**VIA ELECTRONIC MAIL –**

May 9, 2024

Jake Janicek
EH&S Specialist
Caerus Piceance LLC
143 Diamond Avenue
Parachute, Colorado 81635

**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 subsequent investigative soil sampling to further define hydrocarbon impacts (plume) to subsurface soils at the KRK-67S92W/7SENE (H7) (Facility ID: 334864) pad location (Site). Impacts were discovered on June 7, 2023, when production equipment and infrastructure was being relocated when completing remedial work at the Site under approved Remediation Project Number (RPN) 20584. This document serves as a report of work completed (ROWC) which details all investigative assessment activities completed during the second quarter (Q2) of 2024 and is associated with the State of Colorado Energy and Carbon Management Commission (ECMC) Site Investigation and Remediation Workplan (Supplemental Form) 27 Document Number (DN) 403771263. All work completed prior to Q2 of 2024 can be referenced under the ECMC RPN 31686. The Site is in the Caerus' Mamm Creek area of operation in Garfield County, Colorado (Figure 1).

## SOIL SAMPLING ACTIVITIES – H7 TANK INVESTIGATION

On April 11, 2024, WSP conducted field soil screening and pre-drilling potholing activities to clear proposed borehole locations of buried utilities and/or production equipment infrastructure at the Site. Western Slope Oilfield Services, LLC (WCO) of Rifle, Colorado was contracted by Caerus to provide hydro-vacuum truck (hydro-vac) services to assists with the pre-drilling potholing activities. Three pothole locations were daylighted to total depths of 10 feet below ground surface (bgs). As each pothole was advanced the soils were field screened by a WSP geologist at 5-foot intervals using a handheld photo-ionization detector (PID) along with noting visual, and olfactory observations.

On April 12, 2024, WSP personnel returned and completed drilling oversight and the advancement of three soil boring locations at the Site. The three soil borings were advanced by Colorado Drilling and Sampling (CD&S) of Montrose, Colorado who was contracted by Caerus. The borings were advanced using a SIMCO 2800 track mounted drill rig equipped with solid stem augers to total depths of 32 feet bgs. The borings were advanced to further delineate and confirm the previously identified release extent (ECMC DN 403475735). Each of the soil borings were field screened and logged using Unified Soil Classification System (USCS) in 5-foot intervals and were prepared for laboratory submittal at every 10-foot interval including each boring terminus. The investigative 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 PID to monitor for the presence or absence of volatile organic vapors (VOCs). Confirmation soil samples were collected directly from the split spoon sampler (California Sampler) at each 10-foot interval starting from the bottom of each pothole (10 feet) to the boring

terminus (32 feet). The soil boring sample intervals and locations are shown in comparison to previous (3Q 2023) investigative drilling locations on Figure 2. A total of three confirmation soil samples were submitted from each boring location and the depths associated with each of the samples are summarized in the table below.

**Soil Screening Summary Table - April 12, 2024 – H7 Tank Investigation**

| Sample ID | PID (ppm) | Staining or Odor | Submitted for Analysis |
|---|---|---|---|
| 20240412-H7-(SB06)@10-11 | 3.9 | None | Reduced suite |
| 20240412-H7-(SB06)@20-22 | 0.7 | None | Reduced suite |
| 20240412-H7-(SB06)@30-32 | 0.6 | None | Reduced suite |
| 20240412-H7-(SB07)@10-12 | 0.5 | None | Reduced suite |
| 20240412-H7-(SB07)@20-21 | 0.8 | None | Reduced suite |
| 20240412-H7-(SB07)@30-32 | 0.4 | None | Reduced suite |
| 20240412-H7-(SB08)@10-12 | 0.5 | None | Reduced suite |
| 20240412-H7-(SB08)@20-22 | 0.5 | None | Reduced suite |
| 20240412-H7-(SB08)@30-32 | 0.5 | None | Reduced suite |

*Key:*
*PID – photoionization detector* *ppm – parts per million*

All nine investigative soil boring confirmation samples were collected in clean laboratory-prepared containers and submitted to Pace Analytical Laboratories of Mt. Juliet, Tennessee for a reduced suite of total petroleum hydrocarbons (TPH), total xylenes, ethylbenzenes, 1,2,4-trimethylbenzenes, 1,3,5-trimethylbenzenes, and naphthalene per ECMC DN 403475735. The investigative confirmation soil samples were evaluated under the ECMC Table 915-1 Residential Soil Screening Level Concentrations (RSSLCs) milligrams per kilogram (mg/kg) also per ECMC DN 403475735.

