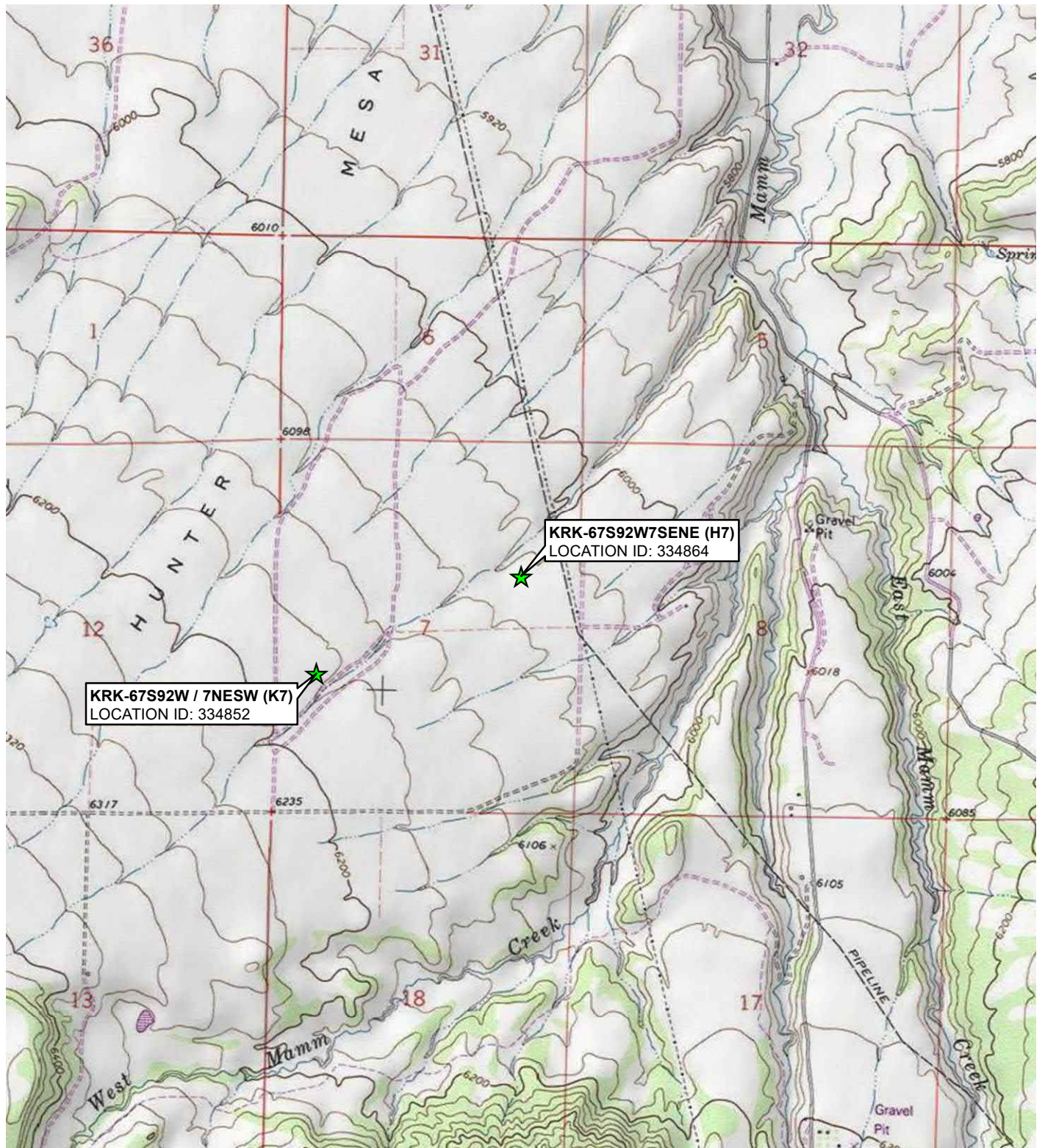
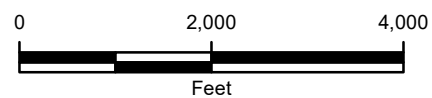


IMAGE COURTESY OF ESRI/USGS

## LEGEND

★ SITE LOCATION



COLORADO

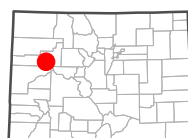


**FIGURE 6**  
**GEOGRAPHIC LOCATION MAP**  
**H7 TANK ASSESSMENT**  
**SENE SEC 7-T7S-R92W**  
**GARFIELD COUNTY, COLORADO**  
**CAERUS PICEANCE LLC**

**wsp**

## TABLE



TABLE 1

SOIL ANALYTICAL RESULTS  
H7 TANK INVESTIGATION  
GARFIELD COUNTY, COLORADO  
CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | CONFIRMATION SOIL SAMPLE |                         |                       |                       |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|--------------------------|-------------------------|-----------------------|-----------------------|
|                         |                                                             |                                                                              |          | 20230621-H7-(SBE)@8-9    | 20230621-H7-(SBE)@11-12 | 20230621-H7-(SBS)@2-3 | 20230621-H7-(SBS)@8-9 |
| Sample Date             |                                                             |                                                                              |          | 6/21/2023                | 6/21/2023               | 6/21/2023             | 6/21/2023             |
| Sample Depth (feet)     |                                                             |                                                                              |          | 8-9                      | 11-12                   | 2-3                   | 8-9                   |
| Sample Type             |                                                             |                                                                              |          | Confirmation             | Confirmation            | Confirmation          | Confirmation          |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | <b>6.09</b>              | <b>7.32</b>             | <b>5.60</b>           | <b>5.42</b>           |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | <b>168</b>               | <b>162</b>              | <b>185</b>            | <b>494</b>            |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.272                    | 0.270                   | 0.311                 | 0.336                 |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | 0.353                    | 0.322                   | 0.170                 | 0.239                 |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | <0.255                   | <0.255                  | <b>0.326</b>          | <0.255                |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | 7.76                     | 11.5                    | 13.1                  | 10.9                  |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | 7.52                     | 10.8                    | 12.4                  | 9.95                  |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | 12.2                     | 13.9                    | 17.0                  | 13.6                  |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | <b>0.359</b>             | <b>0.324</b>            | <b>0.609</b>          | <b>0.404</b>          |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | <0.0865                  | <0.0865                 | 0.100                 | <0.0865               |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | 30.3                     | 38.0                    | 51.7                  | 41.1                  |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 0.462                    | 0.389                   | 0.442                 | 0.405                 |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | 8.10                     | 8.26                    | 7.76                  | 7.83                  |
| SAR                     | <6                                                          | <6                                                                           | unitless | 3.12                     | 4.58                    | 2.19                  | 1.96                  |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | 0.0445                   | 0.0503                  | <0.0217               | 0.0274                |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | 2.04                     | 1.74                    | 3.43                  | 5.48                  |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | 6.36                     | 6.33                    | 2.73                  | 12.2                  |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | 8.445                    | 8.1203                  | 6.16                  | 17.7074               |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | <0.000467                | <0.000467               | <0.000467             | <0.000467             |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | <0.00130                 | <0.00130                | 0.00138               | <0.00130              |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | <0.000737                | <0.000737               | <0.000737             | <0.000737             |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | <0.000880                | <0.000880               | <0.000880             | <0.000880             |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | <0.00158                 | <0.00158                | <0.00158              | <0.00158              |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | <0.00200                 | <0.00200                | <0.00200              | <0.00200              |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | <0.00209                 | <0.00209                | <0.00209              | <0.00209              |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | <0.00230                 | <0.00230                | <0.00230              | <0.00230              |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | <0.00173                 | <0.00173                | <0.00173              | <0.00173              |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | <0.00153                 | <0.00153                | <0.00153              | <0.00153              |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | <0.00215                 | <0.00215                | <0.00215              | <0.00215              |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | <0.00179                 | <0.00179                | <0.00179              | <0.00179              |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | <0.00232                 | <0.00232                | <0.00232              | <0.00232              |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | <0.00172                 | <0.00172                | <0.00172              | <0.00172              |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | <0.00227                 | <0.00227                | <0.00227              | <0.00227              |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | <0.00205                 | <0.00205                | <0.00205              | <0.00205              |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | <0.00181                 | <0.00181                | <0.00181              | <0.00181              |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | <0.00449                 | <0.00449                | <0.00449              | <0.00449              |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | <0.00427                 | <0.00427                | <0.00427              | <0.00427              |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | <0.00408                 | <0.00408                | <0.00408              | <0.00408              |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | <0.00200                 | <0.00200                | <0.00200              | <0.00200              |

NOTES:  
ND - less than the stated reporting limit  
**BOLD** - indicates result exceeds the COGCC concentration level  
COGCC - Colorado Oil and Gas Conservation Commission  
EC- electrical conductivity  
mg/kg - milligrams per kilogram  
mg/l - milligrams per liter  
mmhos/cm - millimhos per centimeter  
SAR - sodium adsorption ratio  
SU - standard unit  
TPH-ORO - total petroleum hydrocarbons- oil range organics  
TPH-GRO - total petroleum hydrocarbons-gasoline range organics  
TPH-DRO - total petroleum hydrocarbons-diesel range organics  
TPH - combination of TPH-GRO, TPH-DRO, and TPH-ORO  
NA - analyte not analyzed  
ND - analyte not detected  
R - risk based  
MCL - maximum containment level (M)  
M - based MCL

TABLE 1

SOIL ANALYTICAL RESULTS  
H7 TANK INVESTIGATION  
GARFIELD COUNTY, COLORADO  
CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | CONFIRMATION SOIL SAMPLE |                         |                       |                         |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|--------------------------|-------------------------|-----------------------|-------------------------|
|                         |                                                             |                                                                              |          | 20230621-H7-(SBW)@2-3    | 20230621-H7-(SBW)@11-12 | 20230622-H7-(SBN)@8-9 | 20230622-H7-(SBN)@14-15 |
| Sample Date             |                                                             |                                                                              |          | 6/21/2023                | 6/21/2023               | 6/22/2023             | 6/22/2023               |
| Sample Depth (feet)     |                                                             |                                                                              |          | 2-3                      | 11-12                   | 8-9                   | 14-15                   |
| Sample Type             |                                                             |                                                                              |          | Confirmation             | Confirmation            | Confirmation          | Confirmation            |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | 5.18                     | 6.09                    | 5.33                  | 9.75                    |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | 1390                     | 168                     | 207                   | 275                     |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.493                    | 0.272                   | 0.180                 | 0.168                   |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | 0.247                    | 0.353                   | 0.382                 | 0.374                   |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | <0.255                   | <0.255                  | <0.255                | <0.255                  |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | 11.7                     | 7.76                    | 9.35                  | 14.3                    |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | 11.0                     | 7.52                    | 98.43                 | 9.83                    |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | 15.0                     | 12.2                    | 13.8                  | 15.5                    |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | 0.486                    | 0.359                   | 0.332                 | 0.387                   |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | <0.0865                  | <0.0865                 | <0.0865               | <0.0865                 |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | 48.3                     | 30.3                    | 35.3                  | 44.3                    |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 0.517                    | 0.462                   | 0.225                 | 0.311                   |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | 8.23                     | 8.10                    | 7.86                  | 8.07                    |
| SAR                     | <6                                                          | <6                                                                           | unitless | 3.93                     | 3.12                    | 0.284                 | 1.50                    |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | <0.0217                  | 0.0445                  | 1,460                 | 1,330                   |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | 3.21                     | 2.04                    | 610                   | 294                     |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | 4.05                     | 6.36                    | 20.3                  | 41.8                    |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | 7.26                     | 8.445                   | 2,090.3               | 1,665.8                 |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | <0.000467                | <0.000467               | <0.00934              | 0.0580                  |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | <0.00130                 | <0.00130                | <0.0260               | 5.34                    |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | <0.000737                | <0.000737               | 2.50                  | 4.11                    |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | <0.000880                | <0.000880               | 62.2                  | 83.1                    |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | <0.00158                 | <0.00158                | 26.6                  | 20.8                    |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | <0.00200                 | <0.00200                | 26.8                  | 21.1                    |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | <0.00209                 | <0.00209                | <0.00209              | <0.00209                |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | <0.00230                 | <0.00230                | <0.00230              | <0.00230                |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | <0.00173                 | <0.00173                | <0.00173              | <0.00173                |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | <0.00153                 | <0.00153                | <0.00153              | <0.00153                |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | <0.00215                 | <0.00215                | <0.00215              | <0.00215                |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | <0.00179                 | <0.00179                | <0.00179              | <0.00179                |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | <0.00232                 | <0.00232                | <0.00232              | <0.00232                |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | <0.00172                 | <0.00172                | <0.00172              | <0.00172                |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | <0.00227                 | <0.00227                | <0.00227              | <0.00227                |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | <0.00205                 | <0.00205                | 0.0372                | 0.00839                 |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | <0.00181                 | <0.00181                | <0.00181              | <0.00181                |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | <0.00449                 | <0.00449                | 0.565                 | 0.158                   |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | <0.00427                 | <0.00427                | 1.53                  | 0.439                   |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | <0.00408                 | <0.00408                | 0.803                 | 0.246                   |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | <0.00200                 | <0.00200                | 0.00296               | <0.00200                |

NOTES:  
ND - less than the stated reporting limit  
**BOLD** - indicates result exceeds the COGCC concentration level  
COGCC - Colorado Oil and Gas Conservation Commission  
EC- electrical conductivity  
mg/kg - milligrams per kilogram  
mg/l - milligrams per liter  
mmhos/cm - millimhos per centimeter  
SAR - sodium adsorption ratio  
SU - standard unit  
TPH-ORO - total petroleum hydrocarbons- oil range organics  
TPH-GRO - total petroleum hydrocarbons-gasoline range organics  
TPH-DRO - total petroleum hydrocarbons-diesel range organics  
TPH - combination of TPH-GRO, TPH-DRO, and TPH-ORO  
NA - analyte not analyzed  
ND - analyte not detected  
R - risk based  
MCL - maximum containment level (M)  
M - based MCL

TABLE 1

SOIL ANALYTICAL RESULTS  
H7 TANK INVESTIGATION  
GARFIELD COUNTY, COLORADO  
CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | CONFIRMATION SOIL SAMPLE |                          |                        |                          |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|--------------------------|--------------------------|------------------------|--------------------------|
|                         |                                                             |                                                                              |          | 20230622-H7-(SB01)@2-3   | 20230622-H7-(SB01)@11-12 | 20230622-H7-(SB02)@5-6 | 20230622-H7-(SB02)@14-15 |
| Sample Date             |                                                             |                                                                              |          | 6/22/2023                | 6/22/2023                | 6/22/2023              | 6/22/2023                |
| Sample Depth (feet)     |                                                             |                                                                              |          | 2-3                      | 11-12                    | 5-6                    | 14-15                    |
| Sample Type             |                                                             |                                                                              |          | Confirmation             | Confirmation             | Confirmation           | Confirmation             |
|                         |                                                             |                                                                              |          |                          |                          |                        |                          |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | 5.80                     | 10.9                     | 5.76                   | 7.61                     |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | 176                      | 309                      | 194                    | 179                      |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.536                    | 0.367                    | 0.0888                 | 0.240                    |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | 0.187                    | 0.366                    | 0.240                  | 0.372                    |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | <0.255                   | <0.255                   | 0.266                  | <0.255                   |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | 13.8                     | 16.9                     | 12.6                   | 12.0                     |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | 9.95                     | 10.0                     | 10.2                   | 9.85                     |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | 15.0                     | 12.6                     | 16.0                   | 14.2                     |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | 0.363                    | 0.400                    | 0.489                  | 0.289                    |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | 0.0971                   | <0.0865                  | <0.0865                | <0.0865                  |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | 44.1                     | 38.0                     | 44.0                   | 40.0                     |
|                         |                                                             |                                                                              |          |                          |                          |                        |                          |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 0.582                    | 0.298                    | 1.060                  | 0.317                    |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | 8.05                     | 8.30                     | 8.17                   | 8.47                     |
| SAR                     | <6                                                          | <6                                                                           | unitless | 2.28                     | 0.962                    | 1.95                   | 0.911                    |
|                         |                                                             |                                                                              |          |                          |                          |                        |                          |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | 2,280                    | 1,330                    | 0.0367                 | 0.109                    |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | 376                      | 441                      | 1.61                   | 4.52                     |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | 7.58                     | 35.1                     | 0.274                  | 12.0                     |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | 2,663.58                 | 1,806.1                  | 1.9207                 | 16.629                   |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | 0.0164                   | 0.0110                   | 0.000467               | <0.000467                |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | 1.16                     | 0.6960                   | <0.00130               | 0.00135                  |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | 4.98                     | 1.14                     | <0.000737              | 0.00110                  |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | 108                      | 25.0                     | 0.00146                | 0.00408                  |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | 23.5                     | 11.7                     | <0.00158               | 0.00490                  |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | 24.1                     | 11.5                     | <0.00200               | 0.00408                  |
|                         |                                                             |                                                                              |          |                          |                          |                        |                          |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | <0.00209                 | <0.00209                 | <0.00209               | <0.00209                 |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | <0.00230                 | <0.00230                 | <0.00230               | <0.00230                 |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | <0.00173                 | <0.00173                 | <0.00173               | <0.00173                 |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | <0.00153                 | <0.00153                 | <0.00153               | <0.00153                 |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | <0.00215                 | <0.00215                 | <0.00215               | <0.00215                 |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | <0.00179                 | <0.00179                 | <0.00179               | <0.00179                 |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | <0.00232                 | <0.00232                 | <0.00232               | <0.00232                 |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | <0.00172                 | <0.00172                 | <0.00172               | <0.00172                 |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | <0.00227                 | <0.00227                 | <0.00227               | <0.00227                 |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | 0.0164                   | 0.0185                   | <0.00205               | <0.00205                 |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | <0.00181                 | <0.00181                 | <0.00181               | <0.00181                 |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | 0.293                    | 0.338                    | <0.00449               | <0.00449                 |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | 0.807                    | 0.920                    | <0.00427               | <0.00427                 |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | 0.411                    | 0.472                    | <0.00408               | <0.00408                 |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | <0.00200                 | <0.00200                 | <0.00200               | <0.00200                 |

NOTES:  
ND - less than the stated reporting limit  
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SU - standard unit  
TPH-ORO - total petroleum hydrocarbons- oil range organics  
TPH-GRO - total petroleum hydrocarbons-gasoline range organics  
TPH-DRO - total petroleum hydrocarbons-diesel range organics  
TPH - combination of TPH-GRO, TPH-DRO, and TPH-ORO  
NA - analyte not analyzed  
ND - analyte not detected  
R - risk based  
MCL - maximum containment level (M)  
M - based MCL



TABLE 1

SOIL ANALYTICAL RESULTS

H7 TANK INVESTIGATION

GARFIELD COUNTY, COLORADO

CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | CONFIRMATION SOIL SAMPLE |                          |                          |                          |                          |                          |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                         |                                                             |                                                                              |          | 20230703-H7-(SB01)@10-12 | 20230703-H7-(SB01)@10-12 | 20230703-H7-(SB01)@20-22 | 20230703-H7-(SB01)@20-22 | 20230703-H7-(SB01)@30-32 | 20230703-H7-(SB01)@30-32 |
| Sample Date             |                                                             |                                                                              |          | 7/3/2023                 | 7/3/2023                 | 7/3/2023                 | 7/3/2023                 | 7/3/2023                 | 7/3/2023                 |
| Sample Depth (feet)     |                                                             |                                                                              |          | 10-12                    | 10-12                    | 20-22                    | 20-22                    | 30-32                    | 30-32                    |
| Sample Type             |                                                             |                                                                              |          | Confirmation             | Confirmation             | Confirmation             | Confirmation             | Confirmation             | Confirmation             |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | 4.02                     | NA                       | 8.00                     | NA                       | 6.40                     | NA                       |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | 191                      | NA                       | 141                      | NA                       | 85.5                     | NA                       |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.188                    | NA                       | 0.318                    | NA                       | 0.141                    | NA                       |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | 0.381                    | NA                       | 0.435                    | NA                       | 0.482                    | NA                       |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | <0.255                   | <0.255                   | <0.255                   | <0.255                   | <0.255                   | <0.255                   |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | 9.01                     | NA                       | 11.9                     | NA                       | 10.3                     | NA                       |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | 6.97                     | NA                       | 8.75                     | NA                       | 8.50                     | NA                       |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | 9.04                     | NA                       | 11.9                     | NA                       | 12.5                     | NA                       |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | 0.395                    | NA                       | 0.319                    | NA                       | 0.208                    | NA                       |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | <0.0865                  | NA                       | <0.0865                  | NA                       | <0.0865                  | NA                       |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | 24.9                     | NA                       | 35.0                     | NA                       | 35.4                     | NA                       |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 0.356                    | NA                       | 0.484                    | NA                       | 0.500                    | NA                       |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | 8.73                     | NA                       | 8.95                     | NA                       | 8.74                     | NA                       |
| SAR                     | <6                                                          | <6                                                                           | unitless | 2.29                     | NA                       | 6.27                     | NA                       | 4.06                     | NA                       |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | 609                      | NA                       | 1,540                    | NA                       | 1.08                     | NA                       |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | 264                      | NA                       | <1.61                    | NA                       | 180                      | NA                       |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | 26.3                     | NA                       | 5.28                     | NA                       | 37.9                     | NA                       |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | 899.3                    | NA                       | 1,545.28                 | NA                       | 218.98                   | NA                       |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | 0.0228                   | NA                       | 0.0760                   | NA                       | <0.000467                | NA                       |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | 1.44                     | NA                       | 3.32                     | NA                       | <0.00130                 | NA                       |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | 1.41                     | NA                       | 2.20                     | NA                       | <0.000737                | NA                       |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | 15.2                     | NA                       | 30.4                     | NA                       | 0.00701                  | NA                       |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | 4.47                     | NA                       | 8.71                     | NA                       | <0.00158                 | NA                       |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | 3.97                     | NA                       | 8.59                     | NA                       | <0.00200                 | NA                       |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | <0.00209                 | NA                       | <0.00209                 | NA                       | <0.00209                 | NA                       |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | <0.00230                 | NA                       | <0.00230                 | NA                       | <0.00230                 | NA                       |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | <0.00173                 | NA                       | <0.00173                 | NA                       | <0.00173                 | NA                       |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | <0.00153                 | NA                       | <0.00153                 | NA                       | <0.00153                 | NA                       |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | <0.00215                 | NA                       | <0.00215                 | NA                       | <0.00215                 | NA                       |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | <0.00179                 | NA                       | <0.00179                 | NA                       | <0.00179                 | NA                       |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | <0.00232                 | NA                       | <0.00232                 | NA                       | <0.00232                 | NA                       |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | <0.00172                 | NA                       | <0.00172                 | NA                       | <0.00172                 | NA                       |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | <0.00227                 | NA                       | <0.00227                 | NA                       | <0.00227                 | NA                       |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | 0.00876                  | NA                       | 0.0115                   | NA                       | <0.00205                 | NA                       |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | <0.00181                 | NA                       | <0.00181                 | NA                       | <0.00181                 | NA                       |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | 0.154                    | NA                       | 0.200                    | NA                       | <0.00449                 | NA                       |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | 0.416                    | NA                       | 0.552                    | NA                       | <0.00427                 | NA                       |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | 0.219                    | NA                       | 0.220                    | NA                       | <0.00408                 | NA                       |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | <0.00200                 | NA                       | <0.00200                 | NA                       | <0.00200                 | NA                       |

NOTES:

ND - less than the stated reporting limit

**BOLD** - indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

EC- electrical conductivity

mg/kg - milligrams per kilogram

mg/l - milligrams per liter

mmhos/cm - millimhos per centimeter

SAR - sodium adsorption ratio

SU - standard unit

TPH-ORO - total petroleum hydrocarbons- oil range organics

TPH-GRO - total petroleum hydrocarbons-gasoline range organics

TPH-DRO - total petroleum hydrocarbons-diesel range organics

TPH - combination of TPH-GRO, TPH-DRO, and TPH-ORO

NA - analyte not analyzed

ND - analyte not detected

R - risk based

MCL - maximum containment level (M)

M - based MCL

TABLE 1

SOIL ANALYTICAL RESULTS

H7 TANK INVESTIGATION

GARFIELD COUNTY, COLORADO

CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | CONFIRMATION SOIL SAMPLE |                          |                            |                            |                            |                            |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|--------------------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|                         |                                                             |                                                                              |          | 20230703-H7-(SB02)@10-12 | 20230703-H7-(SB02)@10-12 | 20230703-H7-(SB02)@20-21.5 | 20230703-H7-(SB02)@20-21.5 | 20230703-H7-(SB02)@30-31.5 | 20230703-H7-(SB02)@30-31.5 |
| Sample Date             |                                                             |                                                                              |          | 7/3/2023                 | 7/3/2023                 | 7/3/2023                   | 7/3/2023                   | 7/3/2023                   | 7/3/2023                   |
| Sample Depth (feet)     |                                                             |                                                                              |          | 10-12                    | 10-12                    | 20-21.5                    | 20-21.5                    | 30-32                      | 30-32                      |
| Sample Type             |                                                             |                                                                              |          | Confirmation             | Confirmation             | Confirmation               | Confirmation               | Confirmation               | Confirmation               |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | 8.52                     | NA                       | 9.01                       | NA                         | 8.30                       | NA                         |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | 197                      | NA                       | 150                        | NA                         | 151                        | NA                         |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.594                    | NA                       | 0.224                      | NA                         | 0.140                      | NA                         |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | 0.386                    | NA                       | 0.407                      | NA                         | 0.425                      | NA                         |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | <0.255                   | <0.255                   | <0.255                     | <0.255                     | <0.255                     | <0.255                     |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | 12.0                     | NA                       | 11.7                       | NA                         | 12.3                       | NA                         |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | 8.86                     | NA                       | 8.20                       | NA                         | 9.25                       | NA                         |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | 15.1                     | NA                       | 12.3                       | NA                         | 12.9                       | NA                         |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | 0.421                    | NA                       | 0.371                      | NA                         | 0.389                      | NA                         |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | <0.0865                  | NA                       | <0.0865                    | NA                         | <0.0865                    | NA                         |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | 38.9                     | NA                       | 35.7                       | NA                         | 36.0                       | NA                         |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 0.707                    | NA                       | 0.152                      | NA                         | 1.440                      | NA                         |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | 9.24                     | NA                       | 8.55                       | NA                         | 8.43                       | NA                         |
| SAR                     | <6                                                          | <6                                                                           | unitless | 6.54                     | NA                       | 4.97                       | NA                         | 4.08                       | NA                         |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | 0.320                    | NA                       | 0.145                      | NA                         | 0.135                      | NA                         |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | 1.82                     | NA                       | 2.69                       | NA                         | 8.68                       | NA                         |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | 8.49                     | NA                       | 12.9                       | NA                         | 46.5                       | NA                         |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | 10.630                   | NA                       | 15.735                     | NA                         | 55.315                     | NA                         |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | <0.000467                | NA                       | 0.00138                    | NA                         | <0.000467                  | NA                         |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | 0.00673                  | NA                       | 0.0021                     | NA                         | 0.0013                     | NA                         |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | 0.00                     | NA                       | <0.000737                  | NA                         | <0.000737                  | NA                         |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | 0.0386                   | NA                       | <0.000880                  | NA                         | <0.000880                  | NA                         |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | 0.0225                   | NA                       | <0.00158                   | NA                         | <0.00158                   | NA                         |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | 0.0211                   | NA                       | <0.00200                   | NA                         | <0.00200                   | NA                         |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | <0.00209                 | NA                       | <0.00209                   | NA                         | <0.00209                   | NA                         |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | <0.00230                 | NA                       | <0.00230                   | NA                         | <0.00230                   | NA                         |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | <0.00173                 | NA                       | <0.00173                   | NA                         | <0.00173                   | NA                         |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | <0.00153                 | NA                       | <0.00153                   | NA                         | <0.00153                   | NA                         |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | <0.00215                 | NA                       | <0.00215                   | NA                         | <0.00215                   | NA                         |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | <0.00179                 | NA                       | <0.00179                   | NA                         | <0.00179                   | NA                         |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | <0.00232                 | NA                       | <0.00232                   | NA                         | <0.00232                   | NA                         |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | <0.00172                 | NA                       | <0.00172                   | NA                         | <0.00172                   | NA                         |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | <0.00227                 | NA                       | <0.00227                   | NA                         | <0.00227                   | NA                         |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | <0.00205                 | NA                       | <0.00205                   | NA                         | <0.00205                   | NA                         |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | <0.00181                 | NA                       | <0.00181                   | NA                         | <0.00181                   | NA                         |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | <0.00449                 | NA                       | <0.00449                   | NA                         | <0.00449                   | NA                         |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | <0.00427                 | NA                       | <0.00427                   | NA                         | <0.00427                   | NA                         |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | <0.00408                 | NA                       | <0.00408                   | NA                         | <0.00408                   | NA                         |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | <0.00200                 | NA                       | <0.00200                   | NA                         | <0.00200                   | NA                         |

NOTES:

ND - less than the stated reporting limit

**BOLD** - indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

EC- electrical conductivity

mg/kg - milligrams per kilogram

mg/l - milligrams per liter

mmhos/cm - millimhos per centimeter

SAR - sodium adsorption ratio

SU - standard unit

TPH-ORO - total petroleum hydrocarbons- oil range organics

TPH-GRO - total petroleum hydrocarbons-gasoline range organics

TPH-DRO - total petroleum hydrocarbons-diesel range organics

TPH - combination of TPH-GRO, TPH-DRO, and TPH-ORO

NA - analyte not analyzed

ND - analyte not detected

R - risk based

MCL - maximum containment level (M)

M - based MCL

TABLE 1

SOIL ANALYTICAL RESULTS

H7 TANK INVESTIGATION

GARFIELD COUNTY, COLORADO

CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | CONFIRMATION SOIL SAMPLE   |                            |                            |                            |                            |                            |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|                         |                                                             |                                                                              |          | 20230705-H7-(SB03)@10-11.5 | 20230705-H7-(SB03)@10-11.5 | 20230705-H7-(SB03)@20-21.5 | 20230705-H7-(SB03)@20-21.5 | 20230705-H7-(SB03)@30-31.5 | 20230705-H7-(SB03)@30-31.5 |
| Sample Date             |                                                             |                                                                              |          | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   |
| Sample Depth (feet)     |                                                             |                                                                              |          | 10-11.5                    | 10-11.5                    | 20-21.5                    | 20-21.5                    | 30-31.5                    | 30-31.5                    |
| Sample Type             |                                                             |                                                                              |          | Confirmation               | Confirmation               | Confirmation               | Confirmation               | Confirmation               | Confirmation               |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | <b>6.18</b>                | NA                         | <b>12.1</b>                | NA                         | <b>5.06</b>                | NA                         |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | <b>190</b>                 | NA                         | <b>141</b>                 | NA                         | <b>149</b>                 | NA                         |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.297                      | NA                         | 0.321                      | NA                         | 0.226                      | NA                         |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | <b>0.461</b>               | NA                         | <b>0.507</b>               | NA                         | 0.274                      | NA                         |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | <0.255                     | <0.255                     | <b>0.362</b>               | <0.255                     | <0.255                     | <0.255                     |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | 15.3                       | NA                         | 14.9                       | NA                         | 14.9                       | NA                         |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | 8.23                       | NA                         | 10.0                       | NA                         | 7.33                       | NA                         |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | 15.0                       | NA                         | 15.6                       | NA                         | 11.1                       | NA                         |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | <b>0.385</b>               | NA                         | <b>0.31</b>                | NA                         | 0.211                      | NA                         |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | <0.0865                    | NA                         | <0.0865                    | NA                         | <0.0865                    | NA                         |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | 34.6                       | NA                         | 46.3                       | NA                         | 33.2                       | NA                         |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 0.369                      | NA                         | 0.435                      | NA                         | 0.878                      | NA                         |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | <b>8.89</b>                | NA                         | <b>9.17</b>                | NA                         | <b>8.58</b>                | NA                         |
| SAR                     | <6                                                          | <6                                                                           | unitless | 1.75                       | NA                         | <b>6.19</b>                | NA                         | 4.56                       | NA                         |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | 0.0667                     | NA                         | 0.0912                     | NA                         | 0.0702                     | NA                         |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | 9.32                       | NA                         | 10.2                       | NA                         | 2.76                       | NA                         |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | 31.0                       | NA                         | 45.5                       | NA                         | 8.54                       | NA                         |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | 40.3867                    | NA                         | 55.7912                    | NA                         | 8.6102                     | NA                         |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | <0.000467                  | NA                         | <0.000467                  | NA                         | <0.000467                  | NA                         |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | <0.00130                   | NA                         | <0.00130                   | NA                         | <0.00130                   | NA                         |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | <0.000737                  | NA                         | <0.000737                  | NA                         | <0.000737                  | NA                         |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | <0.000880                  | NA                         | <0.000880                  | NA                         | <0.000880                  | NA                         |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | <0.00158                   | NA                         | <0.00158                   | NA                         | <0.00158                   | NA                         |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | <0.00200                   | NA                         | <0.00200                   | NA                         | <0.00200                   | NA                         |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | <0.00209                   | NA                         | <0.00209                   | NA                         | <0.00209                   | NA                         |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | <0.00230                   | NA                         | <0.00230                   | NA                         | <0.00230                   | NA                         |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | <0.00173                   | NA                         | <0.00173                   | NA                         | <0.00173                   | NA                         |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | <0.00153                   | NA                         | <0.00153                   | NA                         | <0.00153                   | NA                         |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | <0.00215                   | NA                         | <0.00215                   | NA                         | <0.00215                   | NA                         |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | <0.00179                   | NA                         | <0.00179                   | NA                         | <0.00179                   | NA                         |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | <0.00232                   | NA                         | <0.00232                   | NA                         | <0.00232                   | NA                         |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | <0.00172                   | NA                         | <0.00172                   | NA                         | <0.00172                   | NA                         |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | <0.00227                   | NA                         | <0.00227                   | NA                         | <0.00227                   | NA                         |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | <0.00205                   | NA                         | <0.00205                   | NA                         | <0.00205                   | NA                         |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | <0.00181                   | NA                         | <0.00181                   | NA                         | <0.00181                   | NA                         |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | <0.00449                   | NA                         | <0.00449                   | NA                         | <0.00449                   | NA                         |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | <0.00427                   | NA                         | <0.00427                   | NA                         | <0.00427                   | NA                         |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | <0.00408                   | NA                         | <0.00408                   | NA                         | <0.00408                   | NA                         |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | <0.00200                   | NA                         | <0.00200                   | NA                         | <0.00200                   | NA                         |

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|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|                         |                                                             |                                                                              |          | 20230705-H7-(SB04)@10-11.5 | 20230705-H7-(SB04)@10-11.5 | 20230705-H7-(SB04)@20-21.5 | 20230705-H7-(SB04)@20-21.5 | 20230705-H7-(SB04)@30-31.5 | 20230705-H7-(SB04)@30-31.5 |
| Sample Date             |                                                             |                                                                              |          | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   |
| Sample Depth (feet)     |                                                             |                                                                              |          | 10-11.5                    | 10-11.5                    | 20-21.5                    | 20-21.5                    | 30-31.5                    | 30-31.5                    |
| Sample Type             |                                                             |                                                                              |          | Confirmation               | Confirmation               | Confirmation               | Confirmation               | Confirmation               | Confirmation               |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | 9.50                       | NA                         | 7.21                       | NA                         | 6.55                       | NA                         |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | 184                        | NA                         | 130                        | NA                         | 126                        | NA                         |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.375                      | NA                         | 0.217                      | NA                         | 0.174                      | NA                         |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | 0.384                      | NA                         | 0.686                      | NA                         | 0.382                      | NA                         |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | <0.255                     | <0.255                     | <0.255                     | <0.255                     | <0.255                     | <0.255                     |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | 14.3                       | NA                         | 11.8                       | NA                         | 10.5                       | NA                         |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | 10.9                       | NA                         | 8.88                       | NA                         | 6.87                       | NA                         |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | 17.9                       | NA                         | 14.3                       | NA                         | 11.6                       | NA                         |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | 0.468                      | NA                         | 0.407                      | NA                         | 0.346                      | NA                         |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | <0.0865                    | NA                         | 0.107                      | NA                         | <0.0865                    | NA                         |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | 43.4                       | NA                         | 41.3                       | NA                         | 35.4                       | NA                         |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 0.533                      | NA                         | 2.120                      | NA                         | 1.170                      | NA                         |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | 9.17                       | NA                         | 8.26                       | NA                         | 8.32                       | NA                         |
| SAR                     | <6                                                          | <6                                                                           | unitless | 5.43                       | NA                         | 3.63                       | NA                         | 3.69                       | NA                         |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | 0.0628                     | NA                         | 0.112                      | NA                         | 0.0952                     | NA                         |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | 4.69                       | NA                         | 20.5                       | NA                         | <64.4                      | NA                         |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | 19.8                       | NA                         | 27.6                       | NA                         | 304                        | NA                         |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | 24.5528                    | NA                         | 48.212                     | NA                         | 304.0952                   | NA                         |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | <0.000467                  | NA                         | <0.000467                  | NA                         | <0.000467                  | NA                         |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | <0.00130                   | NA                         | <0.00130                   | NA                         | <0.00130                   | NA                         |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | <0.000737                  | NA                         | <0.000737                  | NA                         | <0.000737                  | NA                         |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | <0.000880                  | NA                         | <0.000880                  | NA                         | <0.000880                  | NA                         |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | <0.00158                   | NA                         | <0.00158                   | NA                         | <0.00158                   | NA                         |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | <0.00200                   | NA                         | <0.00200                   | NA                         | <0.00200                   | NA                         |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | <0.00209                   | NA                         | <0.00209                   | NA                         | <0.00209                   | NA                         |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | <0.00230                   | NA                         | <0.00230                   | NA                         | <0.00230                   | NA                         |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | <0.00173                   | NA                         | <0.00173                   | NA                         | <0.00173                   | NA                         |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | <0.00153                   | NA                         | <0.00153                   | NA                         | <0.00153                   | NA                         |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | <0.00215                   | NA                         | <0.00215                   | NA                         | <0.00215                   | NA                         |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | <0.00179                   | NA                         | <0.00179                   | NA                         | <0.00179                   | NA                         |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | <0.00232                   | NA                         | <0.00232                   | NA                         | <0.00232                   | NA                         |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | <0.00172                   | NA                         | <0.00172                   | NA                         | <0.00172                   | NA                         |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | <0.00227                   | NA                         | <0.00227                   | NA                         | <0.00227                   | NA                         |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | <0.00205                   | NA                         | <0.00205                   | NA                         | <0.00205                   | NA                         |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | <0.00181                   | NA                         | <0.00181                   | NA                         | <0.00181                   | NA                         |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | <0.00449                   | NA                         | <0.00449                   | NA                         | <0.00449                   | NA                         |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | 0.0147                     | NA                         | <0.00427                   | NA                         | <0.00427                   | NA                         |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | 0.0155                     | NA                         | <0.00408                   | NA                         | <0.00408                   | NA                         |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | <0.00200                   | NA                         | <0.00200                   | NA                         | <0.00200                   | NA                         |

NOTES:

ND - less than the stated reporting limit

**BOLD** - indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

EC- electrical conductivity

mg/kg - milligrams per kilogram

mg/l - milligrams per liter

mmhos/cm - millimhos per centimeter

SAR - sodium adsorption ratio

SU - standard unit

TPH-ORO - total petroleum hydrocarbons- oil range organics

TPH-GRO - total petroleum hydrocarbons-gasoline range organics

TPH-DRO - total petroleum hydrocarbons-diesel range organics

TPH - combination of TPH-GRO, TPH-DRO, and TPH-ORO

NA - analyte not analyzed

ND - analyte not detected

R - risk based

MCL - maximum containment level (M)

M - based MCL



TABLE 1

SOIL ANALYTICAL RESULTS

H7 TANK INVESTIGATION

GARFIELD COUNTY, COLORADO

CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | CONFIRMATION SOIL SAMPLE   |                            |                            |                            |                            |                            |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|                         |                                                             |                                                                              |          | 20230705-H7-(SB05)@10-11.5 | 20230705-H7-(SB05)@10-11.5 | 20230705-H7-(SB05)@20-21.5 | 20230705-H7-(SB05)@20-21.5 | 20230705-H7-(SB05)@30-31.5 | 20230705-H7-(SB05)@30-31.5 |
| Sample Date             |                                                             |                                                                              |          | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   | 7/5/2023                   |
| Sample Depth (feet)     |                                                             |                                                                              |          | 10-11.5                    | 10-11.5                    | 20-21.5                    | 20-21.5                    | 30-31.5                    | 30-31.5                    |
| Sample Type             |                                                             |                                                                              |          | Confirmation               | Confirmation               | Confirmation               | Confirmation               | Confirmation               | Confirmation               |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | <b>8.53</b>                | NA                         | <b>6.96</b>                | NA                         | <b>10.2</b>                | NA                         |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | <b>133</b>                 | NA                         | <b>112</b>                 | NA                         | <b>116</b>                 | NA                         |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.182                      | NA                         | 0.269                      | NA                         | 0.332                      | NA                         |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | <b>0.433</b>               | NA                         | <b>0.393</b>               | NA                         | <b>0.535</b>               | NA                         |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | <0.255                     | <0.255                     | <0.255                     | <0.255                     | <0.255                     | <0.255                     |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | 11.1                       | NA                         | 10.2                       | NA                         | 12.6                       | NA                         |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | 8.39                       | NA                         | 7.21                       | NA                         | 12.2                       | NA                         |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | 12.6                       | NA                         | 10.8                       | NA                         | 12.8                       | NA                         |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | <b>0.48</b>                | NA                         | <b>0.293</b>               | NA                         | <b>0.491</b>               | NA                         |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | <0.0865                    | NA                         | <0.0865                    | NA                         | 0.0871                     | NA                         |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | 35.1                       | NA                         | 32.6                       | NA                         | 42.8                       | NA                         |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 0.708                      | NA                         | 2.200                      | NA                         | 1.800                      | NA                         |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | <b>9.12</b>                | NA                         | <b>8.36</b>                | NA                         | <b>8.14</b>                | NA                         |
| SAR                     | <6                                                          | <6                                                                           | unitless | 5.71                       | NA                         | <b>6.48</b>                | NA                         | <b>6.54</b>                | NA                         |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | 0.0588                     | NA                         | 0.0796                     | NA                         | 0.0822                     | NA                         |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | 2.28                       | NA                         | 5.31                       | NA                         | 8.50                       | NA                         |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | 6.37                       | NA                         | 17.4                       | NA                         | 44.9                       | NA                         |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | 8.7088                     | NA                         | 22.7896                    | NA                         | 53.4822                    | NA                         |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | <0.000467                  | NA                         | <0.000467                  | NA                         | <0.000467                  | NA                         |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | <0.00130                   | NA                         | <0.00130                   | NA                         | <0.00130                   | NA                         |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | <0.000737                  | NA                         | <0.000737                  | NA                         | <0.000737                  | NA                         |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | <0.000880                  | NA                         | <0.000880                  | NA                         | <0.000880                  | NA                         |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | <0.00158                   | NA                         | <0.00158                   | NA                         | <0.00158                   | NA                         |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | <0.00200                   | NA                         | <0.00200                   | NA                         | <0.00200                   | NA                         |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | <0.00209                   | NA                         | <0.00209                   | NA                         | <0.00209                   | NA                         |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | <0.00230                   | NA                         | <0.00230                   | NA                         | <0.00230                   | NA                         |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | <0.00173                   | NA                         | <0.00173                   | NA                         | <0.00173                   | NA                         |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | <0.00153                   | NA                         | <0.00153                   | NA                         | <0.00153                   | NA                         |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | <0.00215                   | NA                         | <0.00215                   | NA                         | <0.00215                   | NA                         |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | <0.00179                   | NA                         | <0.00179                   | NA                         | <0.00179                   | NA                         |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | <0.00232                   | NA                         | <0.00232                   | NA                         | <0.00232                   | NA                         |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | <0.00172                   | NA                         | <0.00172                   | NA                         | <0.00172                   | NA                         |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | <0.00227                   | NA                         | <0.00227                   | NA                         | <0.00227                   | NA                         |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | <0.00205                   | NA                         | <0.00205                   | NA                         | <0.00205                   | NA                         |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | <0.00181                   | NA                         | <0.00181                   | NA                         | <0.00181                   | NA                         |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | <b>0.0331</b>              | NA                         | <0.00449                   | NA                         | <0.00449                   | NA                         |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | <b>0.119</b>               | NA                         | <0.00427                   | NA                         | <0.00427                   | NA                         |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | <b>0.0552</b>              | NA                         | <0.00408                   | NA                         | <0.00408                   | NA                         |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | <0.00200                   | NA                         | <0.00200                   | NA                         | <0.00200                   | NA                         |

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TABLE 1

SOIL ANALYTICAL RESULTS  
H7 TANK INVESTIGATION  
GARFIELD COUNTY, COLORADO  
CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | BACKGROUND SOIL SAMPLES   |                           |                           |                           |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|---------------------------|---------------------------|---------------------------|---------------------------|
|                         |                                                             |                                                                              |          | 20220613-H7(BG-01)@10-12' | 20220613-H7(BG-01)@15-17' | 20220613-H7(BG-01)@20-22' | 20220613-H7(BG-01)@25-27' |
| Sample Date             |                                                             |                                                                              |          | 6/13/2022                 | 6/13/2022                 | 6/13/2022                 | 6/13/2022                 |
| Sample Depth (feet)     |                                                             |                                                                              |          | 10-12                     | 15-17                     | 20-22                     | 25-27                     |
| Sample Type             |                                                             |                                                                              |          | Background Sample         | Background Sample         | Background Sample         | Background Sample         |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | 19.3                      | 11.5                      | 10.9                      | 9.99                      |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.658                     | 0.465                     | 0.372                     | 0.299                     |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 4.650                     | 3.730                     | 3.680                     | 3.350                     |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | 7.49                      | 7.98                      | 8.22                      | 8.19                      |
| SAR                     | <6                                                          | <6                                                                           | unitless | 4.45                      | 8.36                      | 7.77                      | 8.54                      |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |

NOTES:  
ND - less than the stated reporting limit  
**BOLD** - indicates result exceeds the COGCC concentration level  
COGCC - Colorado Oil and Gas Conservation Commission  
EC- electrical conductivity  
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TABLE 1

SOIL ANALYTICAL RESULTS  
H7 TANK INVESTIGATION  
GARFIELD COUNTY, COLORADO  
CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | BACKGROUND SOIL SAMPLES   |                           |                           |                           |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|---------------------------|---------------------------|---------------------------|---------------------------|
|                         |                                                             |                                                                              |          | 20220613-H7(BG-01)@30-32' | 20220613-H7(BG-01)@35-37' | 20220613-H7(BG-01)@40-42' | 20220613-H7(BG-02)@10-12' |
| Sample Date             |                                                             |                                                                              |          | 6/13/2022                 | 6/13/2022                 | 6/13/2022                 | 6/13/2022                 |
| Sample Depth (feet)     |                                                             |                                                                              |          | 30-32                     | 35-37                     | 40-42                     | 10-12                     |
| Sample Type             |                                                             |                                                                              |          | Background Sample         | Background Sample         | Background Sample         | Background Sample         |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | 11.5                      | 10.5                      | 11.0                      | 16.9                      |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.270                     | 0.228                     | 0.208                     | 0.300                     |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 3.040                     | 1.200                     | 1.660                     | 2.200                     |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | 7.46                      | 8.67                      | 8.43                      | 8.42                      |
| SAR                     | <6                                                          | <6                                                                           | unitless | 10.8                      | 7.91                      | 9.84                      | 8.51                      |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |

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TABLE 1

SOIL ANALYTICAL RESULTS  
H7 TANK INVESTIGATION  
GARFIELD COUNTY, COLORADO  
CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | BACKGROUND SOIL SAMPLES   |                           |                           |                           |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|---------------------------|---------------------------|---------------------------|---------------------------|
|                         |                                                             |                                                                              |          | 20220613-H7(BG-02)@15-17' | 20220613-H7(BG-02)@20-22' | 20220613-H7(BG-02)@25-27' | 20220613-H7(BG-02)@30-32' |
| Sample Date             |                                                             |                                                                              |          | 6/13/2022                 | 6/13/2022                 | 6/13/2022                 | 6/13/2022                 |
| Sample Depth (feet)     |                                                             |                                                                              |          | 15-17                     | 20-22                     | 25-27                     | 30-32                     |
| Sample Type             |                                                             |                                                                              |          | Background Sample         | Background Sample         | Background Sample         | Background Sample         |
|                         |                                                             |                                                                              |          |                           |                           |                           |                           |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | 19.3                      | 14.3                      | 6.69                      | 22.2                      |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.227                     | 0.237                     | 0.222                     | 0.178                     |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
|                         |                                                             |                                                                              |          |                           |                           |                           |                           |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 4.720                     | 3.070                     | 1.390                     | 1.010                     |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | 7.90                      | 7.96                      | 8.15                      | 8.48                      |
| SAR                     | <6                                                          | <6                                                                           | unitless | 4.83                      | 5.71                      | 6.05                      | 6.56                      |
|                         |                                                             |                                                                              |          |                           |                           |                           |                           |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
|                         |                                                             |                                                                              |          |                           |                           |                           |                           |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | NA                        | NA                        | NA                        | NA                        |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | NA                        | NA                        | NA                        | NA                        |

NOTES:  
ND - less than the stated reporting limit  
**BOLD** - indicates result exceeds the COGCC concentration level  
COGCC - Colorado Oil and Gas Conservation Commission  
EC- electrical conductivity  
mg/kg - milligrams per kilogram  
mg/l - milligrams per liter  
mmhos/cm - millimhos per centimeter  
SAR - sodium adsorption ratio  
SU - standard unit  
TPH-ORO - total petroleum hydrocarbons- oil range organics  
TPH-GRO - total petroleum hydrocarbons-gasoline range organics  
TPH-DRO - total petroleum hydrocarbons-diesel range organics  
TPH - combination of TPH-GRO, TPH-DRO, and TPH-ORO  
NA - analyte not analyzed  
ND - analyte not detected  
R - risk based  
MCL - maximum containment level (M)  
M - based MCL



TABLE 1

SOIL ANALYTICAL RESULTS  
H7 TANK INVESTIGATION  
GARFIELD COUNTY, COLORADO  
CAERUS PICEANCE LLC

| PARAMETER               | COGCC RESIDENTIAL SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | COGCC PROTECTION OF<br>GROUNDWATER SOIL<br>SCREENING LEVEL<br>CONCENTRATIONS | UNITS    | BACKGROUND SOIL SAMPLES   |                           |
|-------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------|---------------------------|---------------------------|
|                         |                                                             |                                                                              |          | 20220613-H7(BG-02)@35-37' | 20220613-H7(BG-02)@40-42' |
| Sample Date             |                                                             |                                                                              |          | 6/13/2022                 | 6/13/2022                 |
| Sample Depth (feet)     |                                                             |                                                                              |          | 35-37                     | 40-42                     |
| Sample Type             |                                                             |                                                                              |          | Background Sample         | Background Sample         |
|                         |                                                             |                                                                              |          |                           |                           |
| Arsenic                 | 0.68                                                        | 0.29 (M)                                                                     | mg/kg    | 7.77                      | 10.3                      |
| Barium                  | 15,000                                                      | 82 (M)                                                                       | mg/kg    | NA                        | NA                        |
| Boron                   | 2                                                           | 2                                                                            | mg/l     | 0.216                     | 0.206                     |
| Cadmium                 | 71                                                          | 0.38 (M)                                                                     | mg/kg    | NA                        | NA                        |
| Chromium (VI)           | 0.3                                                         | 0.00067 (R)                                                                  | mg/kg    | NA                        | NA                        |
| Copper                  | 3,100                                                       | 46 (M)                                                                       | mg/kg    | NA                        | NA                        |
| Lead                    | 400                                                         | 14 (M)                                                                       | mg/kg    | NA                        | NA                        |
| Nickel                  | 1,500                                                       | 26 (R)                                                                       | mg/kg    | NA                        | NA                        |
| Selenium                | 390                                                         | 0.26 (M)                                                                     | mg/kg    | NA                        | NA                        |
| Silver                  | 390                                                         | 0.8 (R)                                                                      | mg/kg    | NA                        | NA                        |
| Zinc                    | 23,000                                                      | 370 (R)                                                                      | mg/kg    | NA                        | NA                        |
|                         |                                                             |                                                                              |          |                           |                           |
| EC                      | <4                                                          | <4                                                                           | mmhos/cm | 1.410                     | 0.919                     |
| pH                      | 6 - 8.3                                                     | 6 - 8.3                                                                      | SU       | 8.22                      | 8.33                      |
| SAR                     | <6                                                          | <6                                                                           | unitless | 5.81                      | 5.02                      |
|                         |                                                             |                                                                              |          |                           |                           |
| TPH-GRO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        |
| TPH-DRO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        |
| TPH-ORO                 |                                                             |                                                                              | mg/kg    | NA                        | NA                        |
| TPH                     | 500                                                         | 500                                                                          | mg/kg    | NA                        | NA                        |
| Benzene                 | 1.2                                                         | 0.0026 (M)                                                                   | mg/kg    | NA                        | NA                        |
| Toluene                 | 490                                                         | 0.69 (M)                                                                     | mg/kg    | NA                        | NA                        |
| Ethylbenzene            | 5.8                                                         | 0.78 (M)                                                                     | mg/kg    | NA                        | NA                        |
| Total Xylenes           | 58                                                          | 9.9 (M)                                                                      | mg/kg    | NA                        | NA                        |
| 1,2,4-trimethylbenzene  | 30                                                          | 0.0081 (R)                                                                   | mg/kg    | NA                        | NA                        |
| 1,3,5-trimethylbenzene  | 27                                                          | 0.0087 (R)                                                                   | mg/kg    | NA                        | NA                        |
|                         |                                                             |                                                                              |          |                           |                           |
| Acenaphthene            | 360                                                         | 5.8 (R)                                                                      | mg/kg    | NA                        | NA                        |
| Anthracene              | 1,800                                                       | 0.55 (R)                                                                     | mg/kg    | NA                        | NA                        |
| Benzo(A)anthracene      | 1.1                                                         | 0.011 (R)                                                                    | mg/kg    | NA                        | NA                        |
| Benzo(B)fluoranthene    | 1.1                                                         | 0.3 (R)                                                                      | mg/kg    | NA                        | NA                        |
| Benzo(K)fluoranthene    | 11                                                          | 2.9 (R)                                                                      | mg/kg    | NA                        | NA                        |
| Benzo(A)pyrene          | 0.11                                                        | 0.24 (M)                                                                     | mg/kg    | NA                        | NA                        |
| Chrysene                | 110                                                         | 9 (R)                                                                        | mg/kg    | NA                        | NA                        |
| Dibenzo(A,H)anthracene  | 0.11                                                        | 0.11 (R)                                                                     | mg/kg    | NA                        | NA                        |
| Fluoranthene            | 240                                                         | 0.096 (R)                                                                    | mg/kg    | NA                        | NA                        |
| Fluorene                | 240                                                         | 0.54 (R)                                                                     | mg/kg    | NA                        | NA                        |
| Indeno(1,2,3,c-d)pyrene | 1.1                                                         | 0.98 (R)                                                                     | mg/kg    | NA                        | NA                        |
| 1-methylnaphthalene     | 18                                                          | 0.006 (R)                                                                    | mg/kg    | NA                        | NA                        |
| 2-methylnaphthalene     | 24                                                          | 0.019 (R)                                                                    | mg/kg    | NA                        | NA                        |
| Naphthalene             | 2                                                           | 0.0038 (R)                                                                   | mg/kg    | NA                        | NA                        |
| Pyrene                  | 180                                                         | 1.3 (R)                                                                      | mg/kg    | NA                        | NA                        |

NOTES:  
ND - less than the stated reporting limit  
**BOLD** - indicates result exceeds the COGCC concentration level  
COGCC - Colorado Oil and Gas Conservation Commission  
EC- electrical conductivity  
mg/kg - milligrams per kilogram  
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SAR - sodium adsorption ratio  
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TPH-ORO - total petroleum hydrocarbons- oil range organics  
TPH-GRO - total petroleum hydrocarbons-gasoline range organics  
TPH-DRO - total petroleum hydrocarbons-diesel range organics  
TPH - combination of TPH-GRO, TPH-DRO, and TPH-ORO  
NA - analyte not analyzed  
ND - analyte not detected  
R - risk based  
MCL - maximum containment level (M)  
M - based MCL

## ENCLOSURE A – PHOTOGRAPHIC LOG



| PHOTOGRAPHIC LOG    |                       |             |
|---------------------|-----------------------|-------------|
| Caerus Piceance LLC | H7 Tank Investigation | 3140550.021 |

| Photo No.                                              | Date          |                                                                                    |
|--------------------------------------------------------|---------------|------------------------------------------------------------------------------------|
| 1                                                      | June 21, 2023 |                                                                                    |
| Tank battery investigation overview;<br>view northwest |               |  |

| Photo No.                                                     | Date          |                                                                                     |
|---------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------|
| 2                                                             | June 21, 2023 |                                                                                     |
| Investigative pothole SBE location<br>overview;<br>view south |               |  |

| Photo No.                                                 | Date          |                                                                                      |
|-----------------------------------------------------------|---------------|--------------------------------------------------------------------------------------|
| 3                                                         | June 21, 2023 |                                                                                      |
| Investigative pothole SBS location<br>overview; view west |               |  |

# PHOTOGRAPHIC LOG

|                     |                       |             |
|---------------------|-----------------------|-------------|
| Caerus Piceance LLC | H7 Tank Investigation | 3140550.021 |
|---------------------|-----------------------|-------------|

| Photo No.                                                            | Date          |                                                                                    |
|----------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------|
| 4                                                                    | June 21, 2023 |                                                                                    |
| Investigative pothole SBS with tape measure at 9 feet bgs; view east |               |  |

| Photo No.                                     | Date          |                                                                                     |
|-----------------------------------------------|---------------|-------------------------------------------------------------------------------------|
| 5                                             | June 21, 2023 |                                                                                     |
| Investigative pothole SBE location; view east |               |  |

| Photo No.                                                             | Date          |                                                                                      |
|-----------------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------|
| 6                                                                     | June 21, 2023 |                                                                                      |
| Investigative pothole SBE with tape measure at 9 feet bgs; view south |               |  |

# PHOTOGRAPHIC LOG

|                     |                       |             |
|---------------------|-----------------------|-------------|
| Caerus Piceance LLC | H7 Tank Investigation | 3140550.021 |
|---------------------|-----------------------|-------------|

| Photo No.                                                 | Date          |                                                                                    |
|-----------------------------------------------------------|---------------|------------------------------------------------------------------------------------|
| 7                                                         | June 22, 2023 |                                                                                    |
| Investigative pothole SBN location overview;<br>view east |               |  |

| Photo No.                                                       | Date          |                                                                                     |
|-----------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------|
| 8                                                               | June 22, 2023 |                                                                                     |
| Investigative pothole SBN terminus at 15 feet bgs;<br>view east |               |  |

| Photo No.                                                  | Date          |                                                                                      |
|------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------|
| 9                                                          | June 22, 2023 |                                                                                      |
| Investigative pothole SB01 location overview;<br>view east |               |  |



| PHOTOGRAPHIC LOG    |                       |             |
|---------------------|-----------------------|-------------|
| Caerus Piceance LLC | H7 Tank Investigation | 3140550.021 |

| Photo No.                                                             | Date          |                                                                                    |
|-----------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------|
| 10                                                                    | June 22, 2023 |                                                                                    |
| Investigative pothole SB01 at 12 feet bgs with soil sample; view west |               |  |

| Photo No.                                               | Date          |                                                                                     |
|---------------------------------------------------------|---------------|-------------------------------------------------------------------------------------|
| 11                                                      | June 22, 2023 |                                                                                     |
| Investigative pothole SB02 location overview; view west |               |  |

| Photo No.                                                      | Date          |                                                                                      |
|----------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------|
| 12                                                             | June 22, 2023 |                                                                                      |
| Investigative pothole SB02 terminus at 15 feet bgs; view north |               |  |



| PHOTOGRAPHIC LOG    |                       |             |
|---------------------|-----------------------|-------------|
| Caerus Piceance LLC | H7 Tank Investigation | 3140550.021 |

| Photo No.                                                                    | Date          |                                                                                    |
|------------------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------|
| 13                                                                           | June 22, 2023 |                                                                                    |
| Investigation area overview after all potholes were backfilled;<br>view east |               |  |



| PHOTOGRAPHIC LOG    |                    |              |
|---------------------|--------------------|--------------|
| Caerus Piceance LLC | H7 Tank Assessment | 31406292.017 |

| Photo No.                                                 | Date         |                                                                                     |
|-----------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|
| 1                                                         | July 3, 2023 |                                                                                     |
| Investigative boring location SB01 overview;<br>view east |              |  |

| Photo No.                                                      | Date         |                                                                                      |
|----------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|
| 2                                                              | July 3, 2023 |                                                                                      |
| Investigation boring SB01 soil sample 20230703-H7-(SB01)@10-12 |              |  |



| PHOTOGRAPHIC LOG    |                    |              |
|---------------------|--------------------|--------------|
| Caerus Piceance LLC | H7 Tank Assessment | 31406292.017 |

| Photo No.                                                      | Date         |                                                                                     |
|----------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|
| 3                                                              | July 3, 2023 |                                                                                     |
| Investigation boring SB01 soil sample 20230703-H7-(SB01)@20-22 |              |  |

| Photo No.                                                      | Date         |                                                                                      |
|----------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|
| 4                                                              | July 3, 2023 |                                                                                      |
| Investigation boring SB01 soil sample 20230703-H7-(SB01)@30-32 |              |  |



| PHOTOGRAPHIC LOG    |                    |              |
|---------------------|--------------------|--------------|
| Caerus Piceance LLC | H7 Tank Assessment | 31406292.017 |

| Photo No.                                              | Date         |                                                                                     |
|--------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|
| 5                                                      | July 3, 2023 |                                                                                     |
| Investigative boring location SB02 overview; view east |              |  |

| Photo No.                                                      | Date         |                                                                                      |
|----------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|
| 6                                                              | July 3, 2023 |                                                                                      |
| Investigation boring SB02 soil sample 20230703-H7-(SB02)@10-12 |              |  |



| PHOTOGRAPHIC LOG    |                    |              |
|---------------------|--------------------|--------------|
| Caerus Piceance LLC | H7 Tank Assessment | 31406292.017 |

| Photo No.                                                        | Date         |                                                                                     |
|------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|
| 7                                                                | July 3, 2023 |                                                                                     |
| Investigation boring SB02 soil sample 20230703-H7-(SB02)@20-21.5 |              |  |

| Photo No.                                                        | Date         |                                                                                      |
|------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|
| 8                                                                | July 3, 2023 |                                                                                      |
| Investigation boring SB02 soil sample 20230703-H7-(SB02)@30-31.5 |              |  |



| PHOTOGRAPHIC LOG    |                    |              |
|---------------------|--------------------|--------------|
| Caerus Piceance LLC | H7 Tank Assessment | 31406292.017 |

| Photo No.                                                   | Date         |  |
|-------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|
| 9                                                           | July 5, 2023 |                                                                                     |
| Investigative boring location SB03 overview; view northwest |              |                                                                                     |

| Photo No.                                                        | Date         |  |
|------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|
| 10                                                               | July 5, 2023 |                                                                                      |
| Investigation boring SB03 soil sample 20230705-H7-(SB03)@10-11.5 |              |                                                                                      |



# PHOTOGRAPHIC LOG

Caerus Piceance LLC

H7 Tank Assessment

31406292.017

Photo No.