A photographic log detailing the investigative assessment activities conducted on April 11 and 12, 2024 is included in Enclosure A. The soil boring drill logs are included in Enclosure B.

## ANALYTICAL RESULTS – H7 TANK INVESTIGATION

Laboratory analytical results of the nine investigative confirmation soil samples collected on April 12, 2024, were either below the laboratory detection limit or were within the ECMC Table 915-1 RSSLCs and Table 915-1 Cleanup Concentrations. The soil borings advanced on April 12, 2024, along with their corresponding analytical results are depicted on Figure 3. The laboratory analytical results are summarized in Table 1 and included in Enclosure C.

## CONCLUSIONS – H7 TANK INVESTIGATION

Based on the analytical presented data herein, subsequent investigation of the release has further narrowed the release footprint of the previously defined plume at the Site as shown on Figure 3. There are remaining ECMC Table 915-1 exceedances of TPH in soil samples 20230703-H7-(SB01)@10-12 and 20230703-H7-(SB01)@20-22 collected during initial subsurface delineation activities. These sample locations are shown on Figure 3. Laboratory analytical reports are included in Enclosure C (previously provided in ECMC DN 403496634). The subsequent drilling investigation completed during April 12, 2024, further confirmed delineation of the horizontal impacts in all cardinal directions to a smaller release footprint. The estimated volume of hydrocarbon impacts is approximately 996 cubic yards of soil.

To address the documented hydrocarbon plume, WSP recommends that Caerus mechanically excavate and remove the defined impacted soils and remediate the soil through onsite landfarming. Based on the analytical data collected during delineation activities, hydrocarbon impacts are isolated directly below the former tank battery where the former dumplines would have transitioned from below ground to above ground and connected to the production

tanks. These impacts are estimated to be between vertical depths of 25 feet and 28 feet bgs. The excavation is anticipated to be advanced to a vertical depth no greater than 28 feet bgs immediately beneath the former soil boring [20230703-H7-(SB01)] location, and a horizontal extent of the three soil boring locations 202400412-H7-(SB06), 202400412-H7-(SB07), and 202400412-H7-(SB08). WSP will oversee and direct the preferred Caerus contracted equipment operator to remove the impacted soil to the known vertical depths and horizontal extents based on the results from the previous drilling investigations. Once the excavation is advanced past the vertical depths of the identified hydrocarbon impacts, soil from all sidewalls and floors will be field screened vertically and horizontally at 2-foot intervals. Once field soil screening techniques indicate compliance with ECMC Table 915-1, confirmation soil samples from all sidewalls and floors of the open excavation will be collected.

Soil sampling and screening activities will be conducted by a WSP geologist who will inspect each soil sample for the presence or absence of petroleum hydrocarbons odor and/or staining. The soil will be characterized as described above in the *Soil Sampling Activities* of this document. All soil sampling equipment will be properly decontaminated between sampling intervals to ensure representative samples are collected. All soil samples will be submitted under a further reduced sampling suite with prior approval by the Director of TPH only. All samples submitted under the approved analyte suite will be evaluated under the ECMC Table 915-1 RSSLCs.

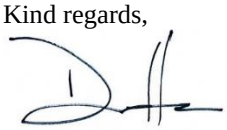
The number of excavation confirmation soil samples collected will be based on Table 1 referenced in the ECMC Rule 915.e.(2) – *Soil Sampling and Analysis Guidance Document*: one floor sample will be collected for every 500 square feet and one sidewall sample will be collected from each sidewall if the sidewall is less than 40 linear feet. If the sidewall is greater than 40 linear feet, one sidewall sample will be collected every 20 linear feet. Due to safety concerns associated with entering the open excavation, all soil samples will be collected from the excavator bucket. Prior to sample collection using the excavator bucket, all sampling surfaces will be scraped to removed smeared areas and/or weathered material to ensure each sample is representative of an undisturbed, recently exposed surface.

All excavated soil determined to be impacted will be stored in a containment berm on the working surface of the pad. An estimated 1,000 cubic yards of hydrocarbon impacted soil will be excavated for onsite landfarming. To adequately characterize the stockpiled soil for onsite landfarming, 5-point composite soil samples will be collected for every 500 cubic yards of excavated soil. Each aliquot included in the five-point composite soil sample will be collected at depth of approximately half of the thickness of the stockpile at each sample location. Compliance sampling of the landfarmed soil will continue until all constituents listed under the Director's approved analyte suite are compliant under ECMC Table 915-1 RSSLCs. Once the landfarmed soil indicates compliance, all previously excavated soil will be used to backfill the open excavation. All composite soil samples will be collected, characterized, field screened, and analyzed as previously described. Once the land farmed soil is removed and used to backfill the open excavation, the surface area beneath the former landfarm footprint will be sampled the ensure the stockpile did not impact the soil surface. The presumed excavation extent and the proposed area of the interim onsite landfarm is depicted on Figures 4 and 5.

Prior to additional confirmation soil sampling WSP recommends Caerus request the Director per ECMC Rule 915.e.(2).C for consideration of a further reduced soil analytical suite to only include TPH. Please see the associated Supplemental Form 27 DN 403771263 "Remediation Section" for additional details on the reasoning behind this request.