Date

11

July 5, 2023

Investigation boring SB03 soil  
sample 20230705-H7-(SB03)@20-  
22



Photo No.

Date

12

July 5, 2023

Investigation boring SB03 soil  
sample 20230705-H7-(SB03)@30-  
31.5





| PHOTOGRAPHIC LOG    |                    |              |
|---------------------|--------------------|--------------|
| Caerus Piceance LLC | H7 Tank Assessment | 31406292.017 |

| Photo No.                                              | Date         |                                                                                     |
|--------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|
| 13                                                     | July 5, 2023 |                                                                                     |
| Investigative boring location SB04 overview; view east |              |  |

| Photo No.                                                        | Date         |                                                                                      |
|------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|
| 14                                                               | July 5, 2023 |                                                                                      |
| Investigation boring SB04 soil sample 20230705-H7-(SB04)@10-11.5 |              |  |



| PHOTOGRAPHIC LOG    |                    |              |
|---------------------|--------------------|--------------|
| Caerus Piceance LLC | H7 Tank Assessment | 31406292.017 |

| Photo No.                                                        | Date         |                                                                                     |
|------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|
| 15                                                               | July 5, 2023 |                                                                                     |
| Investigation boring SB04 soil sample 20230705-H7-(SB04)@20-21.5 |              |  |

| Photo No.                                                        | Date         |                                                                                      |
|------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|
| 16                                                               | July 5, 2023 |                                                                                      |
| Investigation boring SB04 soil sample 20230705-H7-(SB04)@30-31.5 |              |  |



| PHOTOGRAPHIC LOG    |                    |              |
|---------------------|--------------------|--------------|
| Caerus Piceance LLC | H7 Tank Assessment | 31406292.017 |

| Photo No.                                                   | Date         |                                                                                     |
|-------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|
| 17                                                          | July 5, 2023 |                                                                                     |
| Investigative boring location SB05 overview; view northwest |              |  |

| Photo No.                                                        | Date         |                                                                                      |
|------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|
| 18                                                               | July 5, 2023 |                                                                                      |
| Investigation boring SB05 soil sample 20230705-H7-(SB05)@10-11.5 |              |  |



| PHOTOGRAPHIC LOG    |                    |              |
|---------------------|--------------------|--------------|
| Caerus Piceance LLC | H7 Tank Assessment | 31406292.017 |

| Photo No.                                                        | Date         |                                                                                     |
|------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|
| 19                                                               | July 5, 2023 |                                                                                     |
| Investigation boring SB05 soil sample 20230705-H7-(SB05)@20-21.5 |              |  |

| Photo No.                                                        | Date         |                                                                                      |
|------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|
| 20                                                               | July 5, 2023 |                                                                                      |
| Investigation boring SB05 soil sample 20230705-H7-(SB05)@30-31.5 |              |  |



| PHOTOGRAPHIC LOG    |                    |              |
|---------------------|--------------------|--------------|
| Caerus Piceance LLC | H7 Tank Assessment | 31406292.017 |

| Photo No.                                     | Date         |                                                                                     |
|-----------------------------------------------|--------------|-------------------------------------------------------------------------------------|
| 21                                            | July 5, 2023 |                                                                                     |
| H7 aerial overview – post drilling assessment |              |  |

| Photo No.                                     | Date         |                                                                                      |
|-----------------------------------------------|--------------|--------------------------------------------------------------------------------------|
| 22                                            | July 5, 2023 |                                                                                      |
| H7 aerial overview – post drilling assessment |              |  |

## ENCLOSURE B – SOIL BORNG LOGS



**HOLE DIAMETER:** 3"  
**WELL DIAMETER:** NA  
**CASING TYPE:** NA  
**SCREEN TYPE:** NA

# WSP

## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

**PROJECT NAME:** H7 Tank Investigation  
**PROJECT NO:** 31406292.02  
**BORING/WELL ID:** SB01  
**COMPLETION DATE:** 7/3/23  
**TD (ft bgs):** 32'  
**DTW (ft bgs):** NA  
**SCREEN SLOT:** NA  
**CASING LENGTH:** NA  
**SCREEN LENGTH:** NA

**LOGGED BY:** Kate Moreland  
**SAMPLE METHOD:** Split Spoon  
**DRILL METHOD:** Solid Stem  
**DRILLED BY:** CD&S  
**DETECTOR:** MiniRAE 3000  
**FILTER PACK:** NA  
**ANNULUS SEAL:** Bentonite Chips  
**SURFACE SEAL:** NA

| PID (ppm) | Staining | Moisture Content | Sample ID    | Recovery (%) | Depth (ft) | USCS | USCS Graphic | Lithology Description                                                                                                      | Well Construction |
|-----------|----------|------------------|--------------|--------------|------------|------|--------------|----------------------------------------------------------------------------------------------------------------------------|-------------------|
| 3,360     | moist    |                  | SB01 @10-12' | 100%         | 10         | ML   |              | 10' - 12' - SILT, gray, trace fine grained sands, non-plastic, trace gravels, some shale pieces, staining, odor.           |                   |
| 4,017     | moist    |                  |              |              | 15         | ML   |              | 15' - 17' - SILT, gray, trace fine grained sands, non-plastic, trace gravels, some shale pieces, staining, odor.           |                   |
| 4,028     | moist    |                  | SB01 @20-22' | 100%         | 20         | ML   |              | 20' - 22' - SILT, gray, trace fine grained sands, non-plastic, trace gravels, staining, odor.                              |                   |
| 97.2      | moist    |                  |              |              | 25         | ML   |              | 25' - 27' - SILT, gray to light brown, trace fine grained sands, non-plastic, trace gravels, staining, odor.               |                   |
| 22.4      | moist    |                  | SB01 @30-32' | 100%         | 30         | ML   |              | 30' - 32' - SILT, light brown, trace fine grained sands, non-plastic, trace gravels, iron oxidation, no staining, no odor. |                   |
|           |          |                  |              |              | 0          |      |              | 0' - 10' - potholed to 10' bgs, not logged.                                                                                |                   |





# BORING LOG/MONITORING WELL COMPLETION DIAGRAM

**PROJECT NAME:** H7 Tank Investigation  
**PROJECT NO:** 31406292.02  
**BORING/WELL ID:** SB02  
**COMPLETION DATE:** 7/3/23  
**TD (ft bgs):** 32'  
**DTW (ft bgs):** NA  
**SCREEN SLOT:** NA  
**CASING LENGTH:** NA  
**SCREEN LENGTH:** NA

**LOGGED BY:** Kate Moreland  
**SAMPLE METHOD:** Split Spoon  
**DRILL METHOD:** Solid Stem  
**DRILLED BY:** CD&S  
**DETECTOR:** MiniRAE 3000  
**FILTER PACK:** NA  
**ANNULUS SEAL:** Bentonite Chips  
**SURFACE SEAL:** NA

**HOLE DIAMETER:** 3"  
**WELL DIAMETER:** NA  
**CASING TYPE:** NA  
**SCREEN TYPE:** NA

| PID (ppm) | Staining | Moisture Content | Sample ID      | Recovery (%) | Depth (ft) | USCS | USCS Graphic | Lithology Description                                                                                                           | Well Construction |
|-----------|----------|------------------|----------------|--------------|------------|------|--------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 7.2       | dry      |                  | SB02 @10-12'   | 100%         | 10         | ML   |              | 0' - 10' - potholed to 10' bgs, not logged.                                                                                     |                   |
| 9.4       | dry      |                  |                |              | 15         | ML   |              | 10' - 12' - SILT, light brown, trace sands, non-plastic, trace interbedded gravels, no staining, no odor.                       |                   |
| 2.1       | dry      |                  | SB02 @20-21.5' | 75%          | 20         | ML   |              | 15' - 16' - SILT, light brown, trace sands, non-plastic, trace interbedded gravels, no staining, no odor.                       |                   |
| 1.5       | moist    |                  |                | 75%          | 25         | ML   |              | 20' - 21.5' - SILT, light brown, trace sands, non-plastic, trace interbedded gravels, no staining, no odor, calcite inclusions. |                   |
| 8.3       | moist    |                  | SB02 @30-31.5' | 75%          | 30         | ML   |              | 25' - 26.5' - SILT, brown, trace fine grained sands, non-plastic, no staining, no odor.                                         |                   |
|           |          |                  |                |              |            |      |              | 30' - 31.5' - SILT, brown, trace fine grained sands, non-plastic, shale cobbles, no staining, no odor, calcite inclusions.      |                   |



# BORING LOG/MONITORING WELL COMPLETION DIAGRAM

**PROJECT NAME:** H7 Tank Investigation  
**PROJECT NO:** 31406292.02  
**BORING/WELL ID:** SB03  
**COMPLETION DATE:** 7/5/23  
**TD (ft bgs):** 31.5'  
**DTW (ft bgs):** NA  
**SCREEN SLOT:** NA  
**CASING LENGTH:** NA  
**SCREEN LENGTH:** NA

**LOGGED BY:** Kate Moreland  
**SAMPLE METHOD:** Split Spoon  
**DRILL METHOD:** Solid Stem  
**DRILLED BY:** CD&S  
**DETECTOR:** MiniRAE 3000  
**FILTER PACK:** NA  
**ANNULUS SEAL:** Bentonite Chips  
**SURFACE SEAL:** NA

**HOLE DIAMETER:** 3"  
**WELL DIAMETER:** NA  
**CASING TYPE:** NA  
**SCREEN TYPE:** NA

| PID (ppm) | Staining | Moisture Content | Sample ID      | Recovery (%) | Depth (ft) | USCS | USCS Graphic | Lithology Description                                                                                                                                         | Well Construction |
|-----------|----------|------------------|----------------|--------------|------------|------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 2.2       | dry      |                  | SB03 @10-11.5' | 75%          | 10         | ML   |              | 0' - 10' - potholed to 10' bgs, not logged.                                                                                                                   |                   |
| 1.9       | dry      |                  |                | 75%          | 15         | ML   |              | 10' - 11.5' - SILT, brown, trace sands, non-plastic, compact, no staining, no odor, basalt cobble at 11.5' bgs.                                               |                   |
| 1.1       | dry      |                  | SB03 @20-22'   | 100%         | 20         | ML   |              | 15' - 16.5' - SILT, brown, trace sands, non-plastic, compact, trace interbedded gravels, interbedded sandstone cobbles with iron oxide, no staining, no odor. |                   |
| 2.1       | dry      |                  |                | 75%          | 25         | ML   |              | 20' - 22' - SILT, brown, trace sands, non-plastic, compact, trace gravels and sandstone, no staining, no odor, trace calcite inclusions.                      |                   |
| 2.3       | dry      |                  | SB03 @30-31.5' | 75%          | 30         | ML   |              | 25' - 26.5' - SILT, brown, trace sands, non-plastic, compact, interbedded granite cobbles and shale pieces, no staining, no odor, trace calcite inclusions.   |                   |
|           |          |                  |                |              |            |      |              | 30' - 31.5' - SILT, brown, trace sands, non-plastic, compact, interbedded granite cobbles, no staining, no odor, trace calcite inclusions.                    |                   |



## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

|                         |                       |                       |                 |
|-------------------------|-----------------------|-----------------------|-----------------|
| <b>PROJECT NAME:</b>    | H7 Tank Investigation |                       |                 |
| <b>PROJECT NO:</b>      | 31406292.02           | <b>LOGGED BY:</b>     | Kate Moreland   |
| <b>BORING/WELL ID:</b>  | SB04                  | <b>SAMPLE METHOD:</b> | Split Spoon     |
| <b>COMPLETION DATE:</b> | 7/5/23                | <b>DRILL METHOD:</b>  | Solid Stem      |
| <b>TD (ft bgs):</b>     | 31.5'                 | <b>DRILLED BY:</b>    | CD&S            |
| <b>DTW (ft bgs):</b>    | NA                    | <b>DETECTOR:</b>      | MiniRAE 3000    |
| <b>SCREEN SLOT:</b>     | NA                    | <b>FILTER PACK:</b>   | NA              |
| <b>CASING LENGTH:</b>   | NA                    | <b>ANNULUS SEAL:</b>  | Bentonite Chips |
| <b>SCREEN LENGTH:</b>   | NA                    | <b>SURFACE SEAL:</b>  | NA              |

| PID<br>(ppm) | Staining | Moisture<br>Content | Sample ID         | Recovery<br>(%) | Depth<br>(ft) | USCS | USCS<br>Graphic | Lithology Description                                                                                                                                      | Well<br>Construction |
|--------------|----------|---------------------|-------------------|-----------------|---------------|------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 0.4          | dry      |                     | SB04<br>@10-11.5' | 75%             | 0             |      |                 | 0' - 10' - potholed to 10' bgs, not logged.                                                                                                                |                      |
|              |          |                     |                   |                 | 5             |      |                 |                                                                                                                                                            |                      |
|              |          |                     |                   |                 | 10            | ML   |                 | 10' - 11.5' - SILT, brown, trace sands, non-plastic, compact, trace gravels, interbedded granite cobbles, no staining, no odor, trace calcite inclusions.  |                      |
|              |          |                     |                   |                 |               |      |                 |                                                                                                                                                            |                      |
| 0.4          | dry      |                     |                   | 75%             | 15            | ML   |                 | 15' - 16.5' - SILT, brown, trace sands, non-plastic, compact, trace gravels, no staining, no odor, trace calcite inclusions.                               |                      |
|              |          |                     |                   |                 |               |      |                 |                                                                                                                                                            |                      |
| 0.5          | dry      |                     | SB04<br>@20-21.5' | 75%             | 20            | ML   |                 | 20' - 21.5' - SILT, brown, trace sands, non-plastic, compact, trace gravels, no staining, no odor, trace calcite inclusions, mudstone pieces at 21.5' bgs. |                      |
|              |          |                     |                   |                 |               |      |                 |                                                                                                                                                            |                      |
| 0.6          | moist    |                     |                   | 75%             | 25            | ML   |                 | 25' - 26.5' - SILT, brown, trace sands, non-plastic, compact, trace gravels, no staining, no odor.                                                         |                      |
|              |          |                     |                   |                 |               |      |                 |                                                                                                                                                            |                      |
| 0.3          | moist    |                     | SB04<br>@30-31.5' | 75%             | 30            | ML   |                 | 30' - 31.5' - SILT, brown, few sands, non-plastic, compact, trace gravels, trace interbedded sandstone pieces, no staining, no odor.                       |                      |





**BORING LOG/MONITORING WELL COMPLETION DIAGRAM**

**PROJECT NAME:** H7 Tank Investigation  
**PROJECT NO:** 31406292.02  
**BORING/WELL ID:** SB05  
**COMPLETION DATE:** 7/5/23  
**TD (ft bgs):** 31.5'  
**DTW (ft bgs):** NA  
**SCREEN SLOT:** NA  
**CASING LENGTH:** NA  
**SCREEN LENGTH:** NA

**LOGGED BY:** Kate Moreland  
**SAMPLE METHOD:** Split Spoon  
**DRILL METHOD:** Solid Stem  
**DRILLED BY:** CD&S  
**DETECTOR:** MiniRAE 3000  
**FILTER PACK:** NA  
**ANNULUS SEAL:** Bentonite Chips  
**SURFACE SEAL:** NA

**HOLE DIAMETER:** 3"  
**WELL DIAMETER:** NA  
**CASING TYPE:** NA  
**SCREEN TYPE:** NA

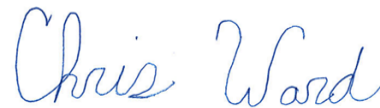
| PID (ppm) | Staining | Moisture Content | Sample ID      | Recovery (%) | Depth (ft) | USCS | USCS Graphic | Lithology Description                                                                                                                                                       | Well Construction |
|-----------|----------|------------------|----------------|--------------|------------|------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 0.5       | moist    |                  | SB05 @10-11.5' | 75%          | 10         | ML   |              | 0' - 10' - potholed to 10' bgs, not logged.<br>10' - 11.5' - SILT, brown, trace sands, non-plastic, compact, trace gravels, no staining, no odor, trace calcite inclusions. |                   |
| 0.4       | moist    |                  |                | 75%          | 15         | ML   |              | 15' - 16.5' - SILT, brown, trace sands, non-plastic, compact, trace gravels, no staining, no odor, trace calcite inclusions.                                                |                   |
| 0.3       | moist    |                  | SB05 @20-21.5' | 75%          | 20         | ML   |              | 20' - 21.5' - SILT, brown, trace sands, non-plastic, compact, trace gravels, trace iron oxidation, no staining, no odor, trace calcite inclusions.                          |                   |
| 0.4       | moist    |                  |                | 75%          | 25         | ML   |              | 25' - 26.5' - SILT, brown, few sands, non-plastic, compact, trace gravels, trace iron oxidation, no staining, no odor, trace calcite inclusions.                            |                   |
| 0.3       | moist    |                  | SB05 @30-31.5' | 75%          | 30         | ML   |              | 30' - 31.5' - SILT, brown, few sands, non-plastic, compact, trace gravels, trace shale pieces, trace iron oxidation, no staining, no odor, trace calcite inclusions.        |                   |

## ENCLOSURE C – LABORATORY ANALYTICAL REPORTS

**Caerus Oil and Gas**

Sample Delivery Group: L1629119  
Samples Received: 06/23/2023  
Project Number: H7  
Description: H7-Tank Battery  
Site: H7  
Report To: Jake J. , Brett M. , Blair R.  
143 Diamond Avenue  
Parachute, CO 81635

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 [www.pacenational.com](http://www.pacenational.com)



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# SAMPLE SUMMARY

20230621-H7-(SBE)@8-9 L1629119-01 Solid

Collected by Ben Herrmann  
Collected date/time 06/21/23 09:15  
Received date/time 06/23/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2083745 | 1        | 06/28/23 16:14        | 06/28/23 16:14     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2084768 | 1        | 06/26/23 18:28        | 07/03/23 01:50     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2084704 | 1        | 06/27/23 08:49        | 06/27/23 10:00     | MCC     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2085626 | 1        | 06/28/23 15:00        | 06/28/23 17:15     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2083748 | 1        | 06/26/23 18:54        | 06/28/23 12:29     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2083962 | 5        | 06/25/23 07:19        | 06/25/23 20:12     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2086256 | 1        | 06/27/23 21:04        | 06/29/23 18:39     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2086667 | 1        | 06/27/23 21:04        | 06/29/23 19:51     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2086403 | 1        | 06/30/23 07:27        | 06/30/23 16:42     | JDG     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086108 | 1        | 06/28/23 17:06        | 06/29/23 04:44     | JRM     | Mt. Juliet, TN |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

20230621-H7-(SBE)@11-12 L1629119-02 Solid

Collected by Ben Herrmann  
Collected date/time 06/21/23 10:20  
Received date/time 06/23/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2083745 | 1        | 06/28/23 16:17        | 06/28/23 16:17     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2084768 | 1        | 06/26/23 18:28        | 07/03/23 01:55     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2084704 | 1        | 06/27/23 08:49        | 06/27/23 10:00     | MCC     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2085626 | 1        | 06/28/23 15:00        | 06/28/23 17:15     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2083748 | 1        | 06/26/23 18:54        | 06/28/23 12:31     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2083962 | 5        | 06/25/23 07:19        | 06/25/23 20:16     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2086256 | 1        | 06/27/23 21:04        | 06/29/23 19:03     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2086667 | 1        | 06/27/23 21:04        | 06/29/23 20:10     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2086403 | 1        | 06/30/23 07:27        | 06/30/23 17:32     | JDG     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086108 | 1        | 06/28/23 17:06        | 06/29/23 05:02     | JRM     | Mt. Juliet, TN |

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

20230621-H7-(SBS)@2-3 L1629119-03 Solid

Collected by Ben Herrmann  
Collected date/time 06/21/23 10:30  
Received date/time 06/23/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2083745 | 1        | 06/28/23 16:20        | 06/28/23 16:20     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2084768 | 1        | 06/26/23 18:28        | 07/03/23 02:00     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2084704 | 1        | 06/27/23 08:49        | 06/27/23 10:00     | MCC     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2085626 | 1        | 06/28/23 15:00        | 06/28/23 17:15     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2083748 | 1        | 06/26/23 18:54        | 06/28/23 12:34     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2083962 | 5        | 06/25/23 07:19        | 06/25/23 20:26     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2086256 | 1        | 06/27/23 21:04        | 06/29/23 19:28     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2086667 | 1        | 06/27/23 21:04        | 06/29/23 20:28     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2086403 | 1        | 06/30/23 07:27        | 06/30/23 15:51     | JDG     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086108 | 1        | 06/28/23 17:06        | 06/29/23 05:20     | JRM     | Mt. Juliet, TN |

Collected by Ben Herrmann  
Collected date/time 06/21/23 12:45  
Received date/time 06/23/23 09:00

20230621-H7-(SBS)@8-9 L1629119-04 Solid

| Method                                              | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                  | WG2083745 | 1        | 06/28/23 16:22        | 06/28/23 16:22     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                        | WG2084768 | 1        | 06/26/23 18:28        | 07/03/23 02:10     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                       | WG2084704 | 1        | 06/27/23 08:49        | 06/27/23 10:00     | MCC     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                    | WG2085626 | 1        | 06/28/23 15:00        | 06/28/23 17:15     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2             | WG2083748 | 1        | 06/26/23 18:54        | 06/28/23 12:37     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                       | WG2083962 | 5        | 06/25/23 07:19        | 06/25/23 20:30     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG2086256 | 1        | 06/27/23 21:04        | 06/29/23 19:52     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B  | WG2086667 | 1        | 06/27/23 21:04        | 06/29/23 20:47     | DWR     | Mt. Juliet, TN |

# SAMPLE SUMMARY

20230621-H7-(SBS)@8-9 L1629119-04 Solid

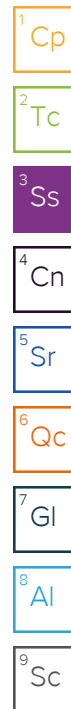
Collected by Ben Herrmann  
Collected date/time 06/21/23 12:45  
Received date/time 06/23/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2086403 | 1        | 06/30/23 07:27        | 06/30/23 16:29     | JDG     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086108 | 1        | 06/28/23 17:06        | 06/29/23 05:38     | JRM     | Mt. Juliet, TN |

20230621-H7-(SBW)@2-3 L1629119-05 Solid

Collected by Ben Herrmann  
Collected date/time 06/21/23 13:10  
Received date/time 06/23/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2083745 | 1        | 06/28/23 16:25        | 06/28/23 16:25     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2084768 | 1        | 06/26/23 18:28        | 07/03/23 02:26     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2084704 | 1        | 06/27/23 08:49        | 06/27/23 10:00     | MCC     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2085626 | 1        | 06/28/23 15:00        | 06/28/23 17:15     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2083748 | 1        | 06/26/23 18:54        | 06/28/23 12:39     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2083962 | 10       | 06/25/23 07:19        | 06/25/23 21:43     | LD      | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2083962 | 5        | 06/25/23 07:19        | 06/25/23 20:33     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2086256 | 1        | 06/27/23 21:04        | 06/29/23 20:17     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2086667 | 1        | 06/27/23 21:04        | 06/29/23 21:06     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2086403 | 1        | 06/30/23 07:27        | 06/30/23 16:04     | JDG     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086108 | 1        | 06/28/23 17:06        | 06/29/23 05:56     | JRM     | Mt. Juliet, TN |



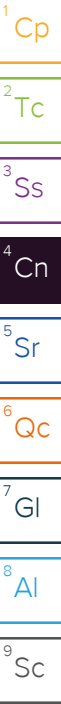


# CASE NARRATIVE

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



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 3.12   |           | 1        | 06/28/2023 16:14     | WG2083745 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/03/2023 01:50     | <a href="#">WG2084768</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.10   | <a href="#">T8</a> | 1        | 06/27/2023 10:00     | <a href="#">WG2084704</a> |

Sample Narrative:

L1629119-01 WG2084704: 8.1 at 22.4C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 462             |           | 10.0         | 1        | 06/28/2023 17:15     | <a href="#">WG2085626</a> |

Sample Narrative:

L1629119-01 WG2085626: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.272       |           | 0.0167   | 0.200    | 1        | 06/28/2023 12:29     | <a href="#">WG2083748</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 6.09         |                   | 0.100     | 1.00      | 5        | 06/25/2023 20:12     | <a href="#">WG2083962</a> |
| Barium   | 168          |                   | 0.152     | 2.50      | 5        | 06/25/2023 20:12     | <a href="#">WG2083962</a> |
| Cadmium  | 0.353        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 06/25/2023 20:12     | <a href="#">WG2083962</a> |
| Copper   | 7.76         |                   | 0.132     | 5.00      | 5        | 06/25/2023 20:12     | <a href="#">WG2083962</a> |
| Lead     | 7.52         |                   | 0.0990    | 2.00      | 5        | 06/25/2023 20:12     | <a href="#">WG2083962</a> |
| Nickel   | 12.2         |                   | 0.197     | 2.50      | 5        | 06/25/2023 20:12     | <a href="#">WG2083962</a> |
| Selenium | 0.359        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 06/25/2023 20:12     | <a href="#">WG2083962</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 06/25/2023 20:12     | <a href="#">WG2083962</a> |
| Zinc     | 30.3         |                   | 0.740     | 25.0      | 5        | 06/25/2023 20:12     | <a href="#">WG2083962</a> |

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

| Analyte                            | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.0445       | <a href="#">J</a> | 0.0217    | 0.100     | 1        | 06/29/2023 18:39     | <a href="#">WG2086256</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 97.6         |                   |           | 77.0-120  |          | 06/29/2023 18:39     | <a href="#">WG2086256</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 06/29/2023 19:51        | <a href="#">WG2086667</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 06/29/2023 19:51        | <a href="#">WG2086667</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 06/29/2023 19:51        | <a href="#">WG2086667</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 06/29/2023 19:51        | <a href="#">WG2086667</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 06/29/2023 19:51        | <a href="#">WG2086667</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 06/29/2023 19:51        | <a href="#">WG2086667</a> |
| (S) Toluene-d8            | 109             |           |              | 75.0-131     |          | 06/29/2023 19:51        | <a href="#">WG2086667</a> |
| (S) 4-Bromofluorobenzene  | 102             |           |              | 67.0-138     |          | 06/29/2023 19:51        | <a href="#">WG2086667</a> |
| (S) 1,2-Dichloroethane-d4 | 97.0            |           |              | 70.0-130     |          | 06/29/2023 19:51        | <a href="#">WG2086667</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 2.04            | J         | 1.61         | 4.00         | 1        | 06/30/2023 16:42        | <a href="#">WG2086403</a> |
| C28-C36 Motor Oil Range | 6.36            |           | 0.274        | 4.00         | 1        | 06/30/2023 16:42        | <a href="#">WG2086403</a> |
| (S) o-Terphenyl         | 58.1            |           |              | 18.0-148     |          | 06/30/2023 16:42        | <a href="#">WG2086403</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| (S) p-Terphenyl-d14    | 59.3            |           |              | 23.0-120     |          | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| (S) Nitrobenzene-d5    | 67.4            |           |              | 14.0-149     |          | 06/29/2023 04:44        | <a href="#">WG2086108</a> |
| (S) 2-Fluorobiphenyl   | 55.7            |           |              | 34.0-125     |          | 06/29/2023 04:44        | <a href="#">WG2086108</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 4.58   |           | 1        | 06/28/2023 16:17     | WG2083745 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/03/2023 01:55     | <a href="#">WG2084768</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.26   | <a href="#">T8</a> | 1        | 06/27/2023 10:00     | <a href="#">WG2084704</a> |

Sample Narrative:

L1629119-02 WG2084704: 8.26 at 22.3C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 389             |           | 10.0         | 1        | 06/28/2023 17:15     | <a href="#">WG2085626</a> |

Sample Narrative:

L1629119-02 WG2085626: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.270       |           | 0.0167   | 0.200    | 1        | 06/28/2023 12:31     | <a href="#">WG2083748</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 7.32         |                   | 0.100     | 1.00      | 5        | 06/25/2023 20:16     | <a href="#">WG2083962</a> |
| Barium   | 162          |                   | 0.152     | 2.50      | 5        | 06/25/2023 20:16     | <a href="#">WG2083962</a> |
| Cadmium  | 0.322        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 06/25/2023 20:16     | <a href="#">WG2083962</a> |
| Copper   | 11.5         |                   | 0.132     | 5.00      | 5        | 06/25/2023 20:16     | <a href="#">WG2083962</a> |
| Lead     | 10.8         |                   | 0.0990    | 2.00      | 5        | 06/25/2023 20:16     | <a href="#">WG2083962</a> |
| Nickel   | 13.9         |                   | 0.197     | 2.50      | 5        | 06/25/2023 20:16     | <a href="#">WG2083962</a> |
| Selenium | 0.324        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 06/25/2023 20:16     | <a href="#">WG2083962</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 06/25/2023 20:16     | <a href="#">WG2083962</a> |
| Zinc     | 38.0         |                   | 0.740     | 25.0      | 5        | 06/25/2023 20:16     | <a href="#">WG2083962</a> |

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

| Analyte                            | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.0503       | <a href="#">J</a> | 0.0217    | 0.100     | 1        | 06/29/2023 19:03     | <a href="#">WG2086256</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 97.3         |                   |           | 77.0-120  |          | 06/29/2023 19:03     | <a href="#">WG2086256</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 06/29/2023 20:10        | <a href="#">WG2086667</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 06/29/2023 20:10        | <a href="#">WG2086667</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 06/29/2023 20:10        | <a href="#">WG2086667</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 06/29/2023 20:10        | <a href="#">WG2086667</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 06/29/2023 20:10        | <a href="#">WG2086667</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 06/29/2023 20:10        | <a href="#">WG2086667</a> |
| (S) Toluene-d8            | 109             |           |              | 75.0-131     |          | 06/29/2023 20:10        | <a href="#">WG2086667</a> |
| (S) 4-Bromofluorobenzene  | 103             |           |              | 67.0-138     |          | 06/29/2023 20:10        | <a href="#">WG2086667</a> |
| (S) 1,2-Dichloroethane-d4 | 96.9            |           |              | 70.0-130     |          | 06/29/2023 20:10        | <a href="#">WG2086667</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 1.74            | J         | 1.61         | 4.00         | 1        | 06/30/2023 17:32        | <a href="#">WG2086403</a> |
| C28-C36 Motor Oil Range | 6.33            |           | 0.274        | 4.00         | 1        | 06/30/2023 17:32        | <a href="#">WG2086403</a> |
| (S) o-Terphenyl         | 56.7            |           |              | 18.0-148     |          | 06/30/2023 17:32        | <a href="#">WG2086403</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| (S) p-Terphenyl-d14    | 56.1            |           |              | 23.0-120     |          | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| (S) Nitrobenzene-d5    | 65.6            |           |              | 14.0-149     |          | 06/29/2023 05:02        | <a href="#">WG2086108</a> |
| (S) 2-Fluorobiphenyl   | 54.4            |           |              | 34.0-125     |          | 06/29/2023 05:02        | <a href="#">WG2086108</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 2.19   |           | 1        | 06/28/2023 16:20     | WG2083745 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| Hexavalent Chromium | 0.326        | J         | 0.255     | 1.00      | 1        | 07/03/2023 02:00     | WG2084768 |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 7.76   | T8        | 1        | 06/27/2023 10:00     | WG2084704 |

Sample Narrative:

L1629119-03 WG2084704: 7.76 at 22.2C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|-----------|
| Specific Conductance | 442             |           | 10.0         | 1        | 06/28/2023 17:15     | WG2085626 |

Sample Narrative:

L1629119-03 WG2085626: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|-----------|
| Hot Water Sol. Boron | 0.311       |           | 0.0167   | 0.200    | 1        | 06/28/2023 12:34     | WG2083748 |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|----------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| Arsenic  | 5.60         |           | 0.100     | 1.00      | 5        | 06/25/2023 20:26     | WG2083962 |
| Barium   | 185          |           | 0.152     | 2.50      | 5        | 06/25/2023 20:26     | WG2083962 |
| Cadmium  | 0.170        | J         | 0.0855    | 1.00      | 5        | 06/25/2023 20:26     | WG2083962 |
| Copper   | 13.1         |           | 0.132     | 5.00      | 5        | 06/25/2023 20:26     | WG2083962 |
| Lead     | 12.4         |           | 0.0990    | 2.00      | 5        | 06/25/2023 20:26     | WG2083962 |
| Nickel   | 17.0         |           | 0.197     | 2.50      | 5        | 06/25/2023 20:26     | WG2083962 |
| Selenium | 0.609        | J         | 0.180     | 2.50      | 5        | 06/25/2023 20:26     | WG2083962 |
| Silver   | 0.100        | J         | 0.0865    | 0.500     | 5        | 06/25/2023 20:26     | WG2083962 |
| Zinc     | 51.7         |           | 0.740     | 25.0      | 5        | 06/25/2023 20:26     | WG2083962 |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| TPH (GC/FID) Low Fraction          | U            |           | 0.0217    | 0.100     | 1        | 06/29/2023 19:28     | WG2086256 |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 96.4         |           |           | 77.0-120  |          | 06/29/2023 19:28     | WG2086256 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 06/29/2023 20:28        | <a href="#">WG2086667</a> |
| Toluene                   | 0.00138         | J         | 0.00130      | 0.00500      | 1        | 06/29/2023 20:28        | <a href="#">WG2086667</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 06/29/2023 20:28        | <a href="#">WG2086667</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 06/29/2023 20:28        | <a href="#">WG2086667</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 06/29/2023 20:28        | <a href="#">WG2086667</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 06/29/2023 20:28        | <a href="#">WG2086667</a> |
| (S) Toluene-d8            | 111             |           |              | 75.0-131     |          | 06/29/2023 20:28        | <a href="#">WG2086667</a> |
| (S) 4-Bromofluorobenzene  | 106             |           |              | 67.0-138     |          | 06/29/2023 20:28        | <a href="#">WG2086667</a> |
| (S) 1,2-Dichloroethane-d4 | 99.2            |           |              | 70.0-130     |          | 06/29/2023 20:28        | <a href="#">WG2086667</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 3.43            | J         | 1.61         | 4.00         | 1        | 06/30/2023 15:51        | <a href="#">WG2086403</a> |
| C28-C36 Motor Oil Range | 2.73            | B J       | 0.274        | 4.00         | 1        | 06/30/2023 15:51        | <a href="#">WG2086403</a> |
| (S) o-Terphenyl         | 63.7            |           |              | 18.0-148     |          | 06/30/2023 15:51        | <a href="#">WG2086403</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| (S) p-Terphenyl-d14    | 71.4            |           |              | 23.0-120     |          | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| (S) Nitrobenzene-d5    | 79.3            |           |              | 14.0-149     |          | 06/29/2023 05:20        | <a href="#">WG2086108</a> |
| (S) 2-Fluorobiphenyl   | 59.9            |           |              | 34.0-125     |          | 06/29/2023 05:20        | <a href="#">WG2086108</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 1.96   |           | 1        | 06/28/2023 16:22     | WG2083745 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/03/2023 02:10     | <a href="#">WG2084768</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 7.83   | <a href="#">T8</a> | 1        | 06/27/2023 10:00     | <a href="#">WG2084704</a> |

Sample Narrative:

L1629119-04 WG2084704: 7.83 at 22C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 405             |           | 10.0         | 1        | 06/28/2023 17:15     | <a href="#">WG2085626</a> |

Sample Narrative:

L1629119-04 WG2085626: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.336       |           | 0.0167   | 0.200    | 1        | 06/28/2023 12:37     | <a href="#">WG2083748</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 5.42         |                   | 0.100     | 1.00      | 5        | 06/25/2023 20:30     | <a href="#">WG2083962</a> |
| Barium   | 494          |                   | 0.152     | 2.50      | 5        | 06/25/2023 20:30     | <a href="#">WG2083962</a> |
| Cadmium  | 0.239        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 06/25/2023 20:30     | <a href="#">WG2083962</a> |
| Copper   | 10.9         |                   | 0.132     | 5.00      | 5        | 06/25/2023 20:30     | <a href="#">WG2083962</a> |
| Lead     | 9.95         |                   | 0.0990    | 2.00      | 5        | 06/25/2023 20:30     | <a href="#">WG2083962</a> |
| Nickel   | 13.6         |                   | 0.197     | 2.50      | 5        | 06/25/2023 20:30     | <a href="#">WG2083962</a> |
| Selenium | 0.404        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 06/25/2023 20:30     | <a href="#">WG2083962</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 06/25/2023 20:30     | <a href="#">WG2083962</a> |
| Zinc     | 41.1         |                   | 0.740     | 25.0      | 5        | 06/25/2023 20:30     | <a href="#">WG2083962</a> |

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

| Analyte                            | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.0274       | <a href="#">J</a> | 0.0217    | 0.100     | 1        | 06/29/2023 19:52     | <a href="#">WG2086256</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 96.8         |                   |           | 77.0-120  |          | 06/29/2023 19:52     | <a href="#">WG2086256</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

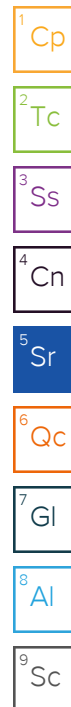
| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 06/29/2023 20:47        | <a href="#">WG2086667</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 06/29/2023 20:47        | <a href="#">WG2086667</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 06/29/2023 20:47        | <a href="#">WG2086667</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 06/29/2023 20:47        | <a href="#">WG2086667</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 06/29/2023 20:47        | <a href="#">WG2086667</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 06/29/2023 20:47        | <a href="#">WG2086667</a> |
| (S) Toluene-d8            | 109             |           |              | 75.0-131     |          | 06/29/2023 20:47        | <a href="#">WG2086667</a> |
| (S) 4-Bromofluorobenzene  | 103             |           |              | 67.0-138     |          | 06/29/2023 20:47        | <a href="#">WG2086667</a> |
| (S) 1,2-Dichloroethane-d4 | 95.6            |           |              | 70.0-130     |          | 06/29/2023 20:47        | <a href="#">WG2086667</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 5.48            |           | 1.61         | 4.00         | 1        | 06/30/2023 16:29        | <a href="#">WG2086403</a> |
| C28-C36 Motor Oil Range | 12.2            |           | 0.274        | 4.00         | 1        | 06/30/2023 16:29        | <a href="#">WG2086403</a> |
| (S) o-Terphenyl         | 68.7            |           |              | 18.0-148     |          | 06/30/2023 16:29        | <a href="#">WG2086403</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| (S) p-Terphenyl-d14    | 66.6            |           |              | 23.0-120     |          | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| (S) Nitrobenzene-d5    | 67.2            |           |              | 14.0-149     |          | 06/29/2023 05:38        | <a href="#">WG2086108</a> |
| (S) 2-Fluorobiphenyl   | 50.6            |           |              | 34.0-125     |          | 06/29/2023 05:38        | <a href="#">WG2086108</a> |



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 3.93   |           | 1        | 06/28/2023 16:25     | WG2083745 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/03/2023 02:26     | <a href="#">WG2084768</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.23   | <a href="#">T8</a> | 1        | 06/27/2023 10:00     | <a href="#">WG2084704</a> |

Sample Narrative:

L1629119-05 WG2084704: 8.233 at 21.9C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 517             |           | 10.0         | 1        | 06/28/2023 17:15     | <a href="#">WG2085626</a> |

Sample Narrative:

L1629119-05 WG2085626: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.493       |           | 0.0167   | 0.200    | 1        | 06/28/2023 12:39     | <a href="#">WG2083748</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 5.18         |                   | 0.100     | 1.00      | 5        | 06/25/2023 20:33     | <a href="#">WG2083962</a> |
| Barium   | 1390         |                   | 0.304     | 5.00      | 10       | 06/25/2023 21:43     | <a href="#">WG2083962</a> |
| Cadmium  | 0.247        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 06/25/2023 20:33     | <a href="#">WG2083962</a> |
| Copper   | 11.7         |                   | 0.132     | 5.00      | 5        | 06/25/2023 20:33     | <a href="#">WG2083962</a> |
| Lead     | 11.0         |                   | 0.0990    | 2.00      | 5        | 06/25/2023 20:33     | <a href="#">WG2083962</a> |
| Nickel   | 15.0         |                   | 0.197     | 2.50      | 5        | 06/25/2023 20:33     | <a href="#">WG2083962</a> |
| Selenium | 0.486        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 06/25/2023 20:33     | <a href="#">WG2083962</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 06/25/2023 20:33     | <a href="#">WG2083962</a> |
| Zinc     | 48.3         |                   | 0.740     | 25.0      | 5        | 06/25/2023 20:33     | <a href="#">WG2083962</a> |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | U            |           | 0.0217    | 0.100     | 1        | 06/29/2023 20:17     | <a href="#">WG2086256</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 97.3         |           |           | 77.0-120  |          | 06/29/2023 20:17     | <a href="#">WG2086256</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 06/29/2023 21:06        | <a href="#">WG2086667</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 06/29/2023 21:06        | <a href="#">WG2086667</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 06/29/2023 21:06        | <a href="#">WG2086667</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 06/29/2023 21:06        | <a href="#">WG2086667</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 06/29/2023 21:06        | <a href="#">WG2086667</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 06/29/2023 21:06        | <a href="#">WG2086667</a> |
| (S) Toluene-d8            | 109             |           |              | 75.0-131     |          | 06/29/2023 21:06        | <a href="#">WG2086667</a> |
| (S) 4-Bromofluorobenzene  | 101             |           |              | 67.0-138     |          | 06/29/2023 21:06        | <a href="#">WG2086667</a> |
| (S) 1,2-Dichloroethane-d4 | 97.7            |           |              | 70.0-130     |          | 06/29/2023 21:06        | <a href="#">WG2086667</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 3.21            | J         | 1.61         | 4.00         | 1        | 06/30/2023 16:04        | <a href="#">WG2086403</a> |
| C28-C36 Motor Oil Range | 4.05            |           | 0.274        | 4.00         | 1        | 06/30/2023 16:04        | <a href="#">WG2086403</a> |
| (S) o-Terphenyl         | 61.4            |           |              | 18.0-148     |          | 06/30/2023 16:04        | <a href="#">WG2086403</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| (S) p-Terphenyl-d14    | 64.8            |           |              | 23.0-120     |          | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| (S) Nitrobenzene-d5    | 77.5            |           |              | 14.0-149     |          | 06/29/2023 05:56        | <a href="#">WG2086108</a> |
| (S) 2-Fluorobiphenyl   | 47.3            |           |              | 34.0-125     |          | 06/29/2023 05:56        | <a href="#">WG2086108</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3943965-1 07/03/23 00:05

|                     | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------------------|-----------|--------------|--------|--------|
| Analyte             | mg/kg     |              | mg/kg  | mg/kg  |
| Hexavalent Chromium | U         |              | 0.255  | 1.00   |

L1629066-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1629066-01 07/03/23 01:34 • (DUP) R3943965-7 07/03/23 01:39

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

L1629119-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1629119-03 07/03/23 02:00 • (DUP) R3943965-8 07/03/23 02:05

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | 0.326           | 0.281      | 1        | 14.7    | ⬇             | 20             |

Laboratory Control Sample (LCS)

(LCS) R3943965-2 07/03/23 00:12

|                     | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------------------|--------------|------------|----------|-------------|---------------|
| Analyte             | mg/kg        | mg/kg      | %        | %           |               |
| Hexavalent Chromium | 10.0         | 11.1       | 111      | 80.0-120    |               |

L1629061-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1629061-02 07/03/23 00:43 • (MS) R3943965-4 07/03/23 00:54 • (MSD) R3943965-5 07/03/23 01:21

|                     | 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      | %       | %        |          | %           |              |               | %    | %          |
| Hexavalent Chromium | 20.0         | U               | 23.1      | 22.6       | 116     | 113      | 1        | 75.0-125    |              |               | 2.10 | 20         |

L1629061-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1629061-02 07/03/23 00:43 • (MS) R3943965-6 07/03/23 01:29

|                     | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|---------------------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte             | mg/kg        | mg/kg           | mg/kg     | %       |          | %           |              |
| Hexavalent Chromium | 6310         | U               | 667       | 10.6    | 50       | 75.0-125    | ⬇6           |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1629206-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1629206-21 06/27/23 10:00 • (DUP) R3941673-2 06/27/23 10:00

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | su              | su         |          | %       |               | %              |
| pH      | 5.53            | 5.52       | 1        | 0.181   |               | 1              |

Sample Narrative:

OS: 5.53 at 21.8C

DUP: 5.52 at 21.7C

<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

L1629206-31 Original Sample (OS) • Duplicate (DUP)

(OS) L1629206-31 06/27/23 10:00 • (DUP) R3941673-3 06/27/23 10:00

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | su              | su         |          | %       |               | %              |
| pH      | 5.47            | 5.50       | 1        | 0.547   |               | 1              |

Sample Narrative:

OS: 5.47 at 21.5C

DUP: 5.5 at 21.5C

Laboratory Control Sample (LCS)

(LCS) R3941673-1 06/27/23 10:00

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

Sample Narrative:

LCS: 10.04 at 20.7C

Method Blank (MB)

(MB) R3942525-1 06/28/23 17:15

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:  
BLANK: at 25C

L1629119-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1629119-05 06/28/23 17:15 • (DUP) R3942525-3 06/28/23 17:15

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 517                         | 516                    | 1        | 0.194        |               | 20                     |

Sample Narrative:  
OS: at 25C  
DUP: at 25C

L1629129-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1629129-09 06/28/23 17:15 • (DUP) R3942525-4 06/28/23 17:15

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 257                         | 214                    | 1        | 18.6         |               | 20                     |

Sample Narrative:  
OS: at 25C  
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3942525-2 06/28/23 17:15

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 327                      | 328                    | 100           | 85.0-115         |               |

Sample Narrative:  
LCS: at 25C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3942302-1 06/28/23 11:49

| Analyte              | MB Result<br>mg/l | MB Qualifier | MB MDL<br>mg/l | MB RDL<br>mg/l |
|----------------------|-------------------|--------------|----------------|----------------|
| Hot Water Sol. Boron | U                 |              | 0.0167         | 0.200          |

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

(LCS) R3942302-2 06/28/23 11:51 • (LCSD) R3942302-3 06/28/23 11:54

| Analyte              | Spike Amount<br>mg/l | LCS Result<br>mg/l | LCSD Result<br>mg/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Hot Water Sol. Boron | 1.00                 | 1.06               | 1.07                | 106           | 107            | 80.0-120         |               |                | 0.844    | 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) R3941069-1 06/25/23 19:45

| Analyte  | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|----------|--------------------|--------------|-----------------|-----------------|
| Arsenic  | U                  |              | 0.100           | 1.00            |
| Barium   | U                  |              | 0.152           | 2.50            |
| Cadmium  | U                  |              | 0.0855          | 1.00            |
| Copper   | U                  |              | 0.133           | 5.00            |
| Lead     | 0.101              | U            | 0.0990          | 2.00            |
| Nickel   | U                  |              | 0.197           | 2.50            |
| Selenium | U                  |              | 0.180           | 2.50            |
| Silver   | U                  |              | 0.0865          | 0.500           |
| Zinc     | U                  |              | 0.740           | 25.0            |

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

Laboratory Control Sample (LCS)

(LCS) R3941069-2 06/25/23 19:49

| Analyte  | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|-----------------------|---------------------|---------------|------------------|---------------|
| Arsenic  | 100                   | 97.5                | 97.5          | 80.0-120         |               |
| Barium   | 100                   | 94.0                | 94.0          | 80.0-120         |               |
| Cadmium  | 100                   | 98.9                | 98.9          | 80.0-120         |               |
| Copper   | 100                   | 85.3                | 85.3          | 80.0-120         |               |
| Lead     | 100                   | 97.2                | 97.2          | 80.0-120         |               |
| Nickel   | 100                   | 98.1                | 98.1          | 80.0-120         |               |
| Selenium | 100                   | 102                 | 102           | 80.0-120         |               |
| Silver   | 20.0                  | 18.9                | 94.3          | 80.0-120         |               |
| Zinc     | 100                   | 93.0                | 93.0          | 80.0-120         |               |

7  
Gl

8  
Al

9  
Sc

L1629334-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1629334-05 06/25/23 19:52 • (MS) R3941069-5 06/25/23 20:02 • (MSD) R3941069-6 06/25/23 20:06

| Analyte  | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Arsenic  | 99.9                  | 0.780                    | 94.3               | 91.4                | 93.5         | 90.6          | 5        | 75.0-125         |              |               | 3.16     | 20              |
| Barium   | 99.9                  | 67.4                     | 192                | 188                 | 125          | 121           | 5        | 75.0-125         |              |               | 2.25     | 20              |
| Cadmium  | 99.9                  | U                        | 109                | 108                 | 109          | 108           | 5        | 75.0-125         |              |               | 1.18     | 20              |
| Copper   | 99.9                  | 23.0                     | 119                | 118                 | 96.3         | 94.5          | 5        | 75.0-125         |              |               | 1.53     | 20              |
| Lead     | 99.9                  | 4.45                     | 108                | 108                 | 104          | 104           | 5        | 75.0-125         |              |               | 0.140    | 20              |
| Nickel   | 99.9                  | 8.52                     | 113                | 111                 | 104          | 103           | 5        | 75.0-125         |              |               | 1.51     | 20              |
| Selenium | 99.9                  | 0.583                    | 106                | 103                 | 106          | 103           | 5        | 75.0-125         |              |               | 2.82     | 20              |
| Silver   | 20.0                  | U                        | 20.7               | 20.7                | 104          | 104           | 5        | 75.0-125         |              |               | 0.0860   | 20              |
| Zinc     | 99.9                  | 25.1                     | 130                | 128                 | 105          | 103           | 5        | 75.0-125         |              |               | 1.66     | 20              |

Method Blank (MB)

(MB) R3943195-3 06/29/23 13:45

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | U                  |              | 0.0217          | 0.100           |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 97.6               |              |                 | 77.0-120        |

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

(LCS) R3943195-1 06/29/23 12:31 • (LCSD) R3943195-2 06/29/23 12:56

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|------------------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 5.55                | 5.51                 | 101           | 100            | 72.0-127         |               |                | 0.723    | 20              |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     |                      | 100           | 104            | 77.0-120         |               |                |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3943422-3 06/29/23 12:54

| Analyte                   | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|---------------------------|--------------------|--------------|-----------------|-----------------|
| Benzene                   | U                  |              | 0.000467        | 0.00100         |
| Toluene                   | U                  |              | 0.00130         | 0.00500         |
| Ethylbenzene              | U                  |              | 0.000737        | 0.00250         |
| Xylenes, Total            | U                  |              | 0.000880        | 0.00650         |
| 1,2,4-Trimethylbenzene    | U                  |              | 0.00158         | 0.00500         |
| 1,3,5-Trimethylbenzene    | U                  |              | 0.00200         | 0.00500         |
| (S) Toluene-d8            | 110                |              |                 | 75.0-131        |
| (S) 4-Bromofluorobenzene  | 103                |              |                 | 67.0-138        |
| (S) 1,2-Dichloroethane-d4 | 98.4               |              |                 | 70.0-130        |

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

(LCS) R3943422-1 06/29/23 11:19 • (LCSD) R3943422-2 06/29/23 11:38

| Analyte                   | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Benzene                   | 0.125                 | 0.121               | 0.129                | 96.8          | 103            | 70.0-123         |               |                | 6.40     | 20              |
| Toluene                   | 0.125                 | 0.135               | 0.140                | 108           | 112            | 75.0-121         |               |                | 3.64     | 20              |
| Ethylbenzene              | 0.125                 | 0.128               | 0.136                | 102           | 109            | 74.0-126         |               |                | 6.06     | 20              |
| Xylenes, Total            | 0.375                 | 0.374               | 0.405                | 99.7          | 108            | 72.0-127         |               |                | 7.96     | 20              |
| 1,2,4-Trimethylbenzene    | 0.125                 | 0.116               | 0.124                | 92.8          | 99.2           | 70.0-126         |               |                | 6.67     | 20              |
| 1,3,5-Trimethylbenzene    | 0.125                 | 0.117               | 0.128                | 93.6          | 102            | 73.0-127         |               |                | 8.98     | 20              |
| (S) Toluene-d8            |                       |                     |                      | 108           | 107            | 75.0-131         |               |                |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                     |                      | 102           | 103            | 67.0-138         |               |                |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                     |                      | 99.4          | 102            | 70.0-130         |               |                |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3943661-1 06/30/23 15:26

| Analyte                 | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|-------------------------|--------------------|--------------|-----------------|-----------------|
| C10-C28 Diesel Range    | U                  |              | 1.61            | 4.00            |
| C28-C36 Motor Oil Range | 0.365              | ⬇            | 0.274           | 4.00            |
| (S) o-Terphenyl         | 78.4               |              |                 | 18.0-148        |

Laboratory Control Sample (LCS)

(LCS) R3943661-2 06/30/23 15:38

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| C10-C28 Diesel Range | 50.0                  | 31.2                | 62.4          | 50.0-150         |               |
| (S) o-Terphenyl      |                       |                     | 61.0          | 18.0-148         |               |

L1629129-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1629129-03 06/30/23 16:54 • (MS) R3943661-3 06/30/23 17:07 • (MSD) R3943661-4 06/30/23 17:20

| Analyte              | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| C10-C28 Diesel Range | 47.4                  | 2.36                     | 33.5               | 34.1                | 65.7         | 66.7          | 1        | 50.0-150         |              |               | 1.78     | 20              |
| (S) o-Terphenyl      |                       |                          |                    |                     | 64.6         | 65.8          |          | 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) R3942818-2 06/29/23 02:58

| Analyte                | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------|--------------------|--------------|-----------------|-----------------|
| Acenaphthene           | U                  |              | 0.00209         | 0.00600         |
| Anthracene             | U                  |              | 0.00230         | 0.00600         |
| Benzo(a)anthracene     | U                  |              | 0.00173         | 0.00600         |
| Benzo(b)fluoranthene   | U                  |              | 0.00153         | 0.00600         |
| Benzo(k)fluoranthene   | U                  |              | 0.00215         | 0.00600         |
| Benzo(a)pyrene         | U                  |              | 0.00179         | 0.00600         |
| Chrysene               | U                  |              | 0.00232         | 0.00600         |
| Dibenz(a,h)anthracene  | U                  |              | 0.00172         | 0.00600         |
| Fluoranthene           | U                  |              | 0.00227         | 0.00600         |
| Fluorene               | U                  |              | 0.00205         | 0.00600         |
| Indeno(1,2,3-cd)pyrene | U                  |              | 0.00181         | 0.00600         |
| 1-Methylnaphthalene    | U                  |              | 0.00449         | 0.0200          |
| 2-Methylnaphthalene    | U                  |              | 0.00427         | 0.0200          |
| Naphthalene            | U                  |              | 0.00408         | 0.0200          |
| Pyrene                 | U                  |              | 0.00200         | 0.00600         |
| (S) p-Terphenyl-d14    | 71.7               |              |                 | 23.0-120        |
| (S) Nitrobenzene-d5    | 66.5               |              |                 | 14.0-149        |
| (S) 2-Fluorobiphenyl   | 66.9               |              |                 | 34.0-125        |

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Laboratory Control Sample (LCS)

(LCS) R3942818-1 06/29/23 02:40

| Analyte                | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Acenaphthene           | 0.0800                | 0.0510              | 63.8          | 50.0-120         |               |
| Anthracene             | 0.0800                | 0.0539              | 67.4          | 50.0-126         |               |
| Benzo(a)anthracene     | 0.0800                | 0.0579              | 72.4          | 45.0-120         |               |
| Benzo(b)fluoranthene   | 0.0800                | 0.0473              | 59.1          | 42.0-121         |               |
| Benzo(k)fluoranthene   | 0.0800                | 0.0458              | 57.3          | 49.0-125         |               |
| Benzo(a)pyrene         | 0.0800                | 0.0480              | 60.0          | 42.0-120         |               |
| Chrysene               | 0.0800                | 0.0510              | 63.8          | 49.0-122         |               |
| Dibenz(a,h)anthracene  | 0.0800                | 0.0462              | 57.8          | 47.0-125         |               |
| Fluoranthene           | 0.0800                | 0.0557              | 69.6          | 49.0-129         |               |
| Fluorene               | 0.0800                | 0.0557              | 69.6          | 49.0-120         |               |
| Indeno(1,2,3-cd)pyrene | 0.0800                | 0.0527              | 65.9          | 46.0-125         |               |
| 1-Methylnaphthalene    | 0.0800                | 0.0523              | 65.4          | 51.0-121         |               |
| 2-Methylnaphthalene    | 0.0800                | 0.0551              | 68.9          | 50.0-120         |               |
| Naphthalene            | 0.0800                | 0.0497              | 62.1          | 50.0-120         |               |
| Pyrene                 | 0.0800                | 0.0502              | 62.8          | 43.0-123         |               |

Laboratory Control Sample (LCS)

(LCS) R3942818-1 06/29/23 02:40

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> |
|----------------------|-----------------------|---------------------|---------------|------------------|----------------------|
| (S) p-Terphenyl-d14  |                       |                     | 64.3          | 23.0-120         |                      |
| (S) Nitrobenzene-d5  |                       |                     | 76.9          | 14.0-149         |                      |
| (S) 2-Fluorobiphenyl |                       |                     | 62.7          | 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

# 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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.                                                                                                                                                                                                                                               |
| 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. |
| 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.                   |
| J6 | The sample matrix interfered with the ability to make any accurate determination; spike value is low. |
| T8 | Sample(s) received past/too close to holding time expiration.                                         |

<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

# ACCREDITATIONS & LOCATIONS

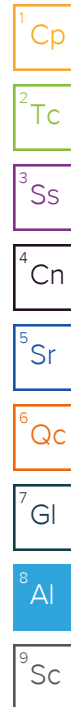
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

|                                |             |                             |                  |
|--------------------------------|-------------|-----------------------------|------------------|
| 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.