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,



Dustin Held
Lead Consultant, Environmental Geologist

Parker Coit, P.G.
Lead Consultant, Geologist

# FIGURES

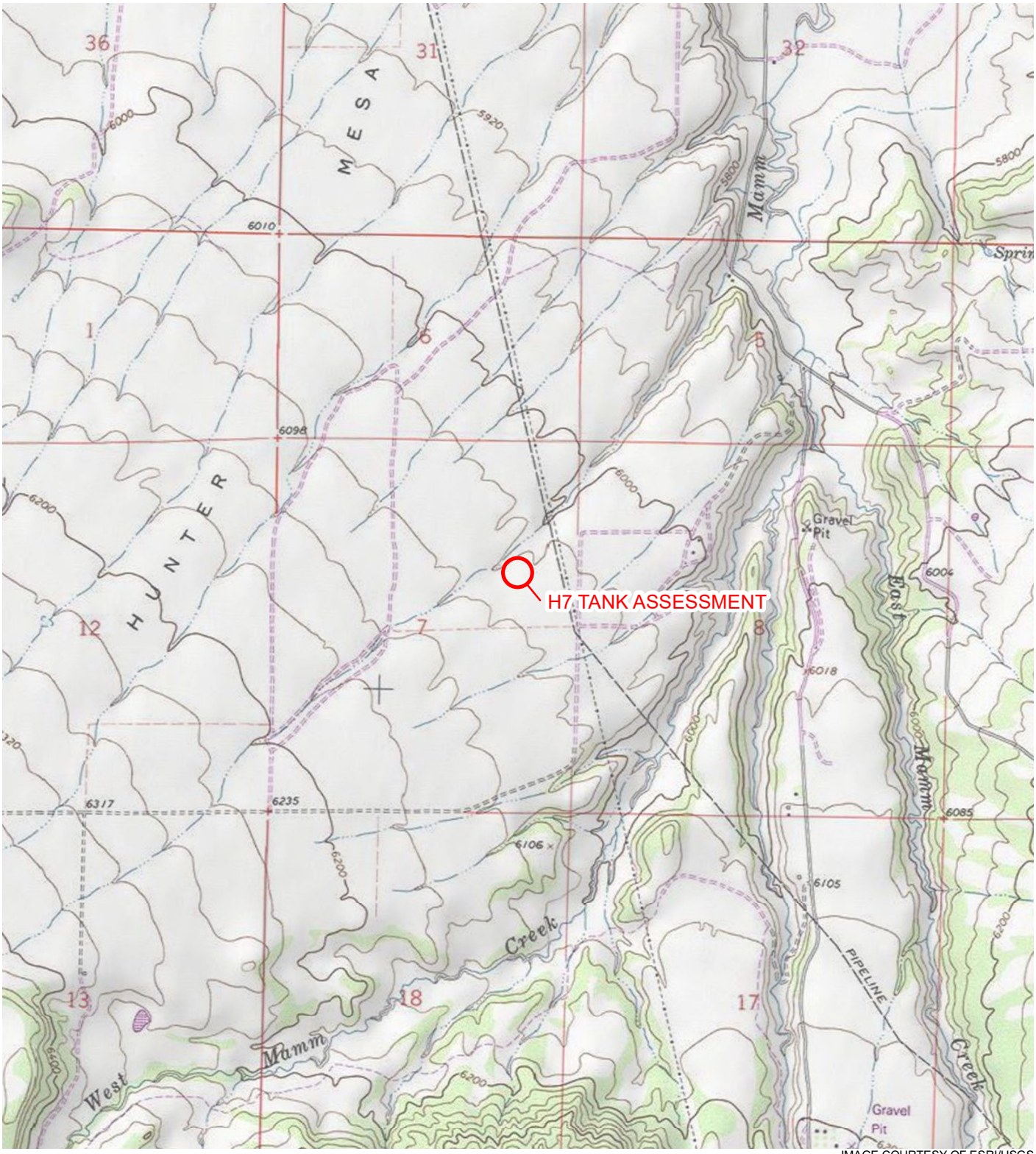



IMAGE COURTESY OF ESRI/USGS

**LEGEND**

SITE LOCATION

0 2,000 4,000

Feet

N

COLORADO

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

wsp

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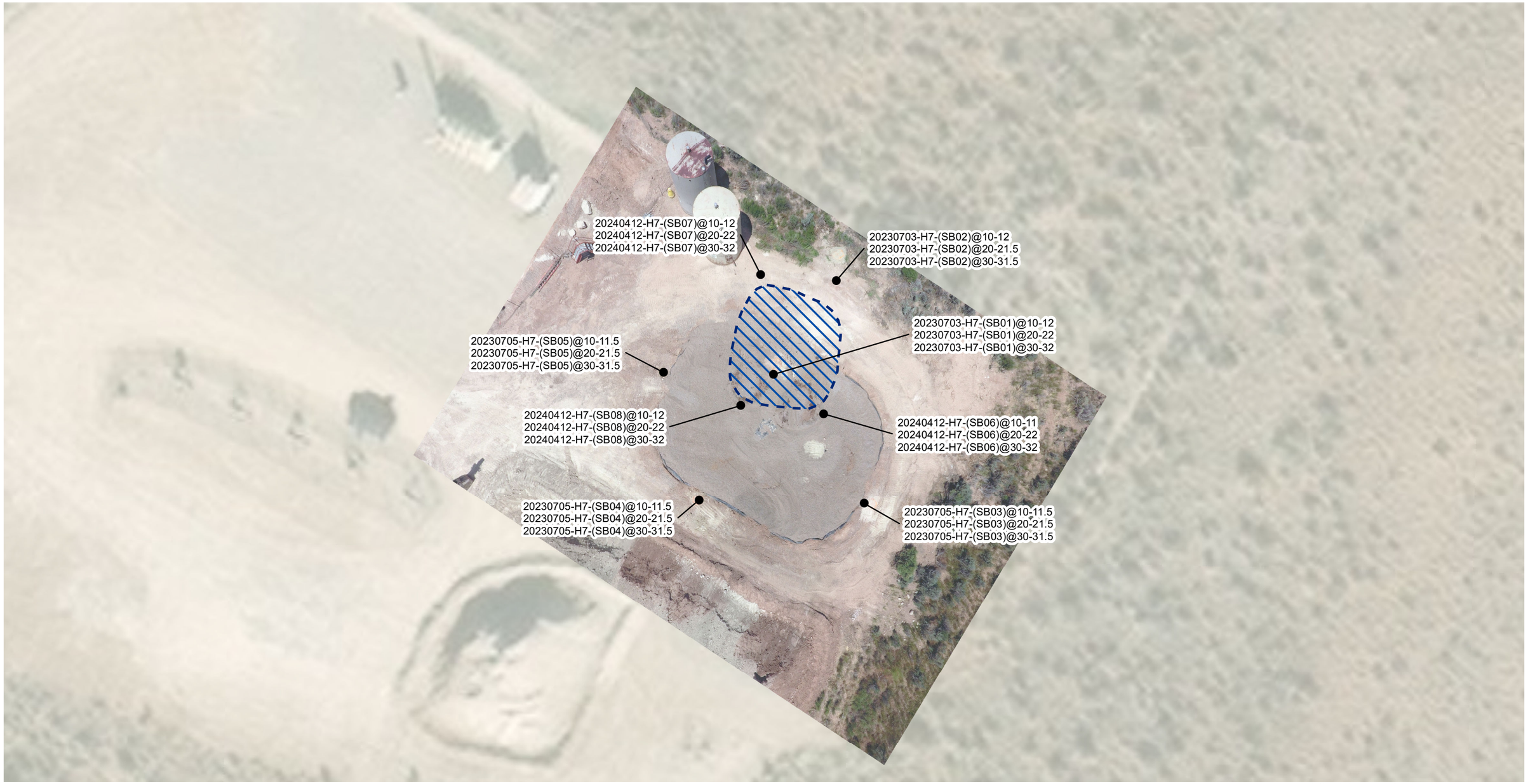