Caerus Piceance LLC  
143 Diamond Avenue  
Parachute, CO 81635  
970-285-9606

Billing Information:

Same as above

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



Report to:  
bmiddleton@caerusoilandgas.com

Email To:  
bmiddleton@caerusoilandgas.com

Project  
Description: **H7- TANK BATTERY**

City/State  
Collected: **Mamm Creek, CO**

Phone:  
Fax:  
Client Project #  
**H7**

Lab Project #  
**H7**

Collected by (print):  
**Ben Herrmann**

Site/Facility ID #  
**H7**

P.O. #  
**H7**

Collected by (signature):

**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 ☒

No.  
of  
Cntrs

TPH - GRO, DRO, ORO

BTEX

Table 915-1 Metals

SAR, pH, EC, Boron (water soluble)

Table 915-1 PAHs

Acctnum:

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Remarks

Sample # (lab only)

20230621-H7-(SBE)@8-9 Grab SS 8-9 06/21/2023 9:15

3

X

X

X

X

X

20230621-H7-(SBE)@11-12 Grab SS 11-12 06/21/2023 10:20

1

X

X

X

X

X

20230621-H7-(SBS)@2-3 Grab SS 2-3 06/21/2023 10:30

1

X

X

X

X

X

20230621-H7-(SBS)@8-9 Grab SS 8-9 06/21/2023 12:45

1

X

X

X

X

X

20230621-H7-(SBW)@2-3 Grab SS 2-3 06/21/2023 13:10

1

X

X

X

X

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 #

Sample Receipt Checklist

COC Seal Present/Intact: ☒ Y ☐ N  
COC Signed/Accurate: ☒ Y ☐ N  
Bottles arrive intact: ☒ Y ☐ N  
Correct bottles used: ☒ Y ☐ N  
Sufficient volume sent: ☒ Y ☐ N  
If Applicable  
VOA Zero Headspace: ☒ Y ☐ N  
Preservation Correct/Checked: ☒ Y ☐ N

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Trip Blank Received: Yes ☒ No ☐  
HCL / MeOH  
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: °C Bottles Received:   
2.1TD=2.1 12

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 6/23/23 Time: 0900

Hold:

Condition:  
NCF / OK

**Caerus Oil and Gas**

Sample Delivery Group: L1629466  
Samples Received: 06/24/2023  
Project Number: H7  
Description: Tank Battery  
Site: H7  
Report To: Jake J. , Brett M. , Blair R.  
143 Diamond Avenue  
Parachute, CO 81635

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 [www.pacenational.com](http://www.pacenational.com)

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<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

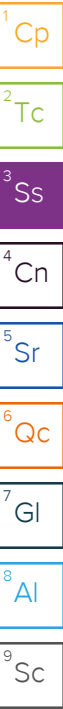
<sup>9</sup> Sc

# SAMPLE SUMMARY

20230622-H7-(SBN)@8-9 L1629466-01 Solid

Collected by Ben Herrman  
Collected date/time 06/22/23 08:50  
Received date/time 06/24/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2085202 | 1        | 06/30/23 23:15        | 06/30/23 23:15     | SPL     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2087033 | 1        | 07/02/23 22:00        | 07/04/23 01:20     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2085328 | 1        | 06/27/23 16:00        | 06/27/23 17:00     | EPW     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2087744 | 1        | 07/01/23 14:06        | 07/01/23 16:16     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2085612 | 1        | 06/30/23 01:06        | 06/30/23 23:49     | SPL     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2085766 | 5        | 06/28/23 10:07        | 06/30/23 00:09     | SJM     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2086927 | 250      | 06/28/23 17:51        | 06/30/23 10:11     | DWR     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2087789 | 20       | 06/28/23 17:51        | 07/01/23 00:16     | JBE     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2086406 | 1        | 06/29/23 16:23        | 06/30/23 18:35     | JDG     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2086406 | 20       | 06/29/23 16:23        | 06/30/23 13:47     | JDG     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086398 | 1        | 06/30/23 14:15        | 07/01/23 07:32     | JRM     | Mt. Juliet, TN |



20230622-H7-(SBN)@14-15 L1629466-02 Solid

Collected by Ben Herrman  
Collected date/time 06/22/23 09:35  
Received date/time 06/24/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2085202 | 1        | 06/30/23 23:18        | 06/30/23 23:18     | SPL     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2087033 | 1        | 07/02/23 22:00        | 07/04/23 01:46     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2085328 | 1        | 06/27/23 16:00        | 06/27/23 17:00     | EPW     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2087744 | 1        | 07/01/23 14:06        | 07/01/23 16:16     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2085612 | 1        | 06/30/23 01:06        | 06/30/23 23:51     | SPL     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2085766 | 5        | 06/28/23 10:07        | 06/30/23 00:13     | SJM     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2090146 | 500      | 06/28/23 17:51        | 07/06/23 14:43     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2087789 | 20       | 06/28/23 17:51        | 07/01/23 00:35     | JBE     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2086406 | 1        | 06/29/23 16:23        | 06/30/23 18:48     | JDG     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2086406 | 20       | 06/29/23 16:23        | 06/30/23 14:00     | JDG     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086398 | 1        | 06/30/23 14:15        | 07/01/23 07:51     | JRM     | Mt. Juliet, TN |

20230622-H7-(SB01)@2-3 L1629466-03 Solid

Collected by Ben Herrman  
Collected date/time 06/22/23 09:50  
Received date/time 06/24/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2085202 | 1        | 06/30/23 23:21        | 06/30/23 23:21     | SPL     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2087033 | 1        | 07/02/23 22:00        | 07/04/23 01:51     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2085328 | 1        | 06/27/23 16:00        | 06/27/23 17:00     | EPW     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2087744 | 1        | 07/01/23 14:06        | 07/01/23 16:16     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2085612 | 1        | 06/30/23 01:06        | 06/30/23 23:54     | SPL     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2085766 | 5        | 06/28/23 10:07        | 06/30/23 00:16     | SJM     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2089769 | 500      | 06/28/23 17:51        | 07/06/23 10:27     | BAM     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2087789 | 8        | 06/28/23 17:51        | 07/01/23 00:54     | JBE     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2087258 | 1        | 07/01/23 08:11        | 07/02/23 08:52     | KAP     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2087258 | 5        | 07/01/23 08:11        | 07/02/23 13:19     | KAP     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086398 | 1        | 06/30/23 14:15        | 07/01/23 08:11     | JRM     | Mt. Juliet, TN |

20230622-H7-(SB01)@11-12 L1629466-04 Solid

Collected by Ben Herrman  
Collected date/time 06/22/23 10:45  
Received date/time 06/24/23 09:00

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG2085202 | 1        | 06/30/23 23:24        | 06/30/23 23:24     | SPL     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199            | WG2087033 | 1        | 07/02/23 22:00        | 07/04/23 01:56     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG2085328 | 1        | 06/27/23 16:00        | 06/27/23 17:00     | EPW     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG2087744 | 1        | 07/01/23 14:06        | 07/01/23 16:16     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG2085612 | 1        | 06/30/23 01:06        | 06/30/23 23:57     | SPL     | Mt. Juliet, TN |

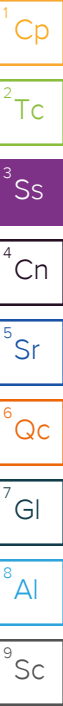


# SAMPLE SUMMARY

20230622-H7-(SB01)@11-12 L1629466-04 Solid

Collected by Ben Herrman  
Collected date/time 06/22/23 10:45  
Received date/time 06/24/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Metals (ICPMS) by Method 6020                               | WG2085766 | 5        | 06/28/23 10:07        | 06/30/23 00:26     | SJM     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2092781 | 1000     | 06/28/23 17:51        | 07/11/23 16:45     | BJO     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2087789 | 20       | 06/28/23 17:51        | 07/01/23 01:13     | JBE     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2087258 | 1        | 07/01/23 08:11        | 07/02/23 11:32     | KAP     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2087258 | 5        | 07/01/23 08:11        | 07/02/23 13:45     | KAP     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086398 | 1        | 06/30/23 14:15        | 07/01/23 08:30     | JRM     | Mt. Juliet, TN |



20230622-H7-(SBW)@11-12 L1629466-05 Solid

Collected by Ben Herrman  
Collected date/time 06/22/23 11:20  
Received date/time 06/24/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2085202 | 1        | 06/30/23 23:27        | 06/30/23 23:27     | SPL     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2087033 | 1        | 07/02/23 22:00        | 07/04/23 02:12     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2085328 | 1        | 06/27/23 16:00        | 06/27/23 17:00     | EPW     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2087744 | 1        | 07/01/23 14:06        | 07/01/23 16:16     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2085612 | 1        | 06/30/23 01:06        | 07/01/23 00:00     | SPL     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2085766 | 5        | 06/28/23 10:07        | 06/30/23 00:29     | SJM     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2086576 | 1        | 06/28/23 17:51        | 07/01/23 18:00     | ACG     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2087789 | 1        | 06/28/23 17:51        | 06/30/23 19:14     | JBE     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2087258 | 1        | 07/01/23 08:11        | 07/02/23 11:19     | KAP     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086398 | 1        | 06/30/23 14:15        | 07/01/23 08:49     | JRM     | Mt. Juliet, TN |

20230622-H7-(SB02)@5-6 L1629466-06 Solid

Collected by Ben Herrman  
Collected date/time 06/22/23 13:10  
Received date/time 06/24/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2085202 | 1        | 06/30/23 23:29        | 06/30/23 23:29     | SPL     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2087033 | 1        | 07/02/23 22:00        | 07/04/23 02:17     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2085329 | 1        | 06/27/23 16:06        | 06/29/23 09:36     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2087744 | 1        | 07/01/23 14:06        | 07/01/23 16:16     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2085612 | 1        | 06/30/23 01:06        | 07/01/23 00:03     | SPL     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2085766 | 5        | 06/28/23 10:07        | 06/30/23 00:32     | SJM     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2086576 | 1        | 06/28/23 17:51        | 07/01/23 18:23     | ACG     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2087789 | 1        | 06/28/23 17:51        | 06/30/23 19:33     | JBE     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2087258 | 1        | 07/01/23 08:11        | 07/02/23 09:06     | KAP     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2086398 | 1        | 06/30/23 14:15        | 07/01/23 09:09     | JRM     | Mt. Juliet, TN |

20230622-H7-(SB02)@14-15 L1629466-07 Solid

Collected by Ben Herrman  
Collected date/time 06/22/23 14:00  
Received date/time 06/24/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2085202 | 1        | 06/30/23 23:32        | 06/30/23 23:32     | SPL     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2087033 | 1        | 07/02/23 22:00        | 07/04/23 02:22     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2085329 | 1        | 06/28/23 08:33        | 06/29/23 09:36     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2087744 | 1        | 07/01/23 14:06        | 07/01/23 16:16     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2085612 | 1        | 06/30/23 01:06        | 07/01/23 00:05     | SPL     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2085766 | 5        | 06/28/23 10:07        | 06/30/23 00:36     | SJM     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2086576 | 1        | 06/28/23 17:51        | 07/01/23 18:53     | ACG     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2087789 | 1        | 06/28/23 17:51        | 06/30/23 19:52     | JBE     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2087258 | 1        | 07/01/23 08:11        | 07/02/23 09:59     | KAP     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2087237 | 1        | 06/30/23 08:26        | 06/30/23 18:21     | JCH     | 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



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 0.284  |           | 1        | 06/30/2023 23:15     | WG2085202 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| Hexavalent Chromium | U            | J6        | 0.255     | 1.00      | 1        | 07/04/2023 01:20     | WG2087033 |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 7.86   | T8        | 1        | 06/27/2023 17:00     | WG2085328 |

Sample Narrative:  
L1629466-01 WG2085328: 7.86 at 22.4C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|-----------|
| Specific Conductance | 225             |           | 10.0         | 1        | 07/01/2023 16:16     | WG2087744 |

Sample Narrative:  
L1629466-01 WG2087744: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|-----------|
| Hot Water Sol. Boron | 0.180       | J         | 0.0167   | 0.200    | 1        | 06/30/2023 23:49     | WG2085612 |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|----------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| Arsenic  | 5.33         |           | 0.100     | 1.00      | 5        | 06/30/2023 00:09     | WG2085766 |
| Barium   | 207          |           | 0.152     | 2.50      | 5        | 06/30/2023 00:09     | WG2085766 |
| Cadmium  | 0.382        | J         | 0.0855    | 1.00      | 5        | 06/30/2023 00:09     | WG2085766 |
| Copper   | 9.35         |           | 0.132     | 5.00      | 5        | 06/30/2023 00:09     | WG2085766 |
| Lead     | 8.43         |           | 0.0990    | 2.00      | 5        | 06/30/2023 00:09     | WG2085766 |
| Nickel   | 13.8         |           | 0.197     | 2.50      | 5        | 06/30/2023 00:09     | WG2085766 |
| Selenium | 0.332        | J         | 0.180     | 2.50      | 5        | 06/30/2023 00:09     | WG2085766 |
| Silver   | U            |           | 0.0865    | 0.500     | 5        | 06/30/2023 00:09     | WG2085766 |
| Zinc     | 35.3         |           | 0.740     | 25.0      | 5        | 06/30/2023 00:09     | WG2085766 |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| TPH (GC/FID) Low Fraction          | 1460         |           | 5.43      | 25.0      | 250      | 06/30/2023 10:11     | WG2086927 |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 105          |           |           | 77.0-120  |          | 06/30/2023 10:11     | WG2086927 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.00934      | 0.0200       | 20       | 07/01/2023 00:16        | <a href="#">WG2087789</a> |
| Ethylbenzene              | 2.50            |           | 0.0147       | 0.0500       | 20       | 07/01/2023 00:16        | <a href="#">WG2087789</a> |
| Toluene                   | U               |           | 0.0260       | 0.100        | 20       | 07/01/2023 00:16        | <a href="#">WG2087789</a> |
| 1,2,4-Trimethylbenzene    | 26.6            |           | 0.0316       | 0.100        | 20       | 07/01/2023 00:16        | <a href="#">WG2087789</a> |
| 1,3,5-Trimethylbenzene    | 26.8            |           | 0.0400       | 0.100        | 20       | 07/01/2023 00:16        | <a href="#">WG2087789</a> |
| Xylenes, Total            | 62.2            |           | 0.0176       | 0.130        | 20       | 07/01/2023 00:16        | <a href="#">WG2087789</a> |
| (S) Toluene-d8            | 98.4            |           |              | 75.0-131     |          | 07/01/2023 00:16        | <a href="#">WG2087789</a> |
| (S) 4-Bromofluorobenzene  | 120             |           |              | 67.0-138     |          | 07/01/2023 00:16        | <a href="#">WG2087789</a> |
| (S) 1,2-Dichloroethane-d4 | 102             |           |              | 70.0-130     |          | 07/01/2023 00:16        | <a href="#">WG2087789</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 610             |                    | 32.2         | 80.0         | 20       | 06/30/2023 13:47        | <a href="#">WG2086406</a> |
| C28-C36 Motor Oil Range | 20.3            |                    | 0.274        | 4.00         | 1        | 06/30/2023 18:35        | <a href="#">WG2086406</a> |
| (S) o-Terphenyl         | 52.4            | <a href="#">J7</a> |              | 18.0-148     |          | 06/30/2023 13:47        | <a href="#">WG2086406</a> |
| (S) o-Terphenyl         | 50.9            |                    |              | 18.0-148     |          | 06/30/2023 18:35        | <a href="#">WG2086406</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Anthracene             | U               |                    | 0.00230      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Acenaphthene           | U               |                    | 0.00209      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Benzo(a)anthracene     | U               |                    | 0.00173      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Benzo(a)pyrene         | U               |                    | 0.00179      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Benzo(b)fluoranthene   | U               |                    | 0.00153      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Benzo(k)fluoranthene   | U               |                    | 0.00215      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Chrysene               | U               |                    | 0.00232      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Dibenz(a,h)anthracene  | U               |                    | 0.00172      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Fluoranthene           | U               |                    | 0.00227      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Fluorene               | 0.0372          |                    | 0.00205      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Indeno(1,2,3-cd)pyrene | U               |                    | 0.00181      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Naphthalene            | 0.803           |                    | 0.00408      | 0.0200       | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| Pyrene                 | 0.00296         | <a href="#">J</a>  | 0.00200      | 0.00600      | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| 1-Methylnaphthalene    | 0.565           |                    | 0.00449      | 0.0200       | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| 2-Methylnaphthalene    | 1.53            |                    | 0.00427      | 0.0200       | 1        | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| (S) p-Terphenyl-d14    | 79.4            |                    |              | 23.0-120     |          | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| (S) Nitrobenzene-d5    | 0.000           | <a href="#">J2</a> |              | 14.0-149     |          | 07/01/2023 07:32        | <a href="#">WG2086398</a> |
| (S) 2-Fluorobiphenyl   | 69.2            |                    |              | 34.0-125     |          | 07/01/2023 07:32        | <a href="#">WG2086398</a> |

## Sample Narrative:

L1629466-01 WG2086398: Surrogate failure due to matrix interference.



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 1.50   |           | 1        | 06/30/2023 23:18     | WG2085202 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/04/2023 01:46     | <a href="#">WG2087033</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.07   | <a href="#">T8</a> | 1        | 06/27/2023 17:00     | <a href="#">WG2085328</a> |

Sample Narrative:

L1629466-02 WG2085328: 8.07 at 22.3C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 311             |           | 10.0         | 1        | 07/01/2023 16:16     | <a href="#">WG2087744</a> |

Sample Narrative:

L1629466-02 WG2087744: at 25C

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

| Analyte              | Result mg/l | Qualifier         | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-------------------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.168       | <a href="#">J</a> | 0.0167   | 0.200    | 1        | 06/30/2023 23:51     | <a href="#">WG2085612</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 9.75         |                   | 0.100     | 1.00      | 5        | 06/30/2023 00:13     | <a href="#">WG2085766</a> |
| Barium   | 275          |                   | 0.152     | 2.50      | 5        | 06/30/2023 00:13     | <a href="#">WG2085766</a> |
| Cadmium  | 0.374        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 06/30/2023 00:13     | <a href="#">WG2085766</a> |
| Copper   | 14.3         |                   | 0.132     | 5.00      | 5        | 06/30/2023 00:13     | <a href="#">WG2085766</a> |
| Lead     | 9.83         |                   | 0.0990    | 2.00      | 5        | 06/30/2023 00:13     | <a href="#">WG2085766</a> |
| Nickel   | 15.5         |                   | 0.197     | 2.50      | 5        | 06/30/2023 00:13     | <a href="#">WG2085766</a> |
| Selenium | 0.387        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 06/30/2023 00:13     | <a href="#">WG2085766</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 06/30/2023 00:13     | <a href="#">WG2085766</a> |
| Zinc     | 44.3         |                   | 0.740     | 25.0      | 5        | 06/30/2023 00:13     | <a href="#">WG2085766</a> |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 1330         |           | 10.9      | 50.0      | 500      | 07/06/2023 14:43     | <a href="#">WG2090146</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 95.3         |           |           | 77.0-120  |          | 07/06/2023 14:43     | <a href="#">WG2090146</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | 0.0580          |           | 0.00934      | 0.0200       | 20       | 07/01/2023 00:35        | <a href="#">WG2087789</a> |
| Ethylbenzene              | 4.11            |           | 0.0147       | 0.0500       | 20       | 07/01/2023 00:35        | <a href="#">WG2087789</a> |
| Toluene                   | 5.34            |           | 0.0260       | 0.100        | 20       | 07/01/2023 00:35        | <a href="#">WG2087789</a> |
| 1,2,4-Trimethylbenzene    | 20.8            |           | 0.0316       | 0.100        | 20       | 07/01/2023 00:35        | <a href="#">WG2087789</a> |
| 1,3,5-Trimethylbenzene    | 21.1            |           | 0.0400       | 0.100        | 20       | 07/01/2023 00:35        | <a href="#">WG2087789</a> |
| Xylenes, Total            | 83.1            |           | 0.0176       | 0.130        | 20       | 07/01/2023 00:35        | <a href="#">WG2087789</a> |
| (S) Toluene-d8            | 102             |           |              | 75.0-131     |          | 07/01/2023 00:35        | <a href="#">WG2087789</a> |
| (S) 4-Bromofluorobenzene  | 123             |           |              | 67.0-138     |          | 07/01/2023 00:35        | <a href="#">WG2087789</a> |
| (S) 1,2-Dichloroethane-d4 | 99.1            |           |              | 70.0-130     |          | 07/01/2023 00:35        | <a href="#">WG2087789</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 294             |                    | 32.2         | 80.0         | 20       | 06/30/2023 14:00        | <a href="#">WG2086406</a> |
| C28-C36 Motor Oil Range | 41.8            |                    | 0.274        | 4.00         | 1        | 06/30/2023 18:48        | <a href="#">WG2086406</a> |
| (S) o-Terphenyl         | 60.2            |                    |              | 18.0-148     |          | 06/30/2023 18:48        | <a href="#">WG2086406</a> |
| (S) o-Terphenyl         | 69.3            | <a href="#">J7</a> |              | 18.0-148     |          | 06/30/2023 14:00        | <a href="#">WG2086406</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Anthracene             | U               |                    | 0.00230      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Acenaphthene           | U               |                    | 0.00209      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Benzo(a)anthracene     | U               |                    | 0.00173      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Benzo(a)pyrene         | U               |                    | 0.00179      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Benzo(b)fluoranthene   | U               |                    | 0.00153      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Benzo(k)fluoranthene   | U               |                    | 0.00215      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Chrysene               | U               |                    | 0.00232      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Dibenz(a,h)anthracene  | U               |                    | 0.00172      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Fluoranthene           | U               |                    | 0.00227      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Fluorene               | 0.00839         |                    | 0.00205      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Indeno(1,2,3-cd)pyrene | U               |                    | 0.00181      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Naphthalene            | 0.246           |                    | 0.00408      | 0.0200       | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| Pyrene                 | U               |                    | 0.00200      | 0.00600      | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| 1-Methylnaphthalene    | 0.158           |                    | 0.00449      | 0.0200       | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| 2-Methylnaphthalene    | 0.439           |                    | 0.00427      | 0.0200       | 1        | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| (S) p-Terphenyl-d14    | 78.0            |                    |              | 23.0-120     |          | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| (S) Nitrobenzene-d5    | 0.000           | <a href="#">J2</a> |              | 14.0-149     |          | 07/01/2023 07:51        | <a href="#">WG2086398</a> |
| (S) 2-Fluorobiphenyl   | 68.7            |                    |              | 34.0-125     |          | 07/01/2023 07:51        | <a href="#">WG2086398</a> |

## Sample Narrative:

L1629466-02 WG2086398: Surrogate failure due to matrix interference.

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 2.28   |           | 1        | 06/30/2023 23:21     | WG2085202 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/04/2023 01:51     | <a href="#">WG2087033</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.05   | <a href="#">T8</a> | 1        | 06/27/2023 17:00     | <a href="#">WG2085328</a> |

Sample Narrative:

L1629466-03 WG2085328: 8.05 at 22.1C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 582             |           | 10.0         | 1        | 07/01/2023 16:16     | <a href="#">WG2087744</a> |

Sample Narrative:

L1629466-03 WG2087744: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.536       |           | 0.0167   | 0.200    | 1        | 06/30/2023 23:54     | <a href="#">WG2085612</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 5.80         |                   | 0.100     | 1.00      | 5        | 06/30/2023 00:16     | <a href="#">WG2085766</a> |
| Barium   | 176          |                   | 0.152     | 2.50      | 5        | 06/30/2023 00:16     | <a href="#">WG2085766</a> |
| Cadmium  | 0.187        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 06/30/2023 00:16     | <a href="#">WG2085766</a> |
| Copper   | 13.8         |                   | 0.132     | 5.00      | 5        | 06/30/2023 00:16     | <a href="#">WG2085766</a> |
| Lead     | 9.95         |                   | 0.0990    | 2.00      | 5        | 06/30/2023 00:16     | <a href="#">WG2085766</a> |
| Nickel   | 15.0         |                   | 0.197     | 2.50      | 5        | 06/30/2023 00:16     | <a href="#">WG2085766</a> |
| Selenium | 0.362        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 06/30/2023 00:16     | <a href="#">WG2085766</a> |
| Silver   | 0.0971       | <a href="#">J</a> | 0.0865    | 0.500     | 5        | 06/30/2023 00:16     | <a href="#">WG2085766</a> |
| Zinc     | 44.1         |                   | 0.740     | 25.0      | 5        | 06/30/2023 00:16     | <a href="#">WG2085766</a> |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 2280         |           | 10.9      | 50.0      | 500      | 07/06/2023 10:27     | <a href="#">WG2089769</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 84.6         |           |           | 77.0-120  |          | 07/06/2023 10:27     | <a href="#">WG2089769</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | 0.0164          |                    | 0.00374      | 0.00800      | 8        | 07/01/2023 00:54        | <a href="#">WG2087789</a> |
| Ethylbenzene              | 4.98            |                    | 0.00590      | 0.0200       | 8        | 07/01/2023 00:54        | <a href="#">WG2087789</a> |
| Toluene                   | 1.16            |                    | 0.0104       | 0.0400       | 8        | 07/01/2023 00:54        | <a href="#">WG2087789</a> |
| 1,2,4-Trimethylbenzene    | 23.5            | <a href="#">E</a>  | 0.0126       | 0.0400       | 8        | 07/01/2023 00:54        | <a href="#">WG2087789</a> |
| 1,3,5-Trimethylbenzene    | 24.1            | <a href="#">E</a>  | 0.0160       | 0.0400       | 8        | 07/01/2023 00:54        | <a href="#">WG2087789</a> |
| Xylenes, Total            | 108             |                    | 0.00704      | 0.0520       | 8        | 07/01/2023 00:54        | <a href="#">WG2087789</a> |
| (S) Toluene-d8            | 112             |                    |              | 75.0-131     |          | 07/01/2023 00:54        | <a href="#">WG2087789</a> |
| (S) 4-Bromofluorobenzene  | 142             | <a href="#">J1</a> |              | 67.0-138     |          | 07/01/2023 00:54        | <a href="#">WG2087789</a> |
| (S) 1,2-Dichloroethane-d4 | 97.3            |                    |              | 70.0-130     |          | 07/01/2023 00:54        | <a href="#">WG2087789</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 376             |           | 8.05         | 20.0         | 5        | 07/02/2023 13:19        | <a href="#">WG2087258</a> |
| C28-C36 Motor Oil Range | 7.58            |           | 0.274        | 4.00         | 1        | 07/02/2023 08:52        | <a href="#">WG2087258</a> |
| (S) o-Terphenyl         | 62.5            |           |              | 18.0-148     |          | 07/02/2023 08:52        | <a href="#">WG2087258</a> |
| (S) o-Terphenyl         | 73.3            |           |              | 18.0-148     |          | 07/02/2023 13:19        | <a href="#">WG2087258</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Anthracene             | U               |                    | 0.00230      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Acenaphthene           | U               |                    | 0.00209      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Benzo(a)anthracene     | U               |                    | 0.00173      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Benzo(a)pyrene         | U               |                    | 0.00179      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Benzo(b)fluoranthene   | U               |                    | 0.00153      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Benzo(k)fluoranthene   | U               |                    | 0.00215      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Chrysene               | U               |                    | 0.00232      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Dibenz(a,h)anthracene  | U               |                    | 0.00172      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Fluoranthene           | U               |                    | 0.00227      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Fluorene               | 0.0164          |                    | 0.00205      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Indeno(1,2,3-cd)pyrene | U               |                    | 0.00181      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Naphthalene            | 0.411           |                    | 0.00408      | 0.0200       | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| Pyrene                 | U               |                    | 0.00200      | 0.00600      | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| 1-Methylnaphthalene    | 0.293           |                    | 0.00449      | 0.0200       | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| 2-Methylnaphthalene    | 0.807           |                    | 0.00427      | 0.0200       | 1        | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| (S) p-Terphenyl-d14    | 86.0            |                    |              | 23.0-120     |          | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| (S) Nitrobenzene-d5    | 0.000           | <a href="#">J2</a> |              | 14.0-149     |          | 07/01/2023 08:11        | <a href="#">WG2086398</a> |
| (S) 2-Fluorobiphenyl   | 71.6            |                    |              | 34.0-125     |          | 07/01/2023 08:11        | <a href="#">WG2086398</a> |

Sample Narrative:

L1629466-03 WG2086398: Surrogate failure due to matrix interference.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 0.962  |           | 1        | 06/30/2023 23:24     | WG2085202 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/04/2023 01:56     | <a href="#">WG2087033</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.30   | <a href="#">T8</a> | 1        | 06/27/2023 17:00     | <a href="#">WG2085328</a> |

Sample Narrative:  
L1629466-04 WG2085328: 8.3 at 22.1C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 298             |           | 10.0         | 1        | 07/01/2023 16:16     | <a href="#">WG2087744</a> |

Sample Narrative:  
L1629466-04 WG2087744: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.367       |           | 0.0167   | 0.200    | 1        | 06/30/2023 23:57     | <a href="#">WG2085612</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 10.9         |                   | 0.100     | 1.00      | 5        | 06/30/2023 00:26     | <a href="#">WG2085766</a> |
| Barium   | 309          |                   | 0.152     | 2.50      | 5        | 06/30/2023 00:26     | <a href="#">WG2085766</a> |
| Cadmium  | 0.366        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 06/30/2023 00:26     | <a href="#">WG2085766</a> |
| Copper   | 16.9         |                   | 0.132     | 5.00      | 5        | 06/30/2023 00:26     | <a href="#">WG2085766</a> |
| Lead     | 10.0         |                   | 0.0990    | 2.00      | 5        | 06/30/2023 00:26     | <a href="#">WG2085766</a> |
| Nickel   | 12.6         |                   | 0.197     | 2.50      | 5        | 06/30/2023 00:26     | <a href="#">WG2085766</a> |
| Selenium | 0.400        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 06/30/2023 00:26     | <a href="#">WG2085766</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 06/30/2023 00:26     | <a href="#">WG2085766</a> |
| Zinc     | 38.0         |                   | 0.740     | 25.0      | 5        | 06/30/2023 00:26     | <a href="#">WG2085766</a> |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 1030         |           | 21.7      | 100       | 1000     | 07/11/2023 16:45     | <a href="#">WG2092781</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 80.4         |           |           | 77.0-120  |          | 07/11/2023 16:45     | <a href="#">WG2092781</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|-----------|
| Benzene                   | 0.0110          | J         | 0.00934      | 0.0200       | 20       | 07/01/2023 01:13        | WG2087789 |
| Ethylbenzene              | 1.14            |           | 0.0147       | 0.0500       | 20       | 07/01/2023 01:13        | WG2087789 |
| Toluene                   | 0.696           |           | 0.0260       | 0.100        | 20       | 07/01/2023 01:13        | WG2087789 |
| 1,2,4-Trimethylbenzene    | 11.7            |           | 0.0316       | 0.100        | 20       | 07/01/2023 01:13        | WG2087789 |
| 1,3,5-Trimethylbenzene    | 11.5            |           | 0.0400       | 0.100        | 20       | 07/01/2023 01:13        | WG2087789 |
| Xylenes, Total            | 25.0            |           | 0.0176       | 0.130        | 20       | 07/01/2023 01:13        | WG2087789 |
| (S) Toluene-d8            | 107             |           |              | 75.0-131     |          | 07/01/2023 01:13        | WG2087789 |
| (S) 4-Bromofluorobenzene  | 117             |           |              | 67.0-138     |          | 07/01/2023 01:13        | WG2087789 |
| (S) 1,2-Dichloroethane-d4 | 96.3            |           |              | 70.0-130     |          | 07/01/2023 01:13        | WG2087789 |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|-----------|
| C10-C28 Diesel Range    | 441             |           | 8.05         | 20.0         | 5        | 07/02/2023 13:45        | WG2087258 |
| C28-C36 Motor Oil Range | 35.1            |           | 0.274        | 4.00         | 1        | 07/02/2023 11:32        | WG2087258 |
| (S) o-Terphenyl         | 71.1            |           |              | 18.0-148     |          | 07/02/2023 13:45        | WG2087258 |
| (S) o-Terphenyl         | 71.9            |           |              | 18.0-148     |          | 07/02/2023 11:32        | WG2087258 |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|-----------|
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Fluorene               | 0.0185          |           | 0.00205      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| Naphthalene            | 0.472           |           | 0.00408      | 0.0200       | 1        | 07/01/2023 08:30        | WG2086398 |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/01/2023 08:30        | WG2086398 |
| 1-Methylnaphthalene    | 0.338           |           | 0.00449      | 0.0200       | 1        | 07/01/2023 08:30        | WG2086398 |
| 2-Methylnaphthalene    | 0.920           |           | 0.00427      | 0.0200       | 1        | 07/01/2023 08:30        | WG2086398 |
| (S) p-Terphenyl-d14    | 79.2            |           |              | 23.0-120     |          | 07/01/2023 08:30        | WG2086398 |
| (S) Nitrobenzene-d5    | 0.000           | J2        |              | 14.0-149     |          | 07/01/2023 08:30        | WG2086398 |
| (S) 2-Fluorobiphenyl   | 71.7            |           |              | 34.0-125     |          | 07/01/2023 08:30        | WG2086398 |

## Sample Narrative:

L1629466-04 WG2086398: Surrogate failure due to matrix interference.

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 2.20   |           | 1        | 06/30/2023 23:27     | WG2085202 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/04/2023 02:12     | <a href="#">WG2087033</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.93   | <a href="#">T8</a> | 1        | 06/27/2023 17:00     | <a href="#">WG2085328</a> |

Sample Narrative:

L1629466-05 WG2085328: 8.93 at 221C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 672             |           | 10.0         | 1        | 07/01/2023 16:16     | <a href="#">WG2087744</a> |

Sample Narrative:

L1629466-05 WG2087744: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.462       |           | 0.0167   | 0.200    | 1        | 07/01/2023 00:00     | <a href="#">WG2085612</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 12.7         |                   | 0.100     | 1.00      | 5        | 06/30/2023 00:29     | <a href="#">WG2085766</a> |
| Barium   | 219          |                   | 0.152     | 2.50      | 5        | 06/30/2023 00:29     | <a href="#">WG2085766</a> |
| Cadmium  | 0.411        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 06/30/2023 00:29     | <a href="#">WG2085766</a> |
| Copper   | 16.3         |                   | 0.132     | 5.00      | 5        | 06/30/2023 00:29     | <a href="#">WG2085766</a> |
| Lead     | 9.73         |                   | 0.0990    | 2.00      | 5        | 06/30/2023 00:29     | <a href="#">WG2085766</a> |
| Nickel   | 15.1         |                   | 0.197     | 2.50      | 5        | 06/30/2023 00:29     | <a href="#">WG2085766</a> |
| Selenium | U            |                   | 0.180     | 2.50      | 5        | 06/30/2023 00:29     | <a href="#">WG2085766</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 06/30/2023 00:29     | <a href="#">WG2085766</a> |
| Zinc     | 44.7         |                   | 0.740     | 25.0      | 5        | 06/30/2023 00:29     | <a href="#">WG2085766</a> |

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

| Analyte                            | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.171        | <a href="#">B</a> | 0.0217    | 0.100     | 1        | 07/01/2023 18:00     | <a href="#">WG2086576</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 91.3         |                   |           | 77.0-120  |          | 07/01/2023 18:00     | <a href="#">WG2086576</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | 0.000600        | U         | 0.000467     | 0.00100      | 1        | 06/30/2023 19:14        | <a href="#">WG2087789</a> |
| Ethylbenzene              | 0.00205         | U         | 0.000737     | 0.00250      | 1        | 06/30/2023 19:14        | <a href="#">WG2087789</a> |
| Toluene                   | 0.00293         | U         | 0.00130      | 0.00500      | 1        | 06/30/2023 19:14        | <a href="#">WG2087789</a> |
| 1,2,4-Trimethylbenzene    | 0.0262          |           | 0.00158      | 0.00500      | 1        | 06/30/2023 19:14        | <a href="#">WG2087789</a> |
| 1,3,5-Trimethylbenzene    | 0.0232          |           | 0.00200      | 0.00500      | 1        | 06/30/2023 19:14        | <a href="#">WG2087789</a> |
| Xylenes, Total            | 0.0410          |           | 0.000880     | 0.00650      | 1        | 06/30/2023 19:14        | <a href="#">WG2087789</a> |
| (S) Toluene-d8            | 108             |           |              | 75.0-131     |          | 06/30/2023 19:14        | <a href="#">WG2087789</a> |
| (S) 4-Bromofluorobenzene  | 88.0            |           |              | 67.0-138     |          | 06/30/2023 19:14        | <a href="#">WG2087789</a> |
| (S) 1,2-Dichloroethane-d4 | 96.4            |           |              | 70.0-130     |          | 06/30/2023 19:14        | <a href="#">WG2087789</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 7.87            |           | 1.61         | 4.00         | 1        | 07/02/2023 11:19        | <a href="#">WG2087258</a> |
| C28-C36 Motor Oil Range | 29.3            |           | 0.274        | 4.00         | 1        | 07/02/2023 11:19        | <a href="#">WG2087258</a> |
| (S) o-Terphenyl         | 73.9            |           |              | 18.0-148     |          | 07/02/2023 11:19        | <a href="#">WG2087258</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| (S) p-Terphenyl-d14    | 80.2            |           |              | 23.0-120     |          | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| (S) Nitrobenzene-d5    | 111             |           |              | 14.0-149     |          | 07/01/2023 08:49        | <a href="#">WG2086398</a> |
| (S) 2-Fluorobiphenyl   | 74.8            |           |              | 34.0-125     |          | 07/01/2023 08:49        | <a href="#">WG2086398</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 1.95   |           | 1        | 06/30/2023 23:29     | WG2085202 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| Hexavalent Chromium | 0.266        | J         | 0.255     | 1.00      | 1        | 07/04/2023 02:17     | WG2087033 |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 8.17   | T8        | 1        | 06/29/2023 09:36     | WG2085329 |

Sample Narrative:  
L1629466-06 WG2085329: 8.17 at 20.9C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|-----------|
| Specific Conductance | 1060            |           | 10.0         | 1        | 07/01/2023 16:16     | WG2087744 |

Sample Narrative:  
L1629466-06 WG2087744: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|-----------|
| Hot Water Sol. Boron | 0.0888      | J         | 0.0167   | 0.200    | 1        | 07/01/2023 00:03     | WG2085612 |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|----------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| Arsenic  | 5.76         |           | 0.100     | 1.00      | 5        | 06/30/2023 00:32     | WG2085766 |
| Barium   | 194          |           | 0.152     | 2.50      | 5        | 06/30/2023 00:32     | WG2085766 |
| Cadmium  | 0.240        | J         | 0.0855    | 1.00      | 5        | 06/30/2023 00:32     | WG2085766 |
| Copper   | 12.6         |           | 0.132     | 5.00      | 5        | 06/30/2023 00:32     | WG2085766 |
| Lead     | 10.2         |           | 0.0990    | 2.00      | 5        | 06/30/2023 00:32     | WG2085766 |
| Nickel   | 16.0         |           | 0.197     | 2.50      | 5        | 06/30/2023 00:32     | WG2085766 |
| Selenium | 0.489        | J         | 0.180     | 2.50      | 5        | 06/30/2023 00:32     | WG2085766 |
| Silver   | U            |           | 0.0865    | 0.500     | 5        | 06/30/2023 00:32     | WG2085766 |
| Zinc     | 44.0         |           | 0.740     | 25.0      | 5        | 06/30/2023 00:32     | WG2085766 |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| TPH (GC/FID) Low Fraction          | 0.0367       | B J       | 0.0217    | 0.100     | 1        | 07/01/2023 18:23     | WG2086576 |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 95.4         |           |           | 77.0-120  |          | 07/01/2023 18:23     | WG2086576 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 06/30/2023 19:33        | <a href="#">WG2087789</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 06/30/2023 19:33        | <a href="#">WG2087789</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 06/30/2023 19:33        | <a href="#">WG2087789</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 06/30/2023 19:33        | <a href="#">WG2087789</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 06/30/2023 19:33        | <a href="#">WG2087789</a> |
| Xylenes, Total            | 0.00146         | <u>J</u>  | 0.000880     | 0.00650      | 1        | 06/30/2023 19:33        | <a href="#">WG2087789</a> |
| (S) Toluene-d8            | 110             |           |              | 75.0-131     |          | 06/30/2023 19:33        | <a href="#">WG2087789</a> |
| (S) 4-Bromofluorobenzene  | 94.4            |           |              | 67.0-138     |          | 06/30/2023 19:33        | <a href="#">WG2087789</a> |
| (S) 1,2-Dichloroethane-d4 | 96.3            |           |              | 70.0-130     |          | 06/30/2023 19:33        | <a href="#">WG2087789</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | U               |           | 1.61         | 4.00         | 1        | 07/02/2023 09:06        | <a href="#">WG2087258</a> |
| C28-C36 Motor Oil Range | U               |           | 0.274        | 4.00         | 1        | 07/02/2023 09:06        | <a href="#">WG2087258</a> |
| (S) o-Terphenyl         | 61.3            |           |              | 18.0-148     |          | 07/02/2023 09:06        | <a href="#">WG2087258</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| (S) p-Terphenyl-d14    | 78.5            |           |              | 23.0-120     |          | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| (S) Nitrobenzene-d5    | 127             |           |              | 14.0-149     |          | 07/01/2023 09:09        | <a href="#">WG2086398</a> |
| (S) 2-Fluorobiphenyl   | 77.6            |           |              | 34.0-125     |          | 07/01/2023 09:09        | <a href="#">WG2086398</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 0.911  |           | 1        | 06/30/2023 23:32     | WG2085202 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/04/2023 02:22     | <a href="#">WG2087033</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.47   | <a href="#">T8</a> | 1        | 06/29/2023 09:36     | <a href="#">WG2085329</a> |

Sample Narrative:  
L1629466-07 WG2085329: 8.47 at 21.1C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 317             |           | 10.0         | 1        | 07/01/2023 16:16     | <a href="#">WG2087744</a> |

Sample Narrative:  
L1629466-07 WG2087744: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.240       |           | 0.0167   | 0.200    | 1        | 07/01/2023 00:05     | <a href="#">WG2085612</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 7.61         |                   | 0.100     | 1.00      | 5        | 06/30/2023 00:36     | <a href="#">WG2085766</a> |
| Barium   | 179          |                   | 0.152     | 2.50      | 5        | 06/30/2023 00:36     | <a href="#">WG2085766</a> |
| Cadmium  | 0.372        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 06/30/2023 00:36     | <a href="#">WG2085766</a> |
| Copper   | 12.0         |                   | 0.132     | 5.00      | 5        | 06/30/2023 00:36     | <a href="#">WG2085766</a> |
| Lead     | 9.85         |                   | 0.0990    | 2.00      | 5        | 06/30/2023 00:36     | <a href="#">WG2085766</a> |
| Nickel   | 14.2         |                   | 0.197     | 2.50      | 5        | 06/30/2023 00:36     | <a href="#">WG2085766</a> |
| Selenium | 0.289        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 06/30/2023 00:36     | <a href="#">WG2085766</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 06/30/2023 00:36     | <a href="#">WG2085766</a> |
| Zinc     | 40.0         |                   | 0.740     | 25.0      | 5        | 06/30/2023 00:36     | <a href="#">WG2085766</a> |

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

| Analyte                            | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.109        | <a href="#">B</a> | 0.0217    | 0.100     | 1        | 07/01/2023 18:53     | <a href="#">WG2086576</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 92.9         |                   |           | 77.0-120  |          | 07/01/2023 18:53     | <a href="#">WG2086576</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 06/30/2023 19:52        | <a href="#">WG2087789</a> |
| Ethylbenzene              | 0.00110         | U         | 0.000737     | 0.00250      | 1        | 06/30/2023 19:52        | <a href="#">WG2087789</a> |
| Toluene                   | 0.00135         | U         | 0.00130      | 0.00500      | 1        | 06/30/2023 19:52        | <a href="#">WG2087789</a> |
| 1,2,4-Trimethylbenzene    | 0.00490         | U         | 0.00158      | 0.00500      | 1        | 06/30/2023 19:52        | <a href="#">WG2087789</a> |
| 1,3,5-Trimethylbenzene    | 0.00408         | U         | 0.00200      | 0.00500      | 1        | 06/30/2023 19:52        | <a href="#">WG2087789</a> |
| Xylenes, Total            | 0.0131          |           | 0.000880     | 0.00650      | 1        | 06/30/2023 19:52        | <a href="#">WG2087789</a> |
| (S) Toluene-d8            | 109             |           |              | 75.0-131     |          | 06/30/2023 19:52        | <a href="#">WG2087789</a> |
| (S) 4-Bromofluorobenzene  | 87.0            |           |              | 67.0-138     |          | 06/30/2023 19:52        | <a href="#">WG2087789</a> |
| (S) 1,2-Dichloroethane-d4 | 96.8            |           |              | 70.0-130     |          | 06/30/2023 19:52        | <a href="#">WG2087789</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 4.52            |           | 1.61         | 4.00         | 1        | 07/02/2023 09:59        | <a href="#">WG2087258</a> |
| C28-C36 Motor Oil Range | 12.0            |           | 0.274        | 4.00         | 1        | 07/02/2023 09:59        | <a href="#">WG2087258</a> |
| (S) o-Terphenyl         | 53.1            |           |              | 18.0-148     |          | 07/02/2023 09:59        | <a href="#">WG2087258</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| (S) p-Terphenyl-d14    | 86.3            |           |              | 23.0-120     |          | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| (S) Nitrobenzene-d5    | 129             |           |              | 14.0-149     |          | 06/30/2023 18:21        | <a href="#">WG2087237</a> |
| (S) 2-Fluorobiphenyl   | 82.2            |           |              | 34.0-125     |          | 06/30/2023 18:21        | <a href="#">WG2087237</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3944373-1 07/04/23 01:07

|                     | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------------------|-----------|--------------|--------|--------|
| Analyte             | mg/kg     |              | mg/kg  | mg/kg  |
| Hexavalent Chromium | U         |              | 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

L1630943-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1630943-01 07/04/23 02:58 • (DUP) R3944373-7 07/04/23 03:14

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | 0.376           | 0.371      | 1        | 1.22    | J             | 20             |

L1631178-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1631178-01 07/04/23 03:45 • (DUP) R3944373-8 07/04/23 03:50

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

Laboratory Control Sample (LCS)

(LCS) R3944373-2 07/04/23 01:15

|                     | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------------------|--------------|------------|----------|-------------|---------------|
| Analyte             | mg/kg        | mg/kg      | %        | %           |               |
| Hexavalent Chromium | 10.0         | 10.5       | 105      | 80.0-120    |               |

L1629466-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1629466-01 07/04/23 01:20 • (MS) R3944373-4 07/04/23 01:30 • (MSD) R3944373-5 07/04/23 01:35

|                     | 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      | %       | %        |          | %           |              |               | %    | %          |
| Hexavalent Chromium | 20.0         | U               | 14.9      | 18.1       | 74.3    | 90.6     | 1        | 75.0-125    | J6           |               | 19.8 | 20         |

L1629466-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1629466-01 07/04/23 01:20 • (MS) R3944373-6 07/04/23 01:41

|                     | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|---------------------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte             | mg/kg        | mg/kg           | mg/kg     | %       |          | %           |              |
| Hexavalent Chromium | 631          | U               | 445       | 70.5    | 50       | 75.0-125    | J6           |

L1628729-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1628729-01 06/27/23 17:00 • (DUP) R3941956-3 06/27/23 17:00

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | su              | su         |          | %       |               | %              |
| pH      | 1.72            | 1.70       | 1        | 1.17    | J3            | 1              |

Sample Narrative:

OS: 1.72 at 23.8C

DUP: 1.7 at 23.8C

L1627290-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1627290-02 06/27/23 17:00 • (DUP) R3941956-2 06/27/23 17:00

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | pH              | su         |          | %       |               | %              |
| pH      | 8.27            | 8.25       | 1        | 0.242   |               | 1              |

Sample Narrative:

OS: 8.27 at 23.8C

DUP: 8.25 at 21.8C

Laboratory Control Sample (LCS)

(LCS) R3941956-1 06/27/23 17:00

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

Sample Narrative:

LCS: 10.02 at 21.9C

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc



L1629235-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1629235-01 06/29/23 09:36 • (DUP) R3942814-2 06/29/23 09:36

|         | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | su              | su         |          | %       |                      | %              |
| pH      | 7.77            | 7.79       | 1        | 0.257   |                      | 1              |

Sample Narrative:

OS: 7.77 at 20.9C

DUP: 7.79 at 20.9C

<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

L1629466-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1629466-07 06/29/23 09:36 • (DUP) R3942814-3 06/29/23 09:36

|         | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | pH              | su         |          | %       |                      | %              |
| pH      | 8.47            | 8.44       | 1        | 0.355   |                      | 1              |

Sample Narrative:

OS: 8.47 at 21.1C

DUP: 8.44 at 20.8C

Laboratory Control Sample (LCS)

(LCS) R3942814-1 06/29/23 09:36

|         | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | <u>LCS Qualifier</u> |
|---------|--------------|------------|----------|-------------|----------------------|
| Analyte | su           | su         | %        | %           |                      |
| pH      | 10.0         | 10.0       | 100      | 99.0-101    |                      |

Sample Narrative:

LCS: 10.03 at 20.8C

Method Blank (MB)

(MB) R3943779-1 07/01/23 16:16

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:

BLANK: at 25C

L1629466-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1629466-03 07/01/23 16:16 • (DUP) R3943779-3 07/01/23 16:16

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 582                         | 584                    | 1        | 0.343        |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3943779-2 07/01/23 16:16

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 327                      | 321                    | 98.2          | 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) R3943786-1 06/30/23 23:41

| Analyte              | MB Result<br>mg/l | MB Qualifier | MB MDL<br>mg/l | MB RDL<br>mg/l |
|----------------------|-------------------|--------------|----------------|----------------|
| Hot Water Sol. Boron | U                 |              | 0.0167         | 0.200          |

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

(LCS) R3943786-2 06/30/23 23:43 • (LCSD) R3943786-3 06/30/23 23:46

| Analyte              | Spike Amount<br>mg/l | LCS Result<br>mg/l | LCSD Result<br>mg/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Hot Water Sol. Boron | 1.00                 | 1.14               | 1.13                | 114           | 113            | 80.0-120         |               |                | 1.17     | 20              |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3943172-7 06/29/23 23:44

| Analyte  | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|----------|--------------------|--------------|-----------------|-----------------|
| Arsenic  | U                  |              | 0.100           | 1.00            |
| Barium   | U                  |              | 0.152           | 2.50            |
| Cadmium  | U                  |              | 0.0855          | 1.00            |
| Copper   | 0.152              | U            | 0.133           | 5.00            |
| Lead     | U                  |              | 0.0990          | 2.00            |
| Nickel   | U                  |              | 0.197           | 2.50            |
| Selenium | U                  |              | 0.180           | 2.50            |
| Silver   | U                  |              | 0.0865          | 0.500           |
| Zinc     | U                  |              | 0.740           | 25.0            |

Laboratory Control Sample (LCS)

(LCS) R3943172-8 06/29/23 23:48

| Analyte  | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|-----------------------|---------------------|---------------|------------------|---------------|
| Arsenic  | 100                   | 98.3                | 98.3          | 80.0-120         |               |
| Barium   | 100                   | 95.7                | 95.7          | 80.0-120         |               |
| Cadmium  | 100                   | 101                 | 101           | 80.0-120         |               |
| Copper   | 100                   | 99.1                | 99.1          | 80.0-120         |               |
| Lead     | 100                   | 94.9                | 94.9          | 80.0-120         |               |
| Nickel   | 100                   | 98.5                | 98.5          | 80.0-120         |               |
| Selenium | 100                   | 101                 | 101           | 80.0-120         |               |
| Silver   | 20.0                  | 20.8                | 104           | 80.0-120         |               |
| Zinc     | 100                   | 95.9                | 95.9          | 80.0-120         |               |

L1629815-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1629815-06 06/29/23 23:51 • (MS) R3943172-11 06/30/23 00:03 • (MSD) R3943172-12 06/30/23 00:06

| Analyte  | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Arsenic  | 100                   | 2.93                     | 100                | 101                 | 97.3         | 97.6          | 5        | 75.0-125         |              |               | 0.278    | 20              |
| Barium   | 100                   | 99.6                     | 205                | 203                 | 106          | 103           | 5        | 75.0-125         |              |               | 1.10     | 20              |
| Cadmium  | 100                   | 0.269                    | 105                | 106                 | 104          | 106           | 5        | 75.0-125         |              |               | 1.53     | 20              |
| Copper   | 100                   | 30.2                     | 130                | 136                 | 99.7         | 106           | 5        | 75.0-125         |              |               | 4.69     | 20              |
| Lead     | 100                   | 14.2                     | 111                | 117                 | 97.0         | 102           | 5        | 75.0-125         |              |               | 4.77     | 20              |
| Nickel   | 100                   | 18.1                     | 116                | 119                 | 98.3         | 101           | 5        | 75.0-125         |              |               | 2.21     | 20              |
| Selenium | 100                   | 0.373                    | 102                | 107                 | 102          | 106           | 5        | 75.0-125         |              |               | 4.58     | 20              |
| Silver   | 20.0                  | 0.359                    | 21.7               | 22.1                | 107          | 109           | 5        | 75.0-125         |              |               | 1.74     | 20              |
| Zinc     | 100                   | 86.1                     | 186                | 191                 | 99.5         | 105           | 5        | 75.0-125         |              |               | 2.96     | 20              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3944640-2 07/01/23 11:03

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | 0.0235             | ⬇            | 0.0217          | 0.100           |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 95.6               |              |                 | 77.0-120        |

Laboratory Control Sample (LCS)

(LCS) R3944640-1 07/01/23 10:10

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 5.38                | 97.8          | 72.0-127         |               |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     | 105           | 77.0-120         |               |

<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) R3944861-3 06/30/23 04:07

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | U                  |              | 0.543           | 2.50            |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 101                |              |                 | 77.0-120        |

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

(LCS) R3944861-1 06/30/23 02:54 • (LCSD) R3944861-2 06/30/23 03:13

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|------------------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 5.71                | 5.80                 | 104           | 105            | 72.0-127         |               |                | 1.56     | 20              |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     |                      | 107           | 111            | 77.0-120         |               |                |          |                 |

L1629435-47 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1629435-47 06/30/23 04:26 • (MS) R3944861-4 06/30/23 10:29 • (MSD) R3944861-5 06/30/23 10:47

| Analyte                            | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|------------------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| TPH (GC/FID) Low Fraction          | 113                   | U                        | 119                | 70.4                | 105          | 62.3          | 25       | 10.0-151         |              | J3            | 51.3     | 28              |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                          |                    |                     | 110          | 74.8          |          | 77.0-120         |              | J2            |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3945449-2 07/06/23 00:27

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | 1.96               | ⬇            | 0.543           | 2.50            |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 94.5               |              |                 | 77.0-120        |

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

(LCS) R3945449-1 07/05/23 23:18 • (LCSD) R3945449-3 07/06/23 13:09

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|------------------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 5.62                | 4.84                 | 102           | 88.0           | 72.0-127         |               |                | 14.9     | 20              |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     |                      | 107           | 104            | 77.0-120         |               |                |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3945637-2 07/06/23 13:23

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | 0.722              | ⬇            | 0.543           | 2.50            |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 96.1               |              |                 | 77.0-120        |

Laboratory Control Sample (LCS)

(LCS) R3945637-1 07/06/23 12:27

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 4.53                | 82.4          | 72.0-127         |               |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     | 101           | 77.0-120         |               |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3947350-2 07/11/23 13:21

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | U                  |              | 0.543           | 2.50            |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 84.1               |              |                 | 77.0-120        |