**LEGEND**

- SOIL BORING
- APPROXIMATE AREA OF IMPACT (995.86 CUBIC YARDS)

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

0 30 60
Feet

N

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

\\corp.pbwan.net\us\CentralData\DCCLDA00\Standard\gis\CaerusPiceanceLLC\H7_Dumpline\Maps\MXDs\Report\FIG03_SOIL_BORING_2024_MAR_APR.mxd

SAMPLE NAME @ FEET BELOW GROUND SURFACE
SAMPLE DATE
TPH: TOTAL PETROLEUM HYDROCARBONS (mg/kg)
E: ETHYLBENZENE (mg/kg)
X: TOTAL XYLENES (mg/kg)
1,2,4-TMB: 1,2,4-TRIMETHYLBENZENE (mg/kg)
1,3,5-TMB: 1,3,5-TRIMETHYLBENZENE (mg/kg)
NAPH: NAPHTHALENE (mg/kg)
mg/kg: MILLIGRAMS PER KILOGRAM
**BOLD** INDICATES RESULT EXCEEDS THE ECMC CONCENTRATION LEVEL
< : INDICATES RESULT IS LESS THAN THE STATED REPORTING LIMIT
MDL: MAXIMUM DETECTION LEVEL

| 20240412-H7-(SB07)@10-12 | 20240412-H7-(SB07)@20-21 | 20240412-H7-(SB07)@30-32 |
|---|---|---|
| 4/12/2024 | 4/12/2024 | 4/12/2024 |
| TPH: <9.00 | TPH: 98.9 | TPH: 75.015 |
| E: <0.00250 | E: <0.00250 | E: <0.00250 |
| X: <0.00650 | X: <0.00650 | X: <0.00650 |
| 1,2,4-TMB: <0.00500 | 1,2,4-TMB: <0.00500 | 1,2,4-TMB: <0.00500 |
| 1,3,5-TMB: <0.00500 | 1,3,5-TMB: <0.00500 | 1,3,5-TMB: <0.00500 |
| NAPH: <0.0125 | NAPH: <0.0125 | NAPH: <0.0125 |