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

(LCS) R3947350-1 07/11/23 12:35 • (LCSD) R3947350-3 07/11/23 14:11

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|------------------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 4.10                | 4.16                 | 74.5          | 75.6           | 72.0-127         |               |                | 1.45     | 20              |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     |                      | 88.4          | 88.6           | 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) R3944920-2 06/30/23 16:45

| Analyte                   | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|---------------------------|--------------------|--------------|-----------------|-----------------|
| Benzene                   | U                  |              | 0.000467        | 0.00100         |
| Toluene                   | U                  |              | 0.00130         | 0.00500         |
| Ethylbenzene              | U                  |              | 0.000737        | 0.00250         |
| Xylenes, Total            | U                  |              | 0.000880        | 0.00650         |
| 1,2,4-Trimethylbenzene    | U                  |              | 0.00158         | 0.00500         |
| 1,3,5-Trimethylbenzene    | U                  |              | 0.00200         | 0.00500         |
| (S) Toluene-d8            | 110                |              |                 | 75.0-131        |
| (S) 4-Bromofluorobenzene  | 84.6               |              |                 | 67.0-138        |
| (S) 1,2-Dichloroethane-d4 | 99.2               |              |                 | 70.0-130        |

Laboratory Control Sample (LCS)

(LCS) R3944920-1 06/30/23 15:29

| Analyte                   | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|---------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Benzene                   | 0.125                 | 0.115               | 92.0          | 70.0-123         |               |
| Toluene                   | 0.125                 | 0.129               | 103           | 75.0-121         |               |
| Ethylbenzene              | 0.125                 | 0.106               | 84.8          | 74.0-126         |               |
| Xylenes, Total            | 0.375                 | 0.318               | 84.8          | 72.0-127         |               |
| 1,2,4-Trimethylbenzene    | 0.125                 | 0.123               | 98.4          | 70.0-126         |               |
| 1,3,5-Trimethylbenzene    | 0.125                 | 0.125               | 100           | 73.0-127         |               |
| (S) Toluene-d8            |                       |                     | 105           | 75.0-131         |               |
| (S) 4-Bromofluorobenzene  |                       |                     | 92.6          | 67.0-138         |               |
| (S) 1,2-Dichloroethane-d4 |                       |                     | 102           | 70.0-130         |               |

<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) R3943387-1 06/30/23 08:58

| Analyte                 | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|-------------------------|--------------------|--------------|-----------------|-----------------|
| C10-C28 Diesel Range    | U                  |              | 1.61            | 4.00            |
| C28-C36 Motor Oil Range | 0.289              | ⬇            | 0.274           | 4.00            |
| (S) o-Terphenyl         | 83.2               |              |                 | 18.0-148        |

Laboratory Control Sample (LCS)

(LCS) R3943387-2 06/30/23 09:10

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| C10-C28 Diesel Range | 50.0                  | 29.7                | 59.4          | 50.0-150         |               |
| (S) o-Terphenyl      |                       |                     | 62.8          | 18.0-148         |               |

L1629265-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1629265-01 06/30/23 13:22 • (MS) R3943387-3 06/30/23 13:34 • (MSD) R3943387-4 06/30/23 13:47

| Analyte              | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| C10-C28 Diesel Range | 50.0                  | 5.93                     | 45.1               | 44.6                | 78.3         | 77.3          | 1        | 50.0-150         |              |               | 1.11     | 20              |
| (S) o-Terphenyl      |                       |                          |                    |                     | 71.5         | 69.8          |          | 18.0-148         |              |               |          |                 |

1  
Cp

2  
Tc

3  
Ss

4  
Cn

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Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Method Blank (MB)

(MB) R3943866-1 07/02/23 07:06

| Analyte                 | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|-------------------------|--------------------|--------------|-----------------|-----------------|
| C10-C28 Diesel Range    | U                  |              | 1.61            | 4.00            |
| C28-C36 Motor Oil Range | U                  |              | 0.274           | 4.00            |
| (S) o-Terphenyl         | 67.0               |              |                 | 18.0-148        |

Laboratory Control Sample (LCS)

(LCS) R3943866-2 07/02/23 07:19

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| C10-C28 Diesel Range | 50.0                  | 28.3                | 56.6          | 50.0-150         |               |
| (S) o-Terphenyl      |                       |                     | 68.0          | 18.0-148         |               |

Original Sample (OS) • Matrix Spike (MS)

(OS) • (MS) R3943866-3 07/02/23 10:39

| Analyte              | Spike Amount<br>mg/kg | Original Result | MS Result<br>mg/kg | MS Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier |
|----------------------|-----------------------|-----------------|--------------------|--------------|----------|------------------|--------------|
| C10-C28 Diesel Range | 47.8                  |                 | 33.0               | 60.8         | 1        | 50.0-150         |              |
| (S) o-Terphenyl      |                       |                 |                    | 64.4         |          | 18.0-148         |              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3944355-2 07/01/23 02:20

| Analyte                | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------|--------------------|--------------|-----------------|-----------------|
| Acenaphthene           | U                  |              | 0.00209         | 0.00600         |
| Anthracene             | U                  |              | 0.00230         | 0.00600         |
| Benzo(a)anthracene     | U                  |              | 0.00173         | 0.00600         |
| Benzo(b)fluoranthene   | U                  |              | 0.00153         | 0.00600         |
| Benzo(k)fluoranthene   | U                  |              | 0.00215         | 0.00600         |
| Benzo(a)pyrene         | U                  |              | 0.00179         | 0.00600         |
| Chrysene               | U                  |              | 0.00232         | 0.00600         |
| Dibenz(a,h)anthracene  | U                  |              | 0.00172         | 0.00600         |
| Fluoranthene           | U                  |              | 0.00227         | 0.00600         |
| Fluorene               | U                  |              | 0.00205         | 0.00600         |
| Indeno(1,2,3-cd)pyrene | U                  |              | 0.00181         | 0.00600         |
| 1-Methylnaphthalene    | U                  |              | 0.00449         | 0.0200          |
| 2-Methylnaphthalene    | 0.00450            | U            | 0.00427         | 0.0200          |
| Naphthalene            | U                  |              | 0.00408         | 0.0200          |
| Pyrene                 | U                  |              | 0.00200         | 0.00600         |
| (S) p-Terphenyl-d14    | 97.0               |              |                 | 23.0-120        |
| (S) Nitrobenzene-d5    | 131                |              |                 | 14.0-149        |
| (S) 2-Fluorobiphenyl   | 92.8               |              |                 | 34.0-125        |

1  
Cp

2  
Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Laboratory Control Sample (LCS)

(LCS) R3944355-1 07/01/23 02:01

| Analyte                | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Acenaphthene           | 0.0800                | 0.0670              | 83.8          | 50.0-120         |               |
| Anthracene             | 0.0800                | 0.0714              | 89.3          | 50.0-126         |               |
| Benzo(a)anthracene     | 0.0800                | 0.0769              | 96.1          | 45.0-120         |               |
| Benzo(b)fluoranthene   | 0.0800                | 0.0654              | 81.8          | 42.0-121         |               |
| Benzo(k)fluoranthene   | 0.0800                | 0.0618              | 77.3          | 49.0-125         |               |
| Benzo(a)pyrene         | 0.0800                | 0.0679              | 84.9          | 42.0-120         |               |
| Chrysene               | 0.0800                | 0.0713              | 89.1          | 49.0-122         |               |
| Dibenz(a,h)anthracene  | 0.0800                | 0.0664              | 83.0          | 47.0-125         |               |
| Fluoranthene           | 0.0800                | 0.0704              | 88.0          | 49.0-129         |               |
| Fluorene               | 0.0800                | 0.0703              | 87.9          | 49.0-120         |               |
| Indeno(1,2,3-cd)pyrene | 0.0800                | 0.0720              | 90.0          | 46.0-125         |               |
| 1-Methylnaphthalene    | 0.0800                | 0.0687              | 85.9          | 51.0-121         |               |
| 2-Methylnaphthalene    | 0.0800                | 0.0716              | 89.5          | 50.0-120         |               |
| Naphthalene            | 0.0800                | 0.0693              | 86.6          | 50.0-120         |               |
| Pyrene                 | 0.0800                | 0.0713              | 89.1          | 43.0-123         |               |

Laboratory Control Sample (LCS)

(LCS) R3944355-1 07/01/23 02:01

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| (S) p-Terphenyl-d14  |                       |                     | 92.4          | 23.0-120         |               |
| (S) Nitrobenzene-d5  |                       |                     | 137           | 14.0-149         |               |
| (S) 2-Fluorobiphenyl |                       |                     | 89.8          | 34.0-125         |               |

L1629061-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1629061-02 07/01/23 02:59 • (MS) R3944355-3 07/01/23 03:19 • (MSD) R3944355-4 07/01/23 03:38

| Analyte                | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Acenaphthene           | 0.0784                | U                        | 0.0602             | 0.0620              | 76.8         | 78.7          | 1        | 14.0-127         |              |               | 2.95     | 27              |
| Anthracene             | 0.0784                | U                        | 0.0623             | 0.0746              | 79.5         | 94.7          | 1        | 10.0-145         |              |               | 18.0     | 30              |
| Benzo(a)anthracene     | 0.0784                | U                        | 0.0675             | 0.164               | 86.1         | 208           | 1        | 10.0-139         |              | J3 J5         | 83.4     | 30              |
| Benzo(b)fluoranthene   | 0.0784                | U                        | 0.0580             | 0.136               | 74.0         | 173           | 1        | 10.0-140         |              | J3 J5         | 80.4     | 36              |
| Benzo(k)fluoranthene   | 0.0784                | U                        | 0.0554             | 0.0993              | 70.7         | 126           | 1        | 10.0-137         |              | J3            | 56.8     | 31              |
| Benzo(a)pyrene         | 0.0784                | U                        | 0.0629             | 0.135               | 80.2         | 171           | 1        | 10.0-141         |              | J3 J5         | 72.9     | 31              |
| Chrysene               | 0.0784                | U                        | 0.0633             | 0.155               | 80.7         | 197           | 1        | 10.0-145         |              | J3 J5         | 84.0     | 30              |
| Dibenz(a,h)anthracene  | 0.0784                | U                        | 0.0569             | 0.0641              | 72.6         | 81.3          | 1        | 10.0-132         |              |               | 11.9     | 31              |
| Fluoranthene           | 0.0784                | U                        | 0.0619             | 0.150               | 79.0         | 190           | 1        | 10.0-153         |              | J3 J5         | 83.2     | 33              |
| Fluorene               | 0.0784                | U                        | 0.0617             | 0.0647              | 78.7         | 82.1          | 1        | 11.0-130         |              |               | 4.75     | 29              |
| Indeno(1,2,3-cd)pyrene | 0.0784                | U                        | 0.0620             | 0.109               | 79.1         | 138           | 1        | 10.0-137         |              | J3 J5         | 55.0     | 32              |
| 1-Methylnaphthalene    | 0.0784                | U                        | 0.0610             | 0.0619              | 77.8         | 78.6          | 1        | 10.0-142         |              |               | 1.46     | 28              |
| 2-Methylnaphthalene    | 0.0784                | U                        | 0.0635             | 0.0641              | 81.0         | 81.3          | 1        | 10.0-137         |              |               | 0.940    | 28              |
| Naphthalene            | 0.0784                | U                        | 0.0621             | 0.0640              | 79.2         | 81.2          | 1        | 10.0-135         |              |               | 3.01     | 27              |
| Pyrene                 | 0.0784                | U                        | 0.0641             | 0.138               | 81.8         | 175           | 1        | 10.0-148         |              | J3 J5         | 73.1     | 35              |
| (S) p-Terphenyl-d14    |                       |                          |                    |                     | 87.5         | 87.7          |          | 23.0-120         |              |               |          |                 |
| (S) Nitrobenzene-d5    |                       |                          |                    |                     | 126          | 128           |          | 14.0-149         |              |               |          |                 |
| (S) 2-Fluorobiphenyl   |                       |                          |                    |                     | 86.9         | 89.6          |          | 34.0-125         |              |               |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3943837-2 06/30/23 14:34

| Analyte                | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------|--------------------|--------------|-----------------|-----------------|
| Acenaphthene           | U                  |              | 0.00209         | 0.00600         |
| Anthracene             | U                  |              | 0.00230         | 0.00600         |
| Benzo(a)anthracene     | U                  |              | 0.00173         | 0.00600         |
| Benzo(b)fluoranthene   | U                  |              | 0.00153         | 0.00600         |
| Benzo(k)fluoranthene   | U                  |              | 0.00215         | 0.00600         |
| Benzo(a)pyrene         | U                  |              | 0.00179         | 0.00600         |
| Chrysene               | U                  |              | 0.00232         | 0.00600         |
| Dibenz(a,h)anthracene  | U                  |              | 0.00172         | 0.00600         |
| Fluoranthene           | U                  |              | 0.00227         | 0.00600         |
| Fluorene               | U                  |              | 0.00205         | 0.00600         |
| Indeno(1,2,3-cd)pyrene | U                  |              | 0.00181         | 0.00600         |
| 1-Methylnaphthalene    | U                  |              | 0.00449         | 0.0200          |
| 2-Methylnaphthalene    | U                  |              | 0.00427         | 0.0200          |
| Naphthalene            | U                  |              | 0.00408         | 0.0200          |
| Pyrene                 | U                  |              | 0.00200         | 0.00600         |
| (S) p-Terphenyl-d14    | 103                |              |                 | 23.0-120        |
| (S) Nitrobenzene-d5    | 110                |              |                 | 14.0-149        |
| (S) 2-Fluorobiphenyl   | 88.8               |              |                 | 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) R3943837-1 06/30/23 14:12

| Analyte                | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Acenaphthene           | 0.0800                | 0.0774              | 96.8          | 50.0-120         |               |
| Anthracene             | 0.0800                | 0.0743              | 92.9          | 50.0-126         |               |
| Benzo(a)anthracene     | 0.0800                | 0.0758              | 94.8          | 45.0-120         |               |
| Benzo(b)fluoranthene   | 0.0800                | 0.0769              | 96.1          | 42.0-121         |               |
| Benzo(k)fluoranthene   | 0.0800                | 0.0785              | 98.1          | 49.0-125         |               |
| Benzo(a)pyrene         | 0.0800                | 0.0718              | 89.8          | 42.0-120         |               |
| Chrysene               | 0.0800                | 0.0809              | 101           | 49.0-122         |               |
| Dibenz(a,h)anthracene  | 0.0800                | 0.0690              | 86.3          | 47.0-125         |               |
| Fluoranthene           | 0.0800                | 0.0756              | 94.5          | 49.0-129         |               |
| Fluorene               | 0.0800                | 0.0777              | 97.1          | 49.0-120         |               |
| Indeno(1,2,3-cd)pyrene | 0.0800                | 0.0706              | 88.3          | 46.0-125         |               |
| 1-Methylnaphthalene    | 0.0800                | 0.0786              | 98.2          | 51.0-121         |               |
| 2-Methylnaphthalene    | 0.0800                | 0.0804              | 101           | 50.0-120         |               |
| Naphthalene            | 0.0800                | 0.0804              | 101           | 50.0-120         |               |
| Pyrene                 | 0.0800                | 0.0891              | 111           | 43.0-123         |               |



Laboratory Control Sample (LCS)

(LCS) R3943837-1 06/30/23 14:12

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| (S) p-Terphenyl-d14  |                       |                     | 108           | 23.0-120         |               |
| (S) Nitrobenzene-d5  |                       |                     | 124           | 14.0-149         |               |
| (S) 2-Fluorobiphenyl |                       |                     | 99.8          | 34.0-125         |               |

L1629417-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1629417-06 06/30/23 19:14 • (MS) R3943837-3 06/30/23 19:31 • (MSD) R3943837-4 06/30/23 19:48

| Analyte                | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Acenaphthene           | 0.0796                | U                        | 0.0809             | 0.0707              | 102          | 90.2          | 1        | 14.0-127         |              |               | 13.5     | 27              |
| Anthracene             | 0.0796                | U                        | 0.0817             | 0.0686              | 103          | 87.5          | 1        | 10.0-145         |              |               | 17.4     | 30              |
| Benzo(a)anthracene     | 0.0796                | 0.0115                   | 0.0820             | 0.0713              | 88.6         | 76.3          | 1        | 10.0-139         |              |               | 14.0     | 30              |
| Benzo(b)fluoranthene   | 0.0796                | 0.0619                   | 0.0964             | 0.0753              | 43.3         | 17.1          | 1        | 10.0-140         |              |               | 24.6     | 36              |
| Benzo(k)fluoranthene   | 0.0796                | U                        | 0.0797             | 0.0707              | 100          | 90.2          | 1        | 10.0-137         |              |               | 12.0     | 31              |
| Benzo(a)pyrene         | 0.0796                | 0.00941                  | 0.0830             | 0.0739              | 92.4         | 82.3          | 1        | 10.0-141         |              |               | 11.6     | 31              |
| Chrysene               | 0.0796                | 0.0193                   | 0.0914             | 0.0777              | 90.6         | 74.5          | 1        | 10.0-145         |              |               | 16.2     | 30              |
| Dibenz(a,h)anthracene  | 0.0796                | 0.00422                  | 0.0657             | 0.0614              | 77.2         | 72.9          | 1        | 10.0-132         |              |               | 6.77     | 31              |
| Fluoranthene           | 0.0796                | 0.0292                   | 0.0902             | 0.0723              | 76.6         | 55.0          | 1        | 10.0-153         |              |               | 22.0     | 33              |
| Fluorene               | 0.0796                | U                        | 0.0854             | 0.0743              | 107          | 94.8          | 1        | 11.0-130         |              |               | 13.9     | 29              |
| Indeno(1,2,3-cd)pyrene | 0.0796                | 0.0275                   | 0.0782             | 0.0668              | 63.7         | 50.1          | 1        | 10.0-137         |              |               | 15.7     | 32              |
| 1-Methylnaphthalene    | 0.0796                | U                        | 0.0804             | 0.0720              | 101          | 91.7          | 1        | 10.0-142         |              |               | 11.0     | 28              |
| 2-Methylnaphthalene    | 0.0796                | U                        | 0.0810             | 0.0734              | 102          | 93.6          | 1        | 10.0-137         |              |               | 9.84     | 28              |
| Naphthalene            | 0.0796                | U                        | 0.0848             | 0.0767              | 107          | 97.8          | 1        | 10.0-135         |              |               | 10.0     | 27              |
| Pyrene                 | 0.0796                | 0.0339                   | 0.104              | 0.0858              | 88.1         | 66.2          | 1        | 10.0-148         |              |               | 19.2     | 35              |
| (S) p-Terphenyl-d14    |                       |                          |                    |                     | 104          | 92.0          |          | 23.0-120         |              |               |          |                 |
| (S) Nitrobenzene-d5    |                       |                          |                    |                     | 143          | 135           |          | 14.0-149         |              |               |          |                 |
| (S) 2-Fluorobiphenyl   |                       |                          |                    |                     | 106          | 92.0          |          | 34.0-125         |              |               |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

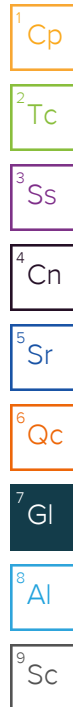
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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.                                                                                                                                                                                                                                               |
| 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. |
| 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.                                                                                          |
| 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.                                                         |
| J1        | Surrogate recovery limits have been exceeded; values are outside upper control limits.                                                      |
| J2        | Surrogate recovery limits have been exceeded; values are outside lower control limits.                                                      |
| J3        | The associated batch QC was outside the established quality control range for precision.                                                    |
| J5        | The sample matrix interfered with the ability to make any accurate determination; spike value is high.                                      |
| J6        | The sample matrix interfered with the ability to make any accurate determination; spike value is low.                                       |
| J7        | Surrogate recovery cannot be used for control limit evaluation due to dilution.                                                             |
| T8        | Sample(s) received past/too close to holding time expiration.                                                                               |



# ACCREDITATIONS & LOCATIONS

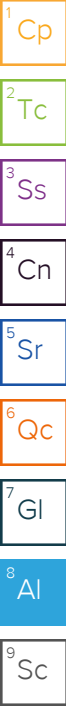
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

|                                |             |                             |                  |
|--------------------------------|-------------|-----------------------------|------------------|
| 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.



NCF / (O)

L1629466

| Tracking<br>Numbers |           | Temperature |           |
|---------------------|-----------|-------------|-----------|
| 5882                | 7564 6541 | NSA6        | 2.40-2.4  |
| 6426                | 9303 2408 | NSA6        | 1.74021.7 |
|                     |           |             |           |
|                     |           |             |           |
|                     |           |             |           |
|                     |           |             |           |



[illegible]

L162946 to

| Tracking<br>Numbers |           | Temperature |             |
|---------------------|-----------|-------------|-------------|
| 5882                | 7564 6541 | N3A6        | 2.40 ~ 2.4  |
| 6426                | 9303 2408 | N3A6        | 1.740 ~ 1.7 |
|                     |           |             |             |
|                     |           |             |             |
|                     |           |             |             |
|                     |           |             |             |

**Caerus Oil and Gas**

Sample Delivery Group: L1633274  
Samples Received: 07/07/2023  
Project Number: H7  
Description: H7-Tank Battery  
Site: H7  
Report To: Brett Middleton  
143 Diamond Avenue  
Parachute, CO 81635

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 [www.pacenational.com](http://www.pacenational.com)

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<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

20230705-H7-(SB05)@10-11.5 L1633274-01 Solid

Collected by  
K. Moreland

Collected date/time  
07/05/23 12:10

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091358 | 1        | 07/16/23 17:10        | 07/16/23 17:10     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2090963 | 1        | 07/10/23 21:45        | 07/11/23 17:37     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091619 | 1        | 07/09/23 11:42        | 07/10/23 11:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2092223 | 1        | 07/12/23 11:30        | 07/13/23 07:50     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091362 | 1        | 07/12/23 14:35        | 07/17/23 12:42     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2094897 | 5        | 07/14/23 10:31        | 07/14/23 19:10     | JPD     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2091946 | 1        | 07/10/23 09:20        | 07/11/23 10:58     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092290 | 1        | 07/10/23 09:20        | 07/11/23 01:02     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2094182 | 1        | 07/12/23 21:14        | 07/13/23 12:49     | KAP     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2094494 | 1        | 07/14/23 11:28        | 07/15/23 00:34     | DLH     | Mt. Juliet, TN |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

20230705-H7-(SB05)@20-21.5 L1633274-02 Solid

Collected by  
K. Moreland

Collected date/time  
07/05/23 12:40

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091358 | 1        | 07/16/23 17:13        | 07/16/23 17:13     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2090963 | 1        | 07/10/23 21:45        | 07/11/23 17:42     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091619 | 1        | 07/09/23 11:42        | 07/10/23 11:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2092223 | 1        | 07/12/23 11:30        | 07/13/23 07:50     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091362 | 1        | 07/12/23 14:35        | 07/17/23 12:45     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2094643 | 5        | 07/13/23 20:39        | 07/13/23 21:53     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2091946 | 1        | 07/10/23 09:20        | 07/11/23 11:23     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092290 | 1        | 07/10/23 09:20        | 07/11/23 01:21     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2094182 | 1        | 07/12/23 21:14        | 07/13/23 13:02     | KAP     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2094494 | 1        | 07/14/23 11:28        | 07/15/23 00:54     | DLH     | Mt. Juliet, TN |

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

20230705-H7-(SB05)@30-31.5 L1633274-03 Solid

Collected by  
K. Moreland

Collected date/time  
07/05/23 13:25

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091358 | 1        | 07/16/23 17:15        | 07/16/23 17:15     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2090963 | 1        | 07/10/23 21:45        | 07/11/23 17:47     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091852 | 1        | 07/10/23 08:38        | 07/10/23 14:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2092223 | 1        | 07/12/23 11:30        | 07/13/23 07:50     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091362 | 1        | 07/12/23 14:35        | 07/17/23 12:48     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2094643 | 5        | 07/13/23 20:39        | 07/13/23 22:10     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2091946 | 1        | 07/10/23 09:20        | 07/11/23 11:47     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092290 | 1        | 07/10/23 09:20        | 07/11/23 01:41     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2094182 | 1        | 07/12/23 21:14        | 07/13/23 13:15     | KAP     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093557 | 1        | 07/12/23 20:03        | 07/13/23 02:27     | AMG     | Mt. Juliet, TN |

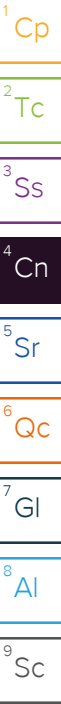


# CASE NARRATIVE

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



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 5.71   |           | 1        | 07/16/2023 17:10     | WG2091358 |

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/11/2023 17:37     | <a href="#">WG2090963</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 9.12   | <a href="#">T8</a> | 1        | 07/10/2023 11:00     | <a href="#">WG2091619</a> |

Sample Narrative:  
L1633274-01 WG2091619: 9.12 at 21.2C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 708             |           | 10.0         | 1        | 07/13/2023 07:50     | <a href="#">WG2092223</a> |

Sample Narrative:  
L1633274-01 WG2092223: at 25C

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

| Analyte              | Result mg/l | Qualifier         | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-------------------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.182       | <a href="#">J</a> | 0.0167   | 0.200    | 1        | 07/17/2023 12:42     | <a href="#">WG2091362</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 8.53         |                   | 0.100     | 1.00      | 5        | 07/14/2023 19:10     | <a href="#">WG2094897</a> |
| Barium   | 133          |                   | 0.152     | 2.50      | 5        | 07/14/2023 19:10     | <a href="#">WG2094897</a> |
| Cadmium  | 0.433        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/14/2023 19:10     | <a href="#">WG2094897</a> |
| Copper   | 11.1         |                   | 0.132     | 5.00      | 5        | 07/14/2023 19:10     | <a href="#">WG2094897</a> |
| Lead     | 8.39         |                   | 0.0990    | 2.00      | 5        | 07/14/2023 19:10     | <a href="#">WG2094897</a> |
| Nickel   | 12.6         |                   | 0.197     | 2.50      | 5        | 07/14/2023 19:10     | <a href="#">WG2094897</a> |
| Selenium | 0.480        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/14/2023 19:10     | <a href="#">WG2094897</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 07/14/2023 19:10     | <a href="#">WG2094897</a> |
| Zinc     | 35.1         |                   | 0.740     | 25.0      | 5        | 07/14/2023 19:10     | <a href="#">WG2094897</a> |

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

| Analyte                            | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.0588       | <a href="#">J</a> | 0.0217    | 0.100     | 1        | 07/11/2023 10:58     | <a href="#">WG2091946</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 95.6         |                   |           | 77.0-120  |          | 07/11/2023 10:58     | <a href="#">WG2091946</a> |

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/11/2023 01:02        | <a href="#">WG2092290</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 07/11/2023 01:02        | <a href="#">WG2092290</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/11/2023 01:02        | <a href="#">WG2092290</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/11/2023 01:02        | <a href="#">WG2092290</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/11/2023 01:02        | <a href="#">WG2092290</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/11/2023 01:02        | <a href="#">WG2092290</a> |
| (S) Toluene-d8            | 103             |           |              | 75.0-131     |          | 07/11/2023 01:02        | <a href="#">WG2092290</a> |
| (S) 4-Bromofluorobenzene  | 103             |           |              | 67.0-138     |          | 07/11/2023 01:02        | <a href="#">WG2092290</a> |
| (S) 1,2-Dichloroethane-d4 | 103             |           |              | 70.0-130     |          | 07/11/2023 01:02        | <a href="#">WG2092290</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier         | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-------------------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 2.28            | <a href="#">U</a> | 1.61         | 4.00         | 1        | 07/13/2023 12:49        | <a href="#">WG2094182</a> |
| C28-C36 Motor Oil Range | 6.37            | <a href="#">B</a> | 0.274        | 4.00         | 1        | 07/13/2023 12:49        | <a href="#">WG2094182</a> |
| (S) o-Terphenyl         | 60.6            |                   |              | 18.0-148     |          | 07/13/2023 12:49        | <a href="#">WG2094182</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| 1-Methylnaphthalene    | 0.0331          |           | 0.00449      | 0.0200       | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| 2-Methylnaphthalene    | 0.119           |           | 0.00427      | 0.0200       | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Naphthalene            | 0.0552          |           | 0.00408      | 0.0200       | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| (S) p-Terphenyl-d14    | 74.7            |           |              | 23.0-120     |          | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| (S) Nitrobenzene-d5    | 76.4            |           |              | 14.0-149     |          | 07/15/2023 00:34        | <a href="#">WG2094494</a> |
| (S) 2-Fluorobiphenyl   | 65.1            |           |              | 34.0-125     |          | 07/15/2023 00:34        | <a href="#">WG2094494</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 6.48   |           | 1        | 07/16/2023 17:13     | WG2091358 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/11/2023 17:42     | <a href="#">WG2090963</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.36   | <a href="#">T8</a> | 1        | 07/10/2023 11:00     | <a href="#">WG2091619</a> |

Sample Narrative:

L1633274-02 WG2091619: 8.36 at 21.2C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 2200            |           | 10.0         | 1        | 07/13/2023 07:50     | <a href="#">WG2092223</a> |

Sample Narrative:

L1633274-02 WG2092223: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.269       |           | 0.0167   | 0.200    | 1        | 07/17/2023 12:45     | <a href="#">WG2091362</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier             | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-----------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 6.96         |                       | 0.100     | 1.00      | 5        | 07/13/2023 21:53     | <a href="#">WG2094643</a> |
| Barium   | 112          | <a href="#">J3 J5</a> | 0.152     | 2.50      | 5        | 07/13/2023 21:53     | <a href="#">WG2094643</a> |
| Cadmium  | 0.393        | <a href="#">J</a>     | 0.0855    | 1.00      | 5        | 07/13/2023 21:53     | <a href="#">WG2094643</a> |
| Copper   | 10.2         |                       | 0.132     | 5.00      | 5        | 07/13/2023 21:53     | <a href="#">WG2094643</a> |
| Lead     | 7.21         |                       | 0.0990    | 2.00      | 5        | 07/13/2023 21:53     | <a href="#">WG2094643</a> |
| Nickel   | 10.8         |                       | 0.197     | 2.50      | 5        | 07/13/2023 21:53     | <a href="#">WG2094643</a> |
| Selenium | 0.293        | <a href="#">J</a>     | 0.180     | 2.50      | 5        | 07/13/2023 21:53     | <a href="#">WG2094643</a> |
| Silver   | U            |                       | 0.0865    | 0.500     | 5        | 07/13/2023 21:53     | <a href="#">WG2094643</a> |
| Zinc     | 32.6         |                       | 0.740     | 25.0      | 5        | 07/13/2023 21:53     | <a href="#">WG2094643</a> |

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

| Analyte                            | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.0796       | <a href="#">J</a> | 0.0217    | 0.100     | 1        | 07/11/2023 11:23     | <a href="#">WG2091946</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 94.5         |                   |           | 77.0-120  |          | 07/11/2023 11:23     | <a href="#">WG2091946</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/11/2023 01:21        | <a href="#">WG2092290</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 07/11/2023 01:21        | <a href="#">WG2092290</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/11/2023 01:21        | <a href="#">WG2092290</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/11/2023 01:21        | <a href="#">WG2092290</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/11/2023 01:21        | <a href="#">WG2092290</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/11/2023 01:21        | <a href="#">WG2092290</a> |
| (S) Toluene-d8            | 104             |           |              | 75.0-131     |          | 07/11/2023 01:21        | <a href="#">WG2092290</a> |
| (S) 4-Bromofluorobenzene  | 103             |           |              | 67.0-138     |          | 07/11/2023 01:21        | <a href="#">WG2092290</a> |
| (S) 1,2-Dichloroethane-d4 | 104             |           |              | 70.0-130     |          | 07/11/2023 01:21        | <a href="#">WG2092290</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 5.31            |           | 1.61         | 4.00         | 1        | 07/13/2023 13:02        | <a href="#">WG2094182</a> |
| C28-C36 Motor Oil Range | 17.4            |           | 0.274        | 4.00         | 1        | 07/13/2023 13:02        | <a href="#">WG2094182</a> |
| (S) o-Terphenyl         | 63.7            |           |              | 18.0-148     |          | 07/13/2023 13:02        | <a href="#">WG2094182</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| (S) p-Terphenyl-d14    | 67.1            |           |              | 23.0-120     |          | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| (S) Nitrobenzene-d5    | 75.7            |           |              | 14.0-149     |          | 07/15/2023 00:54        | <a href="#">WG2094494</a> |
| (S) 2-Fluorobiphenyl   | 62.3            |           |              | 34.0-125     |          | 07/15/2023 00:54        | <a href="#">WG2094494</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Calculated Results

|                         | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Analyte                 | SAR    |           |          |                      |           |
| Sodium Adsorption Ratio | 6.54   |           | 1        | 07/16/2023 17:15     | WG2091358 |

Wet Chemistry by Method 7199

|                     | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Analyte             |              |           |           |           |          |                      |                           |
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/11/2023 17:47     | <a href="#">WG2090963</a> |

Wet Chemistry by Method 9045D

|         | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| Analyte | pH     |                    |          |                      |                           |
| pH      | 8.14   | <a href="#">T8</a> | 1        | 07/10/2023 14:00     | <a href="#">WG2091852</a> |

Sample Narrative:

L1633274-03 WG2091852: 8.14 at 22.1C

Wet Chemistry by Method 9050AMod

|                      | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Analyte              |                 |           |              |          |                      |                           |
| Specific Conductance | 1800            |           | 10.0         | 1        | 07/13/2023 07:50     | <a href="#">WG2092223</a> |

Sample Narrative:

L1633274-03 WG2092223: at 25C

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

|                      | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Analyte              |             |           |          |          |          |                      |                           |
| Hot Water Sol. Boron | 0.332       |           | 0.0167   | 0.200    | 1        | 07/17/2023 12:48     | <a href="#">WG2091362</a> |

Metals (ICPMS) by Method 6020

|          | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Analyte  |              |                   |           |           |          |                      |                           |
| Arsenic  | 10.2         |                   | 0.100     | 1.00      | 5        | 07/13/2023 22:10     | <a href="#">WG2094643</a> |
| Barium   | 116          |                   | 0.152     | 2.50      | 5        | 07/13/2023 22:10     | <a href="#">WG2094643</a> |
| Cadmium  | 0.535        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/13/2023 22:10     | <a href="#">WG2094643</a> |
| Copper   | 12.6         |                   | 0.132     | 5.00      | 5        | 07/13/2023 22:10     | <a href="#">WG2094643</a> |
| Lead     | 12.2         |                   | 0.0990    | 2.00      | 5        | 07/13/2023 22:10     | <a href="#">WG2094643</a> |
| Nickel   | 12.8         |                   | 0.197     | 2.50      | 5        | 07/13/2023 22:10     | <a href="#">WG2094643</a> |
| Selenium | 0.491        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/13/2023 22:10     | <a href="#">WG2094643</a> |
| Silver   | 0.0871       | <a href="#">J</a> | 0.0865    | 0.500     | 5        | 07/13/2023 22:10     | <a href="#">WG2094643</a> |
| Zinc     | 42.8         |                   | 0.740     | 25.0      | 5        | 07/13/2023 22:10     | <a href="#">WG2094643</a> |

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

|                                    | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Analyte                            |              |                   |           |           |          |                      |                           |
| TPH (GC/FID) Low Fraction          | 0.0822       | <a href="#">J</a> | 0.0217    | 0.100     | 1        | 07/11/2023 11:47     | <a href="#">WG2091946</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 93.5         |                   |           | 77.0-120  |          | 07/11/2023 11:47     | <a href="#">WG2091946</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/11/2023 01:41        | <a href="#">WG2092290</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 07/11/2023 01:41        | <a href="#">WG2092290</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/11/2023 01:41        | <a href="#">WG2092290</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/11/2023 01:41        | <a href="#">WG2092290</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/11/2023 01:41        | <a href="#">WG2092290</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/11/2023 01:41        | <a href="#">WG2092290</a> |
| (S) Toluene-d8            | 104             |           |              | 75.0-131     |          | 07/11/2023 01:41        | <a href="#">WG2092290</a> |
| (S) 4-Bromofluorobenzene  | 104             |           |              | 67.0-138     |          | 07/11/2023 01:41        | <a href="#">WG2092290</a> |
| (S) 1,2-Dichloroethane-d4 | 104             |           |              | 70.0-130     |          | 07/11/2023 01:41        | <a href="#">WG2092290</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 8.50            |           | 1.61         | 4.00         | 1        | 07/13/2023 13:15        | <a href="#">WG2094182</a> |
| C28-C36 Motor Oil Range | 44.9            |           | 0.274        | 4.00         | 1        | 07/13/2023 13:15        | <a href="#">WG2094182</a> |
| (S) o-Terphenyl         | 74.8            |           |              | 18.0-148     |          | 07/13/2023 13:15        | <a href="#">WG2094182</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| (S) p-Terphenyl-d14    | 80.9            |           |              | 23.0-120     |          | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| (S) Nitrobenzene-d5    | 80.6            |           |              | 14.0-149     |          | 07/13/2023 02:27        | <a href="#">WG2093557</a> |
| (S) 2-Fluorobiphenyl   | 80.5            |           |              | 34.0-125     |          | 07/13/2023 02:27        | <a href="#">WG2093557</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3947369-1 07/11/23 15:20

|                     | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------------------|-----------|--------------|--------|--------|
| Analyte             | mg/kg     |              | mg/kg  | mg/kg  |
| Hexavalent Chromium | U         |              | 0.255  | 1.00   |

L1628060-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1628060-01 07/11/23 15:33 • (DUP) R3947369-3 07/11/23 15:38

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

L1633242-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633242-02 07/11/23 17:27 • (DUP) R3947369-8 07/11/23 17:32

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | 0.291           | U          | 1        | 200     | P1            | 20             |

Laboratory Control Sample (LCS)

(LCS) R3947369-2 07/11/23 15:27

|                     | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------------------|--------------|------------|----------|-------------|---------------|
| Analyte             | mg/kg        | mg/kg      | %        | %           |               |
| Hexavalent Chromium | 10.0         | 10.4       | 104      | 80.0-120    |               |

L1633240-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633240-07 07/11/23 16:35 • (MS) R3947369-4 07/11/23 16:40 • (MSD) R3947369-5 07/11/23 16:45

|                     | 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      | %       | %        |          | %           |              |               | %    | %          |
| Hexavalent Chromium | 20.0         | U               | 19.7      | 18.7       | 98.7    | 93.6     | 1        | 75.0-125    |              |               | 5.28 | 20         |

L1633240-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1633240-07 07/11/23 16:35 • (MS) R3947369-6 07/11/23 16:50

|                     | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|---------------------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte             | mg/kg        | mg/kg           | mg/kg     | %       |          | %           |              |
| Hexavalent Chromium | 643          | U               | 777       | 121     | 50       | 75.0-125    |              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1633300-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633300-02 07/10/23 11:00 • (DUP) R3946583-2 07/10/23 11:00

|         | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | pH              | su         |          | %       |                      | %              |
| pH      | 8.95            | 8.93       | 1        | 0.224   |                      | 1              |

Sample Narrative:

OS: 8.95 at 20.9C

DUP: 8.93 at 20.9C

L1633435-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1633435-04 07/10/23 11:00 • (DUP) R3946583-3 07/10/23 11:00

|         | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | pH              | su         |          | %       |                      | %              |
| pH      | 8.13            | 8.17       | 1        | 0.491   |                      | 1              |

Sample Narrative:

OS: 8.13 at 21.1C

DUP: 8.17 at 21.1C

Laboratory Control Sample (LCS)

(LCS) R3946583-1 07/10/23 11:00

|         | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | <u>LCS Qualifier</u> |
|---------|--------------|------------|----------|-------------|----------------------|
| Analyte | su           | su         | %        | %           |                      |
| pH      | 10.0         | 10.0       | 100      | 99.0-101    |                      |

Sample Narrative:

LCS: 10.01 at 20.5C

<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

L1633305-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633305-02 07/10/23 14:00 • (DUP) R3946769-2 07/10/23 14:00

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | su              | su         |          | %       |               | %              |
| pH      | 8.15            | 8.14       | 1        | 0.123   |               | 1              |

Sample Narrative:

OS: 8.15 at 22.8C

DUP: 8.14 at 22.8C

<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

L1633305-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1633305-03 07/10/23 14:00 • (DUP) R3946769-3 07/10/23 14:00

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | su              | su         |          | %       |               | %              |
| pH      | 8.21            | 8.20       | 1        | 0.122   |               | 1              |

Sample Narrative:

OS: 8.21 at 22.7C

DUP: 8.2 at 22.7C

Laboratory Control Sample (LCS)

(LCS) R3946769-1 07/10/23 14:00

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

Sample Narrative:

LCS: 10 at 22.4C



Method Blank (MB)

(MB) R3948009-1 07/13/23 07:50

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:

BLANK: at 25C

L1633069-39 Original Sample (OS) • Duplicate (DUP)

(OS) L1633069-39 07/13/23 07:50 • (DUP) R3948009-3 07/13/23 07:50

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 660                         | 659                    | 1        | 0.152        |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

L1633224-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1633224-07 07/13/23 07:50 • (DUP) R3948009-4 07/13/23 07:50

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 202                         | 199                    | 1        | 1.35         |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3948009-2 07/13/23 07:50

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 327                      | 331                    | 101           | 85.0-115         |               |

Sample Narrative:

LCS: at 25C

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3949374-1 07/17/23 12:35

| Analyte              | MB Result<br>mg/l | <u>MB Qualifier</u> | MB MDL<br>mg/l | MB RDL<br>mg/l |
|----------------------|-------------------|---------------------|----------------|----------------|
| Hot Water Sol. Boron | U                 |                     | 0.0167         | 0.200          |

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

(LCS) R3949374-2 07/17/23 12:37 • (LCSD) R3949374-3 07/17/23 12:40

| Analyte              | Spike Amount<br>mg/l | LCS Result<br>mg/l | LCSD Result<br>mg/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> | <u>LCSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|----------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|----------------------|-----------------------|----------|-----------------|
| Hot Water Sol. Boron | 1.00                 | 1.13               | 1.06                | 113           | 106            | 80.0-120         |                      |                       | 6.28     | 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) R3948469-1 07/13/23 21:46

| Analyte  | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|----------|--------------------|--------------|-----------------|-----------------|
| Arsenic  | U                  |              | 0.100           | 1.00            |
| Barium   | U                  |              | 0.152           | 2.50            |
| Cadmium  | U                  |              | 0.0855          | 1.00            |
| Copper   | U                  |              | 0.133           | 5.00            |
| Lead     | U                  |              | 0.0990          | 2.00            |
| Nickel   | U                  |              | 0.197           | 2.50            |
| Selenium | U                  |              | 0.180           | 2.50            |
| Silver   | U                  |              | 0.0865          | 0.500           |
| Zinc     | U                  |              | 0.740           | 25.0            |

Laboratory Control Sample (LCS)

(LCS) R3948469-2 07/13/23 21:50

| Analyte  | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|-----------------------|---------------------|---------------|------------------|---------------|
| Arsenic  | 100                   | 98.1                | 98.1          | 80.0-120         |               |
| Barium   | 100                   | 93.8                | 93.8          | 80.0-120         |               |
| Cadmium  | 100                   | 99.4                | 99.4          | 80.0-120         |               |
| Copper   | 100                   | 98.9                | 98.9          | 80.0-120         |               |
| Lead     | 100                   | 95.0                | 95.0          | 80.0-120         |               |
| Nickel   | 100                   | 97.7                | 97.7          | 80.0-120         |               |
| Selenium | 100                   | 101                 | 101           | 80.0-120         |               |
| Silver   | 20.0                  | 19.6                | 98.0          | 80.0-120         |               |
| Zinc     | 100                   | 94.7                | 94.7          | 80.0-120         |               |

L1633274-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633274-02 07/13/23 21:53 • (MS) R3948469-5 07/13/23 22:03 • (MSD) R3948469-6 07/13/23 22:06

| Analyte  | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Arsenic  | 100                   | 6.96                     | 111                | 101                 | 104          | 94.3          | 5        | 75.0-125         |              |               | 9.13     | 20              |
| Barium   | 100                   | 112                      | 334                | 251                 | 222          | 139           | 5        | 75.0-125         | J5           | J3 J5         | 28.6     | 20              |
| Cadmium  | 100                   | 0.393                    | 109                | 96.5                | 108          | 96.1          | 5        | 75.0-125         |              |               | 11.8     | 20              |
| Copper   | 100                   | 10.2                     | 123                | 108                 | 112          | 97.8          | 5        | 75.0-125         |              |               | 12.6     | 20              |
| Lead     | 100                   | 7.21                     | 114                | 106                 | 107          | 98.3          | 5        | 75.0-125         |              |               | 7.52     | 20              |
| Nickel   | 100                   | 10.8                     | 113                | 103                 | 102          | 92.0          | 5        | 75.0-125         |              |               | 9.26     | 20              |
| Selenium | 100                   | 0.293                    | 108                | 97.7                | 108          | 97.4          | 5        | 75.0-125         |              |               | 10.1     | 20              |
| Silver   | 20.0                  | U                        | 21.5               | 18.9                | 107          | 94.7          | 5        | 75.0-125         |              |               | 12.7     | 20              |
| Zinc     | 100                   | 32.6                     | 137                | 131                 | 105          | 98.4          | 5        | 75.0-125         |              |               | 4.53     | 20              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3948858-2 07/14/23 18:47

| Analyte  | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|----------|--------------------|--------------|-----------------|-----------------|
| Arsenic  | U                  |              | 0.0200          | 0.200           |
| Barium   | U                  |              | 0.0304          | 0.500           |
| Cadmium  | U                  |              | 0.0171          | 0.200           |
| Copper   | 0.0284             | U            | 0.0265          | 1.00            |
| Lead     | 0.0307             | U            | 0.0198          | 0.400           |
| Nickel   | U                  |              | 0.0394          | 0.500           |
| Selenium | U                  |              | 0.0359          | 0.500           |
| Silver   | U                  |              | 0.0173          | 0.100           |
| Zinc     | 0.255              | U            | 0.148           | 5.00            |

Laboratory Control Sample (LCS)

(LCS) R3948858-3 07/14/23 18:51

| Analyte  | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|-----------------------|---------------------|---------------|------------------|---------------|
| Arsenic  | 100                   | 104                 | 104           | 80.0-120         |               |
| Barium   | 100                   | 96.3                | 96.3          | 80.0-120         |               |
| Cadmium  | 100                   | 114                 | 114           | 80.0-120         |               |
| Copper   | 100                   | 93.5                | 93.5          | 80.0-120         |               |
| Lead     | 100                   | 101                 | 101           | 80.0-120         |               |
| Nickel   | 100                   | 104                 | 104           | 80.0-120         |               |
| Selenium | 100                   | 113                 | 113           | 80.0-120         |               |
| Silver   | 20.0                  | 20.9                | 105           | 80.0-120         |               |
| Zinc     | 100                   | 97.2                | 97.2          | 80.0-120         |               |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3947968-2 07/10/23 18:39

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | U                  |              | 0.0217          | 0.100           |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 96.9               |              |                 | 77.0-120        |

Laboratory Control Sample (LCS)

(LCS) R3947968-1 07/10/23 17:36

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 4.43                | 80.5          | 72.0-127         |               |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     | 105           | 77.0-120         |               |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3946986-3 07/10/23 21:08

| Analyte                   | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|---------------------------|--------------------|--------------|-----------------|-----------------|
| Benzene                   | U                  |              | 0.000467        | 0.00100         |
| Toluene                   | U                  |              | 0.00130         | 0.00500         |
| Ethylbenzene              | U                  |              | 0.000737        | 0.00250         |
| Xylenes, Total            | U                  |              | 0.000880        | 0.00650         |
| 1,2,4-Trimethylbenzene    | U                  |              | 0.00158         | 0.00500         |
| 1,3,5-Trimethylbenzene    | U                  |              | 0.00200         | 0.00500         |
| (S) Toluene-d8            | 104                |              |                 | 75.0-131        |
| (S) 4-Bromofluorobenzene  | 103                |              |                 | 67.0-138        |
| (S) 1,2-Dichloroethane-d4 | 106                |              |                 | 70.0-130        |

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

(LCS) R3946986-1 07/10/23 19:33 • (LCSD) R3946986-2 07/10/23 19:52

| Analyte                   | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Benzene                   | 0.125                 | 0.131               | 0.141                | 105           | 113            | 70.0-123         |               |                | 7.35     | 20              |
| Toluene                   | 0.125                 | 0.123               | 0.129                | 98.4          | 103            | 75.0-121         |               |                | 4.76     | 20              |
| Ethylbenzene              | 0.125                 | 0.127               | 0.141                | 102           | 113            | 74.0-126         |               |                | 10.4     | 20              |
| Xylenes, Total            | 0.375                 | 0.378               | 0.406                | 101           | 108            | 72.0-127         |               |                | 7.14     | 20              |
| 1,2,4-Trimethylbenzene    | 0.125                 | 0.119               | 0.134                | 95.2          | 107            | 70.0-126         |               |                | 11.9     | 20              |
| 1,3,5-Trimethylbenzene    | 0.125                 | 0.117               | 0.130                | 93.6          | 104            | 73.0-127         |               |                | 10.5     | 20              |
| (S) Toluene-d8            |                       |                     |                      | 102           | 101            | 75.0-131         |               |                |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                     |                      | 103           | 102            | 67.0-138         |               |                |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                     |                      | 107           | 111            | 70.0-130         |               |                |          |                 |

L1633224-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633224-01 07/10/23 22:49 • (MS) R3946986-4 07/11/23 05:09 • (MSD) R3946986-5 07/11/23 05:28

| Analyte                   | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Benzene                   | 0.125                 | U                        | 0.125              | 0.142               | 100          | 114           | 1        | 10.0-149         |              |               | 12.7     | 37              |
| Toluene                   | 0.125                 | U                        | 0.129              | 0.138               | 103          | 110           | 1        | 10.0-156         |              |               | 6.74     | 38              |
| Ethylbenzene              | 0.125                 | U                        | 0.144              | 0.146               | 115          | 117           | 1        | 10.0-160         |              |               | 1.38     | 38              |
| Xylenes, Total            | 0.375                 | 0.00117                  | 0.424              | 0.440               | 113          | 117           | 1        | 10.0-160         |              |               | 3.70     | 38              |
| 1,2,4-Trimethylbenzene    | 0.125                 | 0.00375                  | 0.236              | 0.162               | 186          | 127           | 1        | 10.0-160         | J5           | J3            | 37.2     | 36              |
| 1,3,5-Trimethylbenzene    | 0.125                 | U                        | 0.210              | 0.151               | 168          | 121           | 1        | 10.0-160         | J5           |               | 32.7     | 38              |
| (S) Toluene-d8            |                       |                          |                    |                     | 104          | 103           |          | 75.0-131         |              |               |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                          |                    |                     | 100          | 103           |          | 67.0-138         |              |               |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                          |                    |                     | 106          | 107           |          | 70.0-130         |              |               |          |                 |

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc



Method Blank (MB)

(MB) R3948356-1 07/13/23 14:01

| Analyte                 | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|-------------------------|--------------------|--------------|-----------------|-----------------|
| C10-C28 Diesel Range    | U                  |              | 1.61            | 4.00            |
| C28-C36 Motor Oil Range | 0.935              | ⬇            | 0.274           | 4.00            |
| (S) o-Terphenyl         | 87.2               |              |                 | 18.0-148        |

Laboratory Control Sample (LCS)

(LCS) R3948356-2 07/13/23 14:14

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| C10-C28 Diesel Range | 50.0                  | 32.2                | 64.4          | 50.0-150         |               |
| (S) o-Terphenyl      |                       |                     | 66.2          | 18.0-148         |               |

<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) R3948583-2 07/13/23 02:07

| Analyte                | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------|--------------------|--------------|-----------------|-----------------|
| Acenaphthene           | U                  |              | 0.00209         | 0.00600         |
| Anthracene             | U                  |              | 0.00230         | 0.00600         |
| Benzo(a)anthracene     | U                  |              | 0.00173         | 0.00600         |
| Benzo(b)fluoranthene   | U                  |              | 0.00153         | 0.00600         |
| Benzo(k)fluoranthene   | U                  |              | 0.00215         | 0.00600         |
| Benzo(a)pyrene         | U                  |              | 0.00179         | 0.00600         |
| Chrysene               | U                  |              | 0.00232         | 0.00600         |
| Dibenz(a,h)anthracene  | U                  |              | 0.00172         | 0.00600         |
| Fluoranthene           | U                  |              | 0.00227         | 0.00600         |
| Fluorene               | U                  |              | 0.00205         | 0.00600         |
| Indeno(1,2,3-cd)pyrene | U                  |              | 0.00181         | 0.00600         |
| 1-Methylnaphthalene    | U                  |              | 0.00449         | 0.0200          |
| 2-Methylnaphthalene    | U                  |              | 0.00427         | 0.0200          |
| Naphthalene            | U                  |              | 0.00408         | 0.0200          |
| Pyrene                 | U                  |              | 0.00200         | 0.00600         |
| (S) p-Terphenyl-d14    | 80.2               |              |                 | 23.0-120        |
| (S) Nitrobenzene-d5    | 69.1               |              |                 | 14.0-149        |
| (S) 2-Fluorobiphenyl   | 73.4               |              |                 | 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) R3948583-1 07/13/23 01:47

| Analyte                | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Acenaphthene           | 0.0800                | 0.0593              | 74.1          | 50.0-120         |               |
| Anthracene             | 0.0800                | 0.0608              | 76.0          | 50.0-126         |               |
| Benzo(a)anthracene     | 0.0800                | 0.0667              | 83.4          | 45.0-120         |               |
| Benzo(b)fluoranthene   | 0.0800                | 0.0632              | 79.0          | 42.0-121         |               |
| Benzo(k)fluoranthene   | 0.0800                | 0.0621              | 77.6          | 49.0-125         |               |
| Benzo(a)pyrene         | 0.0800                | 0.0638              | 79.8          | 42.0-120         |               |
| Chrysene               | 0.0800                | 0.0630              | 78.8          | 49.0-122         |               |
| Dibenz(a,h)anthracene  | 0.0800                | 0.0609              | 76.1          | 47.0-125         |               |
| Fluoranthene           | 0.0800                | 0.0620              | 77.5          | 49.0-129         |               |
| Fluorene               | 0.0800                | 0.0619              | 77.4          | 49.0-120         |               |
| Indeno(1,2,3-cd)pyrene | 0.0800                | 0.0670              | 83.8          | 46.0-125         |               |
| 1-Methylnaphthalene    | 0.0800                | 0.0612              | 76.5          | 51.0-121         |               |
| 2-Methylnaphthalene    | 0.0800                | 0.0623              | 77.9          | 50.0-120         |               |
| Naphthalene            | 0.0800                | 0.0608              | 76.0          | 50.0-120         |               |
| Pyrene                 | 0.0800                | 0.0634              | 79.3          | 43.0-123         |               |

Laboratory Control Sample (LCS)

(LCS) R3948583-1 07/13/23 01:47

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> |
|----------------------|-----------------------|---------------------|---------------|------------------|----------------------|
| (S) p-Terphenyl-d14  |                       |                     | 87.1          | 23.0-120         |                      |
| (S) Nitrobenzene-d5  |                       |                     | 87.2          | 14.0-149         |                      |
| (S) 2-Fluorobiphenyl |                       |                     | 84.9          | 34.0-125         |                      |

L1633276-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633276-01 07/13/23 03:46 • (MS) R3948583-3 07/13/23 04:06 • (MSD) R3948583-4 07/13/23 04:26

| Analyte                | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | <u>MS Qualifier</u> | <u>MSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|---------------------|----------------------|----------|-----------------|
| Acenaphthene           | 0.0788                | U                        | 0.0496             | 0.0557              | 62.9         | 70.0          | 1        | 14.0-127         |                     |                      | 11.6     | 27              |
| Anthracene             | 0.0788                | U                        | 0.0496             | 0.0563              | 62.9         | 70.7          | 1        | 10.0-145         |                     |                      | 12.7     | 30              |
| Benzo(a)anthracene     | 0.0788                | U                        | 0.0524             | 0.0595              | 66.5         | 74.7          | 1        | 10.0-139         |                     |                      | 12.7     | 30              |
| Benzo(b)fluoranthene   | 0.0788                | U                        | 0.0465             | 0.0543              | 59.0         | 68.2          | 1        | 10.0-140         |                     |                      | 15.5     | 36              |
| Benzo(k)fluoranthene   | 0.0788                | U                        | 0.0474             | 0.0554              | 60.2         | 69.6          | 1        | 10.0-137         |                     |                      | 15.6     | 31              |
| Benzo(a)pyrene         | 0.0788                | U                        | 0.0552             | 0.0637              | 70.1         | 80.0          | 1        | 10.0-141         |                     |                      | 14.3     | 31              |
| Chrysene               | 0.0788                | U                        | 0.0513             | 0.0588              | 65.1         | 73.9          | 1        | 10.0-145         |                     |                      | 13.6     | 30              |
| Dibenz(a,h)anthracene  | 0.0788                | U                        | 0.0463             | 0.0541              | 58.8         | 68.0          | 1        | 10.0-132         |                     |                      | 15.5     | 31              |
| Fluoranthene           | 0.0788                | U                        | 0.0505             | 0.0571              | 64.1         | 71.7          | 1        | 10.0-153         |                     |                      | 12.3     | 33              |
| Fluorene               | 0.0788                | U                        | 0.0512             | 0.0576              | 65.0         | 72.4          | 1        | 11.0-130         |                     |                      | 11.8     | 29              |
| Indeno(1,2,3-cd)pyrene | 0.0788                | U                        | 0.0492             | 0.0577              | 62.4         | 72.5          | 1        | 10.0-137         |                     |                      | 15.9     | 32              |
| 1-Methylnaphthalene    | 0.0788                | U                        | 0.0520             | 0.0569              | 66.0         | 71.5          | 1        | 10.0-142         |                     |                      | 9.00     | 28              |
| 2-Methylnaphthalene    | 0.0788                | 0.0147                   | 0.0531             | 0.0580              | 48.7         | 54.4          | 1        | 10.0-137         |                     |                      | 8.82     | 28              |
| Naphthalene            | 0.0788                | 0.0155                   | 0.0507             | 0.0563              | 44.7         | 51.3          | 1        | 10.0-135         |                     |                      | 10.5     | 27              |
| Pyrene                 | 0.0788                | U                        | 0.0523             | 0.0597              | 66.4         | 75.0          | 1        | 10.0-148         |                     |                      | 13.2     | 35              |
| (S) p-Terphenyl-d14    |                       |                          |                    |                     | 71.6         | 83.9          |          | 23.0-120         |                     |                      |          |                 |
| (S) Nitrobenzene-d5    |                       |                          |                    |                     | 73.3         | 78.3          |          | 14.0-149         |                     |                      |          |                 |
| (S) 2-Fluorobiphenyl   |                       |                          |                    |                     | 70.5         | 79.3          |          | 34.0-125         |                     |                      |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3949351-2 07/14/23 19:17

| Analyte                | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------|--------------------|--------------|-----------------|-----------------|
| Acenaphthene           | U                  |              | 0.00209         | 0.00600         |
| Anthracene             | U                  |              | 0.00230         | 0.00600         |
| Benzo(a)anthracene     | U                  |              | 0.00173         | 0.00600         |
| Benzo(b)fluoranthene   | U                  |              | 0.00153         | 0.00600         |
| Benzo(k)fluoranthene   | U                  |              | 0.00215         | 0.00600         |
| Benzo(a)pyrene         | U                  |              | 0.00179         | 0.00600         |
| Chrysene               | U                  |              | 0.00232         | 0.00600         |
| Dibenz(a,h)anthracene  | U                  |              | 0.00172         | 0.00600         |
| Fluoranthene           | U                  |              | 0.00227         | 0.00600         |
| Fluorene               | U                  |              | 0.00205         | 0.00600         |
| Indeno(1,2,3-cd)pyrene | U                  |              | 0.00181         | 0.00600         |
| 1-Methylnaphthalene    | U                  |              | 0.00449         | 0.0200          |
| 2-Methylnaphthalene    | U                  |              | 0.00427         | 0.0200          |
| Naphthalene            | U                  |              | 0.00408         | 0.0200          |
| Pyrene                 | U                  |              | 0.00200         | 0.00600         |
| (S) p-Terphenyl-d14    | 110                |              |                 | 23.0-120        |
| (S) Nitrobenzene-d5    | 84.4               |              |                 | 14.0-149        |
| (S) 2-Fluorobiphenyl   | 92.2               |              |                 | 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) R3949351-1 07/14/23 18:57

| Analyte                | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Acenaphthene           | 0.0800                | 0.0587              | 73.4          | 50.0-120         |               |
| Anthracene             | 0.0800                | 0.0578              | 72.3          | 50.0-126         |               |
| Benzo(a)anthracene     | 0.0800                | 0.0635              | 79.4          | 45.0-120         |               |
| Benzo(b)fluoranthene   | 0.0800                | 0.0622              | 77.8          | 42.0-121         |               |
| Benzo(k)fluoranthene   | 0.0800                | 0.0626              | 78.3          | 49.0-125         |               |
| Benzo(a)pyrene         | 0.0800                | 0.0620              | 77.5          | 42.0-120         |               |
| Chrysene               | 0.0800                | 0.0629              | 78.6          | 49.0-122         |               |
| Dibenz(a,h)anthracene  | 0.0800                | 0.0625              | 78.1          | 47.0-125         |               |
| Fluoranthene           | 0.0800                | 0.0588              | 73.5          | 49.0-129         |               |
| Fluorene               | 0.0800                | 0.0609              | 76.1          | 49.0-120         |               |
| Indeno(1,2,3-cd)pyrene | 0.0800                | 0.0660              | 82.5          | 46.0-125         |               |
| 1-Methylnaphthalene    | 0.0800                | 0.0578              | 72.3          | 51.0-121         |               |
| 2-Methylnaphthalene    | 0.0800                | 0.0590              | 73.8          | 50.0-120         |               |
| Naphthalene            | 0.0800                | 0.0588              | 73.5          | 50.0-120         |               |
| Pyrene                 | 0.0800                | 0.0655              | 81.9          | 43.0-123         |               |

Laboratory Control Sample (LCS)

(LCS) R3949351-1 07/14/23 18:57

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> |
|----------------------|-----------------------|---------------------|---------------|------------------|----------------------|
| (S) p-Terphenyl-d14  |                       |                     | 91.5          | 23.0-120         |                      |
| (S) Nitrobenzene-d5  |                       |                     | 84.7          | 14.0-149         |                      |
| (S) 2-Fluorobiphenyl |                       |                     | 84.1          | 34.0-125         |                      |

L1634002-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1634002-01 07/14/23 19:37 • (MS) R3949351-3 07/14/23 19:57 • (MSD) R3949351-4 07/14/23 20:16

| Analyte                | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | <u>MS Qualifier</u> | <u>MSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|---------------------|----------------------|----------|-----------------|
| Acenaphthene           | 0.0796                | U                        | 0.0702             | 0.0655              | 88.2         | 83.1          | 1        | 14.0-127         |                     |                      | 6.93     | 27              |
| Anthracene             | 0.0796                | U                        | 0.0712             | 0.0648              | 89.4         | 82.2          | 1        | 10.0-145         |                     |                      | 9.41     | 30              |
| Benzo(a)anthracene     | 0.0796                | U                        | 0.0842             | 0.0722              | 106          | 91.6          | 1        | 10.0-139         |                     |                      | 15.3     | 30              |
| Benzo(b)fluoranthene   | 0.0796                | 0.00213                  | 0.0817             | 0.0703              | 100          | 86.5          | 1        | 10.0-140         |                     |                      | 15.0     | 36              |
| Benzo(k)fluoranthene   | 0.0796                | U                        | 0.0805             | 0.0716              | 101          | 90.9          | 1        | 10.0-137         |                     |                      | 11.7     | 31              |
| Benzo(a)pyrene         | 0.0796                | U                        | 0.0906             | 0.0779              | 114          | 98.9          | 1        | 10.0-141         |                     |                      | 15.1     | 31              |
| Chrysene               | 0.0796                | U                        | 0.0831             | 0.0731              | 104          | 92.8          | 1        | 10.0-145         |                     |                      | 12.8     | 30              |
| Dibenz(a,h)anthracene  | 0.0796                | U                        | 0.0770             | 0.0703              | 96.7         | 89.2          | 1        | 10.0-132         |                     |                      | 9.10     | 31              |
| Fluoranthene           | 0.0796                | U                        | 0.0843             | 0.0699              | 106          | 88.7          | 1        | 10.0-153         |                     |                      | 18.7     | 33              |
| Fluorene               | 0.0796                | U                        | 0.0720             | 0.0678              | 90.5         | 86.0          | 1        | 11.0-130         |                     |                      | 6.01     | 29              |
| Indeno(1,2,3-cd)pyrene | 0.0796                | U                        | 0.0850             | 0.0740              | 107          | 93.9          | 1        | 10.0-137         |                     |                      | 13.8     | 32              |
| 1-Methylnaphthalene    | 0.0796                | U                        | 0.0711             | 0.0665              | 89.3         | 84.4          | 1        | 10.0-142         |                     |                      | 6.69     | 28              |
| 2-Methylnaphthalene    | 0.0796                | U                        | 0.0733             | 0.0685              | 92.1         | 86.9          | 1        | 10.0-137         |                     |                      | 6.77     | 28              |
| Naphthalene            | 0.0796                | U                        | 0.0702             | 0.0664              | 88.2         | 84.3          | 1        | 10.0-135         |                     |                      | 5.56     | 27              |
| Pyrene                 | 0.0796                | 0.00229                  | 0.0901             | 0.0733              | 110          | 90.1          | 1        | 10.0-148         |                     |                      | 20.6     | 35              |
| (S) p-Terphenyl-d14    |                       |                          |                    |                     | 103          | 93.2          |          | 23.0-120         |                     |                      |          |                 |
| (S) Nitrobenzene-d5    |                       |                          |                    |                     | 90.6         | 82.1          |          | 14.0-149         |                     |                      |          |                 |
| (S) 2-Fluorobiphenyl   |                       |                          |                    |                     | 91.2         | 84.3          |          | 34.0-125         |                     |                      |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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.                                                                                                                                                                                                                                               |
| 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. |
| 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.                    |
| J3 | The associated batch QC was outside the established quality control range for precision.               |
| J5 | The sample matrix interfered with the ability to make any accurate determination; spike value is high. |
| P1 | RPD value not applicable for sample concentrations less than 5 times the reporting limit.              |
| T8 | Sample(s) received past/too close to holding time expiration.                                          |

<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



# ACCREDITATIONS & LOCATIONS

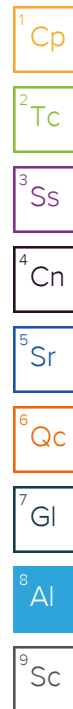
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

|                                |             |                             |                  |
|--------------------------------|-------------|-----------------------------|------------------|
| 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.



NCF  $\sqrt{\quad}$  O



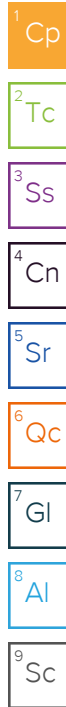
# ANALYTICAL REPORT

July 18, 2023

Revised Report

## Caerus Oil and Gas

Sample Delivery Group: L1633275  
Samples Received: 07/07/2023  
Project Number: H7  
Description: H7-Tank Battery  
Site: H7  
Report To: Jake Janicek  
143 Diamond Avenue  
Parachute, CO 81635



Entire Report Reviewed By:

*Chris Ward*

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 [www.pacenational.com](http://www.pacenational.com)

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|                 |
|-----------------|
| <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

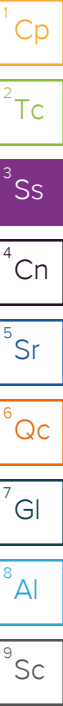
20230705-H7-(SB03)@10-11.5 L1633275-01 Solid

Collected by  
K. Moreland

Collected date/time  
07/05/23 08:20

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091358 | 1        | 07/16/23 17:18        | 07/16/23 17:18     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2090963 | 1        | 07/10/23 21:45        | 07/11/23 17:53     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091852 | 1        | 07/10/23 08:38        | 07/10/23 14:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2092223 | 1        | 07/12/23 11:30        | 07/13/23 07:50     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091362 | 1        | 07/12/23 14:35        | 07/17/23 12:51     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2094643 | 5        | 07/13/23 20:39        | 07/13/23 22:13     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2092833 | 1        | 07/10/23 09:41        | 07/11/23 16:50     | MGF     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092290 | 1        | 07/10/23 09:41        | 07/11/23 01:59     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2094182 | 1        | 07/12/23 21:14        | 07/13/23 13:29     | KAP     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093557 | 1        | 07/12/23 20:03        | 07/13/23 02:46     | AMG     | Mt. Juliet, TN |



20230705-H7-(SB03)@20-21.5 L1633275-02 Solid

Collected by  
K. Moreland

Collected date/time  
07/05/23 09:05

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091358 | 1        | 07/16/23 17:21        | 07/16/23 17:21     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2090963 | 1        | 07/10/23 21:45        | 07/11/23 17:58     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091852 | 1        | 07/10/23 08:38        | 07/10/23 14:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2091873 | 1        | 07/10/23 08:56        | 07/10/23 12:40     | MCC     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091362 | 1        | 07/12/23 14:35        | 07/17/23 12:54     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2094643 | 5        | 07/13/23 20:39        | 07/13/23 22:28     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2092833 | 1        | 07/10/23 09:41        | 07/11/23 17:14     | MGF     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092290 | 1        | 07/10/23 09:41        | 07/11/23 02:18     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093536 | 1        | 07/13/23 06:38        | 07/13/23 15:19     | HLJ     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093557 | 1        | 07/12/23 20:03        | 07/13/23 03:06     | AMG     | Mt. Juliet, TN |

20230705-H7-(SB03)@30-31.5 L1633275-03 Solid

Collected by  
K. Moreland

Collected date/time  
07/05/23 09:45

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091358 | 1        | 07/16/23 17:23        | 07/16/23 17:23     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2090963 | 1        | 07/10/23 21:45        | 07/11/23 18:03     | VSS     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091852 | 1        | 07/10/23 08:38        | 07/10/23 14:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2092223 | 1        | 07/12/23 11:30        | 07/13/23 07:50     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091362 | 1        | 07/12/23 14:35        | 07/17/23 12:56     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2094643 | 5        | 07/13/23 20:39        | 07/13/23 22:32     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2092833 | 1        | 07/10/23 09:41        | 07/11/23 18:33     | MGF     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092290 | 1        | 07/10/23 09:41        | 07/11/23 02:37     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093536 | 1        | 07/13/23 06:38        | 07/13/23 14:29     | HLJ     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093557 | 1        | 07/12/23 20:03        | 07/13/23 03:26     | AMG     | 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

## Report Revision History

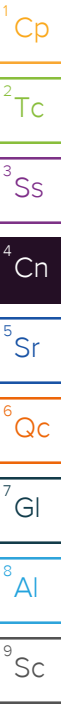
---

Level II Report - Version 1: 07/17/23 15:29

## Project Narrative

---

Updated contact info - Tony Gibson





Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 1.75   |           | 1        | 07/16/2023 17:18     | WG2091358 |

1  
Cp

2  
Tc

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/11/2023 17:53     | <a href="#">WG2090963</a> |

3  
Ss

4  
Cn

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.89   | <a href="#">T8</a> | 1        | 07/10/2023 14:00     | <a href="#">WG2091852</a> |

5  
Sr

6  
Qc

Sample Narrative:

L1633275-01 WG2091852: 8.89 at 23C

7  
Gl

8  
Al

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 369             |           | 10.0         | 1        | 07/13/2023 07:50     | <a href="#">WG2092223</a> |

9  
Sc

Sample Narrative:

L1633275-01 WG2092223: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.297       |           | 0.0167   | 0.200    | 1        | 07/17/2023 12:51     | <a href="#">WG2091362</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 6.18         |                   | 0.100     | 1.00      | 5        | 07/13/2023 22:13     | <a href="#">WG2094643</a> |
| Barium   | 190          |                   | 0.152     | 2.50      | 5        | 07/13/2023 22:13     | <a href="#">WG2094643</a> |
| Cadmium  | 0.461        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/13/2023 22:13     | <a href="#">WG2094643</a> |
| Copper   | 15.3         |                   | 0.132     | 5.00      | 5        | 07/13/2023 22:13     | <a href="#">WG2094643</a> |
| Lead     | 8.23         |                   | 0.0990    | 2.00      | 5        | 07/13/2023 22:13     | <a href="#">WG2094643</a> |
| Nickel   | 15.0         |                   | 0.197     | 2.50      | 5        | 07/13/2023 22:13     | <a href="#">WG2094643</a> |
| Selenium | 0.385        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/13/2023 22:13     | <a href="#">WG2094643</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 07/13/2023 22:13     | <a href="#">WG2094643</a> |
| Zinc     | 34.6         |                   | 0.740     | 25.0      | 5        | 07/13/2023 22:13     | <a href="#">WG2094643</a> |

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

| Analyte                            | Result mg/kg | Qualifier           | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|---------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.0667       | <a href="#">B J</a> | 0.0217    | 0.100     | 1        | 07/11/2023 16:50     | <a href="#">WG2092833</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 94.5         |                     |           | 77.0-120  |          | 07/11/2023 16:50     | <a href="#">WG2092833</a> |

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/11/2023 01:59        | <a href="#">WG2092290</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 07/11/2023 01:59        | <a href="#">WG2092290</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/11/2023 01:59        | <a href="#">WG2092290</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/11/2023 01:59        | <a href="#">WG2092290</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/11/2023 01:59        | <a href="#">WG2092290</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/11/2023 01:59        | <a href="#">WG2092290</a> |
| (S) Toluene-d8            | 105             |           |              | 75.0-131     |          | 07/11/2023 01:59        | <a href="#">WG2092290</a> |
| (S) 4-Bromofluorobenzene  | 101             |           |              | 67.0-138     |          | 07/11/2023 01:59        | <a href="#">WG2092290</a> |
| (S) 1,2-Dichloroethane-d4 | 104             |           |              | 70.0-130     |          | 07/11/2023 01:59        | <a href="#">WG2092290</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 9.32            |           | 1.61         | 4.00         | 1        | 07/13/2023 13:29        | <a href="#">WG2094182</a> |
| C28-C36 Motor Oil Range | 31.0            |           | 0.274        | 4.00         | 1        | 07/13/2023 13:29        | <a href="#">WG2094182</a> |
| (S) o-Terphenyl         | 97.4            |           |              | 18.0-148     |          | 07/13/2023 13:29        | <a href="#">WG2094182</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| (S) p-Terphenyl-d14    | 69.7            |           |              | 23.0-120     |          | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| (S) Nitrobenzene-d5    | 66.6            |           |              | 14.0-149     |          | 07/13/2023 02:46        | <a href="#">WG2093557</a> |
| (S) 2-Fluorobiphenyl   | 65.5            |           |              | 34.0-125     |          | 07/13/2023 02:46        | <a href="#">WG2093557</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 6.19   |           | 1        | 07/16/2023 17:21     | WG2091358 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| Hexavalent Chromium | 0.362        | J         | 0.255     | 1.00      | 1        | 07/11/2023 17:58     | WG2090963 |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 9.17   | T8        | 1        | 07/10/2023 14:00     | WG2091852 |

Sample Narrative:

L1633275-02 WG2091852: 9.17 at 22.8C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|-----------|
| Specific Conductance | 435             |           | 10.0         | 1        | 07/10/2023 12:40     | WG2091873 |

Sample Narrative:

L1633275-02 WG2091873: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|-----------|
| Hot Water Sol. Boron | 0.321       |           | 0.0167   | 0.200    | 1        | 07/17/2023 12:54     | WG2091362 |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|----------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| Arsenic  | 12.1         |           | 0.100     | 1.00      | 5        | 07/13/2023 22:28     | WG2094643 |
| Barium   | 141          |           | 0.152     | 2.50      | 5        | 07/13/2023 22:28     | WG2094643 |
| Cadmium  | 0.507        | J         | 0.0855    | 1.00      | 5        | 07/13/2023 22:28     | WG2094643 |
| Copper   | 14.9         |           | 0.132     | 5.00      | 5        | 07/13/2023 22:28     | WG2094643 |
| Lead     | 10.0         |           | 0.0990    | 2.00      | 5        | 07/13/2023 22:28     | WG2094643 |
| Nickel   | 15.6         |           | 0.197     | 2.50      | 5        | 07/13/2023 22:28     | WG2094643 |
| Selenium | 0.310        | J         | 0.180     | 2.50      | 5        | 07/13/2023 22:28     | WG2094643 |
| Silver   | U            |           | 0.0865    | 0.500     | 5        | 07/13/2023 22:28     | WG2094643 |
| Zinc     | 46.3         |           | 0.740     | 25.0      | 5        | 07/13/2023 22:28     | WG2094643 |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| TPH (GC/FID) Low Fraction          | 0.0912       | B J       | 0.0217    | 0.100     | 1        | 07/11/2023 17:14     | WG2092833 |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 93.9         |           |           | 77.0-120  |          | 07/11/2023 17:14     | WG2092833 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/11/2023 02:18        | <a href="#">WG2092290</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 07/11/2023 02:18        | <a href="#">WG2092290</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/11/2023 02:18        | <a href="#">WG2092290</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/11/2023 02:18        | <a href="#">WG2092290</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/11/2023 02:18        | <a href="#">WG2092290</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/11/2023 02:18        | <a href="#">WG2092290</a> |
| (S) Toluene-d8            | 104             |           |              | 75.0-131     |          | 07/11/2023 02:18        | <a href="#">WG2092290</a> |
| (S) 4-Bromofluorobenzene  | 105             |           |              | 67.0-138     |          | 07/11/2023 02:18        | <a href="#">WG2092290</a> |
| (S) 1,2-Dichloroethane-d4 | 106             |           |              | 70.0-130     |          | 07/11/2023 02:18        | <a href="#">WG2092290</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 10.2            |           | 1.61         | 4.00         | 1        | 07/13/2023 15:19        | <a href="#">WG2093536</a> |
| C28-C36 Motor Oil Range | 45.5            |           | 0.274        | 4.00         | 1        | 07/13/2023 15:19        | <a href="#">WG2093536</a> |
| (S) o-Terphenyl         | 38.9            |           |              | 18.0-148     |          | 07/13/2023 15:19        | <a href="#">WG2093536</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| (S) p-Terphenyl-d14    | 75.8            |           |              | 23.0-120     |          | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| (S) Nitrobenzene-d5    | 79.2            |           |              | 14.0-149     |          | 07/13/2023 03:06        | <a href="#">WG2093557</a> |
| (S) 2-Fluorobiphenyl   | 74.3            |           |              | 34.0-125     |          | 07/13/2023 03:06        | <a href="#">WG2093557</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 4.56   |           | 1        | 07/16/2023 17:23     | WG2091358 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/11/2023 18:03     | <a href="#">WG2090963</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.58   | <a href="#">T8</a> | 1        | 07/10/2023 14:00     | <a href="#">WG2091852</a> |

Sample Narrative:

L1633275-03 WG2091852: 8.58 at 22.9C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 878             |           | 10.0         | 1        | 07/13/2023 07:50     | <a href="#">WG2092223</a> |

Sample Narrative:

L1633275-03 WG2092223: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.226       |           | 0.0167   | 0.200    | 1        | 07/17/2023 12:56     | <a href="#">WG2091362</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 5.06         |                   | 0.100     | 1.00      | 5        | 07/13/2023 22:32     | <a href="#">WG2094643</a> |
| Barium   | 149          |                   | 0.152     | 2.50      | 5        | 07/13/2023 22:32     | <a href="#">WG2094643</a> |
| Cadmium  | 0.274        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/13/2023 22:32     | <a href="#">WG2094643</a> |
| Copper   | 14.9         |                   | 0.132     | 5.00      | 5        | 07/13/2023 22:32     | <a href="#">WG2094643</a> |
| Lead     | 7.33         |                   | 0.0990    | 2.00      | 5        | 07/13/2023 22:32     | <a href="#">WG2094643</a> |
| Nickel   | 11.1         |                   | 0.197     | 2.50      | 5        | 07/13/2023 22:32     | <a href="#">WG2094643</a> |
| Selenium | 0.211        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/13/2023 22:32     | <a href="#">WG2094643</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 07/13/2023 22:32     | <a href="#">WG2094643</a> |
| Zinc     | 33.2         |                   | 0.740     | 25.0      | 5        | 07/13/2023 22:32     | <a href="#">WG2094643</a> |

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

| Analyte                            | Result mg/kg | Qualifier           | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|---------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.0702       | <a href="#">B J</a> | 0.0217    | 0.100     | 1        | 07/11/2023 18:33     | <a href="#">WG2092833</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 91.3         |                     |           | 77.0-120  |          | 07/11/2023 18:33     | <a href="#">WG2092833</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/11/2023 02:37        | <a href="#">WG2092290</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 07/11/2023 02:37        | <a href="#">WG2092290</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/11/2023 02:37        | <a href="#">WG2092290</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/11/2023 02:37        | <a href="#">WG2092290</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/11/2023 02:37        | <a href="#">WG2092290</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/11/2023 02:37        | <a href="#">WG2092290</a> |
| (S) Toluene-d8            | 104             |           |              | 75.0-131     |          | 07/11/2023 02:37        | <a href="#">WG2092290</a> |
| (S) 4-Bromofluorobenzene  | 103             |           |              | 67.0-138     |          | 07/11/2023 02:37        | <a href="#">WG2092290</a> |
| (S) 1,2-Dichloroethane-d4 | 105             |           |              | 70.0-130     |          | 07/11/2023 02:37        | <a href="#">WG2092290</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 2.76            | J         | 1.61         | 4.00         | 1        | 07/13/2023 14:29        | <a href="#">WG2093536</a> |
| C28-C36 Motor Oil Range | 8.54            |           | 0.274        | 4.00         | 1        | 07/13/2023 14:29        | <a href="#">WG2093536</a> |
| (S) o-Terphenyl         | 62.8            |           |              | 18.0-148     |          | 07/13/2023 14:29        | <a href="#">WG2093536</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| (S) p-Terphenyl-d14    | 85.9            |           |              | 23.0-120     |          | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| (S) Nitrobenzene-d5    | 86.4            |           |              | 14.0-149     |          | 07/13/2023 03:26        | <a href="#">WG2093557</a> |
| (S) 2-Fluorobiphenyl   | 83.1            |           |              | 34.0-125     |          | 07/13/2023 03:26        | <a href="#">WG2093557</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3947369-1 07/11/23 15:20

|                     | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------------------|-----------|--------------|--------|--------|
| Analyte             | mg/kg     |              | mg/kg  | mg/kg  |
| Hexavalent Chromium | U         |              | 0.255  | 1.00   |

L1628060-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1628060-01 07/11/23 15:33 • (DUP) R3947369-3 07/11/23 15:38

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

L1633242-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633242-02 07/11/23 17:27 • (DUP) R3947369-8 07/11/23 17:32

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | 0.291           | U          | 1        | 200     | P1            | 20             |

Laboratory Control Sample (LCS)

(LCS) R3947369-2 07/11/23 15:27

|                     | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------------------|--------------|------------|----------|-------------|---------------|
| Analyte             | mg/kg        | mg/kg      | %        | %           |               |
| Hexavalent Chromium | 10.0         | 10.4       | 104      | 80.0-120    |               |

L1633240-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633240-07 07/11/23 16:35 • (MS) R3947369-4 07/11/23 16:40 • (MSD) R3947369-5 07/11/23 16:45

|                     | 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      | %       | %        |          | %           |              |               | %    | %          |
| Hexavalent Chromium | 20.0         | U               | 19.7      | 18.7       | 98.7    | 93.6     | 1        | 75.0-125    |              |               | 5.28 | 20         |

L1633240-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1633240-07 07/11/23 16:35 • (MS) R3947369-6 07/11/23 16:50

|                     | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|---------------------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte             | mg/kg        | mg/kg           | mg/kg     | %       |          | %           |              |
| Hexavalent Chromium | 643          | U               | 777       | 121     | 50       | 75.0-125    |              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1633305-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633305-02 07/10/23 14:00 • (DUP) R3946769-2 07/10/23 14:00

|         | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | su              | su         |          | %       |                      | %              |
| pH      | 8.15            | 8.14       | 1        | 0.123   |                      | 1              |

Sample Narrative:

OS: 8.15 at 22.8C

DUP: 8.14 at 22.8C



L1633305-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1633305-03 07/10/23 14:00 • (DUP) R3946769-3 07/10/23 14:00

|         | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | su              | su         |          | %       |                      | %              |
| pH      | 8.21            | 8.20       | 1        | 0.122   |                      | 1              |

Sample Narrative:

OS: 8.21 at 22.7C

DUP: 8.2 at 22.7C

Laboratory Control Sample (LCS)

(LCS) R3946769-1 07/10/23 14:00

|         | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | <u>LCS Qualifier</u> |
|---------|--------------|------------|----------|-------------|----------------------|
| Analyte | su           | su         | %        | %           |                      |
| pH      | 10.0         | 10.0       | 100      | 99.0-101    |                      |

Sample Narrative:

LCS: 10 at 22.4C

Method Blank (MB)

(MB) R3946650-1 07/10/23 12:40

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:

BLANK: at 25C

L1633242-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633242-02 07/10/23 12:40 • (DUP) R3946650-3 07/10/23 12:40

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 511                         | 511                    | 1        | 0.000        |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

L1633276-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1633276-03 07/10/23 12:40 • (DUP) R3946650-4 07/10/23 12:40

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 1170                        | 1170                   | 1        | 0.000        |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3946650-2 07/10/23 12:40

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 327                      | 335                    | 102           | 85.0-115         |               |

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R3948009-1 07/13/23 07:50

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:

BLANK: at 25C

L1633069-39 Original Sample (OS) • Duplicate (DUP)

(OS) L1633069-39 07/13/23 07:50 • (DUP) R3948009-3 07/13/23 07:50

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 660                         | 659                    | 1        | 0.152        |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

L1633224-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1633224-07 07/13/23 07:50 • (DUP) R3948009-4 07/13/23 07:50

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 202                         | 199                    | 1        | 1.35         |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3948009-2 07/13/23 07:50

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 327                      | 331                    | 101           | 85.0-115         |               |

Sample Narrative:

LCS: at 25C

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3949374-1 07/17/23 12:35

| Analyte              | MB Result<br>mg/l | <u>MB Qualifier</u> | MB MDL<br>mg/l | MB RDL<br>mg/l |
|----------------------|-------------------|---------------------|----------------|----------------|
| Hot Water Sol. Boron | U                 |                     | 0.0167         | 0.200          |

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

(LCS) R3949374-2 07/17/23 12:37 • (LCSD) R3949374-3 07/17/23 12:40

| Analyte              | Spike Amount<br>mg/l | LCS Result<br>mg/l | LCSD Result<br>mg/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> | <u>LCSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|----------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|----------------------|-----------------------|----------|-----------------|
| Hot Water Sol. Boron | 1.00                 | 1.13               | 1.06                | 113           | 106            | 80.0-120         |                      |                       | 6.28     | 20              |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3948469-1 07/13/23 21:46

| Analyte  | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|----------|--------------------|--------------|-----------------|-----------------|
| Arsenic  | U                  |              | 0.100           | 1.00            |
| Barium   | U                  |              | 0.152           | 2.50            |
| Cadmium  | U                  |              | 0.0855          | 1.00            |
| Copper   | U                  |              | 0.133           | 5.00            |
| Lead     | U                  |              | 0.0990          | 2.00            |
| Nickel   | U                  |              | 0.197           | 2.50            |
| Selenium | U                  |              | 0.180           | 2.50            |
| Silver   | U                  |              | 0.0865          | 0.500           |
| Zinc     | U                  |              | 0.740           | 25.0            |

Laboratory Control Sample (LCS)

(LCS) R3948469-2 07/13/23 21:50

| Analyte  | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|-----------------------|---------------------|---------------|------------------|---------------|
| Arsenic  | 100                   | 98.1                | 98.1          | 80.0-120         |               |
| Barium   | 100                   | 93.8                | 93.8          | 80.0-120         |               |
| Cadmium  | 100                   | 99.4                | 99.4          | 80.0-120         |               |
| Copper   | 100                   | 98.9                | 98.9          | 80.0-120         |               |
| Lead     | 100                   | 95.0                | 95.0          | 80.0-120         |               |
| Nickel   | 100                   | 97.7                | 97.7          | 80.0-120         |               |
| Selenium | 100                   | 101                 | 101           | 80.0-120         |               |
| Silver   | 20.0                  | 19.6                | 98.0          | 80.0-120         |               |
| Zinc     | 100                   | 94.7                | 94.7          | 80.0-120         |               |

L1633274-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633274-02 07/13/23 21:53 • (MS) R3948469-5 07/13/23 22:03 • (MSD) R3948469-6 07/13/23 22:06

| Analyte  | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Arsenic  | 100                   | 6.96                     | 111                | 101                 | 104          | 94.3          | 5        | 75.0-125         |              |               | 9.13     | 20              |
| Barium   | 100                   | 112                      | 334                | 251                 | 222          | 139           | 5        | 75.0-125         | J5           | J3 J5         | 28.6     | 20              |
| Cadmium  | 100                   | 0.393                    | 109                | 96.5                | 108          | 96.1          | 5        | 75.0-125         |              |               | 11.8     | 20              |
| Copper   | 100                   | 10.2                     | 123                | 108                 | 112          | 97.8          | 5        | 75.0-125         |              |               | 12.6     | 20              |
| Lead     | 100                   | 7.21                     | 114                | 106                 | 107          | 98.3          | 5        | 75.0-125         |              |               | 7.52     | 20              |
| Nickel   | 100                   | 10.8                     | 113                | 103                 | 102          | 92.0          | 5        | 75.0-125         |              |               | 9.26     | 20              |
| Selenium | 100                   | 0.293                    | 108                | 97.7                | 108          | 97.4          | 5        | 75.0-125         |              |               | 10.1     | 20              |
| Silver   | 20.0                  | U                        | 21.5               | 18.9                | 107          | 94.7          | 5        | 75.0-125         |              |               | 12.7     | 20              |
| Zinc     | 100                   | 32.6                     | 137                | 131                 | 105          | 98.4          | 5        | 75.0-125         |              |               | 4.53     | 20              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3947537-2 07/11/23 15:40

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | 0.0294             | ⬇            | 0.0217          | 0.100           |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 98.4               |              |                 | 77.0-120        |

Laboratory Control Sample (LCS)

(LCS) R3947537-1 07/11/23 14:04

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 4.53                | 82.4          | 72.0-127         |               |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     | 100           | 77.0-120         |               |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3946986-3 07/10/23 21:08

| Analyte                   | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|---------------------------|--------------------|--------------|-----------------|-----------------|
| Benzene                   | U                  |              | 0.000467        | 0.00100         |
| Toluene                   | U                  |              | 0.00130         | 0.00500         |
| Ethylbenzene              | U                  |              | 0.000737        | 0.00250         |
| Xylenes, Total            | U                  |              | 0.000880        | 0.00650         |
| 1,2,4-Trimethylbenzene    | U                  |              | 0.00158         | 0.00500         |
| 1,3,5-Trimethylbenzene    | U                  |              | 0.00200         | 0.00500         |
| (S) Toluene-d8            | 104                |              |                 | 75.0-131        |
| (S) 4-Bromofluorobenzene  | 103                |              |                 | 67.0-138        |
| (S) 1,2-Dichloroethane-d4 | 106                |              |                 | 70.0-130        |

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

(LCS) R3946986-1 07/10/23 19:33 • (LCSD) R3946986-2 07/10/23 19:52

| Analyte                   | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Benzene                   | 0.125                 | 0.131               | 0.141                | 105           | 113            | 70.0-123         |               |                | 7.35     | 20              |
| Toluene                   | 0.125                 | 0.123               | 0.129                | 98.4          | 103            | 75.0-121         |               |                | 4.76     | 20              |
| Ethylbenzene              | 0.125                 | 0.127               | 0.141                | 102           | 113            | 74.0-126         |               |                | 10.4     | 20              |
| Xylenes, Total            | 0.375                 | 0.378               | 0.406                | 101           | 108            | 72.0-127         |               |                | 7.14     | 20              |
| 1,2,4-Trimethylbenzene    | 0.125                 | 0.119               | 0.134                | 95.2          | 107            | 70.0-126         |               |                | 11.9     | 20              |
| 1,3,5-Trimethylbenzene    | 0.125                 | 0.117               | 0.130                | 93.6          | 104            | 73.0-127         |               |                | 10.5     | 20              |
| (S) Toluene-d8            |                       |                     |                      | 102           | 101            | 75.0-131         |               |                |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                     |                      | 103           | 102            | 67.0-138         |               |                |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                     |                      | 107           | 111            | 70.0-130         |               |                |          |                 |

L1633224-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633224-01 07/10/23 22:49 • (MS) R3946986-4 07/11/23 05:09 • (MSD) R3946986-5 07/11/23 05:28

| Analyte                   | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Benzene                   | 0.125                 | U                        | 0.125              | 0.142               | 100          | 114           | 1        | 10.0-149         |              |               | 12.7     | 37              |
| Toluene                   | 0.125                 | U                        | 0.129              | 0.138               | 103          | 110           | 1        | 10.0-156         |              |               | 6.74     | 38              |
| Ethylbenzene              | 0.125                 | U                        | 0.144              | 0.146               | 115          | 117           | 1        | 10.0-160         |              |               | 1.38     | 38              |
| Xylenes, Total            | 0.375                 | 0.00117                  | 0.424              | 0.440               | 113          | 117           | 1        | 10.0-160         |              |               | 3.70     | 38              |
| 1,2,4-Trimethylbenzene    | 0.125                 | 0.00375                  | 0.236              | 0.162               | 186          | 127           | 1        | 10.0-160         | J5           | J3            | 37.2     | 36              |
| 1,3,5-Trimethylbenzene    | 0.125                 | U                        | 0.210              | 0.151               | 168          | 121           | 1        | 10.0-160         | J5           |               | 32.7     | 38              |
| (S) Toluene-d8            |                       |                          |                    |                     | 104          | 103           |          | 75.0-131         |              |               |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                          |                    |                     | 100          | 103           |          | 67.0-138         |              |               |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                          |                    |                     | 106          | 107           |          | 70.0-130         |              |               |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3948300-2 07/13/23 16:25

| Analyte                 | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|-------------------------|--------------------|--------------|-----------------|-----------------|
| C10-C28 Diesel Range    | U                  |              | 1.61            | 4.00            |
| C28-C36 Motor Oil Range | U                  |              | 0.274           | 4.00            |
| (S) o-Terphenyl         | 83.3               |              |                 | 18.0-148        |

Laboratory Control Sample (LCS)

(LCS) R3948300-1 07/13/23 14:04

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| C10-C28 Diesel Range | 50.0                  | 31.6                | 63.2          | 50.0-150         |               |
| (S) o-Terphenyl      |                       |                     | 58.0          | 18.0-148         |               |

<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) R3948356-1 07/13/23 14:01

| Analyte                 | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|-------------------------|--------------------|--------------|-----------------|-----------------|
| C10-C28 Diesel Range    | U                  |              | 1.61            | 4.00            |
| C28-C36 Motor Oil Range | 0.935              | ⬇            | 0.274           | 4.00            |
| (S) o-Terphenyl         | 87.2               |              |                 | 18.0-148        |

Laboratory Control Sample (LCS)

(LCS) R3948356-2 07/13/23 14:14

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| C10-C28 Diesel Range | 50.0                  | 32.2                | 64.4          | 50.0-150         |               |
| (S) o-Terphenyl      |                       |                     | 66.2          | 18.0-148         |               |

<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) R3948583-2 07/13/23 02:07

| Analyte                | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------|--------------------|--------------|-----------------|-----------------|
| Acenaphthene           | U                  |              | 0.00209         | 0.00600         |
| Anthracene             | U                  |              | 0.00230         | 0.00600         |
| Benzo(a)anthracene     | U                  |              | 0.00173         | 0.00600         |
| Benzo(b)fluoranthene   | U                  |              | 0.00153         | 0.00600         |
| Benzo(k)fluoranthene   | U                  |              | 0.00215         | 0.00600         |
| Benzo(a)pyrene         | U                  |              | 0.00179         | 0.00600         |
| Chrysene               | U                  |              | 0.00232         | 0.00600         |
| Dibenz(a,h)anthracene  | U                  |              | 0.00172         | 0.00600         |
| Fluoranthene           | U                  |              | 0.00227         | 0.00600         |
| Fluorene               | U                  |              | 0.00205         | 0.00600         |
| Indeno(1,2,3-cd)pyrene | U                  |              | 0.00181         | 0.00600         |
| 1-Methylnaphthalene    | U                  |              | 0.00449         | 0.0200          |
| 2-Methylnaphthalene    | U                  |              | 0.00427         | 0.0200          |
| Naphthalene            | U                  |              | 0.00408         | 0.0200          |
| Pyrene                 | U                  |              | 0.00200         | 0.00600         |
| (S) p-Terphenyl-d14    | 80.2               |              |                 | 23.0-120        |
| (S) Nitrobenzene-d5    | 69.1               |              |                 | 14.0-149        |
| (S) 2-Fluorobiphenyl   | 73.4               |              |                 | 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) R3948583-1 07/13/23 01:47

| Analyte                | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Acenaphthene           | 0.0800                | 0.0593              | 74.1          | 50.0-120         |               |
| Anthracene             | 0.0800                | 0.0608              | 76.0          | 50.0-126         |               |
| Benzo(a)anthracene     | 0.0800                | 0.0667              | 83.4          | 45.0-120         |               |
| Benzo(b)fluoranthene   | 0.0800                | 0.0632              | 79.0          | 42.0-121         |               |
| Benzo(k)fluoranthene   | 0.0800                | 0.0621              | 77.6          | 49.0-125         |               |
| Benzo(a)pyrene         | 0.0800                | 0.0638              | 79.8          | 42.0-120         |               |
| Chrysene               | 0.0800                | 0.0630              | 78.8          | 49.0-122         |               |
| Dibenz(a,h)anthracene  | 0.0800                | 0.0609              | 76.1          | 47.0-125         |               |
| Fluoranthene           | 0.0800                | 0.0620              | 77.5          | 49.0-129         |               |
| Fluorene               | 0.0800                | 0.0619              | 77.4          | 49.0-120         |               |
| Indeno(1,2,3-cd)pyrene | 0.0800                | 0.0670              | 83.8          | 46.0-125         |               |
| 1-Methylnaphthalene    | 0.0800                | 0.0612              | 76.5          | 51.0-121         |               |
| 2-Methylnaphthalene    | 0.0800                | 0.0623              | 77.9          | 50.0-120         |               |
| Naphthalene            | 0.0800                | 0.0608              | 76.0          | 50.0-120         |               |
| Pyrene                 | 0.0800                | 0.0634              | 79.3          | 43.0-123         |               |

Laboratory Control Sample (LCS)

(LCS) R3948583-1 07/13/23 01:47

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> |
|----------------------|-----------------------|---------------------|---------------|------------------|----------------------|
| (S) p-Terphenyl-d14  |                       |                     | 87.1          | 23.0-120         |                      |
| (S) Nitrobenzene-d5  |                       |                     | 87.2          | 14.0-149         |                      |
| (S) 2-Fluorobiphenyl |                       |                     | 84.9          | 34.0-125         |                      |

L1633276-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633276-01 07/13/23 03:46 • (MS) R3948583-3 07/13/23 04:06 • (MSD) R3948583-4 07/13/23 04:26

| Analyte                | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | <u>MS Qualifier</u> | <u>MSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|---------------------|----------------------|----------|-----------------|
| Acenaphthene           | 0.0788                | U                        | 0.0496             | 0.0557              | 62.9         | 70.0          | 1        | 14.0-127         |                     |                      | 11.6     | 27              |
| Anthracene             | 0.0788                | U                        | 0.0496             | 0.0563              | 62.9         | 70.7          | 1        | 10.0-145         |                     |                      | 12.7     | 30              |
| Benzo(a)anthracene     | 0.0788                | U                        | 0.0524             | 0.0595              | 66.5         | 74.7          | 1        | 10.0-139         |                     |                      | 12.7     | 30              |
| Benzo(b)fluoranthene   | 0.0788                | U                        | 0.0465             | 0.0543              | 59.0         | 68.2          | 1        | 10.0-140         |                     |                      | 15.5     | 36              |
| Benzo(k)fluoranthene   | 0.0788                | U                        | 0.0474             | 0.0554              | 60.2         | 69.6          | 1        | 10.0-137         |                     |                      | 15.6     | 31              |
| Benzo(a)pyrene         | 0.0788                | U                        | 0.0552             | 0.0637              | 70.1         | 80.0          | 1        | 10.0-141         |                     |                      | 14.3     | 31              |
| Chrysene               | 0.0788                | U                        | 0.0513             | 0.0588              | 65.1         | 73.9          | 1        | 10.0-145         |                     |                      | 13.6     | 30              |
| Dibenz(a,h)anthracene  | 0.0788                | U                        | 0.0463             | 0.0541              | 58.8         | 68.0          | 1        | 10.0-132         |                     |                      | 15.5     | 31              |
| Fluoranthene           | 0.0788                | U                        | 0.0505             | 0.0571              | 64.1         | 71.7          | 1        | 10.0-153         |                     |                      | 12.3     | 33              |
| Fluorene               | 0.0788                | U                        | 0.0512             | 0.0576              | 65.0         | 72.4          | 1        | 11.0-130         |                     |                      | 11.8     | 29              |
| Indeno(1,2,3-cd)pyrene | 0.0788                | U                        | 0.0492             | 0.0577              | 62.4         | 72.5          | 1        | 10.0-137         |                     |                      | 15.9     | 32              |
| 1-Methylnaphthalene    | 0.0788                | U                        | 0.0520             | 0.0569              | 66.0         | 71.5          | 1        | 10.0-142         |                     |                      | 9.00     | 28              |
| 2-Methylnaphthalene    | 0.0788                | 0.0147                   | 0.0531             | 0.0580              | 48.7         | 54.4          | 1        | 10.0-137         |                     |                      | 8.82     | 28              |
| Naphthalene            | 0.0788                | 0.0155                   | 0.0507             | 0.0563              | 44.7         | 51.3          | 1        | 10.0-135         |                     |                      | 10.5     | 27              |
| Pyrene                 | 0.0788                | U                        | 0.0523             | 0.0597              | 66.4         | 75.0          | 1        | 10.0-148         |                     |                      | 13.2     | 35              |
| (S) p-Terphenyl-d14    |                       |                          |                    |                     | 71.6         | 83.9          |          | 23.0-120         |                     |                      |          |                 |
| (S) Nitrobenzene-d5    |                       |                          |                    |                     | 73.3         | 78.3          |          | 14.0-149         |                     |                      |          |                 |
| (S) 2-Fluorobiphenyl   |                       |                          |                    |                     | 70.5         | 79.3          |          | 34.0-125         |                     |                      |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

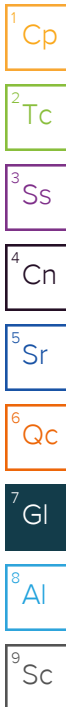
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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.                                                                                                                                                                                                                                               |
| 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. |
| 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.                    |
| J3        | The associated batch QC was outside the established quality control range for precision.               |
| J5        | The sample matrix interfered with the ability to make any accurate determination; spike value is high. |
| P1        | RPD value not applicable for sample concentrations less than 5 times the reporting limit.              |
| T8        | Sample(s) received past/too close to holding time expiration.                                          |



# ACCREDITATIONS & LOCATIONS

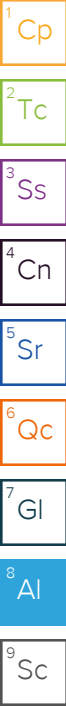
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

|                                |             |                             |                  |
|--------------------------------|-------------|-----------------------------|------------------|
| 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.



Condition:  
NCF / OK



# ANALYTICAL REPORT

July 18, 2023

Revised Report

## Caerus Oil and Gas

Sample Delivery Group: L1633276  
Samples Received: 07/07/2023  
Project Number: H7  
Description: H7-Tank Battery  
Site: H7  
Report To: Jake Janicek  
143 Diamond Avenue  
Parachute, CO 81635

<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

Entire Report Reviewed By:

*Chris Ward*

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 [www.pacenational.com](http://www.pacenational.com)

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<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

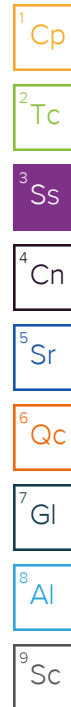
20230705-H7-(SB04)@10-11.5 L1633276-01 Solid

Collected by  
K. Moreland

Collected date/time  
07/05/23 10:25

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091359 | 1        | 07/17/23 11:50        | 07/17/23 11:50     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2091732 | 1        | 07/10/23 00:40        | 07/11/23 12:14     | SET     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091581 | 1        | 07/09/23 08:40        | 07/09/23 13:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2091873 | 1        | 07/10/23 08:56        | 07/10/23 12:40     | MCC     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091364 | 1        | 07/13/23 13:21        | 07/17/23 13:49     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2091602 | 5        | 07/09/23 22:26        | 07/11/23 17:02     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2092833 | 1        | 07/10/23 11:16        | 07/11/23 20:06     | MGF     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092290 | 1        | 07/10/23 11:16        | 07/11/23 02:56     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093536 | 1        | 07/13/23 06:38        | 07/13/23 14:41     | HLJ     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093557 | 1        | 07/12/23 20:03        | 07/13/23 03:46     | AMG     | Mt. Juliet, TN |



20230705-H7-(SB04)@20-21.5 L1633276-02 Solid

Collected by  
K. Moreland

Collected date/time  
07/05/23 11:00

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091359 | 1        | 07/17/23 11:52        | 07/17/23 11:52     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2091732 | 1        | 07/10/23 00:40        | 07/11/23 12:19     | SET     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091581 | 1        | 07/09/23 08:40        | 07/09/23 13:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2091873 | 1        | 07/10/23 08:56        | 07/10/23 12:40     | MCC     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091364 | 1        | 07/13/23 13:21        | 07/17/23 13:51     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2091602 | 5        | 07/09/23 22:26        | 07/11/23 17:05     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2092833 | 1        | 07/10/23 11:16        | 07/11/23 20:29     | MGF     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092290 | 1        | 07/10/23 11:16        | 07/11/23 03:15     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093536 | 1        | 07/13/23 06:38        | 07/13/23 14:41     | HLJ     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093557 | 1        | 07/12/23 20:03        | 07/13/23 04:45     | AMG     | Mt. Juliet, TN |

20230705-H7-(SB04)@30-31.5 L1633276-03 Solid

Collected by  
K. Moreland

Collected date/time  
07/05/23 12:00

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091359 | 1        | 07/17/23 11:55        | 07/17/23 11:55     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2091732 | 1        | 07/10/23 00:40        | 07/11/23 12:45     | SET     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091581 | 1        | 07/09/23 08:40        | 07/09/23 13:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2091873 | 1        | 07/10/23 08:56        | 07/10/23 12:40     | MCC     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091364 | 1        | 07/13/23 13:21        | 07/17/23 13:54     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2091602 | 5        | 07/09/23 22:26        | 07/11/23 17:09     | LD      | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2092833 | 1        | 07/10/23 11:16        | 07/11/23 20:52     | MGF     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092290 | 1        | 07/10/23 11:16        | 07/11/23 03:34     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093536 | 40       | 07/13/23 06:38        | 07/13/23 16:25     | HLJ     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093557 | 1        | 07/12/23 20:03        | 07/13/23 05:05     | AMG     | 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

## Report Revision History

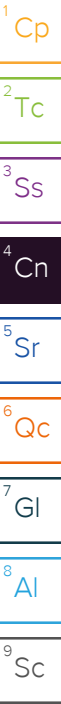
---

Level II Report - Version 1: 07/17/23 15:27

## Project Narrative

---

Updated contact info - Tony Gibson



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 5.43   |           | 1        | 07/17/2023 11:50     | WG2091359 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/11/2023 12:14     | <a href="#">WG2091732</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 9.17   | <a href="#">T8</a> | 1        | 07/09/2023 13:00     | <a href="#">WG2091581</a> |

Sample Narrative:  
L1633276-01 WG2091581: 9.17 at 21.2C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 533             |           | 10.0         | 1        | 07/10/2023 12:40     | <a href="#">WG2091873</a> |

Sample Narrative:  
L1633276-01 WG2091873: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.375       |           | 0.0167   | 0.200    | 1        | 07/17/2023 13:49     | <a href="#">WG2091364</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 9.50         |                   | 0.100     | 1.00      | 5        | 07/11/2023 17:02     | <a href="#">WG2091602</a> |
| Barium   | 184          |                   | 0.152     | 2.50      | 5        | 07/11/2023 17:02     | <a href="#">WG2091602</a> |
| Cadmium  | 0.384        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/11/2023 17:02     | <a href="#">WG2091602</a> |
| Copper   | 14.3         |                   | 0.132     | 5.00      | 5        | 07/11/2023 17:02     | <a href="#">WG2091602</a> |
| Lead     | 10.9         |                   | 0.0990    | 2.00      | 5        | 07/11/2023 17:02     | <a href="#">WG2091602</a> |
| Nickel   | 17.9         |                   | 0.197     | 2.50      | 5        | 07/11/2023 17:02     | <a href="#">WG2091602</a> |
| Selenium | 0.468        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/11/2023 17:02     | <a href="#">WG2091602</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 07/11/2023 17:02     | <a href="#">WG2091602</a> |
| Zinc     | 43.4         |                   | 0.740     | 25.0      | 5        | 07/11/2023 17:02     | <a href="#">WG2091602</a> |

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

| Analyte                            | Result mg/kg | Qualifier           | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|---------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.0628       | <a href="#">B J</a> | 0.0217    | 0.100     | 1        | 07/11/2023 20:06     | <a href="#">WG2092833</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 93.5         |                     |           | 77.0-120  |          | 07/11/2023 20:06     | <a href="#">WG2092833</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/11/2023 02:56        | <a href="#">WG2092290</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 07/11/2023 02:56        | <a href="#">WG2092290</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/11/2023 02:56        | <a href="#">WG2092290</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/11/2023 02:56        | <a href="#">WG2092290</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/11/2023 02:56        | <a href="#">WG2092290</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/11/2023 02:56        | <a href="#">WG2092290</a> |
| (S) Toluene-d8            | 104             |           |              | 75.0-131     |          | 07/11/2023 02:56        | <a href="#">WG2092290</a> |
| (S) 4-Bromofluorobenzene  | 101             |           |              | 67.0-138     |          | 07/11/2023 02:56        | <a href="#">WG2092290</a> |
| (S) 1,2-Dichloroethane-d4 | 104             |           |              | 70.0-130     |          | 07/11/2023 02:56        | <a href="#">WG2092290</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 4.69            |           | 1.61         | 4.00         | 1        | 07/13/2023 14:41        | <a href="#">WG2093536</a> |
| C28-C36 Motor Oil Range | 19.8            |           | 0.274        | 4.00         | 1        | 07/13/2023 14:41        | <a href="#">WG2093536</a> |
| (S) o-Terphenyl         | 38.0            |           |              | 18.0-148     |          | 07/13/2023 14:41        | <a href="#">WG2093536</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| 2-Methylnaphthalene    | 0.0147          | U         | 0.00427      | 0.0200       | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Naphthalene            | 0.0155          | U         | 0.00408      | 0.0200       | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| (S) p-Terphenyl-d14    | 78.6            |           |              | 23.0-120     |          | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| (S) Nitrobenzene-d5    | 74.4            |           |              | 14.0-149     |          | 07/13/2023 03:46        | <a href="#">WG2093557</a> |
| (S) 2-Fluorobiphenyl   | 72.5            |           |              | 34.0-125     |          | 07/13/2023 03:46        | <a href="#">WG2093557</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 3.63   |           | 1        | 07/17/2023 11:52     | WG2091359 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/11/2023 12:19     | <a href="#">WG2091732</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.26   | <a href="#">T8</a> | 1        | 07/09/2023 13:00     | <a href="#">WG2091581</a> |

Sample Narrative:

L1633276-02 WG2091581: 8.26 at 21.2C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 2120            |           | 10.0         | 1        | 07/10/2023 12:40     | <a href="#">WG2091873</a> |

Sample Narrative:

L1633276-02 WG2091873: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.217       |           | 0.0167   | 0.200    | 1        | 07/17/2023 13:51     | <a href="#">WG2091364</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 7.21         |                   | 0.100     | 1.00      | 5        | 07/11/2023 17:05     | <a href="#">WG2091602</a> |
| Barium   | 130          |                   | 0.152     | 2.50      | 5        | 07/11/2023 17:05     | <a href="#">WG2091602</a> |
| Cadmium  | 0.686        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/11/2023 17:05     | <a href="#">WG2091602</a> |
| Copper   | 11.8         |                   | 0.132     | 5.00      | 5        | 07/11/2023 17:05     | <a href="#">WG2091602</a> |
| Lead     | 8.88         |                   | 0.0990    | 2.00      | 5        | 07/11/2023 17:05     | <a href="#">WG2091602</a> |
| Nickel   | 14.3         |                   | 0.197     | 2.50      | 5        | 07/11/2023 17:05     | <a href="#">WG2091602</a> |
| Selenium | 0.407        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/11/2023 17:05     | <a href="#">WG2091602</a> |
| Silver   | 0.107        | <a href="#">J</a> | 0.0865    | 0.500     | 5        | 07/11/2023 17:05     | <a href="#">WG2091602</a> |
| Zinc     | 41.3         |                   | 0.740     | 25.0      | 5        | 07/11/2023 17:05     | <a href="#">WG2091602</a> |

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

| Analyte                            | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.112        | <a href="#">B</a> | 0.0217    | 0.100     | 1        | 07/11/2023 20:29     | <a href="#">WG2092833</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 94.3         |                   |           | 77.0-120  |          | 07/11/2023 20:29     | <a href="#">WG2092833</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/11/2023 03:15        | <a href="#">WG2092290</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 07/11/2023 03:15        | <a href="#">WG2092290</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/11/2023 03:15        | <a href="#">WG2092290</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/11/2023 03:15        | <a href="#">WG2092290</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/11/2023 03:15        | <a href="#">WG2092290</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/11/2023 03:15        | <a href="#">WG2092290</a> |
| (S) Toluene-d8            | 103             |           |              | 75.0-131     |          | 07/11/2023 03:15        | <a href="#">WG2092290</a> |
| (S) 4-Bromofluorobenzene  | 101             |           |              | 67.0-138     |          | 07/11/2023 03:15        | <a href="#">WG2092290</a> |
| (S) 1,2-Dichloroethane-d4 | 105             |           |              | 70.0-130     |          | 07/11/2023 03:15        | <a href="#">WG2092290</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 20.5            |           | 1.61         | 4.00         | 1        | 07/13/2023 14:41        | <a href="#">WG2093536</a> |
| C28-C36 Motor Oil Range | 27.6            |           | 0.274        | 4.00         | 1        | 07/13/2023 14:41        | <a href="#">WG2093536</a> |
| (S) o-Terphenyl         | 42.4            |           |              | 18.0-148     |          | 07/13/2023 14:41        | <a href="#">WG2093536</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| (S) p-Terphenyl-d14    | 72.7            |           |              | 23.0-120     |          | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| (S) Nitrobenzene-d5    | 69.5            |           |              | 14.0-149     |          | 07/13/2023 04:45        | <a href="#">WG2093557</a> |
| (S) 2-Fluorobiphenyl   | 68.7            |           |              | 34.0-125     |          | 07/13/2023 04:45        | <a href="#">WG2093557</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 3.69   |           | 1        | 07/17/2023 11:55     | WG2091359 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/11/2023 12:45     | <a href="#">WG2091732</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.32   | <a href="#">T8</a> | 1        | 07/09/2023 13:00     | <a href="#">WG2091581</a> |

Sample Narrative:

L1633276-03 WG2091581: 8.32 at 21.4C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 1170            |           | 10.0         | 1        | 07/10/2023 12:40     | <a href="#">WG2091873</a> |

Sample Narrative:

L1633276-03 WG2091873: at 25C

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

| Analyte              | Result mg/l | Qualifier         | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-------------------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.174       | <a href="#">J</a> | 0.0167   | 0.200    | 1        | 07/17/2023 13:54     | <a href="#">WG2091364</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 6.55         |                   | 0.100     | 1.00      | 5        | 07/11/2023 17:09     | <a href="#">WG2091602</a> |
| Barium   | 126          |                   | 0.152     | 2.50      | 5        | 07/11/2023 17:09     | <a href="#">WG2091602</a> |
| Cadmium  | 0.382        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/11/2023 17:09     | <a href="#">WG2091602</a> |
| Copper   | 10.5         |                   | 0.132     | 5.00      | 5        | 07/11/2023 17:09     | <a href="#">WG2091602</a> |
| Lead     | 6.87         |                   | 0.0990    | 2.00      | 5        | 07/11/2023 17:09     | <a href="#">WG2091602</a> |
| Nickel   | 11.6         |                   | 0.197     | 2.50      | 5        | 07/11/2023 17:09     | <a href="#">WG2091602</a> |
| Selenium | 0.346        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/11/2023 17:09     | <a href="#">WG2091602</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 07/11/2023 17:09     | <a href="#">WG2091602</a> |
| Zinc     | 35.4         |                   | 0.740     | 25.0      | 5        | 07/11/2023 17:09     | <a href="#">WG2091602</a> |

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

| Analyte                            | Result mg/kg | Qualifier           | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|---------------------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.0952       | <a href="#">B J</a> | 0.0217    | 0.100     | 1        | 07/11/2023 20:52     | <a href="#">WG2092833</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 94.0         |                     |           | 77.0-120  |          | 07/11/2023 20:52     | <a href="#">WG2092833</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/11/2023 03:34        | <a href="#">WG2092290</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 07/11/2023 03:34        | <a href="#">WG2092290</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/11/2023 03:34        | <a href="#">WG2092290</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/11/2023 03:34        | <a href="#">WG2092290</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/11/2023 03:34        | <a href="#">WG2092290</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/11/2023 03:34        | <a href="#">WG2092290</a> |
| (S) Toluene-d8            | 102             |           |              | 75.0-131     |          | 07/11/2023 03:34        | <a href="#">WG2092290</a> |
| (S) 4-Bromofluorobenzene  | 101             |           |              | 67.0-138     |          | 07/11/2023 03:34        | <a href="#">WG2092290</a> |
| (S) 1,2-Dichloroethane-d4 | 105             |           |              | 70.0-130     |          | 07/11/2023 03:34        | <a href="#">WG2092290</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | U               |                    | 64.4         | 160          | 40       | 07/13/2023 16:25        | <a href="#">WG2093536</a> |
| C28-C36 Motor Oil Range | 304             |                    | 11.0         | 160          | 40       | 07/13/2023 16:25        | <a href="#">WG2093536</a> |
| (S) o-Terphenyl         | 46.0            | <a href="#">J7</a> |              | 18.0-148     |          | 07/13/2023 16:25        | <a href="#">WG2093536</a> |

Sample Narrative:

L1633276-03 WG2093536: Dilution due to matrix.