SB02

SB05

| 20230703-H7-(SB01)@10-12 | 20230703-H7-(SB01)@20-22 | 20230703-H7-(SB01)@30-32 |
|---|---|---|
| 7/3/2023 | 7/3/2023 | 7/3/2023 |
| TPH: **899.3** | TPH: **1,545.28** | TPH: 218.98 |

| 20240412-H7-(SB08)@10-12 | 20240412-H7-(SB08)@20-22 | 20240412-H7-(SB08)@30-32 |
|---|---|---|
| 4/12/2024 | 4/12/2024 | 4/12/2024 |
| TPH: 21.7 | TPH: 34.858 | TPH: 46.452 |
| E: <0.00250 | E: <0.00250 | E: <0.00250 |
| X: <0.00650 | X: <0.00650 | X: <0.00650 |
| 1,2,4-TMB: <0.00500 | 1,2,4-TMB: <0.00500 | 1,2,4-TMB: <0.00500 |
| 1,3,5-TMB: <0.00500 | 1,3,5-TMB: <0.00500 | 1,3,5-TMB: <0.00500 |
| NAPH: <0.0125 | NAPH: <0.0125 | NAPH: <0.0125 |

| 20240412-H7-(SB06)@10-11 | 20240412-H7-(SB06)@20-22 | 20240412-H7-(SB06)@30-32 |
|---|---|---|
| 4/12/2024 | 4/12/2024 | 4/12/2024 |
| TPH: <9.00 | TPH: 12.4 | TPH: 5.02 |
| E: <0.00250 | E: <0.00250 | E: <0.00250 |
| X: <0.00650 | X: <0.00650 | X: <0.00650 |
| 1,2,4-TMB: <0.00500 | 1,2,4-TMB: <0.00500 | 1,2,4-TMB: <0.00500 |
| 1,3,5-TMB: <0.00500 | 1,3,5-TMB: <0.00500 | 1,3,5-TMB: <0.00500 |
| NAPH: <0.0125 | NAPH: <0.0125 | NAPH: <0.0125 |

SB04

SB03

**LEGEND**

- SOIL BORING
- APPROXIMATE AREA OF IMPACT (995.86 CUBIC YARDS)

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

0 25 50
Feet

N

FIGURE 3
SOIL BORING ANALYTICAL RESULTS
H7 TANK ASSESSMENT
SENE SEC 7-T7S-R92W
GARFIELD COUNTY, COLORADO
**CAERUS PICEANCE LLC**

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**LEGEND**

PROPOSED EXCAVATION EXTENT

APPROXIMATE AREA OF IMPACT (995.86 CUBIC YARDS)

BACKGROUND IMAGE COURTESY OF GOOGLE EARTH (JULY 2023)
FOREGROUND IMAGE COURTESY OF WSP DRONE SURVEY JULY 5, 2023

0 25 50
Feet

N

FIGURE 4
PROPOSED EXCAVATION SITE MAP
H7 TANK ASSESSMENT
SENE SEC 7-T7S-R92W
GARFIELD COUNTY, COLORADO
**CAERUS PICEANCE LLC**

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**LEGEND**

PROPOSED LANDFARM LOCATION

BACKGROUND IMAGE COURTESY OF GOOGLE EARTH (JULY 2023)

0 50 100

Feet

N

FIGURE 5
PROPOSED LANDFARM LOCATION MAP
H7 TANK ASSESSMENT
SENE SEC 7-T7S-R92W
GARFIELD COUNTY, COLORADO
**CAERUS PICEANCE LLC**