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| (S) p-Terphenyl-d14    | 81.9            |           |              | 23.0-120     |          | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| (S) Nitrobenzene-d5    | 73.8            |           |              | 14.0-149     |          | 07/13/2023 05:05        | <a href="#">WG2093557</a> |
| (S) 2-Fluorobiphenyl   | 75.0            |           |              | 34.0-125     |          | 07/13/2023 05:05        | <a href="#">WG2093557</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3947267-1 07/11/23 12:02

|                     | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------------------|-----------|--------------|--------|--------|
| Analyte             | mg/kg     |              | mg/kg  | mg/kg  |
| Hexavalent Chromium | U         |              | 0.255  | 1.00   |

L1633406-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1633406-05 07/11/23 13:22 • (DUP) R3947267-7 07/11/23 13:27

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | 0.481           | 0.693      | 1        | 36.0    | J P1          | 20             |

L1633435-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633435-02 07/11/23 14:19 • (DUP) R3947267-8 07/11/23 14:24

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

Laboratory Control Sample (LCS)

(LCS) R3947267-2 07/11/23 12:09

|                     | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------------------|--------------|------------|----------|-------------|---------------|
| Analyte             | mg/kg        | mg/kg      | %        | %           |               |
| Hexavalent Chromium | 10.0         | 10.8       | 108      | 80.0-120    |               |

L1633276-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633276-02 07/11/23 12:19 • (MS) R3947267-3 07/11/23 12:25 • (MSD) R3947267-4 07/11/23 12:30

|                     | 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      | %       | %        |          | %           |              |               | %    | %          |
| Hexavalent Chromium | 20.0         | U               | 20.4      | 18.4       | 102     | 91.9     | 1        | 75.0-125    |              |               | 10.4 | 20         |

L1633276-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1633276-02 07/11/23 12:19 • (MS) R3947267-5 07/11/23 12:35

|                     | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|---------------------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte             | mg/kg        | mg/kg           | mg/kg     | %       |          | %           |              |
| Hexavalent Chromium | 638          | U               | 781       | 122     | 50       | 75.0-125    |              |

<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

L1633242-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1633242-01 07/09/23 13:00 • (DUP) R3946384-2 07/09/23 13:00

|         | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | su              | su         |          | %       |                      | %              |
| pH      | 8.42            | 8.44       | 1        | 0.237   |                      | 1              |

Sample Narrative:

OS: 8.42 at 21.5C

DUP: 8.44 at 21.6C

<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

L1633435-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1633435-06 07/09/23 13:00 • (DUP) R3946384-3 07/09/23 13:00

|         | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | pH              | su         |          | %       |                      | %              |
| pH      | 8.24            | 8.25       | 1        | 0.121   |                      | 1              |

Sample Narrative:

OS: 8.24 at 21.6C

DUP: 8.25 at 21.3C

Laboratory Control Sample (LCS)

(LCS) R3946384-1 07/09/23 13:00

|         | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | <u>LCS Qualifier</u> |
|---------|--------------|------------|----------|-------------|----------------------|
| Analyte | su           | su         | %        | %           |                      |
| pH      | 10.0         | 10.0       | 100      | 99.0-101    |                      |

Sample Narrative:

LCS: 10 at 21.6C

Method Blank (MB)

(MB) R3946650-1 07/10/23 12:40

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:  
BLANK: at 25C

L1633242-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633242-02 07/10/23 12:40 • (DUP) R3946650-3 07/10/23 12:40

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 511                         | 511                    | 1        | 0.000        |               | 20                     |

Sample Narrative:  
OS: at 25C  
DUP: at 25C

L1633276-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1633276-03 07/10/23 12:40 • (DUP) R3946650-4 07/10/23 12:40

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 1170                        | 1170                   | 1        | 0.000        |               | 20                     |

Sample Narrative:  
OS: at 25C  
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3946650-2 07/10/23 12:40

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 327                      | 335                    | 102           | 85.0-115         |               |

Sample Narrative:  
LCS: at 25C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3949375-1 07/17/23 13:41

| Analyte              | MB Result<br>mg/l | MB Qualifier | MB MDL<br>mg/l | MB RDL<br>mg/l |
|----------------------|-------------------|--------------|----------------|----------------|
| Hot Water Sol. Boron | U                 |              | 0.0167         | 0.200          |

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

(LCS) R3949375-2 07/17/23 13:43 • (LCSD) R3949375-3 07/17/23 13:46

| Analyte              | Spike Amount<br>mg/l | LCS Result<br>mg/l | LCSD Result<br>mg/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Hot Water Sol. Boron | 1.00                 | 0.955              | 0.969               | 95.5          | 96.9           | 80.0-120         |               |                | 1.41     | 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) R3947288-1 07/11/23 16:14

| Analyte  | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|----------|--------------------|--------------|-----------------|-----------------|
| Arsenic  | U                  |              | 0.100           | 1.00            |
| Barium   | U                  |              | 0.152           | 2.50            |
| Cadmium  | U                  |              | 0.0855          | 1.00            |
| Copper   | U                  |              | 0.133           | 5.00            |
| Lead     | U                  |              | 0.0990          | 2.00            |
| Nickel   | U                  |              | 0.197           | 2.50            |
| Selenium | U                  |              | 0.180           | 2.50            |
| Silver   | U                  |              | 0.0865          | 0.500           |
| Zinc     | U                  |              | 0.740           | 25.0            |

Laboratory Control Sample (LCS)

(LCS) R3947288-2 07/11/23 16:17

| Analyte  | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|-----------------------|---------------------|---------------|------------------|---------------|
| Arsenic  | 100                   | 97.7                | 97.7          | 80.0-120         |               |
| Barium   | 100                   | 89.9                | 89.9          | 80.0-120         |               |
| Cadmium  | 100                   | 98.4                | 98.4          | 80.0-120         |               |
| Copper   | 100                   | 90.8                | 90.8          | 80.0-120         |               |
| Lead     | 100                   | 90.4                | 90.4          | 80.0-120         |               |
| Nickel   | 100                   | 98.4                | 98.4          | 80.0-120         |               |
| Selenium | 100                   | 101                 | 101           | 80.0-120         |               |
| Silver   | 20.0                  | 20.3                | 102           | 80.0-120         |               |
| Zinc     | 100                   | 92.9                | 92.9          | 80.0-120         |               |

L1633435-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633435-04 07/11/23 16:21 • (MS) R3947288-5 07/11/23 16:31 • (MSD) R3947288-6 07/11/23 16:34

| Analyte  | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Arsenic  | 100                   | 18.1                     | 114                | 101                 | 95.7         | 83.3          | 5        | 75.0-125         |              |               | 11.5     | 20              |
| Barium   | 100                   | 4370                     | 7650               | 7100                | 3290         | 2730          | 5        | 75.0-125         | E V          | E V           | 7.57     | 20              |
| Cadmium  | 100                   | 0.482                    | 103                | 91.2                | 103          | 90.7          | 5        | 75.0-125         |              |               | 12.5     | 20              |
| Copper   | 100                   | 24.4                     | 110                | 96.5                | 86.0         | 72.1          | 5        | 75.0-125         |              | J6            | 13.4     | 20              |
| Lead     | 100                   | 17.2                     | 109                | 97.4                | 91.4         | 80.2          | 5        | 75.0-125         |              |               | 10.8     | 20              |
| Nickel   | 100                   | 20.0                     | 111                | 98.4                | 90.8         | 78.4          | 5        | 75.0-125         |              |               | 11.9     | 20              |
| Selenium | 100                   | 0.922                    | 106                | 91.3                | 105          | 90.4          | 5        | 75.0-125         | E            |               | 14.5     | 20              |
| Silver   | 20.0                  | 0.0987                   | 20.8               | 18.0                | 104          | 89.5          | 5        | 75.0-125         |              |               | 14.5     | 20              |
| Zinc     | 100                   | 61.6                     | 141                | 138                 | 79.0         | 75.9          | 5        | 75.0-125         |              |               | 2.24     | 20              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3947537-2 07/11/23 15:40

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | 0.0294             | ⬇            | 0.0217          | 0.100           |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 98.4               |              |                 | 77.0-120        |

Laboratory Control Sample (LCS)

(LCS) R3947537-1 07/11/23 14:04

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 4.53                | 82.4          | 72.0-127         |               |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     | 100           | 77.0-120         |               |

<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) R3946986-3 07/10/23 21:08

| Analyte                   | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|---------------------------|--------------------|--------------|-----------------|-----------------|
| Benzene                   | U                  |              | 0.000467        | 0.00100         |
| Toluene                   | U                  |              | 0.00130         | 0.00500         |
| Ethylbenzene              | U                  |              | 0.000737        | 0.00250         |
| Xylenes, Total            | U                  |              | 0.000880        | 0.00650         |
| 1,2,4-Trimethylbenzene    | U                  |              | 0.00158         | 0.00500         |
| 1,3,5-Trimethylbenzene    | U                  |              | 0.00200         | 0.00500         |
| (S) Toluene-d8            | 104                |              |                 | 75.0-131        |
| (S) 4-Bromofluorobenzene  | 103                |              |                 | 67.0-138        |
| (S) 1,2-Dichloroethane-d4 | 106                |              |                 | 70.0-130        |

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

(LCS) R3946986-1 07/10/23 19:33 • (LCSD) R3946986-2 07/10/23 19:52

| Analyte                   | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Benzene                   | 0.125                 | 0.131               | 0.141                | 105           | 113            | 70.0-123         |               |                | 7.35     | 20              |
| Toluene                   | 0.125                 | 0.123               | 0.129                | 98.4          | 103            | 75.0-121         |               |                | 4.76     | 20              |
| Ethylbenzene              | 0.125                 | 0.127               | 0.141                | 102           | 113            | 74.0-126         |               |                | 10.4     | 20              |
| Xylenes, Total            | 0.375                 | 0.378               | 0.406                | 101           | 108            | 72.0-127         |               |                | 7.14     | 20              |
| 1,2,4-Trimethylbenzene    | 0.125                 | 0.119               | 0.134                | 95.2          | 107            | 70.0-126         |               |                | 11.9     | 20              |
| 1,3,5-Trimethylbenzene    | 0.125                 | 0.117               | 0.130                | 93.6          | 104            | 73.0-127         |               |                | 10.5     | 20              |
| (S) Toluene-d8            |                       |                     |                      | 102           | 101            | 75.0-131         |               |                |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                     |                      | 103           | 102            | 67.0-138         |               |                |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                     |                      | 107           | 111            | 70.0-130         |               |                |          |                 |

L1633224-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633224-01 07/10/23 22:49 • (MS) R3946986-4 07/11/23 05:09 • (MSD) R3946986-5 07/11/23 05:28

| Analyte                   | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Benzene                   | 0.125                 | U                        | 0.125              | 0.142               | 100          | 114           | 1        | 10.0-149         |              |               | 12.7     | 37              |
| Toluene                   | 0.125                 | U                        | 0.129              | 0.138               | 103          | 110           | 1        | 10.0-156         |              |               | 6.74     | 38              |
| Ethylbenzene              | 0.125                 | U                        | 0.144              | 0.146               | 115          | 117           | 1        | 10.0-160         |              |               | 1.38     | 38              |
| Xylenes, Total            | 0.375                 | 0.00117                  | 0.424              | 0.440               | 113          | 117           | 1        | 10.0-160         |              |               | 3.70     | 38              |
| 1,2,4-Trimethylbenzene    | 0.125                 | 0.00375                  | 0.236              | 0.162               | 186          | 127           | 1        | 10.0-160         | J5           | J3            | 37.2     | 36              |
| 1,3,5-Trimethylbenzene    | 0.125                 | U                        | 0.210              | 0.151               | 168          | 121           | 1        | 10.0-160         | J5           |               | 32.7     | 38              |
| (S) Toluene-d8            |                       |                          |                    |                     | 104          | 103           |          | 75.0-131         |              |               |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                          |                    |                     | 100          | 103           |          | 67.0-138         |              |               |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                          |                    |                     | 106          | 107           |          | 70.0-130         |              |               |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3948300-2 07/13/23 16:25

| Analyte                 | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|-------------------------|--------------------|--------------|-----------------|-----------------|
| C10-C28 Diesel Range    | U                  |              | 1.61            | 4.00            |
| C28-C36 Motor Oil Range | U                  |              | 0.274           | 4.00            |
| (S) o-Terphenyl         | 83.3               |              |                 | 18.0-148        |

Laboratory Control Sample (LCS)

(LCS) R3948300-1 07/13/23 14:04

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| C10-C28 Diesel Range | 50.0                  | 31.6                | 63.2          | 50.0-150         |               |
| (S) o-Terphenyl      |                       |                     | 58.0          | 18.0-148         |               |

<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) R3948583-2 07/13/23 02:07

| Analyte                | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------|--------------------|--------------|-----------------|-----------------|
| Acenaphthene           | U                  |              | 0.00209         | 0.00600         |
| Anthracene             | U                  |              | 0.00230         | 0.00600         |
| Benzo(a)anthracene     | U                  |              | 0.00173         | 0.00600         |
| Benzo(b)fluoranthene   | U                  |              | 0.00153         | 0.00600         |
| Benzo(k)fluoranthene   | U                  |              | 0.00215         | 0.00600         |
| Benzo(a)pyrene         | U                  |              | 0.00179         | 0.00600         |
| Chrysene               | U                  |              | 0.00232         | 0.00600         |
| Dibenz(a,h)anthracene  | U                  |              | 0.00172         | 0.00600         |
| Fluoranthene           | U                  |              | 0.00227         | 0.00600         |
| Fluorene               | U                  |              | 0.00205         | 0.00600         |
| Indeno(1,2,3-cd)pyrene | U                  |              | 0.00181         | 0.00600         |
| 1-Methylnaphthalene    | U                  |              | 0.00449         | 0.0200          |
| 2-Methylnaphthalene    | U                  |              | 0.00427         | 0.0200          |
| Naphthalene            | U                  |              | 0.00408         | 0.0200          |
| Pyrene                 | U                  |              | 0.00200         | 0.00600         |
| (S) p-Terphenyl-d14    | 80.2               |              |                 | 23.0-120        |
| (S) Nitrobenzene-d5    | 69.1               |              |                 | 14.0-149        |
| (S) 2-Fluorobiphenyl   | 73.4               |              |                 | 34.0-125        |

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Laboratory Control Sample (LCS)

(LCS) R3948583-1 07/13/23 01:47

| Analyte                | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Acenaphthene           | 0.0800                | 0.0593              | 74.1          | 50.0-120         |               |
| Anthracene             | 0.0800                | 0.0608              | 76.0          | 50.0-126         |               |
| Benzo(a)anthracene     | 0.0800                | 0.0667              | 83.4          | 45.0-120         |               |
| Benzo(b)fluoranthene   | 0.0800                | 0.0632              | 79.0          | 42.0-121         |               |
| Benzo(k)fluoranthene   | 0.0800                | 0.0621              | 77.6          | 49.0-125         |               |
| Benzo(a)pyrene         | 0.0800                | 0.0638              | 79.8          | 42.0-120         |               |
| Chrysene               | 0.0800                | 0.0630              | 78.8          | 49.0-122         |               |
| Dibenz(a,h)anthracene  | 0.0800                | 0.0609              | 76.1          | 47.0-125         |               |
| Fluoranthene           | 0.0800                | 0.0620              | 77.5          | 49.0-129         |               |
| Fluorene               | 0.0800                | 0.0619              | 77.4          | 49.0-120         |               |
| Indeno(1,2,3-cd)pyrene | 0.0800                | 0.0670              | 83.8          | 46.0-125         |               |
| 1-Methylnaphthalene    | 0.0800                | 0.0612              | 76.5          | 51.0-121         |               |
| 2-Methylnaphthalene    | 0.0800                | 0.0623              | 77.9          | 50.0-120         |               |
| Naphthalene            | 0.0800                | 0.0608              | 76.0          | 50.0-120         |               |
| Pyrene                 | 0.0800                | 0.0634              | 79.3          | 43.0-123         |               |

Laboratory Control Sample (LCS)

(LCS) R3948583-1 07/13/23 01:47

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| (S) p-Terphenyl-d14  |                       |                     | 87.1          | 23.0-120         |               |
| (S) Nitrobenzene-d5  |                       |                     | 87.2          | 14.0-149         |               |
| (S) 2-Fluorobiphenyl |                       |                     | 84.9          | 34.0-125         |               |

L1633276-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633276-01 07/13/23 03:46 • (MS) R3948583-3 07/13/23 04:06 • (MSD) R3948583-4 07/13/23 04:26

| Analyte                | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Acenaphthene           | 0.0788                | U                        | 0.0496             | 0.0557              | 62.9         | 70.0          | 1        | 14.0-127         |              |               | 11.6     | 27              |
| Anthracene             | 0.0788                | U                        | 0.0496             | 0.0563              | 62.9         | 70.7          | 1        | 10.0-145         |              |               | 12.7     | 30              |
| Benzo(a)anthracene     | 0.0788                | U                        | 0.0524             | 0.0595              | 66.5         | 74.7          | 1        | 10.0-139         |              |               | 12.7     | 30              |
| Benzo(b)fluoranthene   | 0.0788                | U                        | 0.0465             | 0.0543              | 59.0         | 68.2          | 1        | 10.0-140         |              |               | 15.5     | 36              |
| Benzo(k)fluoranthene   | 0.0788                | U                        | 0.0474             | 0.0554              | 60.2         | 69.6          | 1        | 10.0-137         |              |               | 15.6     | 31              |
| Benzo(a)pyrene         | 0.0788                | U                        | 0.0552             | 0.0637              | 70.1         | 80.0          | 1        | 10.0-141         |              |               | 14.3     | 31              |
| Chrysene               | 0.0788                | U                        | 0.0513             | 0.0588              | 65.1         | 73.9          | 1        | 10.0-145         |              |               | 13.6     | 30              |
| Dibenz(a,h)anthracene  | 0.0788                | U                        | 0.0463             | 0.0541              | 58.8         | 68.0          | 1        | 10.0-132         |              |               | 15.5     | 31              |
| Fluoranthene           | 0.0788                | U                        | 0.0505             | 0.0571              | 64.1         | 71.7          | 1        | 10.0-153         |              |               | 12.3     | 33              |
| Fluorene               | 0.0788                | U                        | 0.0512             | 0.0576              | 65.0         | 72.4          | 1        | 11.0-130         |              |               | 11.8     | 29              |
| Indeno(1,2,3-cd)pyrene | 0.0788                | U                        | 0.0492             | 0.0577              | 62.4         | 72.5          | 1        | 10.0-137         |              |               | 15.9     | 32              |
| 1-Methylnaphthalene    | 0.0788                | U                        | 0.0520             | 0.0569              | 66.0         | 71.5          | 1        | 10.0-142         |              |               | 9.00     | 28              |
| 2-Methylnaphthalene    | 0.0788                | 0.0147                   | 0.0531             | 0.0580              | 48.7         | 54.4          | 1        | 10.0-137         |              |               | 8.82     | 28              |
| Naphthalene            | 0.0788                | 0.0155                   | 0.0507             | 0.0563              | 44.7         | 51.3          | 1        | 10.0-135         |              |               | 10.5     | 27              |
| Pyrene                 | 0.0788                | U                        | 0.0523             | 0.0597              | 66.4         | 75.0          | 1        | 10.0-148         |              |               | 13.2     | 35              |
| (S) p-Terphenyl-d14    |                       |                          |                    |                     | 71.6         | 83.9          |          | 23.0-120         |              |               |          |                 |
| (S) Nitrobenzene-d5    |                       |                          |                    |                     | 73.3         | 78.3          |          | 14.0-149         |              |               |          |                 |
| (S) 2-Fluorobiphenyl   |                       |                          |                    |                     | 70.5         | 79.3          |          | 34.0-125         |              |               |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

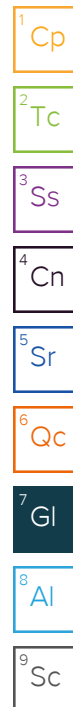
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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.                                                                                                                                                                                                                                               |
| 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. |
| 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.                                                                                          |
| 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.                                                    |
| J5        | The sample matrix interfered with the ability to make any accurate determination; spike value is high.                                      |
| J6        | The sample matrix interfered with the ability to make any accurate determination; spike value is low.                                       |
| J7        | Surrogate recovery cannot be used for control limit evaluation due to dilution.                                                             |
| P1        | RPD value not applicable for sample concentrations less than 5 times the reporting limit.                                                   |
| T8        | Sample(s) received past/too close to holding time expiration.                                                                               |
| V         | The sample concentration is too high to evaluate accurate spike recoveries.                                                                 |





# ACCREDITATIONS & LOCATIONS

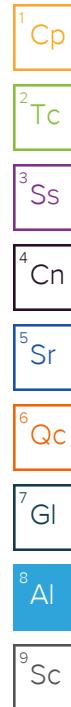
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

|                                |             |                             |                  |
|--------------------------------|-------------|-----------------------------|------------------|
| 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.





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



L# **L11033276**  
**B152**

Table #

Acctnum.

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Remarks Sample # (lab only)

-01

-02

-03

Analysis / Container / Preservative

Pres  
Chk

Billing Information:

Same as above

Email To:

bmiddleton@caerusoilandgas.com

City/State

Collected: Mamm Creek, CO

Lab Project #

H7

P.O. #

H7

Quote #

Date Results Needed

Standard TAT

No.  
of  
Cntrs

TPH- GRO, DRO, ORO

BTEX

Table 915-1 Metals

SAR, pH, EC, Boron (water soluble)

Table 915-1 PAHs

Sample ID

Comp/Grab

Matrix \*

Depth'

Date

Time

No.  
of  
Cntrs

caerus Piceance LLC  
43 Diamond Avenue  
arachute, CO 81635  
70-285-9606

Report to:  
bmiddleton@caerusoilandgas.com

Project  
Description: H7-Tank BATTERY

Phone:

Fax:

Collected by (print):

K. MORELAND

Collected by (signature):

K. Moreland

Immediately  
Packed on Ice N ☐ Y ☒

Client Project #

H7

Site/Facility ID #

H7

Rush? (Lab MUST Be Notified)

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

20230705-H7-(SB04)@10-11.5

GRAB

SS

10-11.5

7/5/23

1025

3

X

X

X

X

X

20230705-H7-(SB04)@20-21.5

↓

↓

20-21.5

↓

1100

↓

↓

↓

↓

↓

↓

20230705-H7-(SB04)@30-31.5

↓

↓

30-31.5

↓

1200

↓

↓

↓

↓

↓

↓

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

Remarks:

pH Temp

Flow Other

Samples returned via:

UPS FedEx Courier

Tracking # 642653066797

Relinquished by: (Signature)

K. Moreland

Date:

7/6/23

Time:

1200

Received by: (Signature)

[Signature]

Trip Blank Received: Yes/No

HCL/ MeOH  
TBR

Temp 60.4°C Bottles Received: 9

2-310-23

Date: 7-7-23 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition:

NCF OK

Relinquished by: (Signature)

Date:

7/6/23

Time:

1400

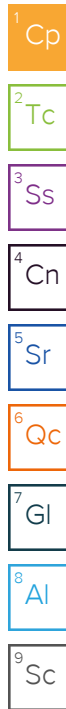
Received for lab by: (Signature)

[Signature]



# ANALYTICAL REPORT

July 18, 2023



## Caerus Oil and Gas

Sample Delivery Group: L1633298  
Samples Received: 07/08/2023  
Project Number: H7  
Description:  
Site: H7  
Report To: Jake Janicek  
143 Diamond Avenue  
Parachute, CO 81635

Entire Report Reviewed By:

*Chris Ward*

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 [www.pacenational.com](http://www.pacenational.com)

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<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

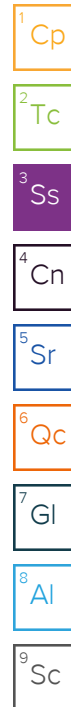
20230703-H7-(SB02) @ 10-12 L1633298-01 Solid

Collected by  
K. Moreland

Collected date/time  
07/03/23 12:20

Received date/time  
07/08/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091359 | 1        | 07/17/23 11:58        | 07/17/23 11:58     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2091346 | 1        | 07/11/23 13:35        | 07/12/23 14:27     | SET     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091619 | 1        | 07/09/23 11:42        | 07/10/23 11:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2091873 | 1        | 07/10/23 08:56        | 07/10/23 12:40     | MCC     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091364 | 1        | 07/11/23 10:16        | 07/17/23 13:57     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2096348 | 5        | 07/17/23 15:38        | 07/18/23 09:46     | SJM     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2094121 | 1        | 07/11/23 17:59        | 07/13/23 16:37     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2093055 | 1        | 07/11/23 17:59        | 07/12/23 02:30     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093944 | 1        | 07/13/23 15:42        | 07/14/23 03:10     | JAS     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093947 | 1        | 07/13/23 09:17        | 07/13/23 16:26     | AMG     | Mt. Juliet, TN |



20230703-H7-(SB02) @ 20-21.5 L1633298-02 Solid

Collected by  
K. Moreland

Collected date/time  
07/03/23 13:05

Received date/time  
07/08/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091359 | 1        | 07/17/23 12:01        | 07/17/23 12:01     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2091346 | 1        | 07/11/23 13:35        | 07/12/23 15:04     | SET     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091619 | 1        | 07/09/23 11:42        | 07/10/23 11:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2091873 | 1        | 07/10/23 08:56        | 07/10/23 12:40     | MCC     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091364 | 1        | 07/11/23 10:16        | 07/17/23 14:00     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2096348 | 5        | 07/17/23 15:38        | 07/18/23 09:49     | SJM     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2094121 | 1        | 07/11/23 17:59        | 07/13/23 16:56     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2093055 | 1        | 07/11/23 17:59        | 07/12/23 02:49     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093944 | 1        | 07/13/23 15:42        | 07/14/23 01:05     | JAS     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093947 | 1        | 07/13/23 09:17        | 07/13/23 16:44     | AMG     | Mt. Juliet, TN |

20230703-H7-(SB02) @ 30-31.5 L1633298-03 Solid

Collected by  
K. Moreland

Collected date/time  
07/03/23 14:00

Received date/time  
07/08/23 09:00

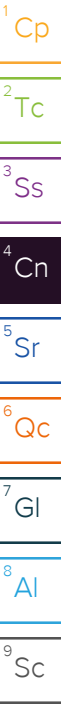
| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091359 | 1        | 07/17/23 12:04        | 07/17/23 12:04     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2091346 | 1        | 07/11/23 13:35        | 07/12/23 15:09     | SET     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091619 | 1        | 07/09/23 11:42        | 07/10/23 11:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2091873 | 1        | 07/10/23 08:56        | 07/10/23 12:40     | MCC     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091364 | 1        | 07/11/23 10:16        | 07/17/23 14:02     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2091599 | 5        | 07/10/23 08:17        | 07/13/23 14:46     | JPD     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2094121 | 1        | 07/11/23 17:59        | 07/13/23 17:14     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2093055 | 1        | 07/11/23 17:59        | 07/12/23 03:08     | DWR     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093944 | 1        | 07/13/23 15:42        | 07/14/23 01:18     | JAS     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2094332 | 1        | 07/13/23 16:38        | 07/14/23 02:46     | AED     | 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





Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 6.54   |           | 1        | 07/17/2023 11:58     | WG2091359 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| Hexavalent Chromium | U            | J5        | 0.255     | 1.00      | 1        | 07/12/2023 14:27     | WG2091346 |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 9.24   | T8        | 1        | 07/10/2023 11:00     | WG2091619 |

Sample Narrative:

L1633298-01 WG2091619: 9.24 at 21.1C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|-----------|
| Specific Conductance | 707             |           | 10.0         | 1        | 07/10/2023 12:40     | WG2091873 |

Sample Narrative:

L1633298-01 WG2091873: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|-----------|
| Hot Water Sol. Boron | 0.594       |           | 0.0167   | 0.200    | 1        | 07/17/2023 13:57     | WG2091364 |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|----------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| Arsenic  | 8.52         |           | 0.100     | 1.00      | 5        | 07/18/2023 09:46     | WG2096348 |
| Barium   | 197          |           | 0.152     | 2.50      | 5        | 07/18/2023 09:46     | WG2096348 |
| Cadmium  | 0.386        | J         | 0.0855    | 1.00      | 5        | 07/18/2023 09:46     | WG2096348 |
| Copper   | 12.0         |           | 0.132     | 5.00      | 5        | 07/18/2023 09:46     | WG2096348 |
| Lead     | 8.86         |           | 0.0990    | 2.00      | 5        | 07/18/2023 09:46     | WG2096348 |
| Nickel   | 15.1         |           | 0.197     | 2.50      | 5        | 07/18/2023 09:46     | WG2096348 |
| Selenium | 0.421        | J         | 0.180     | 2.50      | 5        | 07/18/2023 09:46     | WG2096348 |
| Silver   | U            |           | 0.0865    | 0.500     | 5        | 07/18/2023 09:46     | WG2096348 |
| Zinc     | 38.9         |           | 0.740     | 25.0      | 5        | 07/18/2023 09:46     | WG2096348 |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|-----------|
| TPH (GC/FID) Low Fraction          | 0.320        |           | 0.0217    | 0.100     | 1        | 07/13/2023 16:37     | WG2094121 |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 98.9         |           |           | 77.0-120  |          | 07/13/2023 16:37     | WG2094121 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/12/2023 02:30        | <a href="#">WG2093055</a> |
| Toluene                   | 0.00673         |           | 0.00130      | 0.00500      | 1        | 07/12/2023 02:30        | <a href="#">WG2093055</a> |
| Ethylbenzene              | 0.00203         | J         | 0.000737     | 0.00250      | 1        | 07/12/2023 02:30        | <a href="#">WG2093055</a> |
| Xylenes, Total            | 0.0386          |           | 0.000880     | 0.00650      | 1        | 07/12/2023 02:30        | <a href="#">WG2093055</a> |
| 1,2,4-Trimethylbenzene    | 0.0225          |           | 0.00158      | 0.00500      | 1        | 07/12/2023 02:30        | <a href="#">WG2093055</a> |
| 1,3,5-Trimethylbenzene    | 0.0211          |           | 0.00200      | 0.00500      | 1        | 07/12/2023 02:30        | <a href="#">WG2093055</a> |
| (S) Toluene-d8            | 106             |           |              | 75.0-131     |          | 07/12/2023 02:30        | <a href="#">WG2093055</a> |
| (S) 4-Bromofluorobenzene  | 103             |           |              | 67.0-138     |          | 07/12/2023 02:30        | <a href="#">WG2093055</a> |
| (S) 1,2-Dichloroethane-d4 | 88.2            |           |              | 70.0-130     |          | 07/12/2023 02:30        | <a href="#">WG2093055</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 1.82            | J         | 1.61         | 4.00         | 1        | 07/14/2023 03:10        | <a href="#">WG2093944</a> |
| C28-C36 Motor Oil Range | 8.49            |           | 0.274        | 4.00         | 1        | 07/14/2023 03:10        | <a href="#">WG2093944</a> |
| (S) o-Terphenyl         | 38.9            |           |              | 18.0-148     |          | 07/14/2023 03:10        | <a href="#">WG2093944</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| (S) p-Terphenyl-d14    | 84.8            |           |              | 23.0-120     |          | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| (S) Nitrobenzene-d5    | 94.2            |           |              | 14.0-149     |          | 07/13/2023 16:26        | <a href="#">WG2093947</a> |
| (S) 2-Fluorobiphenyl   | 83.2            |           |              | 34.0-125     |          | 07/13/2023 16:26        | <a href="#">WG2093947</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 4.97   |           | 1        | 07/17/2023 12:01     | WG2091359 |

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/12/2023 15:04     | <a href="#">WG2091346</a> |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.55   | <a href="#">T8</a> | 1        | 07/10/2023 11:00     | <a href="#">WG2091619</a> |

Sample Narrative:  
L1633298-02 WG2091619: 8.55 at 21.1C

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 152             |           | 10.0         | 1        | 07/10/2023 12:40     | <a href="#">WG2091873</a> |

Sample Narrative:  
L1633298-02 WG2091873: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.224       |           | 0.0167   | 0.200    | 1        | 07/17/2023 14:00     | <a href="#">WG2091364</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 9.01         |                   | 0.100     | 1.00      | 5        | 07/18/2023 09:49     | <a href="#">WG2096348</a> |
| Barium   | 150          |                   | 0.152     | 2.50      | 5        | 07/18/2023 09:49     | <a href="#">WG2096348</a> |
| Cadmium  | 0.407        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/18/2023 09:49     | <a href="#">WG2096348</a> |
| Copper   | 11.7         |                   | 0.132     | 5.00      | 5        | 07/18/2023 09:49     | <a href="#">WG2096348</a> |
| Lead     | 8.20         |                   | 0.0990    | 2.00      | 5        | 07/18/2023 09:49     | <a href="#">WG2096348</a> |
| Nickel   | 12.3         |                   | 0.197     | 2.50      | 5        | 07/18/2023 09:49     | <a href="#">WG2096348</a> |
| Selenium | 0.371        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/18/2023 09:49     | <a href="#">WG2096348</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 07/18/2023 09:49     | <a href="#">WG2096348</a> |
| Zinc     | 35.7         |                   | 0.740     | 25.0      | 5        | 07/18/2023 09:49     | <a href="#">WG2096348</a> |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 0.145        |           | 0.0217    | 0.100     | 1        | 07/13/2023 16:56     | <a href="#">WG2094121</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 98.6         |           |           | 77.0-120  |          | 07/13/2023 16:56     | <a href="#">WG2094121</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | 0.00138         |           | 0.000467     | 0.00100      | 1        | 07/12/2023 02:49        | <a href="#">WG2093055</a> |
| Toluene                   | 0.00205         | J         | 0.00130      | 0.00500      | 1        | 07/12/2023 02:49        | <a href="#">WG2093055</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/12/2023 02:49        | <a href="#">WG2093055</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/12/2023 02:49        | <a href="#">WG2093055</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/12/2023 02:49        | <a href="#">WG2093055</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/12/2023 02:49        | <a href="#">WG2093055</a> |
| (S) Toluene-d8            | 107             |           |              | 75.0-131     |          | 07/12/2023 02:49        | <a href="#">WG2093055</a> |
| (S) 4-Bromofluorobenzene  | 103             |           |              | 67.0-138     |          | 07/12/2023 02:49        | <a href="#">WG2093055</a> |
| (S) 1,2-Dichloroethane-d4 | 83.7            |           |              | 70.0-130     |          | 07/12/2023 02:49        | <a href="#">WG2093055</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 2.69            | J         | 1.61         | 4.00         | 1        | 07/14/2023 01:05        | <a href="#">WG2093944</a> |
| C28-C36 Motor Oil Range | 12.9            |           | 0.274        | 4.00         | 1        | 07/14/2023 01:05        | <a href="#">WG2093944</a> |
| (S) o-Terphenyl         | 33.2            |           |              | 18.0-148     |          | 07/14/2023 01:05        | <a href="#">WG2093944</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| (S) p-Terphenyl-d14    | 80.8            |           |              | 23.0-120     |          | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| (S) Nitrobenzene-d5    | 95.4            |           |              | 14.0-149     |          | 07/13/2023 16:44        | <a href="#">WG2093947</a> |
| (S) 2-Fluorobiphenyl   | 84.0            |           |              | 34.0-125     |          | 07/13/2023 16:44        | <a href="#">WG2093947</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

|                         | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Analyte                 | SAR    |           |          |                      |           |
| Sodium Adsorption Ratio | 4.08   |           | 1        | 07/17/2023 12:04     | WG2091359 |

Wet Chemistry by Method 7199

|                     | Result | Qualifier | MDL   | RDL   | Dilution | Analysis date / time | Batch                     |
|---------------------|--------|-----------|-------|-------|----------|----------------------|---------------------------|
| Analyte             | mg/kg  |           | mg/kg | mg/kg |          |                      |                           |
| Hexavalent Chromium | U      |           | 0.255 | 1.00  | 1        | 07/12/2023 15:09     | <a href="#">WG2091346</a> |

Wet Chemistry by Method 9045D

|         | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| Analyte | pH     |                    |          |                      |                           |
| pH      | 8.43   | <a href="#">T8</a> | 1        | 07/10/2023 11:00     | <a href="#">WG2091619</a> |

Sample Narrative:

L1633298-03 WG2091619: 8.43 at 20.9C

Wet Chemistry by Method 9050AMod

|                      | Result   | Qualifier | RDL      | Dilution | Analysis date / time | Batch                     |
|----------------------|----------|-----------|----------|----------|----------------------|---------------------------|
| Analyte              | umhos/cm |           | umhos/cm |          |                      |                           |
| Specific Conductance | 1440     |           | 10.0     | 1        | 07/10/2023 12:40     | <a href="#">WG2091873</a> |

Sample Narrative:

L1633298-03 WG2091873: at 25C

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

|                      | Result | Qualifier         | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------------|--------|-------------------|--------|-------|----------|----------------------|---------------------------|
| Analyte              | mg/l   |                   | mg/l   | mg/l  |          |                      |                           |
| Hot Water Sol. Boron | 0.140  | <a href="#">J</a> | 0.0167 | 0.200 | 1        | 07/17/2023 14:02     | <a href="#">WG2091364</a> |

Metals (ICPMS) by Method 6020

|          | Result | Qualifier         | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------|--------|-------------------|--------|-------|----------|----------------------|---------------------------|
| Analyte  | mg/kg  |                   | mg/kg  | mg/kg |          |                      |                           |
| Arsenic  | 8.30   |                   | 0.100  | 1.00  | 5        | 07/13/2023 14:46     | <a href="#">WG2091599</a> |
| Barium   | 151    |                   | 0.152  | 2.50  | 5        | 07/13/2023 14:46     | <a href="#">WG2091599</a> |
| Cadmium  | 0.425  | <a href="#">J</a> | 0.0855 | 1.00  | 5        | 07/13/2023 14:46     | <a href="#">WG2091599</a> |
| Copper   | 12.3   |                   | 0.132  | 5.00  | 5        | 07/13/2023 14:46     | <a href="#">WG2091599</a> |
| Lead     | 9.25   |                   | 0.0990 | 2.00  | 5        | 07/13/2023 14:46     | <a href="#">WG2091599</a> |
| Nickel   | 12.9   |                   | 0.197  | 2.50  | 5        | 07/13/2023 14:46     | <a href="#">WG2091599</a> |
| Selenium | 0.389  | <a href="#">J</a> | 0.180  | 2.50  | 5        | 07/13/2023 14:46     | <a href="#">WG2091599</a> |
| Silver   | U      |                   | 0.0865 | 0.500 | 5        | 07/13/2023 14:46     | <a href="#">WG2091599</a> |
| Zinc     | 36.0   |                   | 0.740  | 25.0  | 5        | 07/13/2023 14:46     | <a href="#">WG2091599</a> |

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

|                                    | Result | Qualifier | MDL    | RDL      | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------|-----------|--------|----------|----------|----------------------|---------------------------|
| Analyte                            | mg/kg  |           | mg/kg  | mg/kg    |          |                      |                           |
| TPH (GC/FID) Low Fraction          | 0.135  |           | 0.0217 | 0.100    | 1        | 07/13/2023 17:14     | <a href="#">WG2094121</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 98.2   |           |        | 77.0-120 |          | 07/13/2023 17:14     | <a href="#">WG2094121</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/12/2023 03:08        | <a href="#">WG2093055</a> |
| Toluene                   | 0.00133         | J         | 0.00130      | 0.00500      | 1        | 07/12/2023 03:08        | <a href="#">WG2093055</a> |
| Ethylbenzene              | U               |           | 0.000737     | 0.00250      | 1        | 07/12/2023 03:08        | <a href="#">WG2093055</a> |
| Xylenes, Total            | U               |           | 0.000880     | 0.00650      | 1        | 07/12/2023 03:08        | <a href="#">WG2093055</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/12/2023 03:08        | <a href="#">WG2093055</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/12/2023 03:08        | <a href="#">WG2093055</a> |
| (S) Toluene-d8            | 106             |           |              | 75.0-131     |          | 07/12/2023 03:08        | <a href="#">WG2093055</a> |
| (S) 4-Bromofluorobenzene  | 103             |           |              | 67.0-138     |          | 07/12/2023 03:08        | <a href="#">WG2093055</a> |
| (S) 1,2-Dichloroethane-d4 | 92.3            |           |              | 70.0-130     |          | 07/12/2023 03:08        | <a href="#">WG2093055</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 8.68            |           | 1.61         | 4.00         | 1        | 07/14/2023 01:18        | <a href="#">WG2093944</a> |
| C28-C36 Motor Oil Range | 46.5            |           | 0.274        | 4.00         | 1        | 07/14/2023 01:18        | <a href="#">WG2093944</a> |
| (S) o-Terphenyl         | 50.0            |           |              | 18.0-148     |          | 07/14/2023 01:18        | <a href="#">WG2093944</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| (S) p-Terphenyl-d14    | 76.8            |           |              | 23.0-120     |          | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| (S) Nitrobenzene-d5    | 80.5            |           |              | 14.0-149     |          | 07/14/2023 02:46        | <a href="#">WG2094332</a> |
| (S) 2-Fluorobiphenyl   | 63.7            |           |              | 34.0-125     |          | 07/14/2023 02:46        | <a href="#">WG2094332</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3947843-1 07/12/23 12:52

|                     | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------------------|-----------|--------------|--------|--------|
| Analyte             | mg/kg     |              | mg/kg  | mg/kg  |
| Hexavalent Chromium | U         |              | 0.255  | 1.00   |

L1632965-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1632965-06 07/12/23 13:30 • (DUP) R3947843-3 07/12/23 13:35

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

L1633322-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1633322-01 07/12/23 15:30 • (DUP) R3947843-8 07/12/23 15:35

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

Laboratory Control Sample (LCS)

(LCS) R3947843-2 07/12/23 12:59

|                     | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------------------|--------------|------------|----------|-------------|---------------|
| Analyte             | mg/kg        | mg/kg      | %        | %           |               |
| Hexavalent Chromium | 10.0         | 10.9       | 109      | 80.0-120    |               |

L1633298-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633298-01 07/12/23 14:27 • (MS) R3947843-4 07/12/23 14:33 • (MSD) R3947843-5 07/12/23 14:38

|                     | 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      | %       | %        |          | %           |              |               | %     | %          |
| Hexavalent Chromium | 20.0         | U               | 19.6      | 19.5       | 98.1    | 97.3     | 1        | 75.0-125    |              |               | 0.792 | 20         |

L1633298-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1633298-01 07/12/23 14:27 • (MS) R3947843-6 07/12/23 14:43

|                     | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|---------------------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte             | mg/kg        | mg/kg           | mg/kg     | %       |          | %           |              |
| Hexavalent Chromium | 643          | U               | 872       | 136     | 50       | 75.0-125    | J5           |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1633300-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633300-02 07/10/23 11:00 • (DUP) R3946583-2 07/10/23 11:00

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | pH              | su         |          | %       |               | %              |
| pH      | 8.95            | 8.93       | 1        | 0.224   |               | 1              |

Sample Narrative:

OS: 8.95 at 20.9C

DUP: 8.93 at 20.9C

<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

L1633435-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1633435-04 07/10/23 11:00 • (DUP) R3946583-3 07/10/23 11:00

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | pH              | su         |          | %       |               | %              |
| pH      | 8.13            | 8.17       | 1        | 0.491   |               | 1              |

Sample Narrative:

OS: 8.13 at 21.1C

DUP: 8.17 at 21.1C

Laboratory Control Sample (LCS)

(LCS) R3946583-1 07/10/23 11:00

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

Sample Narrative:

LCS: 10.01 at 20.5C

Method Blank (MB)

(MB) R3946650-1 07/10/23 12:40

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:

BLANK: at 25C

L1633242-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633242-02 07/10/23 12:40 • (DUP) R3946650-3 07/10/23 12:40

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 511                         | 511                    | 1        | 0.000        |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

L1633276-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1633276-03 07/10/23 12:40 • (DUP) R3946650-4 07/10/23 12:40

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 1170                        | 1170                   | 1        | 0.000        |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3946650-2 07/10/23 12:40

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 327                      | 335                    | 102           | 85.0-115         |               |

Sample Narrative:

LCS: at 25C

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Method Blank (MB)

(MB) R3949375-1 07/17/23 13:41

| Analyte              | MB Result<br>mg/l | <u>MB Qualifier</u> | MB MDL<br>mg/l | MB RDL<br>mg/l |
|----------------------|-------------------|---------------------|----------------|----------------|
| Hot Water Sol. Boron | U                 |                     | 0.0167         | 0.200          |

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

(LCS) R3949375-2 07/17/23 13:43 • (LCSD) R3949375-3 07/17/23 13:46

| Analyte              | Spike Amount<br>mg/l | LCS Result<br>mg/l | LCSD Result<br>mg/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> | <u>LCSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|----------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|----------------------|-----------------------|----------|-----------------|
| Hot Water Sol. Boron | 1.00                 | 0.955              | 0.969               | 95.5          | 96.9           | 80.0-120         |                      |                       | 1.41     | 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) R3946975-1 07/11/23 09:44

| Analyte  | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|----------|--------------------|--------------|-----------------|-----------------|
| Arsenic  | U                  |              | 0.100           | 1.00            |
| Barium   | U                  |              | 0.152           | 2.50            |
| Cadmium  | U                  |              | 0.0855          | 1.00            |
| Copper   | U                  |              | 0.133           | 5.00            |
| Lead     | U                  |              | 0.0990          | 2.00            |
| Nickel   | U                  |              | 0.197           | 2.50            |
| Selenium | U                  |              | 0.180           | 2.50            |
| Silver   | U                  |              | 0.0865          | 0.500           |
| Zinc     | U                  |              | 0.740           | 25.0            |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

Method Blank (MB)

(MB) R3948357-1 07/13/23 13:52

| Analyte | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|---------|--------------------|--------------|-----------------|-----------------|
| Zinc    | U                  |              | 0.740           | 25.0            |

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3946975-2 07/11/23 09:48

| Analyte  | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|-----------------------|---------------------|---------------|------------------|---------------|
| Arsenic  | 100                   | 97.3                | 97.3          | 80.0-120         |               |
| Barium   | 100                   | 91.9                | 91.9          | 80.0-120         |               |
| Cadmium  | 100                   | 96.0                | 96.0          | 80.0-120         |               |
| Copper   | 100                   | 88.3                | 88.3          | 80.0-120         |               |
| Lead     | 100                   | 90.8                | 90.8          | 80.0-120         |               |
| Nickel   | 100                   | 95.9                | 95.9          | 80.0-120         |               |
| Selenium | 100                   | 99.8                | 99.8          | 80.0-120         |               |
| Silver   | 20.0                  | 19.2                | 96.2          | 80.0-120         |               |
| Zinc     | 100                   | 91.2                | 91.2          | 80.0-120         |               |

Laboratory Control Sample (LCS)

(LCS) R3948357-2 07/13/23 13:55

| Analyte | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|---------|-----------------------|---------------------|---------------|------------------|---------------|
| Zinc    | 100                   | 94.2                | 94.2          | 80.0-120         |               |

L1628080-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1628080-34 07/11/23 09:51 • (MS) R3946975-5 07/11/23 10:01 • (MSD) R3946975-6 07/11/23 10:04

| Analyte  | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Arsenic  | 100                   | 0.442                    | 93.5               | 88.8                | 93.1         | 88.4          | 5        | 75.0-125         |              |               | 5.14     | 20              |
| Barium   | 100                   | 13.1                     | 104                | 96.4                | 90.7         | 83.3          | 5        | 75.0-125         | E            | E             | 7.38     | 20              |
| Cadmium  | 100                   | U                        | 93.4               | 88.5                | 93.4         | 88.5          | 5        | 75.0-125         |              |               | 5.46     | 20              |
| Copper   | 100                   | 1.08                     | 88.3               | 86.2                | 87.2         | 85.1          | 5        | 75.0-125         |              |               | 2.46     | 20              |
| Lead     | 100                   | 3.95                     | 90.1               | 90.3                | 86.2         | 86.3          | 5        | 75.0-125         |              |               | 0.176    | 20              |
| Nickel   | 100                   | 0.853                    | 97.0               | 90.5                | 96.2         | 89.6          | 5        | 75.0-125         |              |               | 6.97     | 20              |
| Selenium | 100                   | 0.235                    | 92.7               | 86.8                | 92.5         | 86.5          | 5        | 75.0-125         |              |               | 6.62     | 20              |
| Silver   | 20.0                  | U                        | 18.6               | 17.7                | 93.0         | 88.3          | 5        | 75.0-125         |              |               | 5.17     | 20              |

L1628080-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1628080-34 07/13/23 13:58 • (MS) R3948357-5 07/13/23 14:08 • (MSD) R3948357-6 07/13/23 14:11

| Analyte | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Zinc    | 100                   | 2.03                     | 90.4               | 89.0                | 88.4         | 87.0          | 5        | 75.0-125         |              |               | 1.56     | 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) R3949618-1 07/18/23 08:53

| Analyte  | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|----------|--------------------|--------------|-----------------|-----------------|
| Arsenic  | U                  |              | 0.100           | 1.00            |
| Barium   | U                  |              | 0.152           | 2.50            |
| Cadmium  | U                  |              | 0.0855          | 1.00            |
| Copper   | U                  |              | 0.133           | 5.00            |
| Lead     | U                  |              | 0.0990          | 2.00            |
| Nickel   | U                  |              | 0.197           | 2.50            |
| Selenium | U                  |              | 0.180           | 2.50            |
| Silver   | U                  |              | 0.0865          | 0.500           |
| Zinc     | U                  |              | 0.740           | 25.0            |

Laboratory Control Sample (LCS)

(LCS) R3949618-2 07/18/23 08:57

| Analyte  | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|-----------------------|---------------------|---------------|------------------|---------------|
| Arsenic  | 100                   | 112                 | 112           | 80.0-120         |               |
| Barium   | 100                   | 105                 | 105           | 80.0-120         |               |
| Cadmium  | 100                   | 111                 | 111           | 80.0-120         |               |
| Copper   | 100                   | 105                 | 105           | 80.0-120         |               |
| Lead     | 100                   | 102                 | 102           | 80.0-120         |               |
| Nickel   | 100                   | 110                 | 110           | 80.0-120         |               |
| Selenium | 100                   | 112                 | 112           | 80.0-120         |               |
| Silver   | 20.0                  | 21.2                | 106           | 80.0-120         |               |
| Zinc     | 100                   | 106                 | 106           | 80.0-120         |               |

L1630878-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1630878-21 07/18/23 09:00 • (MS) R3949618-5 07/18/23 09:10 • (MSD) R3949618-6 07/18/23 09:13

| Analyte  | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Arsenic  | 100                   | 3.55                     | 88.7               | 82.5                | 85.2         | 78.9          | 5        | 75.0-125         |              |               | 7.30     | 20              |
| Barium   | 100                   | 80.5                     | 154                | 149                 | 73.6         | 68.5          | 5        | 75.0-125         | J6           | J6            | 3.37     | 20              |
| Cadmium  | 100                   | 0.119                    | 92.2               | 89.0                | 92.1         | 88.8          | 5        | 75.0-125         |              |               | 3.61     | 20              |
| Copper   | 100                   | 23.1                     | 107                | 102                 | 83.7         | 78.6          | 5        | 75.0-125         |              |               | 4.84     | 20              |
| Lead     | 100                   | 3.04                     | 88.5               | 83.7                | 85.4         | 80.7          | 5        | 75.0-125         |              |               | 5.50     | 20              |
| Nickel   | 100                   | 27.1                     | 108                | 101                 | 81.1         | 74.0          | 5        | 75.0-125         |              | J6            | 6.82     | 20              |
| Selenium | 100                   | 0.306                    | 87.4               | 82.3                | 87.1         | 82.0          | 5        | 75.0-125         |              |               | 5.99     | 20              |
| Silver   | 20.0                  | U                        | 17.6               | 16.9                | 87.9         | 84.7          | 5        | 75.0-125         |              |               | 3.74     | 20              |
| Zinc     | 100                   | 40.8                     | 127                | 117                 | 85.9         | 76.6          | 5        | 75.0-125         |              |               | 7.65     | 20              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3948373-2 07/13/23 13:13

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | U                  |              | 0.0217          | 0.100           |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 95.6               |              |                 | 77.0-120        |

Laboratory Control Sample (LCS)

(LCS) R3948373-1 07/13/23 12:02

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 5.06                | 92.0          | 72.0-127         |               |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     | 104           | 77.0-120         |               |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3948196-3 07/11/23 20:57

| Analyte                   | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|---------------------------|--------------------|--------------|-----------------|-----------------|
| Benzene                   | U                  |              | 0.000467        | 0.00100         |
| Toluene                   | U                  |              | 0.00130         | 0.00500         |
| Ethylbenzene              | U                  |              | 0.000737        | 0.00250         |
| Xylenes, Total            | U                  |              | 0.000880        | 0.00650         |
| 1,2,4-Trimethylbenzene    | U                  |              | 0.00158         | 0.00500         |
| 1,3,5-Trimethylbenzene    | U                  |              | 0.00200         | 0.00500         |
| (S) Toluene-d8            | 105                |              |                 | 75.0-131        |
| (S) 4-Bromofluorobenzene  | 104                |              |                 | 67.0-138        |
| (S) 1,2-Dichloroethane-d4 | 91.6               |              |                 | 70.0-130        |

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

(LCS) R3948196-1 07/11/23 19:22 • (LCSD) R3948196-2 07/11/23 19:41

| Analyte                   | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Benzene                   | 0.125                 | 0.125               | 0.130                | 100           | 104            | 70.0-123         |               |                | 3.92     | 20              |
| Toluene                   | 0.125                 | 0.133               | 0.132                | 106           | 106            | 75.0-121         |               |                | 0.755    | 20              |
| Ethylbenzene              | 0.125                 | 0.121               | 0.124                | 96.8          | 99.2           | 74.0-126         |               |                | 2.45     | 20              |
| Xylenes, Total            | 0.375                 | 0.359               | 0.371                | 95.7          | 98.9           | 72.0-127         |               |                | 3.29     | 20              |
| 1,2,4-Trimethylbenzene    | 0.125                 | 0.111               | 0.115                | 88.8          | 92.0           | 70.0-126         |               |                | 3.54     | 20              |
| 1,3,5-Trimethylbenzene    | 0.125                 | 0.109               | 0.114                | 87.2          | 91.2           | 73.0-127         |               |                | 4.48     | 20              |
| (S) Toluene-d8            |                       |                     |                      | 105           | 103            | 75.0-131         |               |                |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                     |                      | 103           | 103            | 67.0-138         |               |                |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                     |                      | 98.3          | 99.7           | 70.0-130         |               |                |          |                 |

L1633312-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633312-02 07/12/23 05:21 • (MS) R3948196-4 07/12/23 05:59 • (MSD) R3948196-5 07/12/23 06:18

| Analyte                   | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Benzene                   | 0.990                 | U                        | 0.939              | 0.940               | 94.8         | 94.9          | 8        | 10.0-149         |              |               | 0.106    | 37              |
| Toluene                   | 0.990                 | U                        | 0.970              | 0.955               | 98.0         | 96.5          | 8        | 10.0-156         |              |               | 1.56     | 38              |
| Ethylbenzene              | 0.990                 | U                        | 0.938              | 0.902               | 94.7         | 91.1          | 8        | 10.0-160         |              |               | 3.91     | 38              |
| Xylenes, Total            | 2.97                  | 0.534                    | 3.29               | 3.27                | 92.8         | 92.1          | 8        | 10.0-160         |              |               | 0.610    | 38              |
| 1,2,4-Trimethylbenzene    | 0.990                 | 0.595                    | 1.54               | 1.51                | 95.5         | 92.4          | 8        | 10.0-160         |              |               | 1.97     | 36              |
| 1,3,5-Trimethylbenzene    | 0.990                 | 2.33                     | 3.46               | 3.39                | 114          | 107           | 8        | 10.0-160         |              |               | 2.04     | 38              |
| (S) Toluene-d8            |                       |                          |                    |                     | 102          | 101           |          | 75.0-131         |              |               |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                          |                    |                     | 105          | 107           |          | 67.0-138         |              |               |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                          |                    |                     | 98.1         | 98.3          |          | 70.0-130         |              |               |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1633312-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633312-02 07/12/23 05:21 • (MS) R3948196-4 07/12/23 05:59 • (MSD) R3948196-5 07/12/23 06:18

| Analyte | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | <u>MS Qualifier</u> | <u>MSD Qualifier</u> | RPD | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|---------------------|----------------------|-----|------------|
|         | mg/kg        | mg/kg           | mg/kg     | mg/kg      | %       | %        |          | %           |                     |                      | %   | %          |

Sample Narrative:

OS: Non-target compounds too high to run at a lower dilution.

<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) R3948503-1 07/13/23 20:42

| Analyte                 | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|-------------------------|--------------------|--------------|-----------------|-----------------|
| C10-C28 Diesel Range    | U                  |              | 1.61            | 4.00            |
| C28-C36 Motor Oil Range | 0.286              | ⌵            | 0.274           | 4.00            |
| (S) o-Terphenyl         | 61.4               |              |                 | 18.0-148        |

Laboratory Control Sample (LCS)

(LCS) R3948503-2 07/13/23 20:55

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| C10-C28 Diesel Range | 50.0                  | 32.7                | 65.4          | 50.0-150         |               |
| (S) o-Terphenyl      |                       |                     | 62.6          | 18.0-148         |               |

L1633252-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633252-02 07/13/23 22:14 • (MS) R3948503-3 07/13/23 22:27 • (MSD) R3948503-4 07/13/23 22:41

| Analyte              | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| C10-C28 Diesel Range | 50.0                  | U                        | 35.1               | 38.0                | 70.2         | 76.0          | 1        | 50.0-150         |              |               | 7.93     | 20              |
| (S) o-Terphenyl      |                       |                          |                    |                     | 61.7         | 65.0          |          | 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) R3948566-2 07/13/23 15:21

| Analyte                | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------|--------------------|--------------|-----------------|-----------------|
| Acenaphthene           | U                  |              | 0.00209         | 0.00600         |
| Anthracene             | U                  |              | 0.00230         | 0.00600         |
| Benzo(a)anthracene     | U                  |              | 0.00173         | 0.00600         |
| Benzo(b)fluoranthene   | U                  |              | 0.00153         | 0.00600         |
| Benzo(k)fluoranthene   | U                  |              | 0.00215         | 0.00600         |
| Benzo(a)pyrene         | U                  |              | 0.00179         | 0.00600         |
| Chrysene               | U                  |              | 0.00232         | 0.00600         |
| Dibenz(a,h)anthracene  | U                  |              | 0.00172         | 0.00600         |
| Fluoranthene           | U                  |              | 0.00227         | 0.00600         |
| Fluorene               | U                  |              | 0.00205         | 0.00600         |
| Indeno(1,2,3-cd)pyrene | U                  |              | 0.00181         | 0.00600         |
| 1-Methylnaphthalene    | U                  |              | 0.00449         | 0.0200          |
| 2-Methylnaphthalene    | U                  |              | 0.00427         | 0.0200          |
| Naphthalene            | U                  |              | 0.00408         | 0.0200          |
| Pyrene                 | U                  |              | 0.00200         | 0.00600         |
| (S) p-Terphenyl-d14    | 70.4               |              |                 | 23.0-120        |
| (S) Nitrobenzene-d5    | 69.5               |              |                 | 14.0-149        |
| (S) 2-Fluorobiphenyl   | 67.1               |              |                 | 34.0-125        |

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Laboratory Control Sample (LCS)

(LCS) R3948566-1 07/13/23 15:03

| Analyte                | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Acenaphthene           | 0.0800                | 0.0642              | 80.3          | 50.0-120         |               |
| Anthracene             | 0.0800                | 0.0670              | 83.8          | 50.0-126         |               |
| Benzo(a)anthracene     | 0.0800                | 0.0728              | 91.0          | 45.0-120         |               |
| Benzo(b)fluoranthene   | 0.0800                | 0.0608              | 76.0          | 42.0-121         |               |
| Benzo(k)fluoranthene   | 0.0800                | 0.0614              | 76.8          | 49.0-125         |               |
| Benzo(a)pyrene         | 0.0800                | 0.0482              | 60.3          | 42.0-120         |               |
| Chrysene               | 0.0800                | 0.0656              | 82.0          | 49.0-122         |               |
| Dibenz(a,h)anthracene  | 0.0800                | 0.0600              | 75.0          | 47.0-125         |               |
| Fluoranthene           | 0.0800                | 0.0746              | 93.3          | 49.0-129         |               |
| Fluorene               | 0.0800                | 0.0675              | 84.4          | 49.0-120         |               |
| Indeno(1,2,3-cd)pyrene | 0.0800                | 0.0689              | 86.1          | 46.0-125         |               |
| 1-Methylnaphthalene    | 0.0800                | 0.0619              | 77.4          | 51.0-121         |               |
| 2-Methylnaphthalene    | 0.0800                | 0.0647              | 80.9          | 50.0-120         |               |
| Naphthalene            | 0.0800                | 0.0588              | 73.5          | 50.0-120         |               |
| Pyrene                 | 0.0800                | 0.0655              | 81.9          | 43.0-123         |               |

Laboratory Control Sample (LCS)

(LCS) R3948566-1 07/13/23 15:03

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> |
|----------------------|-----------------------|---------------------|---------------|------------------|----------------------|
| (S) p-Terphenyl-d14  |                       |                     | 88.2          | 23.0-120         |                      |
| (S) Nitrobenzene-d5  |                       |                     | 99.6          | 14.0-149         |                      |
| (S) 2-Fluorobiphenyl |                       |                     | 89.8          | 34.0-125         |                      |

L1633290-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633290-04 07/13/23 21:31 • (MS) R3948566-3 07/13/23 21:49 • (MSD) R3948566-4 07/13/23 22:06

| Analyte                | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | <u>MS Qualifier</u> | <u>MSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|---------------------|----------------------|----------|-----------------|
| Acenaphthene           | 0.0784                | U                        | 0.0494             | 0.0483              | 63.0         | 61.9          | 1        | 14.0-127         |                     |                      | 2.25     | 27              |
| Anthracene             | 0.0784                | U                        | 0.0523             | 0.0509              | 66.7         | 65.3          | 1        | 10.0-145         |                     |                      | 2.71     | 30              |
| Benzo(a)anthracene     | 0.0784                | U                        | 0.0596             | 0.0602              | 76.0         | 77.2          | 1        | 10.0-139         |                     |                      | 1.00     | 30              |
| Benzo(b)fluoranthene   | 0.0784                | 0.00440                  | 0.0441             | 0.0478              | 50.6         | 55.6          | 1        | 10.0-140         |                     |                      | 8.05     | 36              |
| Benzo(k)fluoranthene   | 0.0784                | U                        | 0.0463             | 0.0466              | 59.1         | 59.7          | 1        | 10.0-137         |                     |                      | 0.646    | 31              |
| Benzo(a)pyrene         | 0.0784                | 0.00211                  | 0.0546             | 0.0568              | 67.0         | 70.1          | 1        | 10.0-141         |                     |                      | 3.95     | 31              |
| Chrysene               | 0.0784                | U                        | 0.0551             | 0.0584              | 70.3         | 74.9          | 1        | 10.0-145         |                     |                      | 5.81     | 30              |
| Dibenz(a,h)anthracene  | 0.0784                | U                        | 0.0478             | 0.0465              | 61.0         | 59.6          | 1        | 10.0-132         |                     |                      | 2.76     | 31              |
| Fluoranthene           | 0.0784                | U                        | 0.0569             | 0.0696              | 72.6         | 89.2          | 1        | 10.0-153         |                     |                      | 20.1     | 33              |
| Fluorene               | 0.0784                | U                        | 0.0503             | 0.0494              | 64.2         | 63.3          | 1        | 11.0-130         |                     |                      | 1.81     | 29              |
| Indeno(1,2,3-cd)pyrene | 0.0784                | 0.00404                  | 0.0503             | 0.0505              | 59.0         | 59.6          | 1        | 10.0-137         |                     |                      | 0.397    | 32              |
| 1-Methylnaphthalene    | 0.0784                | U                        | 0.0505             | 0.0503              | 64.4         | 64.5          | 1        | 10.0-142         |                     |                      | 0.397    | 28              |
| 2-Methylnaphthalene    | 0.0784                | U                        | 0.0535             | 0.0531              | 68.2         | 68.1          | 1        | 10.0-137         |                     |                      | 0.750    | 28              |
| Naphthalene            | 0.0784                | U                        | 0.0508             | 0.0505              | 64.8         | 64.7          | 1        | 10.0-135         |                     |                      | 0.592    | 27              |
| Pyrene                 | 0.0784                | 0.00331                  | 0.0475             | 0.0577              | 56.4         | 69.7          | 1        | 10.0-148         |                     |                      | 19.4     | 35              |
| (S) p-Terphenyl-d14    |                       |                          |                    |                     | 50.4         | 53.9          |          | 23.0-120         |                     |                      |          |                 |
| (S) Nitrobenzene-d5    |                       |                          |                    |                     | 86.2         | 94.5          |          | 14.0-149         |                     |                      |          |                 |
| (S) 2-Fluorobiphenyl   |                       |                          |                    |                     | 45.7         | 48.5          |          | 34.0-125         |                     |                      |          |                 |

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc



Method Blank (MB)

(MB) R3948561-2 07/13/23 22:12

| Analyte                | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------|--------------------|--------------|-----------------|-----------------|
| Acenaphthene           | U                  |              | 0.00209         | 0.00600         |
| Anthracene             | U                  |              | 0.00230         | 0.00600         |
| Benzo(a)anthracene     | U                  |              | 0.00173         | 0.00600         |
| Benzo(b)fluoranthene   | U                  |              | 0.00153         | 0.00600         |
| Benzo(k)fluoranthene   | U                  |              | 0.00215         | 0.00600         |
| Benzo(a)pyrene         | U                  |              | 0.00179         | 0.00600         |
| Chrysene               | U                  |              | 0.00232         | 0.00600         |
| Dibenz(a,h)anthracene  | U                  |              | 0.00172         | 0.00600         |
| Fluoranthene           | U                  |              | 0.00227         | 0.00600         |
| Fluorene               | U                  |              | 0.00205         | 0.00600         |
| Indeno(1,2,3-cd)pyrene | U                  |              | 0.00181         | 0.00600         |
| 1-Methylnaphthalene    | U                  |              | 0.00449         | 0.0200          |
| 2-Methylnaphthalene    | U                  |              | 0.00427         | 0.0200          |
| Naphthalene            | U                  |              | 0.00408         | 0.0200          |
| Pyrene                 | U                  |              | 0.00200         | 0.00600         |
| (S) p-Terphenyl-d14    | 89.7               |              |                 | 23.0-120        |
| (S) Nitrobenzene-d5    | 96.6               |              |                 | 14.0-149        |
| (S) 2-Fluorobiphenyl   | 72.9               |              |                 | 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) R3948561-1 07/13/23 21:53

| Analyte                | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Acenaphthene           | 0.0800                | 0.0630              | 78.8          | 50.0-120         |               |
| Anthracene             | 0.0800                | 0.0639              | 79.9          | 50.0-126         |               |
| Benzo(a)anthracene     | 0.0800                | 0.0723              | 90.4          | 45.0-120         |               |
| Benzo(b)fluoranthene   | 0.0800                | 0.0690              | 86.3          | 42.0-121         |               |
| Benzo(k)fluoranthene   | 0.0800                | 0.0641              | 80.1          | 49.0-125         |               |
| Benzo(a)pyrene         | 0.0800                | 0.0632              | 79.0          | 42.0-120         |               |
| Chrysene               | 0.0800                | 0.0677              | 84.6          | 49.0-122         |               |
| Dibenz(a,h)anthracene  | 0.0800                | 0.0717              | 89.6          | 47.0-125         |               |
| Fluoranthene           | 0.0800                | 0.0669              | 83.6          | 49.0-129         |               |
| Fluorene               | 0.0800                | 0.0695              | 86.9          | 49.0-120         |               |
| Indeno(1,2,3-cd)pyrene | 0.0800                | 0.0747              | 93.4          | 46.0-125         |               |
| 1-Methylnaphthalene    | 0.0800                | 0.0621              | 77.6          | 51.0-121         |               |
| 2-Methylnaphthalene    | 0.0800                | 0.0642              | 80.3          | 50.0-120         |               |
| Naphthalene            | 0.0800                | 0.0627              | 78.4          | 50.0-120         |               |
| Pyrene                 | 0.0800                | 0.0696              | 87.0          | 43.0-123         |               |

Laboratory Control Sample (LCS)

(LCS) R3948561-1 07/13/23 21:53

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> |
|----------------------|-----------------------|---------------------|---------------|------------------|----------------------|
| (S) p-Terphenyl-d14  |                       |                     | 88.8          | 23.0-120         |                      |
| (S) Nitrobenzene-d5  |                       |                     | 125           | 14.0-149         |                      |
| (S) 2-Fluorobiphenyl |                       |                     | 84.5          | 34.0-125         |                      |

L1634586-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1634586-01 07/14/23 04:23 • (MS) R3948561-3 07/14/23 04:43 • (MSD) R3948561-4 07/14/23 05:02

| Analyte                | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | <u>MS Qualifier</u> | <u>MSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|---------------------|----------------------|----------|-----------------|
| Acenaphthene           | 0.0764                | 0.00255                  | 0.0500             | 0.0430              | 62.1         | 53.2          | 1        | 14.0-127         |                     |                      | 15.1     | 27              |
| Anthracene             | 0.0764                | 0.00553                  | 0.0605             | 0.0525              | 72.0         | 61.8          | 1        | 10.0-145         |                     |                      | 14.2     | 30              |
| Benzo(a)anthracene     | 0.0764                | 0.0800                   | 0.163              | 0.154               | 109          | 97.4          | 1        | 10.0-139         |                     |                      | 5.68     | 30              |
| Benzo(b)fluoranthene   | 0.0764                | 0.143                    | 0.243              | 0.234               | 131          | 120           | 1        | 10.0-140         |                     |                      | 3.77     | 36              |
| Benzo(k)fluoranthene   | 0.0764                | 0.0518                   | 0.116              | 0.107               | 84.0         | 72.6          | 1        | 10.0-137         |                     |                      | 8.07     | 31              |
| Benzo(a)pyrene         | 0.0764                | 0.0988                   | 0.190              | 0.181               | 119          | 108           | 1        | 10.0-141         |                     |                      | 4.85     | 31              |
| Chrysene               | 0.0764                | 0.0901                   | 0.187              | 0.184               | 127          | 124           | 1        | 10.0-145         |                     |                      | 1.62     | 30              |
| Dibenz(a,h)anthracene  | 0.0764                | 0.0143                   | 0.0673             | 0.0612              | 69.4         | 61.7          | 1        | 10.0-132         |                     |                      | 9.49     | 31              |
| Fluoranthene           | 0.0764                | 0.212                    | 0.336              | 0.328               | 162          | 153           | 1        | 10.0-153         | J5                  |                      | 2.41     | 33              |
| Fluorene               | 0.0764                | 0.00257                  | 0.0551             | 0.0458              | 68.8         | 56.9          | 1        | 11.0-130         |                     |                      | 18.4     | 29              |
| Indeno(1,2,3-cd)pyrene | 0.0764                | 0.0988                   | 0.186              | 0.175               | 114          | 100           | 1        | 10.0-137         |                     |                      | 6.09     | 32              |
| 1-Methylnaphthalene    | 0.0764                | U                        | 0.0459             | 0.0436              | 60.1         | 57.4          | 1        | 10.0-142         |                     |                      | 5.14     | 28              |
| 2-Methylnaphthalene    | 0.0764                | U                        | 0.0471             | 0.0449              | 61.6         | 59.1          | 1        | 10.0-137         |                     |                      | 4.78     | 28              |
| Naphthalene            | 0.0764                | U                        | 0.0458             | 0.0484              | 59.9         | 63.7          | 1        | 10.0-135         |                     |                      | 5.52     | 27              |
| Pyrene                 | 0.0764                | 0.179                    | 0.287              | 0.276               | 141          | 128           | 1        | 10.0-148         |                     |                      | 3.91     | 35              |
| (S) p-Terphenyl-d14    |                       |                          |                    |                     | 71.0         | 50.5          |          | 23.0-120         |                     |                      |          |                 |
| (S) Nitrobenzene-d5    |                       |                          |                    |                     | 81.7         | 98.4          |          | 14.0-149         |                     |                      |          |                 |
| (S) 2-Fluorobiphenyl   |                       |                          |                    |                     | 60.9         | 51.0          |          | 34.0-125         |                     |                      |          |                 |

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

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.

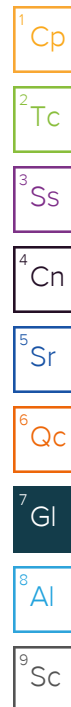
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

### Abbreviations and Definitions

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MDL                          | Method Detection Limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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.                                                                                                                                                                                                                                               |
| 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. |
| 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

|    |                                                                                                                                             |
|----|---------------------------------------------------------------------------------------------------------------------------------------------|
| 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.                                                         |
| J5 | The sample matrix interfered with the ability to make any accurate determination; spike value is high.                                      |
| J6 | The sample matrix interfered with the ability to make any accurate determination; spike value is low.                                       |
| T8 | Sample(s) received past/too close to holding time expiration.                                                                               |



# ACCREDITATIONS & LOCATIONS

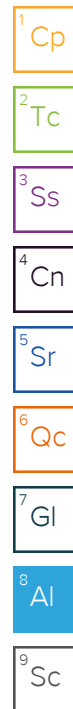
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

|                                |             |                             |                  |
|--------------------------------|-------------|-----------------------------|------------------|
| 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.







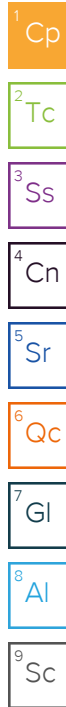
# ANALYTICAL REPORT

July 18, 2023

Revised Report

## Caerus Oil and Gas

Sample Delivery Group: L1633300  
Samples Received: 07/07/2023  
Project Number: H7  
Description:  
Site: H7  
Report To: Jake Janicek  
143 Diamond Avenue  
Parachute, CO 81635



Entire Report Reviewed By:

*Chris Ward*

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.

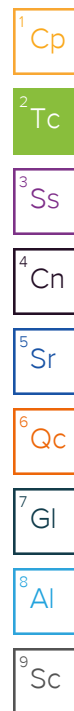
**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)



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# SAMPLE SUMMARY

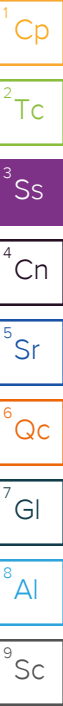
20230703-H7-(SB01) @ 10-12 L1633300-01 Solid

Collected by  
K. Moreland

Collected date/time  
07/03/23 10:10

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091359 | 1        | 07/17/23 12:06        | 07/17/23 12:06     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2091346 | 1        | 07/11/23 13:35        | 07/12/23 15:14     | SET     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091619 | 1        | 07/09/23 11:42        | 07/10/23 11:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2091873 | 1        | 07/10/23 08:56        | 07/10/23 12:40     | MCC     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091364 | 1        | 07/11/23 10:16        | 07/17/23 14:05     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2091599 | 5        | 07/10/23 08:17        | 07/13/23 14:49     | JPD     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2093007 | 200      | 07/10/23 13:18        | 07/12/23 18:24     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092297 | 20       | 07/10/23 13:18        | 07/11/23 04:11     | BAM     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093536 | 1        | 07/13/23 06:38        | 07/13/23 15:06     | HLJ     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093557 | 1        | 07/12/23 20:03        | 07/13/23 05:25     | AMG     | Mt. Juliet, TN |



20230703-H7-(SB01) @ 20-22 L1633300-02 Solid

Collected by  
K. Moreland

Collected date/time  
07/03/23 10:50

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091359 | 1        | 07/17/23 12:09        | 07/17/23 12:09     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2091346 | 1        | 07/11/23 13:35        | 07/12/23 15:19     | SET     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091619 | 1        | 07/09/23 11:42        | 07/10/23 11:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2092223 | 1        | 07/12/23 11:30        | 07/13/23 07:50     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091364 | 1        | 07/11/23 10:16        | 07/17/23 14:13     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2091599 | 5        | 07/10/23 08:17        | 07/13/23 14:53     | JPD     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2093007 | 200      | 07/10/23 13:18        | 07/12/23 18:42     | NCC     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092297 | 20       | 07/10/23 13:18        | 07/11/23 04:29     | BAM     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093536 | 1        | 07/13/23 06:38        | 07/13/23 14:17     | HLJ     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093557 | 1        | 07/12/23 20:03        | 07/13/23 05:45     | AMG     | Mt. Juliet, TN |

20230703-H7-(SB01) @ 30-32 L1633300-03 Solid

Collected by  
K. Moreland

Collected date/time  
07/03/23 11:40

Received date/time  
07/07/23 09:00

| Method                                                      | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-------------------------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                                          | WG2091359 | 1        | 07/17/23 12:12        | 07/17/23 12:12     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 7199                                | WG2091346 | 1        | 07/11/23 13:35        | 07/12/23 15:24     | SET     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D                               | WG2091619 | 1        | 07/09/23 11:42        | 07/10/23 11:00     | BJM     | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod                            | WG2092223 | 1        | 07/12/23 11:30        | 07/13/23 07:50     | NTG     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2                     | WG2091364 | 1        | 07/11/23 10:16        | 07/17/23 14:16     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020                               | WG2091599 | 5        | 07/10/23 08:17        | 07/13/23 14:56     | JPD     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC) by Method 8015D/GRO         | WG2092833 | 1        | 07/10/23 13:18        | 07/11/23 21:15     | MGF     | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B          | WG2092297 | 1        | 07/10/23 13:18        | 07/11/23 03:14     | BAM     | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M        | WG2093536 | 1        | 07/13/23 06:38        | 07/13/23 15:19     | HLJ     | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM | WG2093557 | 1        | 07/12/23 20:03        | 07/13/23 06:05     | AMG     | 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

## Report Revision History

---

Level II Report - Version 1: 07/17/23 15:30

## Project Narrative

---

Updated contact info - Tony Gibson



Calculated Results

|                         | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Analyte                 | SAR    |           |          |                      |           |
| Sodium Adsorption Ratio | 2.29   |           | 1        | 07/17/2023 12:06     | WG2091359 |

Wet Chemistry by Method 7199

|                     | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Analyte             |              |           |           |           |          |                      |                           |
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/12/2023 15:14     | <a href="#">WG2091346</a> |

Wet Chemistry by Method 9045D

|         | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| Analyte | pH     |                    |          |                      |                           |
| pH      | 8.73   | <a href="#">T8</a> | 1        | 07/10/2023 11:00     | <a href="#">WG2091619</a> |

Sample Narrative:  
L1633300-01 WG2091619: 8.73 at 20.9C

Wet Chemistry by Method 9050AMod

|                      | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Analyte              |                 |           |              |          |                      |                           |
| Specific Conductance | 356             |           | 10.0         | 1        | 07/10/2023 12:40     | <a href="#">WG2091873</a> |

Sample Narrative:  
L1633300-01 WG2091873: at 25C

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

|                      | Result mg/l | Qualifier         | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-------------------|----------|----------|----------|----------------------|---------------------------|
| Analyte              |             |                   |          |          |          |                      |                           |
| Hot Water Sol. Boron | 0.188       | <a href="#">J</a> | 0.0167   | 0.200    | 1        | 07/17/2023 14:05     | <a href="#">WG2091364</a> |

Metals (ICPMS) by Method 6020

|          | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Analyte  |              |                   |           |           |          |                      |                           |
| Arsenic  | 4.02         |                   | 0.100     | 1.00      | 5        | 07/13/2023 14:49     | <a href="#">WG2091599</a> |
| Barium   | 191          |                   | 0.152     | 2.50      | 5        | 07/13/2023 14:49     | <a href="#">WG2091599</a> |
| Cadmium  | 0.381        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/13/2023 14:49     | <a href="#">WG2091599</a> |
| Copper   | 9.01         |                   | 0.132     | 5.00      | 5        | 07/13/2023 14:49     | <a href="#">WG2091599</a> |
| Lead     | 6.97         |                   | 0.0990    | 2.00      | 5        | 07/13/2023 14:49     | <a href="#">WG2091599</a> |
| Nickel   | 9.04         |                   | 0.197     | 2.50      | 5        | 07/13/2023 14:49     | <a href="#">WG2091599</a> |
| Selenium | 0.395        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/13/2023 14:49     | <a href="#">WG2091599</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 07/13/2023 14:49     | <a href="#">WG2091599</a> |
| Zinc     | 24.9         | <a href="#">J</a> | 0.740     | 25.0      | 5        | 07/13/2023 14:49     | <a href="#">WG2091599</a> |

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

|                                    | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Analyte                            |              |           |           |           |          |                      |                           |
| TPH (GC/FID) Low Fraction          | 609          |           | 4.34      | 20.0      | 200      | 07/12/2023 18:24     | <a href="#">WG2093007</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 96.9         |           |           | 77.0-120  |          | 07/12/2023 18:24     | <a href="#">WG2093007</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

| Analyte                   | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | 0.0228          |                    | 0.00934      | 0.0200       | 20       | 07/11/2023 04:11        | <a href="#">WG2092297</a> |
| Toluene                   | 1.44            |                    | 0.0260       | 0.100        | 20       | 07/11/2023 04:11        | <a href="#">WG2092297</a> |
| Ethylbenzene              | 1.41            |                    | 0.0147       | 0.0500       | 20       | 07/11/2023 04:11        | <a href="#">WG2092297</a> |
| Xylenes, Total            | 15.2            | <a href="#">J5</a> | 0.0176       | 0.130        | 20       | 07/11/2023 04:11        | <a href="#">WG2092297</a> |
| 1,2,4-Trimethylbenzene    | 4.47            | <a href="#">J5</a> | 0.0316       | 0.100        | 20       | 07/11/2023 04:11        | <a href="#">WG2092297</a> |
| 1,3,5-Trimethylbenzene    | 3.97            | <a href="#">J5</a> | 0.0400       | 0.100        | 20       | 07/11/2023 04:11        | <a href="#">WG2092297</a> |
| (S) Toluene-d8            | 111             |                    |              | 75.0-131     |          | 07/11/2023 04:11        | <a href="#">WG2092297</a> |
| (S) 4-Bromofluorobenzene  | 102             |                    |              | 67.0-138     |          | 07/11/2023 04:11        | <a href="#">WG2092297</a> |
| (S) 1,2-Dichloroethane-d4 | 97.9            |                    |              | 70.0-130     |          | 07/11/2023 04:11        | <a href="#">WG2092297</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 264             |           | 1.61         | 4.00         | 1        | 07/13/2023 15:06        | <a href="#">WG2093536</a> |
| C28-C36 Motor Oil Range | 26.3            |           | 0.274        | 4.00         | 1        | 07/13/2023 15:06        | <a href="#">WG2093536</a> |
| (S) o-Terphenyl         | 45.4            |           |              | 18.0-148     |          | 07/13/2023 15:06        | <a href="#">WG2093536</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |                    | 0.00209      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Anthracene             | U               |                    | 0.00230      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Benzo(a)anthracene     | U               |                    | 0.00173      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Benzo(b)fluoranthene   | U               |                    | 0.00153      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Benzo(k)fluoranthene   | U               |                    | 0.00215      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Benzo(a)pyrene         | U               |                    | 0.00179      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Chrysene               | U               |                    | 0.00232      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Dibenz(a,h)anthracene  | U               |                    | 0.00172      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Fluoranthene           | U               |                    | 0.00227      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Fluorene               | 0.00876         |                    | 0.00205      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Indeno(1,2,3-cd)pyrene | U               |                    | 0.00181      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| 1-Methylnaphthalene    | 0.154           |                    | 0.00449      | 0.0200       | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| 2-Methylnaphthalene    | 0.416           |                    | 0.00427      | 0.0200       | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Naphthalene            | 0.219           |                    | 0.00408      | 0.0200       | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| Pyrene                 | U               |                    | 0.00200      | 0.00600      | 1        | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| (S) p-Terphenyl-d14    | 88.0            |                    |              | 23.0-120     |          | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| (S) Nitrobenzene-d5    | 162             | <a href="#">J1</a> |              | 14.0-149     |          | 07/13/2023 05:25        | <a href="#">WG2093557</a> |
| (S) 2-Fluorobiphenyl   | 79.4            |                    |              | 34.0-125     |          | 07/13/2023 05:25        | <a href="#">WG2093557</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 6.27   |           | 1        | 07/17/2023 12:09     | WG2091359 |

1 Cp

2 Tc

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/12/2023 15:19     | <a href="#">WG2091346</a> |

3 Ss

4 Cn

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.95   | <a href="#">T8</a> | 1        | 07/10/2023 11:00     | <a href="#">WG2091619</a> |

5 Sr

6 Qc

Sample Narrative:

L1633300-02 WG2091619: 8.95 at 20.9C

7 Gl

8 Al

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 484             |           | 10.0         | 1        | 07/13/2023 07:50     | <a href="#">WG2092223</a> |

9 Sc

Sample Narrative:

L1633300-02 WG2092223: at 25C

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

| Analyte              | Result mg/l | Qualifier | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-----------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.318       |           | 0.0167   | 0.200    | 1        | 07/17/2023 14:13     | <a href="#">WG2091364</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 8.00         |                   | 0.100     | 1.00      | 5        | 07/13/2023 14:53     | <a href="#">WG2091599</a> |
| Barium   | 141          |                   | 0.152     | 2.50      | 5        | 07/13/2023 14:53     | <a href="#">WG2091599</a> |
| Cadmium  | 0.435        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/13/2023 14:53     | <a href="#">WG2091599</a> |
| Copper   | 11.9         |                   | 0.132     | 5.00      | 5        | 07/13/2023 14:53     | <a href="#">WG2091599</a> |
| Lead     | 8.75         |                   | 0.0990    | 2.00      | 5        | 07/13/2023 14:53     | <a href="#">WG2091599</a> |
| Nickel   | 11.9         |                   | 0.197     | 2.50      | 5        | 07/13/2023 14:53     | <a href="#">WG2091599</a> |
| Selenium | 0.319        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/13/2023 14:53     | <a href="#">WG2091599</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 07/13/2023 14:53     | <a href="#">WG2091599</a> |
| Zinc     | 35.0         |                   | 0.740     | 25.0      | 5        | 07/13/2023 14:53     | <a href="#">WG2091599</a> |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 1540         |           | 4.34      | 20.0      | 200      | 07/12/2023 18:42     | <a href="#">WG2093007</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 97.3         |           |           | 77.0-120  |          | 07/12/2023 18:42     | <a href="#">WG2093007</a> |

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

| Analyte                   | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | 0.0760          |                    | 0.00934      | 0.0200       | 20       | 07/11/2023 04:29        | <a href="#">WG2092297</a> |
| Toluene                   | 3.32            |                    | 0.0260       | 0.100        | 20       | 07/11/2023 04:29        | <a href="#">WG2092297</a> |
| Ethylbenzene              | 2.20            | <a href="#">J3</a> | 0.0147       | 0.0500       | 20       | 07/11/2023 04:29        | <a href="#">WG2092297</a> |
| Xylenes, Total            | 30.4            |                    | 0.0176       | 0.130        | 20       | 07/11/2023 04:29        | <a href="#">WG2092297</a> |
| 1,2,4-Trimethylbenzene    | 8.71            |                    | 0.0316       | 0.100        | 20       | 07/11/2023 04:29        | <a href="#">WG2092297</a> |
| 1,3,5-Trimethylbenzene    | 8.59            |                    | 0.0400       | 0.100        | 20       | 07/11/2023 04:29        | <a href="#">WG2092297</a> |
| (S) Toluene-d8            | 114             |                    |              | 75.0-131     |          | 07/11/2023 04:29        | <a href="#">WG2092297</a> |
| (S) 4-Bromofluorobenzene  | 104             |                    |              | 67.0-138     |          | 07/11/2023 04:29        | <a href="#">WG2092297</a> |
| (S) 1,2-Dichloroethane-d4 | 96.1            |                    |              | 70.0-130     |          | 07/11/2023 04:29        | <a href="#">WG2092297</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | U               |           | 1.61         | 4.00         | 1        | 07/13/2023 14:17        | <a href="#">WG2093536</a> |
| C28-C36 Motor Oil Range | 5.28            |           | 0.274        | 4.00         | 1        | 07/13/2023 14:17        | <a href="#">WG2093536</a> |
| (S) o-Terphenyl         | 41.6            |           |              | 18.0-148     |          | 07/13/2023 14:17        | <a href="#">WG2093536</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier          | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|--------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |                    | 0.00209      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Anthracene             | U               |                    | 0.00230      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Benzo(a)anthracene     | U               |                    | 0.00173      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Benzo(b)fluoranthene   | U               |                    | 0.00153      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Benzo(k)fluoranthene   | U               |                    | 0.00215      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Benzo(a)pyrene         | U               |                    | 0.00179      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Chrysene               | U               |                    | 0.00232      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Dibenz(a,h)anthracene  | U               |                    | 0.00172      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Fluoranthene           | U               |                    | 0.00227      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Fluorene               | 0.0115          |                    | 0.00205      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Indeno(1,2,3-cd)pyrene | U               |                    | 0.00181      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| 1-Methylnaphthalene    | 0.200           |                    | 0.00449      | 0.0200       | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| 2-Methylnaphthalene    | 0.552           |                    | 0.00427      | 0.0200       | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Naphthalene            | 0.220           |                    | 0.00408      | 0.0200       | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| Pyrene                 | U               |                    | 0.00200      | 0.00600      | 1        | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| (S) p-Terphenyl-d14    | 75.0            |                    |              | 23.0-120     |          | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| (S) Nitrobenzene-d5    | 345             | <a href="#">J1</a> |              | 14.0-149     |          | 07/13/2023 05:45        | <a href="#">WG2093557</a> |
| (S) 2-Fluorobiphenyl   | 69.4            |                    |              | 34.0-125     |          | 07/13/2023 05:45        | <a href="#">WG2093557</a> |

Sample Narrative:

L1633300-02 WG2093557: Surrogate failure due to matrix interference

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 4.06   |           | 1        | 07/17/2023 12:12     | WG2091359 |

1 Cp

2 Tc

Wet Chemistry by Method 7199

| Analyte             | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|---------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| Hexavalent Chromium | U            |           | 0.255     | 1.00      | 1        | 07/12/2023 15:24     | <a href="#">WG2091346</a> |

3 Ss

4 Cn

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.74   | <a href="#">T8</a> | 1        | 07/10/2023 11:00     | <a href="#">WG2091619</a> |

5 Sr

6 Qc

Sample Narrative:

L1633300-03 WG2091619: 8.74 at 21C

7 Gl

8 Al

Wet Chemistry by Method 9050AMod

| Analyte              | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch                     |
|----------------------|-----------------|-----------|--------------|----------|----------------------|---------------------------|
| Specific Conductance | 500             |           | 10.0         | 1        | 07/13/2023 07:50     | <a href="#">WG2092223</a> |

9 Sc

Sample Narrative:

L1633300-03 WG2092223: at 25C

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

| Analyte              | Result mg/l | Qualifier         | MDL mg/l | RDL mg/l | Dilution | Analysis date / time | Batch                     |
|----------------------|-------------|-------------------|----------|----------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | 0.141       | <a href="#">J</a> | 0.0167   | 0.200    | 1        | 07/17/2023 14:16     | <a href="#">WG2091364</a> |

Metals (ICPMS) by Method 6020

| Analyte  | Result mg/kg | Qualifier         | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|----------|--------------|-------------------|-----------|-----------|----------|----------------------|---------------------------|
| Arsenic  | 6.40         |                   | 0.100     | 1.00      | 5        | 07/13/2023 14:56     | <a href="#">WG2091599</a> |
| Barium   | 85.5         |                   | 0.152     | 2.50      | 5        | 07/13/2023 14:56     | <a href="#">WG2091599</a> |
| Cadmium  | 0.482        | <a href="#">J</a> | 0.0855    | 1.00      | 5        | 07/13/2023 14:56     | <a href="#">WG2091599</a> |
| Copper   | 10.3         |                   | 0.132     | 5.00      | 5        | 07/13/2023 14:56     | <a href="#">WG2091599</a> |
| Lead     | 8.50         |                   | 0.0990    | 2.00      | 5        | 07/13/2023 14:56     | <a href="#">WG2091599</a> |
| Nickel   | 12.5         |                   | 0.197     | 2.50      | 5        | 07/13/2023 14:56     | <a href="#">WG2091599</a> |
| Selenium | 0.208        | <a href="#">J</a> | 0.180     | 2.50      | 5        | 07/13/2023 14:56     | <a href="#">WG2091599</a> |
| Silver   | U            |                   | 0.0865    | 0.500     | 5        | 07/13/2023 14:56     | <a href="#">WG2091599</a> |
| Zinc     | 35.4         |                   | 0.740     | 25.0      | 5        | 07/13/2023 14:56     | <a href="#">WG2091599</a> |

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

| Analyte                            | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch                     |
|------------------------------------|--------------|-----------|-----------|-----------|----------|----------------------|---------------------------|
| TPH (GC/FID) Low Fraction          | 1.08         |           | 0.0217    | 0.100     | 1        | 07/11/2023 21:15     | <a href="#">WG2092833</a> |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 81.7         |           |           | 77.0-120  |          | 07/11/2023 21:15     | <a href="#">WG2092833</a> |



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

| Analyte                   | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Benzene                   | U               |           | 0.000467     | 0.00100      | 1        | 07/11/2023 03:14        | <a href="#">WG2092297</a> |
| Toluene                   | U               |           | 0.00130      | 0.00500      | 1        | 07/11/2023 03:14        | <a href="#">WG2092297</a> |
| Ethylbenzene              | U               | <u>J3</u> | 0.000737     | 0.00250      | 1        | 07/11/2023 03:14        | <a href="#">WG2092297</a> |
| Xylenes, Total            | 0.00701         |           | 0.000880     | 0.00650      | 1        | 07/11/2023 03:14        | <a href="#">WG2092297</a> |
| 1,2,4-Trimethylbenzene    | U               |           | 0.00158      | 0.00500      | 1        | 07/11/2023 03:14        | <a href="#">WG2092297</a> |
| 1,3,5-Trimethylbenzene    | U               |           | 0.00200      | 0.00500      | 1        | 07/11/2023 03:14        | <a href="#">WG2092297</a> |
| (S) Toluene-d8            | 114             |           |              | 75.0-131     |          | 07/11/2023 03:14        | <a href="#">WG2092297</a> |
| (S) 4-Bromofluorobenzene  | 94.6            |           |              | 67.0-138     |          | 07/11/2023 03:14        | <a href="#">WG2092297</a> |
| (S) 1,2-Dichloroethane-d4 | 93.9            |           |              | 70.0-130     |          | 07/11/2023 03:14        | <a href="#">WG2092297</a> |

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

| Analyte                 | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|-------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| C10-C28 Diesel Range    | 180             |           | 1.61         | 4.00         | 1        | 07/13/2023 15:19        | <a href="#">WG2093536</a> |
| C28-C36 Motor Oil Range | 37.9            |           | 0.274        | 4.00         | 1        | 07/13/2023 15:19        | <a href="#">WG2093536</a> |
| (S) o-Terphenyl         | 37.0            |           |              | 18.0-148     |          | 07/13/2023 15:19        | <a href="#">WG2093536</a> |

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

| Analyte                | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|------------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Acenaphthene           | U               |           | 0.00209      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Anthracene             | U               |           | 0.00230      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Benzo(a)anthracene     | U               |           | 0.00173      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Benzo(b)fluoranthene   | U               |           | 0.00153      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Benzo(k)fluoranthene   | U               |           | 0.00215      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Benzo(a)pyrene         | U               |           | 0.00179      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Chrysene               | U               |           | 0.00232      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Dibenz(a,h)anthracene  | U               |           | 0.00172      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Fluoranthene           | U               |           | 0.00227      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Fluorene               | U               |           | 0.00205      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Indeno(1,2,3-cd)pyrene | U               |           | 0.00181      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| 1-Methylnaphthalene    | U               |           | 0.00449      | 0.0200       | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| 2-Methylnaphthalene    | U               |           | 0.00427      | 0.0200       | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Naphthalene            | U               |           | 0.00408      | 0.0200       | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| Pyrene                 | U               |           | 0.00200      | 0.00600      | 1        | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| (S) p-Terphenyl-d14    | 70.4            |           |              | 23.0-120     |          | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| (S) Nitrobenzene-d5    | 63.6            |           |              | 14.0-149     |          | 07/13/2023 06:05        | <a href="#">WG2093557</a> |
| (S) 2-Fluorobiphenyl   | 62.5            |           |              | 34.0-125     |          | 07/13/2023 06:05        | <a href="#">WG2093557</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3947843-1 07/12/23 12:52

|                     | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------------------|-----------|--------------|--------|--------|
| Analyte             | mg/kg     |              | mg/kg  | mg/kg  |
| Hexavalent Chromium | U         |              | 0.255  | 1.00   |

L1632965-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1632965-06 07/12/23 13:30 • (DUP) R3947843-3 07/12/23 13:35

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

L1633322-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1633322-01 07/12/23 15:30 • (DUP) R3947843-8 07/12/23 15:35

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

Laboratory Control Sample (LCS)

(LCS) R3947843-2 07/12/23 12:59

|                     | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------------------|--------------|------------|----------|-------------|---------------|
| Analyte             | mg/kg        | mg/kg      | %        | %           |               |
| Hexavalent Chromium | 10.0         | 10.9       | 109      | 80.0-120    |               |

L1633298-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633298-01 07/12/23 14:27 • (MS) R3947843-4 07/12/23 14:33 • (MSD) R3947843-5 07/12/23 14:38

|                     | 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      | %       | %        |          | %           |              |               | %     | %          |
| Hexavalent Chromium | 20.0         | U               | 19.6      | 19.5       | 98.1    | 97.3     | 1        | 75.0-125    |              |               | 0.792 | 20         |

L1633298-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1633298-01 07/12/23 14:27 • (MS) R3947843-6 07/12/23 14:43

|                     | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|---------------------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte             | mg/kg        | mg/kg           | mg/kg     | %       |          | %           |              |
| Hexavalent Chromium | 643          | U               | 872       | 136     | 50       | 75.0-125    | J5           |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1633300-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633300-02 07/10/23 11:00 • (DUP) R3946583-2 07/10/23 11:00

|         | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | pH              | su         |          | %       |                      | %              |
| pH      | 8.95            | 8.93       | 1        | 0.224   |                      | 1              |

Sample Narrative:

OS: 8.95 at 20.9C

DUP: 8.93 at 20.9C

L1633435-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1633435-04 07/10/23 11:00 • (DUP) R3946583-3 07/10/23 11:00

|         | Original Result | DUP Result | Dilution | DUP RPD | <u>DUP Qualifier</u> | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|----------------------|----------------|
| Analyte | pH              | su         |          | %       |                      | %              |
| pH      | 8.13            | 8.17       | 1        | 0.491   |                      | 1              |

Sample Narrative:

OS: 8.13 at 21.1C

DUP: 8.17 at 21.1C

Laboratory Control Sample (LCS)

(LCS) R3946583-1 07/10/23 11:00

|         | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | <u>LCS Qualifier</u> |
|---------|--------------|------------|----------|-------------|----------------------|
| Analyte | su           | su         | %        | %           |                      |
| pH      | 10.0         | 10.0       | 100      | 99.0-101    |                      |

Sample Narrative:

LCS: 10.01 at 20.5C

<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) R3946650-1 07/10/23 12:40

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:  
BLANK: at 25C

L1633242-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1633242-02 07/10/23 12:40 • (DUP) R3946650-3 07/10/23 12:40

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 511                         | 511                    | 1        | 0.000        |               | 20                     |

Sample Narrative:  
OS: at 25C  
DUP: at 25C

L1633276-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1633276-03 07/10/23 12:40 • (DUP) R3946650-4 07/10/23 12:40

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 1170                        | 1170                   | 1        | 0.000        |               | 20                     |

Sample Narrative:  
OS: at 25C  
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3946650-2 07/10/23 12:40

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 327                      | 335                    | 102           | 85.0-115         |               |

Sample Narrative:  
LCS: at 25C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3948009-1 07/13/23 07:50

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:  
BLANK: at 25C

L1633069-39 Original Sample (OS) • Duplicate (DUP)

(OS) L1633069-39 07/13/23 07:50 • (DUP) R3948009-3 07/13/23 07:50

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 660                         | 659                    | 1        | 0.152        |               | 20                     |

Sample Narrative:  
OS: at 25C  
DUP: at 25C

L1633224-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1633224-07 07/13/23 07:50 • (DUP) R3948009-4 07/13/23 07:50

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 202                         | 199                    | 1        | 1.35         |               | 20                     |

Sample Narrative:  
OS: at 25C  
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3948009-2 07/13/23 07:50

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 327                      | 331                    | 101           | 85.0-115         |               |

Sample Narrative:  
LCS: at 25C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3949375-1 07/17/23 13:41

| Analyte              | MB Result<br>mg/l | <u>MB Qualifier</u> | MB MDL<br>mg/l | MB RDL<br>mg/l |
|----------------------|-------------------|---------------------|----------------|----------------|
| Hot Water Sol. Boron | U                 |                     | 0.0167         | 0.200          |

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

(LCS) R3949375-2 07/17/23 13:43 • (LCSD) R3949375-3 07/17/23 13:46

| Analyte              | Spike Amount<br>mg/l | LCS Result<br>mg/l | LCSD Result<br>mg/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> | <u>LCSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|----------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|----------------------|-----------------------|----------|-----------------|
| Hot Water Sol. Boron | 1.00                 | 0.955              | 0.969               | 95.5          | 96.9           | 80.0-120         |                      |                       | 1.41     | 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) R3946975-1 07/11/23 09:44

| Analyte  | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|----------|--------------------|--------------|-----------------|-----------------|
| Arsenic  | U                  |              | 0.100           | 1.00            |
| Barium   | U                  |              | 0.152           | 2.50            |
| Cadmium  | U                  |              | 0.0855          | 1.00            |
| Copper   | U                  |              | 0.133           | 5.00            |
| Lead     | U                  |              | 0.0990          | 2.00            |
| Nickel   | U                  |              | 0.197           | 2.50            |
| Selenium | U                  |              | 0.180           | 2.50            |
| Silver   | U                  |              | 0.0865          | 0.500           |
| Zinc     | U                  |              | 0.740           | 25.0            |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

Method Blank (MB)

(MB) R3948357-1 07/13/23 13:52

| Analyte | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|---------|--------------------|--------------|-----------------|-----------------|
| Zinc    | U                  |              | 0.740           | 25.0            |

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3946975-2 07/11/23 09:48

| Analyte  | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------|-----------------------|---------------------|---------------|------------------|---------------|
| Arsenic  | 100                   | 97.3                | 97.3          | 80.0-120         |               |
| Barium   | 100                   | 91.9                | 91.9          | 80.0-120         |               |
| Cadmium  | 100                   | 96.0                | 96.0          | 80.0-120         |               |
| Copper   | 100                   | 88.3                | 88.3          | 80.0-120         |               |
| Lead     | 100                   | 90.8                | 90.8          | 80.0-120         |               |
| Nickel   | 100                   | 95.9                | 95.9          | 80.0-120         |               |
| Selenium | 100                   | 99.8                | 99.8          | 80.0-120         |               |
| Silver   | 20.0                  | 19.2                | 96.2          | 80.0-120         |               |
| Zinc     | 100                   | 91.2                | 91.2          | 80.0-120         |               |

Laboratory Control Sample (LCS)

(LCS) R3948357-2 07/13/23 13:55

| Analyte | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|---------|-----------------------|---------------------|---------------|------------------|---------------|
| Zinc    | 100                   | 94.2                | 94.2          | 80.0-120         |               |



L1628080-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1628080-34 07/11/23 09:51 • (MS) R3946975-5 07/11/23 10:01 • (MSD) R3946975-6 07/11/23 10:04

| Analyte  | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Arsenic  | 100                   | 0.442                    | 93.5               | 88.8                | 93.1         | 88.4          | 5        | 75.0-125         |              |               | 5.14     | 20              |
| Barium   | 100                   | 13.1                     | 104                | 96.4                | 90.7         | 83.3          | 5        | 75.0-125         | E            | E             | 7.38     | 20              |
| Cadmium  | 100                   | U                        | 93.4               | 88.5                | 93.4         | 88.5          | 5        | 75.0-125         |              |               | 5.46     | 20              |
| Copper   | 100                   | 1.08                     | 88.3               | 86.2                | 87.2         | 85.1          | 5        | 75.0-125         |              |               | 2.46     | 20              |
| Lead     | 100                   | 3.95                     | 90.1               | 90.3                | 86.2         | 86.3          | 5        | 75.0-125         |              |               | 0.176    | 20              |
| Nickel   | 100                   | 0.853                    | 97.0               | 90.5                | 96.2         | 89.6          | 5        | 75.0-125         |              |               | 6.97     | 20              |
| Selenium | 100                   | 0.235                    | 92.7               | 86.8                | 92.5         | 86.5          | 5        | 75.0-125         |              |               | 6.62     | 20              |
| Silver   | 20.0                  | U                        | 18.6               | 17.7                | 93.0         | 88.3          | 5        | 75.0-125         |              |               | 5.17     | 20              |

L1628080-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1628080-34 07/13/23 13:58 • (MS) R3948357-5 07/13/23 14:08 • (MSD) R3948357-6 07/13/23 14:11

| Analyte | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Zinc    | 100                   | 2.03                     | 90.4               | 89.0                | 88.4         | 87.0          | 5        | 75.0-125         |              |               | 1.56     | 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) R3947537-2 07/11/23 15:40

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | 0.0294             | ⬇            | 0.0217          | 0.100           |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 98.4               |              |                 | 77.0-120        |

Laboratory Control Sample (LCS)

(LCS) R3947537-1 07/11/23 14:04

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 4.53                | 82.4          | 72.0-127         |               |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     | 100           | 77.0-120         |               |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3947941-2 07/12/23 11:23

| Analyte                            | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) Low Fraction          | 0.697              | ⬇            | 0.543           | 2.50            |
| (S)<br>a,a,a-Trifluorotoluene(FID) | 100                |              |                 | 77.0-120        |

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

(LCS) R3947941-1 07/12/23 10:46 • (LCSD) R3947941-3 07/12/23 11:41

| Analyte                            | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|------------------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| TPH (GC/FID) Low Fraction          | 5.50                  | 6.28                | 6.39                 | 114           | 116            | 72.0-127         |               |                | 1.74     | 20              |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                     |                      | 103           | 103            | 77.0-120         |               |                |          |                 |

L1633168-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633168-01 07/12/23 14:46 • (MS) R3947941-4 07/12/23 19:01 • (MSD) R3947941-5 07/12/23 19:19

| Analyte                            | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|------------------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| TPH (GC/FID) Low Fraction          | 323                   | 3.38                     | 373                | 337                 | 114          | 103           | 58.8     | 10.0-151         |              |               | 10.1     | 28              |
| (S)<br>a,a,a-Trifluorotoluene(FID) |                       |                          |                    |                     | 105          | 102           |          | 77.0-120         |              |               |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3947915-3 07/10/23 21:18

| Analyte                   | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|---------------------------|--------------------|--------------|-----------------|-----------------|
| Benzene                   | U                  |              | 0.000467        | 0.00100         |
| Toluene                   | U                  |              | 0.00130         | 0.00500         |
| Ethylbenzene              | U                  |              | 0.000737        | 0.00250         |
| Xylenes, Total            | U                  |              | 0.000880        | 0.00650         |
| 1,2,4-Trimethylbenzene    | U                  |              | 0.00158         | 0.00500         |
| 1,3,5-Trimethylbenzene    | U                  |              | 0.00200         | 0.00500         |
| (S) Toluene-d8            | 117                |              |                 | 75.0-131        |
| (S) 4-Bromofluorobenzene  | 95.8               |              |                 | 67.0-138        |
| (S) 1,2-Dichloroethane-d4 | 102                |              |                 | 70.0-130        |

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

(LCS) R3947915-1 07/10/23 19:43 • (LCSD) R3947915-2 07/10/23 20:02

| Analyte                   | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| Benzene                   | 0.125                 | 0.127               | 0.105                | 102           | 84.0           | 70.0-123         |               |                | 19.0     | 20              |
| Toluene                   | 0.125                 | 0.144               | 0.121                | 115           | 96.8           | 75.0-121         |               |                | 17.4     | 20              |
| Ethylbenzene              | 0.125                 | 0.149               | 0.121                | 119           | 96.8           | 74.0-126         |               | J3             | 20.7     | 20              |
| Xylenes, Total            | 0.375                 | 0.416               | 0.352                | 111           | 93.9           | 72.0-127         |               |                | 16.7     | 20              |
| 1,2,4-Trimethylbenzene    | 0.125                 | 0.115               | 0.0986               | 92.0          | 78.9           | 70.0-126         |               |                | 15.4     | 20              |
| 1,3,5-Trimethylbenzene    | 0.125                 | 0.112               | 0.100                | 89.6          | 80.0           | 73.0-127         |               |                | 11.3     | 20              |
| (S) Toluene-d8            |                       |                     |                      | 112           | 112            | 75.0-131         |               |                |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                     |                      | 97.4          | 97.4           | 67.0-138         |               |                |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                     |                      | 106           | 105            | 70.0-130         |               |                |          |                 |

L1633300-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633300-01 07/11/23 04:11 • (MS) R3947915-4 07/11/23 04:48 • (MSD) R3947915-5 07/11/23 05:07

| Analyte                   | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| Benzene                   | 2.48                  | 0.0228                   | 2.48               | 2.51                | 100          | 101           | 20       | 10.0-149         |              |               | 1.20     | 37              |
| Toluene                   | 2.48                  | 1.44                     | 4.45               | 4.61                | 121          | 128           | 20       | 10.0-156         |              |               | 3.53     | 38              |
| Ethylbenzene              | 2.48                  | 1.41                     | 4.13               | 4.26                | 110          | 115           | 20       | 10.0-160         |              |               | 3.10     | 38              |
| Xylenes, Total            | 7.43                  | 15.2                     | 28.2               | 30.3                | 175          | 203           | 20       | 10.0-160         | J5           | J5            | 7.18     | 38              |
| 1,2,4-Trimethylbenzene    | 2.48                  | 4.47                     | 8.27               | 8.50                | 153          | 163           | 20       | 10.0-160         |              | J5            | 2.74     | 36              |
| 1,3,5-Trimethylbenzene    | 2.48                  | 3.97                     | 8.12               | 8.44                | 167          | 180           | 20       | 10.0-160         | J5           | J5            | 3.86     | 38              |
| (S) Toluene-d8            |                       |                          |                    |                     | 113          | 115           |          | 75.0-131         |              |               |          |                 |
| (S) 4-Bromofluorobenzene  |                       |                          |                    |                     | 101          | 103           |          | 67.0-138         |              |               |          |                 |
| (S) 1,2-Dichloroethane-d4 |                       |                          |                    |                     | 97.2         | 95.9          |          | 70.0-130         |              |               |          |                 |

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Method Blank (MB)

(MB) R3948300-2 07/13/23 16:25

| Analyte                 | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|-------------------------|--------------------|--------------|-----------------|-----------------|
| C10-C28 Diesel Range    | U                  |              | 1.61            | 4.00            |
| C28-C36 Motor Oil Range | U                  |              | 0.274           | 4.00            |
| (S) o-Terphenyl         | 83.3               |              |                 | 18.0-148        |

Laboratory Control Sample (LCS)

(LCS) R3948300-1 07/13/23 14:04

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|-----------------------|---------------------|---------------|------------------|---------------|
| C10-C28 Diesel Range | 50.0                  | 31.6                | 63.2          | 50.0-150         |               |
| (S) o-Terphenyl      |                       |                     | 58.0          | 18.0-148         |               |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3948583-2 07/13/23 02:07

| Analyte                | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|------------------------|--------------------|--------------|-----------------|-----------------|
| Acenaphthene           | U                  |              | 0.00209         | 0.00600         |
| Anthracene             | U                  |              | 0.00230         | 0.00600         |
| Benzo(a)anthracene     | U                  |              | 0.00173         | 0.00600         |
| Benzo(b)fluoranthene   | U                  |              | 0.00153         | 0.00600         |
| Benzo(k)fluoranthene   | U                  |              | 0.00215         | 0.00600         |
| Benzo(a)pyrene         | U                  |              | 0.00179         | 0.00600         |
| Chrysene               | U                  |              | 0.00232         | 0.00600         |
| Dibenz(a,h)anthracene  | U                  |              | 0.00172         | 0.00600         |
| Fluoranthene           | U                  |              | 0.00227         | 0.00600         |
| Fluorene               | U                  |              | 0.00205         | 0.00600         |
| Indeno(1,2,3-cd)pyrene | U                  |              | 0.00181         | 0.00600         |
| 1-Methylnaphthalene    | U                  |              | 0.00449         | 0.0200          |
| 2-Methylnaphthalene    | U                  |              | 0.00427         | 0.0200          |
| Naphthalene            | U                  |              | 0.00408         | 0.0200          |
| Pyrene                 | U                  |              | 0.00200         | 0.00600         |
| (S) p-Terphenyl-d14    | 80.2               |              |                 | 23.0-120        |
| (S) Nitrobenzene-d5    | 69.1               |              |                 | 14.0-149        |
| (S) 2-Fluorobiphenyl   | 73.4               |              |                 | 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) R3948583-1 07/13/23 01:47

| Analyte                | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|------------------------|-----------------------|---------------------|---------------|------------------|---------------|
| Acenaphthene           | 0.0800                | 0.0593              | 74.1          | 50.0-120         |               |
| Anthracene             | 0.0800                | 0.0608              | 76.0          | 50.0-126         |               |
| Benzo(a)anthracene     | 0.0800                | 0.0667              | 83.4          | 45.0-120         |               |
| Benzo(b)fluoranthene   | 0.0800                | 0.0632              | 79.0          | 42.0-121         |               |
| Benzo(k)fluoranthene   | 0.0800                | 0.0621              | 77.6          | 49.0-125         |               |
| Benzo(a)pyrene         | 0.0800                | 0.0638              | 79.8          | 42.0-120         |               |
| Chrysene               | 0.0800                | 0.0630              | 78.8          | 49.0-122         |               |
| Dibenz(a,h)anthracene  | 0.0800                | 0.0609              | 76.1          | 47.0-125         |               |
| Fluoranthene           | 0.0800                | 0.0620              | 77.5          | 49.0-129         |               |
| Fluorene               | 0.0800                | 0.0619              | 77.4          | 49.0-120         |               |
| Indeno(1,2,3-cd)pyrene | 0.0800                | 0.0670              | 83.8          | 46.0-125         |               |
| 1-Methylnaphthalene    | 0.0800                | 0.0612              | 76.5          | 51.0-121         |               |
| 2-Methylnaphthalene    | 0.0800                | 0.0623              | 77.9          | 50.0-120         |               |
| Naphthalene            | 0.0800                | 0.0608              | 76.0          | 50.0-120         |               |
| Pyrene                 | 0.0800                | 0.0634              | 79.3          | 43.0-123         |               |

Laboratory Control Sample (LCS)

(LCS) R3948583-1 07/13/23 01:47

| Analyte              | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCS Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> |
|----------------------|-----------------------|---------------------|---------------|------------------|----------------------|
| (S) p-Terphenyl-d14  |                       |                     | 87.1          | 23.0-120         |                      |
| (S) Nitrobenzene-d5  |                       |                     | 87.2          | 14.0-149         |                      |
| (S) 2-Fluorobiphenyl |                       |                     | 84.9          | 34.0-125         |                      |

L1633276-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1633276-01 07/13/23 03:46 • (MS) R3948583-3 07/13/23 04:06 • (MSD) R3948583-4 07/13/23 04:26

| Analyte                | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | <u>MS Qualifier</u> | <u>MSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|---------------------|----------------------|----------|-----------------|
| Acenaphthene           | 0.0788                | U                        | 0.0496             | 0.0557              | 62.9         | 70.0          | 1        | 14.0-127         |                     |                      | 11.6     | 27              |
| Anthracene             | 0.0788                | U                        | 0.0496             | 0.0563              | 62.9         | 70.7          | 1        | 10.0-145         |                     |                      | 12.7     | 30              |
| Benzo(a)anthracene     | 0.0788                | U                        | 0.0524             | 0.0595              | 66.5         | 74.7          | 1        | 10.0-139         |                     |                      | 12.7     | 30              |
| Benzo(b)fluoranthene   | 0.0788                | U                        | 0.0465             | 0.0543              | 59.0         | 68.2          | 1        | 10.0-140         |                     |                      | 15.5     | 36              |
| Benzo(k)fluoranthene   | 0.0788                | U                        | 0.0474             | 0.0554              | 60.2         | 69.6          | 1        | 10.0-137         |                     |                      | 15.6     | 31              |
| Benzo(a)pyrene         | 0.0788                | U                        | 0.0552             | 0.0637              | 70.1         | 80.0          | 1        | 10.0-141         |                     |                      | 14.3     | 31              |
| Chrysene               | 0.0788                | U                        | 0.0513             | 0.0588              | 65.1         | 73.9          | 1        | 10.0-145         |                     |                      | 13.6     | 30              |
| Dibenz(a,h)anthracene  | 0.0788                | U                        | 0.0463             | 0.0541              | 58.8         | 68.0          | 1        | 10.0-132         |                     |                      | 15.5     | 31              |
| Fluoranthene           | 0.0788                | U                        | 0.0505             | 0.0571              | 64.1         | 71.7          | 1        | 10.0-153         |                     |                      | 12.3     | 33              |
| Fluorene               | 0.0788                | U                        | 0.0512             | 0.0576              | 65.0         | 72.4          | 1        | 11.0-130         |                     |                      | 11.8     | 29              |
| Indeno(1,2,3-cd)pyrene | 0.0788                | U                        | 0.0492             | 0.0577              | 62.4         | 72.5          | 1        | 10.0-137         |                     |                      | 15.9     | 32              |
| 1-Methylnaphthalene    | 0.0788                | U                        | 0.0520             | 0.0569              | 66.0         | 71.5          | 1        | 10.0-142         |                     |                      | 9.00     | 28              |
| 2-Methylnaphthalene    | 0.0788                | 0.0147                   | 0.0531             | 0.0580              | 48.7         | 54.4          | 1        | 10.0-137         |                     |                      | 8.82     | 28              |
| Naphthalene            | 0.0788                | 0.0155                   | 0.0507             | 0.0563              | 44.7         | 51.3          | 1        | 10.0-135         |                     |                      | 10.5     | 27              |
| Pyrene                 | 0.0788                | U                        | 0.0523             | 0.0597              | 66.4         | 75.0          | 1        | 10.0-148         |                     |                      | 13.2     | 35              |
| (S) p-Terphenyl-d14    |                       |                          |                    |                     | 71.6         | 83.9          |          | 23.0-120         |                     |                      |          |                 |
| (S) Nitrobenzene-d5    |                       |                          |                    |                     | 73.3         | 78.3          |          | 14.0-149         |                     |                      |          |                 |
| (S) 2-Fluorobiphenyl   |                       |                          |                    |                     | 70.5         | 79.3          |          | 34.0-125         |                     |                      |          |                 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

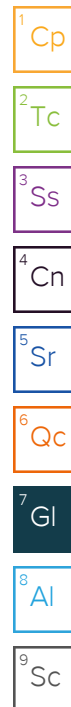
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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.                                                                                                                                                                                                                                               |
| 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. |
| 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                                                                                                                                 |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 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.                                                         |
| J1        | Surrogate recovery limits have been exceeded; values are outside upper control limits.                                                      |
| J3        | The associated batch QC was outside the established quality control range for precision.                                                    |
| J5        | The sample matrix interfered with the ability to make any accurate determination; spike value is high.                                      |
| T8        | Sample(s) received past/too close to holding time expiration.                                                                               |



# ACCREDITATIONS & LOCATIONS

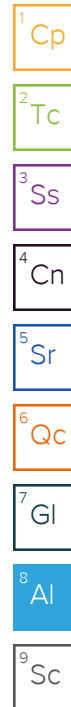
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

|                                |             |                             |                  |
|--------------------------------|-------------|-----------------------------|------------------|
| 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.



|       |            |
|-------|------------|
| Hold: | Condition: |
|-------|------------|



# ANALYTICAL REPORT

August 02, 2023

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

## Caerus Oil and Gas

Sample Delivery Group: L1639938

Samples Received: 07/07/2023

Project Number: H7

Description: H7-Tank Battery

Site: H7

Report To: Jake J / Blair R / Brett M

143 Diamond Avenue

Parachute, CO 81635

Entire Report Reviewed By:

Chris Ward

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 [www.pacenational.com](http://www.pacenational.com)

ACCOUNT:  
Caerus Oil and Gas

PROJECT:  
H7

SDG:  
L1639938

DATE/TIME:  
08/02/23 10:44

PAGE:  
1 of 29

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SAMPLE SUMMARY

20230705-H7-(SB05)@10-11.5 L1639938-01 Solid

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

| Method                                       | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|----------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19        | 08/02/23 03:17     | VSS     | Mt. Juliet, TN |
| 20230705-H7-(SB05)@20-21.5 L1639938-02 Solid |           |          |                       |                    |         |                |
| Method                                       | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |

|                                              |           |          |                       |                    |         |                |
|----------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19        | 08/02/23 03:22     | VSS     | Mt. Juliet, TN |
| 20230705-H7-(SB05)@30-31.5 L1639938-03 Solid |           |          |                       |                    |         |                |
| Method                                       | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |

|                                              |           |          |                       |                    |         |                |
|----------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19        | 08/02/23 03:43     | VSS     | Mt. Juliet, TN |
| 20230705-H7-(SB03)@10-11.5 L1639938-04 Solid |           |          |                       |                    |         |                |
| Method                                       | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |

|                                              |           |          |                       |                    |         |                |
|----------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19        | 08/02/23 03:48     | VSS     | Mt. Juliet, TN |
| 20230705-H7-(SB03)@20-21.5 L1639938-05 Solid |           |          |                       |                    |         |                |
| Method                                       | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |

|                                              |           |          |                       |                    |         |                |
|----------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19        | 08/02/23 03:54     | VSS     | Mt. Juliet, TN |
| 20230705-H7-(SB03)@30-31.5 L1639938-06 Solid |           |          |                       |                    |         |                |
| Method                                       | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |

|                                              |           |          |                       |                    |         |                |
|----------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19        | 08/02/23 03:59     | VSS     | Mt. Juliet, TN |
| 20230705-H7-(SB04)@10-11.5 L1639938-07 Solid |           |          |                       |                    |         |                |
| Method                                       | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |

|                                              |           |          |                       |                    |         |                |
|----------------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19        | 08/02/23 04:04     | VSS     | Mt. Juliet, TN |
| 20230705-H7-(SB04)@20-21.5 L1639938-08 Solid |           |          |                       |                    |         |                |
| Method                                       | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |

|                              |           |   |                |                |     |                |
|------------------------------|-----------|---|----------------|----------------|-----|----------------|
| Wet Chemistry by Method 7199 | WG2104470 | 1 | 08/02/23 02:19 | 08/02/23 04:09 | VSS | Mt. Juliet, TN |
|------------------------------|-----------|---|----------------|----------------|-----|----------------|



SAMPLE SUMMARY

20230705-H7-(SB04)@30-31.5 L1639938-09 Solid

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

| Method                                       | Batch     | Dilution | Preparation date/time       | Analysis date/time                    | Analyst                              | Location       |
|----------------------------------------------|-----------|----------|-----------------------------|---------------------------------------|--------------------------------------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19              | 08/02/23 04:14                        | VSS                                  | Mt. Juliet, TN |
| 20230703-H7-(SB02) @ 10-12 L1639938-10 Solid |           |          | Collected by<br>K. Moreland | Collected date/time<br>07/03/23 12:20 | Received date/time<br>07/07/23 09:00 |                |

| Method                                         | Batch     | Dilution | Preparation date/time       | Analysis date/time                    | Analyst                              | Location       |
|------------------------------------------------|-----------|----------|-----------------------------|---------------------------------------|--------------------------------------|----------------|
| Wet Chemistry by Method 7199                   | WG2104470 | 1        | 08/02/23 02:19              | 08/02/23 04:19                        | VSS                                  | Mt. Juliet, TN |
| 20230703-H7-(SB02) @ 20-21.5 L1639938-11 Solid |           |          | Collected by<br>K. Moreland | Collected date/time<br>07/03/23 13:05 | Received date/time<br>07/07/23 09:00 |                |

| Method                                         | Batch     | Dilution | Preparation date/time       | Analysis date/time                    | Analyst                              | Location       |
|------------------------------------------------|-----------|----------|-----------------------------|---------------------------------------|--------------------------------------|----------------|
| Wet Chemistry by Method 7199                   | WG2104470 | 1        | 08/02/23 02:19              | 08/02/23 04:30                        | VSS                                  | Mt. Juliet, TN |
| 20230703-H7-(SB02) @ 30-31.5 L1639938-12 Solid |           |          | Collected by<br>K. Moreland | Collected date/time<br>07/03/23 14:00 | Received date/time<br>07/07/23 09:00 |                |

| Method                                       | Batch     | Dilution | Preparation date/time       | Analysis date/time                    | Analyst                              | Location       |
|----------------------------------------------|-----------|----------|-----------------------------|---------------------------------------|--------------------------------------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19              | 08/02/23 04:45                        | VSS                                  | Mt. Juliet, TN |
| 20230703-H7-(SB01) @ 10-12 L1639938-13 Solid |           |          | Collected by<br>K. Moreland | Collected date/time<br>07/03/23 10:10 | Received date/time<br>07/07/23 09:00 |                |

| Method                                       | Batch     | Dilution | Preparation date/time       | Analysis date/time                    | Analyst                              | Location       |
|----------------------------------------------|-----------|----------|-----------------------------|---------------------------------------|--------------------------------------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19              | 08/02/23 04:51                        | VSS                                  | Mt. Juliet, TN |
| 20230703-H7-(SB01) @ 20-22 L1639938-14 Solid |           |          | Collected by<br>K. Moreland | Collected date/time<br>07/03/23 10:50 | Received date/time<br>07/07/23 09:00 |                |

| Method                                       | Batch     | Dilution | Preparation date/time       | Analysis date/time                    | Analyst                              | Location       |
|----------------------------------------------|-----------|----------|-----------------------------|---------------------------------------|--------------------------------------|----------------|
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19              | 08/02/23 04:56                        | VSS                                  | Mt. Juliet, TN |
| 20230703-H7-(SB01) @ 30-32 L1639938-15 Solid |           |          | Collected by<br>K. Moreland | Collected date/time<br>07/03/23 11:40 | Received date/time<br>07/07/23 09:00 |                |
| Wet Chemistry by Method 7199                 | WG2104470 | 1        | 08/02/23 02:19              | 08/02/23 05:01                        | VSS                                  | 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

Chris Ward  
Project Manager

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |           | 0.255        | 1.00         | 1        | 08/02/2023 03:17        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | <u>Qualifier</u> | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|---------------------|-----------------|------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |                  | 0.255        | 1.00         | 1        | 08/02/2023 03:22        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | <u>Qualifier</u> | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|---------------------|-----------------|------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |                  | 0.255        | 1.00         | 1        | 08/02/2023 03:43        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |           | 0.255        | 1.00         | 1        | 08/02/2023 03:48        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |           | 0.255        | 1.00         | 1        | 08/02/2023 03:54        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|---------------------|-----------------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               | 0.255        | 1.00         | 1        | 08/02/2023 03:59        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | <u>Qualifier</u> | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|---------------------|-----------------|------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |                  | 0.255        | 1.00         | 1        | 08/02/2023 04:04        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |           | 0.255        | 1.00         | 1        | 08/02/2023 04:09        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | <u>Qualifier</u> | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|---------------------|-----------------|------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |                  | 0.255        | 1.00         | 1        | 08/02/2023 04:14        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | <u>Qualifier</u> | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|---------------------|-----------------|------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |                  | 0.255        | 1.00         | 1        | 08/02/2023 04:19        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | <u>Qualifier</u> | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|---------------------|-----------------|------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |                  | 0.255        | 1.00         | 1        | 08/02/2023 04:30        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | <u>Qualifier</u> | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|---------------------|-----------------|------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |                  | 0.255        | 1.00         | 1        | 08/02/2023 04:45        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|---------------------|-----------------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               | 0.255        | 1.00         | 1        | 08/02/2023 04:51        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | <u>Qualifier</u> | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|---------------------|-----------------|------------------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |                  | 0.255        | 1.00         | 1        | 08/02/2023 04:56        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Wet Chemistry by Method 7199

| Analyte             | Result<br>mg/kg | Qualifier | MDL<br>mg/kg | RDL<br>mg/kg | Dilution | Analysis<br>date / time | Batch                     |
|---------------------|-----------------|-----------|--------------|--------------|----------|-------------------------|---------------------------|
| Hexavalent Chromium | U               |           | 0.255        | 1.00         | 1        | 08/02/2023 05:01        | <a href="#">WG2104470</a> |

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3955566-1 08/02/23 02:39

|                     | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------------------|-----------|--------------|--------|--------|
| Analyte             | mg/kg     |              | mg/kg  | mg/kg  |
| Hexavalent Chromium | U         |              | 0.255  | 1.00   |

L1639938-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1639938-02 08/02/23 03:22 • (DUP) R3955566-7 08/02/23 03:28

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

L1639938-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1639938-10 08/02/23 04:19 • (DUP) R3955566-8 08/02/23 04:25

|                     | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------------------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte             | mg/kg           | mg/kg      |          | %       |               | %              |
| Hexavalent Chromium | U               | U          | 1        | 0.000   |               | 20             |

Laboratory Control Sample (LCS)

(LCS) R3955566-2 08/02/23 02:46

|                     | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------------------|--------------|------------|----------|-------------|---------------|
| Analyte             | mg/kg        | mg/kg      | %        | %           |               |
| Hexavalent Chromium | 10.0         | 11.0       | 110      | 80.0-120    |               |

L1637382-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637382-01 08/02/23 02:51 • (MS) R3955566-4 08/02/23 03:02 • (MSD) R3955566-5 08/02/23 03:07

|                     | 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      | %       | %        |          | %           |              |               | %     | %          |
| Hexavalent Chromium | 20.0         | U               | 21.5      | 21.3       | 107     | 106      | 1        | 75.0-125    |              |               | 0.923 | 20         |

L1637382-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1637382-01 08/02/23 02:51 • (MS) R3955566-6 08/02/23 03:12

|                     | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|---------------------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Analyte             | mg/kg        | mg/kg           | mg/kg     | %       |          | %           |              |
| Hexavalent Chromium | 643          | U               | 536       | 83.3    | 50       | 75.0-125    |              |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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. |
| 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 |
|-----------|-------------|
|-----------|-------------|

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

|                               |             |                             |                  |
|-------------------------------|-------------|-----------------------------|------------------|
| Alabama                       | 40660       | Nebraska                    | NE-05-15-05      |
| 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                     | A130792     | 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.





Condition:  
NCF / OK



Condition:  
NCF / OK

|       |                        |
|-------|------------------------|
| Hold: | Condition:<br>NCF / OK |
|-------|------------------------|



Caerus Piceance LLC  
143 Diamond Avenue  
Parachute, CO 81635  
970-285-9606

Report to:  
bmiddleton@caerusoilandgas.com

|              |                   |
|--------------|-------------------|
| Project      | H7 - TANK BATTERY |
| Description. |                   |

Phone: 949 374 2506  
Fax:

Collected by (print):  
K. MORELAND

Collected by (signature):  
K. Monelanch  
Immediately  
Packed on Ice N ☐ Y ☐

**Billing Information:**

Same as above

Email To: [bmiddleton@caerusoilandgas.com](mailto:bmiddleton@caerusoilandgas.com)

City/State  
Collected: Mamm Creek, CO

|               |    |
|---------------|----|
| Lab Project # | H7 |
|---------------|----|

|        |    |
|--------|----|
| P.O. # | H7 |
|--------|----|

| Quote # | Quote | Source |
|---------|-------|--------|
| 1       | ...   | ...    |
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| 100     | ...   | ...    |

**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

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# 1633300

Table #

Acctn

Template:

Prelogin:

TSR:

PB:

Shipped Via:

|         |                     |
|---------|---------------------|
| Remarks | Sample # (lab only) |
|---------|---------------------|

[illegible]

\* Matrix:

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

Remarks: x2 802 and x1 1602 per sample

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

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

Samples returned via:  
UPS ☐ FedEx ☐ Courier ☐

Tracking # 6426 8306 6558

Received by: (Signature)

Trip Blank Received: Yes / No  
HCL / MeOH  
TBR

Received by: (Signature)

Temp. 68.2°C Bottles Received: 9

Received for lab by: (Signature)

|        |       |
|--------|-------|
| Date:  | Time: |
| 7-7-23 | 9:00  |

Sample Receipt Checklist

|                               |    |   |   |
|-------------------------------|----|---|---|
| COC Seal Present/Intact:      | NP | ① | N |
| COC Signed/Accurate:          |    | X | N |
| Bottles arrive intact:        |    | X | N |
| Correct bottles used:         |    | X | N |
| Sufficient volume sent:       |    | X | N |
| <u>If Applicable</u>          |    |   |   |
| VOA Zero Headspace:           |    | Y | N |
| Preservation Correct/Checked: |    | ① | N |

If preservation required by Login: Date/Time

|       |                        |
|-------|------------------------|
| Hold: | Condition:<br>NCF / OK |
|-------|------------------------|

CAERUSPCO Relogs Start going OOH 7/31

R2/R3/R4/RX/EX

Please relog the below to one new SDG for CR6IC

L1633274

L1633275

L1633276

L1633298

L1633300

\* \_ \*

\*Thanks,\*

*Project Manager2\_*

**\*Pace Analytical National**

\*

12065 Lebanon Road | Mt. Juliet, TN 37122\*\*

[Chris.ward@pacelabs.com](mailto:Chris.ward@pacelabs.com)

| [www.pacenational.com](http://www.pacenational.com)

<u>615.773.9712</u>

**\*MAKE YOUR PAYMENTS ONLINE\***

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P Please consider the environment before printing this email

**Time estimate:** oh

**Time spent:** oh

**Members**



Chris Ward (responsible)

**Caerus Oil and Gas**

Sample Delivery Group: L1505173  
Samples Received: 06/15/2022  
Project Number: H7  
Description: H7-Dumpline  
Site: H7  
Report To: Brett Middleton  
143 Diamond Avenue  
Parachute, CO 81635

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 [www.pacenational.com](http://www.pacenational.com)

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|                 |
|-----------------|
| <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

## 20220613-H7 (BG-01) @ 10-12' L1505173-01 Solid

Collected by Kevin Fletcher  
Collected date/time 06/13/22 09:05  
Received date/time 06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887986 | 1        | 07/06/22 20:03        | 07/06/22 20:03     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1881766 | 1        | 06/19/22 07:53        | 06/20/22 12:45     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887982 | 1        | 06/30/22 20:55        | 07/06/22 19:31     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 16:36     | JPD     | Mt. Juliet, TN |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

## 20220613-H7 (BG-01) @ 15-17' L1505173-02 Solid

Collected by Kevin Fletcher  
Collected date/time 06/13/22 09:30  
Received date/time 06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887986 | 1        | 07/06/22 20:06        | 07/06/22 20:06     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1881766 | 1        | 06/19/22 07:53        | 06/20/22 12:45     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887982 | 1        | 06/30/22 20:55        | 07/06/22 19:33     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 17:11     | JPD     | Mt. Juliet, TN |

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

## 20220613-H7 (BG-01) @ 20-22' L1505173-03 Solid

Collected by Kevin Fletcher  
Collected date/time 06/13/22 10:00  
Received date/time 06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887986 | 1        | 07/06/22 20:08        | 07/06/22 20:08     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887982 | 1        | 06/30/22 20:55        | 07/06/22 19:36     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 17:15     | JPD     | Mt. Juliet, TN |

<sup>9</sup>Sc

## 20220613-H7 (BG-01) @ 25-27' L1505173-04 Solid

Collected by Kevin Fletcher  
Collected date/time 06/13/22 10:30  
Received date/time 06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887986 | 1        | 07/06/22 20:11        | 07/06/22 20:11     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887982 | 1        | 06/30/22 20:55        | 07/06/22 19:39     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 17:18     | JPD     | Mt. Juliet, TN |

## 20220613-H7 (BG-01) @ 30-32' L1505173-05 Solid

Collected by Kevin Fletcher  
Collected date/time 06/13/22 11:00  
Received date/time 06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887986 | 1        | 07/06/22 20:14        | 07/06/22 20:14     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887982 | 1        | 06/30/22 20:55        | 07/06/22 19:42     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 17:21     | JPD     | Mt. Juliet, TN |



# SAMPLE SUMMARY

## 20220613-H7 (BG-01) @ 35-37' L1505173-06 Solid

Collected by  
Kevin Fletcher

Collected date/time  
06/13/22 11:30

Received date/time  
06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887986 | 1        | 07/06/22 20:16        | 07/06/22 20:16     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887982 | 1        | 06/30/22 20:55        | 07/06/22 19:45     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 17:24     | JPD     | Mt. Juliet, TN |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

## 20220613-H7 (BG-01) @ 40-42' L1505173-07 Solid

Collected by  
Kevin Fletcher

Collected date/time  
06/13/22 12:15

Received date/time  
06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887986 | 1        | 07/06/22 20:19        | 07/06/22 20:19     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887982 | 1        | 06/30/22 20:55        | 07/06/22 19:53     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 17:28     | JPD     | Mt. Juliet, TN |

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

## 20220613-H7 (BG-02) @ 10-12' L1505173-08 Solid

Collected by  
Kevin Fletcher

Collected date/time  
06/13/22 12:55

Received date/time  
06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887986 | 1        | 07/06/22 20:22        | 07/06/22 20:22     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887982 | 1        | 06/30/22 20:55        | 07/06/22 19:56     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 17:31     | JPD     | Mt. Juliet, TN |

<sup>9</sup>Sc

## 20220613-H7 (BG-02) @ 15-17' L1505173-09 Solid

Collected by  
Kevin Fletcher

Collected date/time  
06/13/22 13:20

Received date/time  
06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887986 | 1        | 07/06/22 19:16        | 07/06/22 19:16     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887982 | 1        | 06/30/22 20:55        | 07/06/22 19:59     | ZSA     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 17:34     | JPD     | Mt. Juliet, TN |

## 20220613-H7 (BG-02) @ 20-22' L1505173-10 Solid

Collected by  
Kevin Fletcher

Collected date/time  
06/13/22 13:30

Received date/time  
06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887990 | 1        | 07/06/22 20:33        | 07/06/22 20:33     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887992 | 1        | 07/04/22 00:04        | 07/07/22 13:04     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 17:37     | JPD     | Mt. Juliet, TN |

# SAMPLE SUMMARY

## 20220613-H7 (BG-02) @ 25-27' L1505173-11 Solid

Collected by Kevin Fletcher  
Collected date/time 06/13/22 13:55  
Received date/time 06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887990 | 1        | 07/06/22 20:36        | 07/06/22 20:36     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887992 | 1        | 07/04/22 00:04        | 07/07/22 13:06     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 17:57     | JPD     | Mt. Juliet, TN |

## 20220613-H7 (BG-02) @ 30-32' L1505173-12 Solid

Collected by Kevin Fletcher  
Collected date/time 06/13/22 14:15  
Received date/time 06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887990 | 1        | 07/06/22 20:38        | 07/06/22 20:38     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887992 | 1        | 07/04/22 00:04        | 07/07/22 13:09     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 18:00     | JPD     | Mt. Juliet, TN |

## 20220613-H7 (BG-02) @ 35-37' L1505173-13 Solid

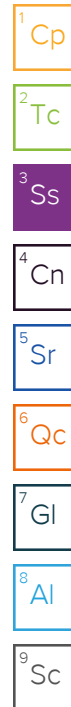
Collected by Kevin Fletcher  
Collected date/time 06/13/22 14:45  
Received date/time 06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887990 | 1        | 07/06/22 20:41        | 07/06/22 20:41     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887992 | 1        | 07/04/22 00:04        | 07/07/22 13:12     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 18:03     | JPD     | Mt. Juliet, TN |

## 20220613-H7 (BG-02) @ 40-42' L1505173-14 Solid

Collected by Kevin Fletcher  
Collected date/time 06/13/22 15:15  
Received date/time 06/15/22 09:30

| Method                                  | Batch     | Dilution | Preparation date/time | Analysis date/time | Analyst | Location       |
|-----------------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Calculated Results                      | WG1887990 | 1        | 07/06/22 20:44        | 07/06/22 20:44     | ZSA     | Mt. Juliet, TN |
| Wet Chemistry by Method 9045D           | WG1883093 | 1        | 06/21/22 08:00        | 06/23/22 09:05     | GI      | Mt. Juliet, TN |
| Wet Chemistry by Method 9050AMod        | WG1882850 | 1        | 06/21/22 12:40        | 06/21/22 14:33     | ARD     | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B-NE493 Ch 2 | WG1887992 | 1        | 07/04/22 00:04        | 07/07/22 13:15     | CCE     | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020           | WG1883072 | 5        | 06/23/22 17:02        | 06/24/22 18:07     | JPD     | 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



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 4.45   |           | 1        | 07/06/2022 20:03     | WG1887986 |

<sup>1</sup> Cp

<sup>2</sup> Tc

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch                     |
|---------|--------|-----------|----------|----------------------|---------------------------|
| pH      | 7.49   | T8        | 1        | 06/23/2022 09:05     | <a href="#">WG1883093</a> |

<sup>3</sup> Ss

<sup>4</sup> Cn

Sample Narrative:

L1505173-01 WG1883093: 7.49 at 22.3C

<sup>5</sup> Sr

<sup>6</sup> Qc

Wet Chemistry by Method 9050AMod

| Analyte              | Result   | Qualifier | RDL      | Dilution | Analysis date / time | Batch                     |
|----------------------|----------|-----------|----------|----------|----------------------|---------------------------|
| Specific Conductance | umhos/cm |           | umhos/cm |          |                      |                           |
| Specific Conductance | 4650     |           | 10.0     | 1        | 06/20/2022 12:45     | <a href="#">WG1881766</a> |

<sup>7</sup> Gl

<sup>8</sup> Al

Sample Narrative:

L1505173-01 WG1881766: at 25C

<sup>9</sup> Sc

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

| Analyte              | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
|                      | mg/l   |           | mg/l   | mg/l  |          |                      |                           |
| Hot Water Sol. Boron | 0.658  |           | 0.0167 | 0.200 | 1        | 07/06/2022 19:31     | <a href="#">WG1887982</a> |

Metals (ICPMS) by Method 6020

| Analyte | Result | Qualifier | MDL   | RDL   | Dilution | Analysis date / time | Batch                     |
|---------|--------|-----------|-------|-------|----------|----------------------|---------------------------|
|         | mg/kg  |           | mg/kg | mg/kg |          |                      |                           |
| Arsenic | 19.3   |           | 0.100 | 1.00  | 5        | 06/24/2022 16:36     | <a href="#">WG1883072</a> |

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 8.36   |           | 1        | 07/06/2022 20:06     | WG1887986 |

<sup>1</sup>Cp

<sup>2</sup>Tc

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 7.98   | T8        | 1        | 06/23/2022 09:05     | WG1883093 |

<sup>3</sup>Ss

<sup>4</sup>Cn

Sample Narrative:  
L1505173-02 WG1883093: 7.98 at 22.7C

<sup>5</sup>Sr

Wet Chemistry by Method 9050AMod

| Analyte              | Result   | Qualifier | RDL      | Dilution | Analysis date / time | Batch     |
|----------------------|----------|-----------|----------|----------|----------------------|-----------|
| Specific Conductance | umhos/cm |           | umhos/cm |          |                      |           |
| Specific Conductance | 3730     |           | 10.0     | 1        | 06/20/2022 12:45     | WG1881766 |

<sup>6</sup>Qc

<sup>7</sup>Gl

Sample Narrative:  
L1505173-02 WG1881766: at 25C

<sup>8</sup>Al

<sup>9</sup>Sc

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

| Analyte              | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|--------|-------|----------|----------------------|-----------|
| Hot Water Sol. Boron | mg/l   |           | mg/l   | mg/l  |          |                      |           |
| Hot Water Sol. Boron | 0.465  |           | 0.0167 | 0.200 | 1        | 07/06/2022 19:33     | WG1887982 |

Metals (ICPMS) by Method 6020

| Analyte | Result | Qualifier | MDL   | RDL   | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|-------|-------|----------|----------------------|-----------|
| Arsenic | mg/kg  |           | mg/kg | mg/kg |          |                      |           |
| Arsenic | 11.5   |           | 0.100 | 1.00  | 5        | 06/24/2022 17:11     | WG1883072 |

## Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 7.77   |           | 1        | 07/06/2022 20:08     | WG1887986 |

## Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch                     |
|---------|--------|-----------|----------|----------------------|---------------------------|
| pH      | 8.22   | T8        | 1        | 06/23/2022 09:05     | <a href="#">WG1883093</a> |

## Sample Narrative:

L1505173-03 WG1883093: 8.22 at 22.4C

## Wet Chemistry by Method 9050AMod

| Analyte              | Result   | Qualifier | RDL      | Dilution | Analysis date / time | Batch                     |
|----------------------|----------|-----------|----------|----------|----------------------|---------------------------|
| Specific Conductance | umhos/cm |           | umhos/cm |          |                      |                           |
| Specific Conductance | 3680     |           | 10.0     | 1        | 06/21/2022 14:33     | <a href="#">WG1882850</a> |

## Sample Narrative:

L1505173-03 WG1882850: at 25C

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

| Analyte              | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | mg/l   |           | mg/l   | mg/l  |          |                      |                           |
| Hot Water Sol. Boron | 0.372  |           | 0.0167 | 0.200 | 1        | 07/06/2022 19:36     | <a href="#">WG1887982</a> |

## Metals (ICPMS) by Method 6020

| Analyte | Result | Qualifier | MDL   | RDL   | Dilution | Analysis date / time | Batch                     |
|---------|--------|-----------|-------|-------|----------|----------------------|---------------------------|
| Arsenic | mg/kg  |           | mg/kg | mg/kg |          |                      |                           |
| Arsenic | 10.9   |           | 0.100 | 1.00  | 5        | 06/24/2022 17:15     | <a href="#">WG1883072</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 8.54   |           | 1        | 07/06/2022 20:11     | WG1887986 |

1  
Cp

2  
Tc

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 8.19   | T8        | 1        | 06/23/2022 09:05     | WG1883093 |

3  
Ss

4  
Cn

Sample Narrative:

L1505173-04 WG1883093: 8.19 at 22.5C

5  
Sr

Wet Chemistry by Method 9050AMod

| Analyte              | Result   | Qualifier | RDL      | Dilution | Analysis date / time | Batch     |
|----------------------|----------|-----------|----------|----------|----------------------|-----------|
| Specific Conductance | umhos/cm |           | umhos/cm |          |                      |           |
| Specific Conductance | 3350     |           | 10.0     | 1        | 06/21/2022 14:33     | WG1882850 |

6  
Qc

7  
Gl

Sample Narrative:

L1505173-04 WG1882850: at 25C

8  
Al

9  
Sc

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

| Analyte              | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|--------|-------|----------|----------------------|-----------|
| Hot Water Sol. Boron | mg/l   |           | mg/l   | mg/l  |          |                      |           |
| Hot Water Sol. Boron | 0.299  |           | 0.0167 | 0.200 | 1        | 07/06/2022 19:39     | WG1887982 |

Metals (ICPMS) by Method 6020

| Analyte | Result | Qualifier | MDL   | RDL   | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|-------|-------|----------|----------------------|-----------|
| Arsenic | mg/kg  |           | mg/kg | mg/kg |          |                      |           |
| Arsenic | 9.99   |           | 0.100 | 1.00  | 5        | 06/24/2022 17:18     | WG1883072 |



## Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 10.8   |           | 1        | 07/06/2022 20:14     | WG1887986 |

## Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch                     |
|---------|--------|-----------|----------|----------------------|---------------------------|
| pH      | 7.46   | T8        | 1        | 06/23/2022 09:05     | <a href="#">WG1883093</a> |

## Sample Narrative:

L1505173-05 WG1883093: 7.46 at 22.5C

## Wet Chemistry by Method 9050AMod

| Analyte              | Result | Qualifier | RDL      | Dilution | Analysis date / time | Batch                     |
|----------------------|--------|-----------|----------|----------|----------------------|---------------------------|
| Specific Conductance | 3040   |           | umhos/cm | 1        | 06/21/2022 14:33     | <a href="#">WG1882850</a> |

## Sample Narrative:

L1505173-05 WG1882850: at 25C

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

|                      | Result | <u>Qualifier</u> | MDL    | RDL   | Dilution | Analysis         | <u>Batch</u>              |
|----------------------|--------|------------------|--------|-------|----------|------------------|---------------------------|
| Analyte              | mg/l   |                  | mg/l   | mg/l  |          | date / time      |                           |
| Hot Water Sol. Boron | 0.270  |                  | 0.0167 | 0.200 | 1        | 07/06/2022 19:42 | <a href="#">WG1887982</a> |

## Metals (ICPMS) by Method 6020

|         | Result | Qualifier | MDL   | RDL   | Dilution | Analysis         | Batch                     |
|---------|--------|-----------|-------|-------|----------|------------------|---------------------------|
| Analyte | mg/kg  |           | mg/kg | mg/kg |          | date / time      |                           |
| Arsenic | 11.5   |           | 0.100 | 1.00  | 5        | 06/24/2022 17:21 | <a href="#">WG1883072</a> |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 7.91   |           | 1        | 07/06/2022 20:16     | WG1887986 |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 8.67   | T8        | 1        | 06/23/2022 09:05     | WG1883093 |

Sample Narrative:

L1505173-06 WG1883093: 8.67 at 22.6C

Wet Chemistry by Method 9050AMod

| Analyte              | Result | Qualifier | RDL      | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|----------|----------|----------------------|-----------|
| Specific Conductance | 1200   |           | umhos/cm | 1        | 06/21/2022 14:33     | WG1882850 |

Sample Narrative:

L1505173-06 WG1882850: at 25C

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

| Analyte              | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|------|------|----------|----------------------|-----------|
| Hot Water Sol. Boron | 0.228  |           | mg/l | mg/l | 1        | 07/06/2022 19:45     | WG1887982 |

Metals (ICPMS) by Method 6020

| Analyte | Result | Qualifier | MDL   | RDL   | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|-------|-------|----------|----------------------|-----------|
| Arsenic | 10.5   |           | mg/kg | mg/kg | 5        | 06/24/2022 17:24     | WG1883072 |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

## Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 9.84   |           | 1        | 07/06/2022 20:19     | WG1887986 |

## Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier          | Dilution | Analysis date / time | Batch                     |
|---------|--------|--------------------|----------|----------------------|---------------------------|
| pH      | 8.43   | <a href="#">T8</a> | 1        | 06/23/2022 09:05     | <a href="#">WG1883093</a> |

## Sample Narrative:

L1505173-07 WG1883093: 8.43 at 22.7C

## Wet Chemistry by Method 9050AMod

| Analyte              | Result   | Qualifier | RDL      | Dilution | Analysis date / time | Batch                     |
|----------------------|----------|-----------|----------|----------|----------------------|---------------------------|
| Specific Conductance | umhos/cm |           | umhos/cm |          |                      |                           |
| Specific Conductance | 1660     |           | 10.0     | 1        | 06/21/2022 14:33     | <a href="#">WG1882850</a> |

## Sample Narrative:

L1505173-07 WG1882850: at 25C

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

| Analyte              | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch                     |
|----------------------|--------|-----------|--------|-------|----------|----------------------|---------------------------|
| Hot Water Sol. Boron | mg/l   |           | mg/l   | mg/l  |          |                      |                           |
| Hot Water Sol. Boron | 0.208  |           | 0.0167 | 0.200 | 1        | 07/06/2022 19:53     | <a href="#">WG1887982</a> |

## Metals (ICPMS) by Method 6020

| Analyte | Result | Qualifier | MDL   | RDL   | Dilution | Analysis date / time | Batch                     |
|---------|--------|-----------|-------|-------|----------|----------------------|---------------------------|
| Arsenic | mg/kg  |           | mg/kg | mg/kg |          |                      |                           |
| Arsenic | 11.0   |           | 0.100 | 1.00  | 5        | 06/24/2022 17:28     | <a href="#">WG1883072</a> |

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

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 8.51   |           | 1        | 07/06/2022 20:22     | WG1887986 |

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 8.42   | T8        | 1        | 06/23/2022 09:05     | WG1883093 |

Sample Narrative:

L1505173-08 WG1883093: 8.42 at 22.6C

Wet Chemistry by Method 9050AMod

| Analyte              | Result<br>umhos/cm | Qualifier | RDL<br>umhos/cm | Dilution | Analysis<br>date / time | Batch                     |
|----------------------|--------------------|-----------|-----------------|----------|-------------------------|---------------------------|
| Specific Conductance | 2200               |           | 10.0            | 1        | 06/21/2022 14:33        | <a href="#">WG1882850</a> |

Sample Narrative:

L1505173-08 WG1882850: at 25C

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

| Analyte              | Result<br>mg/l | Qualifier | MDL<br>mg/l | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|----------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Hot Water Sol. Boron | 0.300          |           | 0.0167      | 0.200       | 1        | 07/06/2022 19:56        | <a href="#">WG1887982</a> |

Metals (ICPMS) by Method 6020

|         | Result | <u>Qualifier</u> | MDL   | RDL   | Dilution | Analysis         | <u>Batch</u>              |
|---------|--------|------------------|-------|-------|----------|------------------|---------------------------|
| Analyte | mg/kg  |                  | mg/kg | mg/kg |          | date / time      |                           |
| Arsenic | 16.9   |                  | 0.100 | 1.00  | 5        | 06/24/2022 17:31 | <a href="#">WG1883072</a> |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 4.83   |           | 1        | 07/06/2022 19:16     | WG1887986 |

1  
Cp

2  
Tc

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 7.90   | T8        | 1        | 06/23/2022 09:05     | WG1883093 |

3  
Ss

4  
Cn

Sample Narrative:  
L1505173-09 WG1883093: 7.9 at 22.5C

5  
Sr

Wet Chemistry by Method 9050AMod

| Analyte              | Result<br>umhos/cm | <u>Qualifier</u> | RDL<br>umhos/cm | Dilution | Analysis<br>date / time | <u>Batch</u>              |
|----------------------|--------------------|------------------|-----------------|----------|-------------------------|---------------------------|
| Specific Conductance | 4720               |                  | 10.0            | 1        | 06/21/2022 14:33        | <a href="#">WG1882850</a> |

6  
Qc

7  
Gl

Sample Narrative:  
L1505173-09 WG1882850: at 25C

8  
Al

9  
Sc

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

| Analyte              | Result<br>mg/l | Qualifier | MDL<br>mg/l | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|----------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Hot Water Sol. Boron | 0.227          |           | 0.0167      | 0.200       | 1        | 07/06/2022 19:59        | <a href="#">WG1887982</a> |

Metals (ICPMS) by Method 6020

|         | Result | <u>Qualifier</u> | MDL   | RDL   | Dilution | Analysis         | <u>Batch</u>              |
|---------|--------|------------------|-------|-------|----------|------------------|---------------------------|
| Analyte | mg/kg  |                  | mg/kg | mg/kg |          | date / time      |                           |
| Arsenic | 19.3   |                  | 0.100 | 1.00  | 5        | 06/24/2022 17:34 | <a href="#">WG1883072</a> |

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 5.71   |           | 1        | 07/06/2022 20:33     | WG1887990 |

1  
Cp

2  
Tc

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 7.96   | T8        | 1        | 06/23/2022 09:05     | WG1883093 |

3  
Ss

4  
Cn

Sample Narrative:  
L1505173-10 WG1883093: 7.96 at 22.6C

5  
Sr

Wet Chemistry by Method 9050AMod

| Analyte              | Result<br>umhos/cm | Qualifier | RDL<br>umhos/cm | Dilution | Analysis<br>date / time | Batch                     |
|----------------------|--------------------|-----------|-----------------|----------|-------------------------|---------------------------|
| Specific Conductance | 3070               |           | 10.0            | 1        | 06/21/2022 14:33        | <a href="#">WG1882850</a> |

6  
Qc

7  
Gl

Sample Narrative:  
L1505173-10 WG1882850: at 25C

8  
Al

9  
Sc

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

| Analyte              | Result<br>mg/l | Qualifier | MDL<br>mg/l | RDL<br>mg/l | Dilution | Analysis<br>date / time | Batch                     |
|----------------------|----------------|-----------|-------------|-------------|----------|-------------------------|---------------------------|
| Hot Water Sol. Boron | 0.237          |           | 0.0167      | 0.200       | 1        | 07/07/2022 13:04        | <a href="#">WG1887992</a> |

Metals (ICPMS) by Method 6020

|         | Result | <u>Qualifier</u> | MDL   | RDL   | Dilution | Analysis         | <u>Batch</u>              |
|---------|--------|------------------|-------|-------|----------|------------------|---------------------------|
| Analyte | mg/kg  |                  | mg/kg | mg/kg |          | date / time      |                           |
| Arsenic | 14.3   |                  | 0.100 | 1.00  | 5        | 06/24/2022 17:37 | <a href="#">WG1883072</a> |

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 6.05   |           | 1        | 07/06/2022 20:36     | WG1887990 |

<sup>1</sup>Cp

<sup>2</sup>Tc

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 8.15   | T8        | 1        | 06/23/2022 09:05     | WG1883093 |

<sup>3</sup>Ss

<sup>4</sup>Cn

Sample Narrative:  
L1505173-11 WG1883093: 8.15 at 22.5C

<sup>5</sup>Sr

Wet Chemistry by Method 9050AMod

| Analyte              | Result | Qualifier | RDL  | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|------|----------|----------------------|-----------|
| Specific Conductance | 1390   |           | 10.0 | 1        | 06/21/2022 14:33     | WG1882850 |

<sup>6</sup>Qc

<sup>7</sup>Gl

Sample Narrative:  
L1505173-11 WG1882850: at 25C

<sup>8</sup>Al

<sup>9</sup>Sc

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

| Analyte              | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|--------|-------|----------|----------------------|-----------|
| Hot Water Sol. Boron | 0.222  |           | 0.0167 | 0.200 | 1        | 07/07/2022 13:06     | WG1887992 |

Metals (ICPMS) by Method 6020

| Analyte | Result | Qualifier | MDL   | RDL  | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|-------|------|----------|----------------------|-----------|
| Arsenic | 6.69   |           | 0.100 | 1.00 | 5        | 06/24/2022 17:57     | WG1883072 |



Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 6.56   |           | 1        | 07/06/2022 20:38     | WG1887990 |

1  
Cp

2  
Tc

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 8.48   | T8        | 1        | 06/23/2022 09:05     | WG1883093 |

3  
Ss

4  
Cn

Sample Narrative:

L1505173-12 WG1883093: 8.48 at 22.6C

5  
Sr

Wet Chemistry by Method 9050AMod

| Analyte              | Result | Qualifier | RDL      | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|----------|----------|----------------------|-----------|
| Specific Conductance | 1010   |           | umhos/cm | 1        | 06/21/2022 14:33     | WG1882850 |

6  
Qc

7  
Gl

Sample Narrative:

L1505173-12 WG1882850: at 25C

8  
Al

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

| Analyte              | Result | Qualifier | MDL  | RDL  | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|------|------|----------|----------------------|-----------|
| Hot Water Sol. Boron | 0.178  | J         | mg/l | mg/l | 1        | 07/07/2022 13:09     | WG1887992 |

9  
Sc

Metals (ICPMS) by Method 6020

| Analyte | Result | Qualifier | MDL   | RDL   | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|-------|-------|----------|----------------------|-----------|
| Arsenic | 22.2   |           | mg/kg | mg/kg | 5        | 06/24/2022 18:00     | WG1883072 |

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 5.81   |           | 1        | 07/06/2022 20:41     | WG1887990 |

<sup>1</sup>Cp

<sup>2</sup>Tc

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 8.22   | T8        | 1        | 06/23/2022 09:05     | WG1883093 |

<sup>3</sup>Ss

<sup>4</sup>Cn

Sample Narrative:  
L1505173-13 WG1883093: 8.22 at 22.7C

<sup>5</sup>Sr

Wet Chemistry by Method 9050AMod

| Analyte              | Result | Qualifier | RDL  | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|------|----------|----------------------|-----------|
| Specific Conductance | 1410   |           | 10.0 | 1        | 06/21/2022 14:33     | WG1882850 |

<sup>6</sup>Qc

<sup>7</sup>Gl

Sample Narrative:  
L1505173-13 WG1882850: at 25C

<sup>8</sup>Al

<sup>9</sup>Sc

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

| Analyte              | Result | Qualifier | MDL    | RDL   | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|--------|-------|----------|----------------------|-----------|
| Hot Water Sol. Boron | 0.216  |           | 0.0167 | 0.200 | 1        | 07/07/2022 13:12     | WG1887992 |

Metals (ICPMS) by Method 6020

| Analyte | Result | Qualifier | MDL   | RDL  | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|-------|------|----------|----------------------|-----------|
| Arsenic | 7.77   |           | 0.100 | 1.00 | 5        | 06/24/2022 18:03     | WG1883072 |

Calculated Results

| Analyte                 | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|-------------------------|--------|-----------|----------|----------------------|-----------|
| Sodium Adsorption Ratio | 5.02   |           | 1        | 07/06/2022 20:44     | WG1887990 |

1  
Cp

2  
Tc

Wet Chemistry by Method 9045D

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|----------|----------------------|-----------|
| pH      | 8.33   | T8        | 1        | 06/23/2022 09:05     | WG1883093 |

3  
Ss

4  
Cn

Sample Narrative:  
L1505173-14 WG1883093: 8.33 at 22.5C

5  
Sr

Wet Chemistry by Method 9050AMod

| Analyte              | Result | Qualifier | RDL      | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|----------|----------|----------------------|-----------|
| Specific Conductance | 919    |           | umhos/cm | 1        | 06/21/2022 14:33     | WG1882850 |

6  
Qc

7  
Gl

Sample Narrative:  
L1505173-14 WG1882850: at 25C

8  
Al

9  
Sc

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

| Analyte              | Result | Qualifier | MDL  | RDL   | Dilution | Analysis date / time | Batch     |
|----------------------|--------|-----------|------|-------|----------|----------------------|-----------|
| Hot Water Sol. Boron | 0.206  |           | mg/l | 0.200 | 1        | 07/07/2022 13:15     | WG1887992 |

Metals (ICPMS) by Method 6020

| Analyte | Result | Qualifier | MDL   | RDL  | Dilution | Analysis date / time | Batch     |
|---------|--------|-----------|-------|------|----------|----------------------|-----------|
| Arsenic | 10.3   |           | mg/kg | 1.00 | 5        | 06/24/2022 18:07     | WG1883072 |

L1503726-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1503726-01 06/23/22 09:05 • (DUP) R3806454-2 06/23/22 09:05

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | su              | su         |          | %       |               | %              |
| pH      | 4.61            | 4.60       | 1        | 0.217   |               | 1              |

Sample Narrative:

OS: 4.61 at 22.7C

DUP: 4.6 at 22.7C

<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

L1505173-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1505173-03 06/23/22 09:05 • (DUP) R3806454-3 06/23/22 09:05

|         | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---------|-----------------|------------|----------|---------|---------------|----------------|
| Analyte | pH              | su         |          | %       |               | %              |
| pH      | 8.22            | 8.23       | 1        | 0.122   |               | 1              |

Sample Narrative:

OS: 8.22 at 22.4C

DUP: 8.23 at 22.5C

Laboratory Control Sample (LCS)

(LCS) R3806454-1 06/23/22 09:05

|         | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | su           | su         | %        | %           |               |
| pH      | 10.0         | 9.90       | 99.0     | 99.0-101    |               |

Sample Narrative:

LCS: 9.9 at 22.9C

Method Blank (MB)

(MB) R3805020-1 06/20/22 12:45

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:

BLANK: at 25C

L1504999-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1504999-05 06/20/22 12:45 • (DUP) R3805020-3 06/20/22 12:45

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 225                         | 233                    | 1        | 3.76         |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

L1505001-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1505001-08 06/20/22 12:45 • (DUP) R3805020-4 06/20/22 12:45

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 5070                        | 5010                   | 1        | 1.19         |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3805020-2 06/20/22 12:45

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 268                      | 288                    | 107           | 85.0-115         |               |

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R3805607-1 06/21/22 14:33

| Analyte              | MB Result<br>umhos/cm | MB Qualifier | MB MDL<br>umhos/cm | MB RDL<br>umhos/cm |
|----------------------|-----------------------|--------------|--------------------|--------------------|
| Specific Conductance | U                     |              | 10.0               | 10.0               |

Sample Narrative:

BLANK: at 25C

L1505173-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1505173-12 06/21/22 14:33 • (DUP) R3805607-3 06/21/22 14:33

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 1010                        | 998                    | 1        | 1.39         |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

L1506388-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1506388-01 06/21/22 14:33 • (DUP) R3805607-4 06/21/22 14:33

| Analyte              | Original Result<br>umhos/cm | DUP Result<br>umhos/cm | Dilution | DUP RPD<br>% | DUP Qualifier | DUP RPD<br>Limits<br>% |
|----------------------|-----------------------------|------------------------|----------|--------------|---------------|------------------------|
| Specific Conductance | 52.0                        | 51.7                   | 1        | 0.579        |               | 20                     |

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3805607-2 06/21/22 14:33

| Analyte              | Spike Amount<br>umhos/cm | LCS Result<br>umhos/cm | LCS Rec.<br>% | Rec. Limits<br>% | LCS Qualifier |
|----------------------|--------------------------|------------------------|---------------|------------------|---------------|
| Specific Conductance | 268                      | 282                    | 105           | 85.0-115         |               |

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R3811663-1 07/06/22 18:45

| Analyte              | MB Result<br>mg/l | <u>MB Qualifier</u> | MB MDL<br>mg/l | MB RDL<br>mg/l |
|----------------------|-------------------|---------------------|----------------|----------------|
| Hot Water Sol. Boron | U                 |                     | 0.0167         | 0.200          |

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

(LCS) R3811663-2 07/06/22 18:48 • (LCSD) R3811663-3 07/06/22 18:50

| Analyte              | Spike Amount<br>mg/l | LCS Result<br>mg/l | LCSD Result<br>mg/l | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> | <u>LCSD Qualifier</u> | RPD<br>% | RPD Limits<br>% |
|----------------------|----------------------|--------------------|---------------------|---------------|----------------|------------------|----------------------|-----------------------|----------|-----------------|
| Hot Water Sol. Boron | 1.00                 | 1.09               | 1.09                | 109           | 109            | 80.0-120         |                      |                       | 0.152    | 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) R3812039-1 07/07/22 12:56

| Analyte              | MB Result<br>mg/l | MB Qualifier | MB MDL<br>mg/l | MB RDL<br>mg/l |
|----------------------|-------------------|--------------|----------------|----------------|
| Hot Water Sol. Boron | U                 |              | 0.0167         | 0.200          |

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3807339-1 06/24/22 16:29

|         | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|--------|--------|
| Analyte | mg/kg     |              | mg/kg  | mg/kg  |
| Arsenic | U         |              | 0.100  | 1.00   |

Laboratory Control Sample (LCS)

(LCS) R3807339-2 06/24/22 16:33

|         | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | mg/kg        | mg/kg      | %        | %           |               |
| Arsenic | 100          | 96.6       | 96.6     | 80.0-120    |               |

L1505173-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1505173-01 06/24/22 16:36 • (MS) R3807339-5 06/24/22 16:46 • (MSD) R3807339-6 06/24/22 16:49

|         | 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      | %       | %        |          | %           |              |               | %    | %          |
| Arsenic | 100          | 19.3            | 120       | 114        | 101     | 95.2     | 5        | 75.0-125    |              |               | 4.69 | 20         |

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# 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.

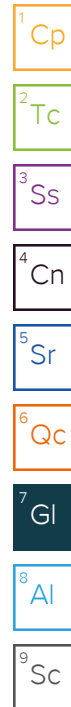
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

## Abbreviations and Definitions

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MDL                          | Method Detection Limit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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. |
| 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

|    |                                                                                     |
|----|-------------------------------------------------------------------------------------|
| J  | The identification of the analyte is acceptable; the reported value is an estimate. |
| T8 | Sample(s) received past/too close to holding time expiration.                       |



# ACCREDITATIONS & LOCATIONS

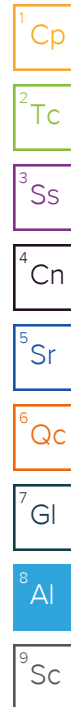
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

|                                |             |                             |                  |
|--------------------------------|-------------|-----------------------------|------------------|
| 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.



Caerus Oil & Gas LLC  
143 Diamond Avenue  
Parachute, CO 81635  
970-285-9606

Billing Information:

Same as above

Pres  
Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 2



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



Report to:  
bmiddleton@caerusoilandgas.com

Email To:  
bmiddleton@caerusoilandgas.com

Project  
Description: H7-Dumpline

City/State  
Collected: Mamm Creek, CO

Phone:  
Fax:

Client Project #  
H7

Lab Project #  
H7

Collected by (print):

Kevin Fletcher

Site/Facility ID #  
H7

P.O. #  
H7

Collected by (signature):

[Signature]

Rush? (Lab MUST Be Notified)

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

Quote #

Date Results Needed

Standard TAT

Immediately  
Packed on Ice N Y X

No.  
of  
Cntrs

pH, EC, SAR, Boron

Arsenic

L# U505173  
D142

Acctnum:

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Remarks

Sample # (lab only)

20220613-H7(BG-01)@10-12'

Grab

SS

10-12'

6/13/22

905

2

X

X

20220613-H7(BG-01)@15-17'

15-17'

930

20220613-H7(BG-01)@20-22'

20-22'

1000

20220613-H7(BG-01)@25-27'

25-27'

1030

20220613-H7(BG-01)@30-32'

30-32'

1100

20220613-H7(BG-01)@35-37'

35-37'

1130

20220613-H7(BG-01)@40-42'

40-42'

1215

20220613-H7(BG-02)@10-12'

10-12'

1255

20220613-H7(BG-02)@15-17'

15-17'

1320

20220613-H7(BG-02)@20-22'

20-22'

1330

\* Matrix:

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

Remarks:

Samples returned via:

UPS FedEx Courier

Tracking #

pH Temp

Flow Other

Sample Receipt Checklist

COC Seal Present/Intact: NP Y N  
COC Signed/Accurate: N  
Bottles arrive intact: N  
Correct bottles used: N  
Sufficient volume sent: N  
If Applicable  
VOA Zero Headspace: Y N  
Preservation Correct/Checked: Y N

Relinquished by: (Signature)

[Signature]

Date:

6/14/22

Time:

1500

Received by: (Signature)

[Signature]

Trip Blank Received: Yes/No

HCL / MeOH  
TBR

Relinquished by: (Signature)

[Signature]

Date:

6/14/22

Time:

1700

Received by: (Signature)

[Signature]

Temp: DRA\* Bottles Received:

1.310-1.3 28

If preservation required by Login: Date/Time

Relinquished by: (Signature)

[Signature]

Date:

6/15/22

Time:

0930

Received for lab by: (Signature)

[Signature]

Date:

6/15/22

Time:

0930

Hold:

Condition:

NCF / OK

| <b>Caerus Oil &amp; Gas LLC</b><br>143 Diamond Avenue<br>Parachute, CO 81635<br>970-285-9606 |  |                                                                                                                                                                                                                                                                                                                           |          | Billing Information:<br><br><p align="center"><b>Same as above</b></p>                                                                                     |         |                            |   | Pres Chk     |   | Analysis / Container / Preservative |  |  |  |  |  |  |  |  |  |  |  | Chain of Custody Page <b>2</b> of <b>2</b>                                                                    |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------------|---|--------------|---|-------------------------------------|--|--|--|--|--|--|--|--|--|--|--|---------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| Report to:<br><b>bmiddleton@caerusoilandgas.com</b>                                          |  |                                                                                                                                                                                                                                                                                                                           |          | Email To:<br><b>bmiddleton@caerusoilandgas.com</b>                                                                                                         |         |                            |   |              |   |                                     |  |  |  |  |  |  |  |  |  |  |  | <br><small>Pace Analytical®<br/>National Center for Testing &amp; Innovation</small>                          |  |  |  |  |  |  |  |  |  |
| Project Description:<br><b>H7-Dumpline</b>                                                   |  |                                                                                                                                                                                                                                                                                                                           |          | City/State Collected:<br><b>Mamm Creek, CO</b>                                                                                                             |         |                            |   |              |   |                                     |  |  |  |  |  |  |  |  |  |  |  | 12065 Lebanon Rd<br>Mount Juliet, TN 37122<br>Phone: 615-758-5858<br>Phone: 800-767-5859<br>Fax: 615-758-5859 |  |  |  |  |  |  |  |  |  |
| Phone:                                                                                       |  | Fax:                                                                                                                                                                                                                                                                                                                      |          | Client Project #<br><b>H7</b>                                                                                                                              |         | Lab Project #<br><b>H7</b> |   |              |   |                                     |  |  |  |  |  |  |  |  |  |  |  | pH, EC, SAR, Boron<br><br>Arsenic                                                                             |  |  |  |  |  |  |  |  |  |
|                                                                                              |  |                                                                                                                                                                                                                                                                                                                           |          |                                                                                                                                                            |         |                            |   |              |   |                                     |  |  |  |  |  |  |  |  |  |  |  |                                                                                                               |  |  |  |  |  |  |  |  |  |
| Collected by (print):<br><b>Kevlin Fletcher</b>                                              |  | Site/Facility ID #<br><b>H7</b>                                                                                                                                                                                                                                                                                           |          | P.O. #<br><b>H7</b>                                                                                                                                        |         |                            |   |              |   |                                     |  |  |  |  |  |  |  |  |  |  |  |                                                                                                               |  |  |  |  |  |  |  |  |  |
| Collected by (signature):<br>                                                                |  | <b>Rush?</b> (Lab MUST Be Notified)<br><input type="checkbox"/> Same Day <input type="checkbox"/> Five Day<br><input type="checkbox"/> Next Day <input checked="" type="checkbox"/> 5 Day (Rad Only)<br><input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only)<br><input type="checkbox"/> Three Day |          | Quote #                                                                                                                                                    |         |                            |   |              |   |                                     |  |  |  |  |  |  |  |  |  |  |  |                                                                                                               |  |  |  |  |  |  |  |  |  |
| Immediately Packed on Ice N ___ Y <input checked="" type="checkbox"/> X                      |  |                                                                                                                                                                                                                                                                                                                           |          | Date Results Needed<br><div style="border: 1px solid black; border-radius: 50%; width: fit-content; margin: auto; padding: 2px;"><b>Standard TAT</b></div> |         |                            |   | No. of Cntrs |   |                                     |  |  |  |  |  |  |  |  |  |  |  |                                                                                                               |  |  |  |  |  |  |  |  |  |
| Sample ID                                                                                    |  | Comp/Grab                                                                                                                                                                                                                                                                                                                 | Matrix * | Depth                                                                                                                                                      | Date    | Time                       |   |              |   |                                     |  |  |  |  |  |  |  |  |  |  |  |                                                                                                               |  |  |  |  |  |  |  |  |  |
| 20220613-H7(BG-02)E26-27'                                                                    |  | Grab                                                                                                                                                                                                                                                                                                                      | SS       | 26-27'                                                                                                                                                     | 6/13/22 | 1355                       | 2 | X            | X |                                     |  |  |  |  |  |  |  |  |  |  |  |                                                                                                               |  |  |  |  |  |  |  |  |  |
| 20220613-H7(BG-02)@30-32'                                                                    |  | ↓                                                                                                                                                                                                                                                                                                                         | ↓        | 30-32'                                                                                                                                                     | ↓       | 1415                       | ↓ | ↓            | ↓ |                                     |  |  |  |  |  |  |  |  |  |  |  |                                                                                                               |  |  |  |  |  |  |  |  |  |
| 20220613-H7(BG-02)@35-37'                                                                    |  | ↓                                                                                                                                                                                                                                                                                                                         | ↓        | 35-37'                                                                                                                                                     | ↓       | 1445                       | ↓ | ↓            | ↓ |                                     |  |  |  |  |  |  |  |  |  |  |  |                                                                                                               |  |  |  |  |  |  |  |  |  |
| 20220613-H7(BG-02)@40-42'                                                                    |  | ↓                                                                                                                                                                                                                                                                                                                         | ↓        | 40-42'                                                                                                                                                     | ↓       | 1515                       | ↓ | ↓            | ↓ |                                     |  |  |  |  |  |  |  |  |  |  |  |                                                                                                               |  |  |  |  |  |  |  |  |  |

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