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TABLE

# TABLE 1

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

| | | | Soil Analytical Results | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | | | **EC** | **SAR** | **pH** | **Boron** | **Arsenic** | **Barium** | **Cadmium** | **Chromium VI** | **Copper** | **Lead** | **Nickel** | **Selenium** | **Silver** | **Zinc** |
| **915-1 RESIDENTIAL SOIL** | | | 4000 | 6 | 8.3 | 2 | 0.68 | 15000 | 71 | 0.3 | 3100 | 400 | 1500 | 390 | 390 | 23000 |
| **Units** | | | umhos/cm | No Unit | SU | mg/L | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| **Sample Name** | **Sample Date** | **Lab Report** | | | | | | | | | | | | | | |
| 20230703-H7-(SB01) @ 10-12 | 07/03/2023 | L1633300 | 0.356 | 2.29 | **8.73** | 0.188 | **4.02** | 191 | 0.381 | **< 1.00** | 9.01 | 6.97 | 9.04 | 0.395 | < 0.500 | 24.9 |
| 20230703-H7-(SB01) @ 20-22 | 07/03/2023 | L1633300 | 0.484 | **6.27** | **8.95** | 0.318 | **8.00** | 141 | 0.435 | **< 1.00** | 11.9 | 8.75 | 11.9 | 0.319 | < 0.500 | 35.0 |
| 20230703-H7-(SB01) @ 30-32 | 07/03/2023 | L1633300 | 0.5 | 4.06 | **8.74** | 0.141 | **6.40** | 85.5 | 0.482 | **< 1.00** | 10.3 | 8.50 | 12.5 | 0.208 | < 0.500 | 35.4 |
| 20230703-H7-(SB02) @ 10-12 | 07/03/2023 | L1633298 | 0.707 | **6.54** | **9.24** | 0.594 | **8.52** | 197 | 0.386 | **< 1.00** | 12.0 | 8.86 | 15.1 | 0.421 | < 0.500 | 38.9 |
| 20230703-H7-(SB02) @ 20-21.5 | 07/03/2023 | L1633298 | 0.152 | 4.97 | **8.55** | 0.224 | **9.01** | 150 | 0.407 | **< 1.00** | 11.7 | 8.20 | 12.3 | 0.371 | < 0.500 | 35.7 |
| 20230703-H7-(SB02) @ 30-31.5 | 07/03/2023 | L1633298 | 1.44 | 4.08 | **8.43** | 0.140 | **8.30** | 151 | 0.425 | **< 1.00** | 12.3 | 9.25 | 12.9 | 0.389 | < 0.500 | 36.0 |
| 20230705-H7-(SB03)@10-11.5 | 07/05/2023 | L1633275 | 0.369 | 1.75 | **8.89** | 0.297 | **6.18** | 190 | 0.461 | **< 1.00** | 15.3 | 8.23 | 15.0 | 0.385 | < 0.500 | 34.6 |
| 20230705-H7-(SB03)@20-21.5 | 07/05/2023 | L1633275 | 0.435 | **6.19** | **9.17** | 0.321 | **12.1** | 141 | 0.507 | **0.362** | 14.9 | 10.0 | 15.6 | 0.310 | < 0.500 | 46.3 |
| 20230705-H7-(SB03)@30-31.5 | 07/05/2023 | L1633275 | 0.878 | 4.56 | **8.58** | 0.226 | **5.06** | 149 | 0.274 | **< 1.00** | 14.9 | 7.33 | 11.1 | 0.211 | < 0.500 | 33.2 |
| 20230705-H7-(SB04)@10-11.5 | 07/05/2023 | L1633276 | 0.533 | 5.43 | **9.17** | 0.375 | **9.50** | 184 | 0.384 | **< 1.00** | 14.3 | 10.9 | 17.9 | 0.468 | < 0.500 | 43.4 |
| 20230705-H7-(SB04)@20-21.5 | 07/05/2023 | L1633276 | 2.12 | 3.63 | 8.26 | 0.217 | **7.21** | 130 | 0.686 | **< 1.00** | 11.8 | 8.88 | 14.3 | 0.407 | 0.107 | 41.3 |
| 20230705-H7-(SB04)@30-31.5 | 07/05/2023 | L1633276 | 1.17 | 3.69 | **8.32** | 0.174 | **6.55** | 126 | 0.382 | **< 1.00** | 10.5 | 6.87 | 11.6 | 0.346 | < 0.500 | 35.4 |
| 20230705-H7-(SB05)@10-11.5 | 07/05/2023 | L1633274 | 0.708 | 5.71 | **9.12** | 0.182 | **8.53** | 133 | 0.433 | **< 1.00** | 11.1 | 8.39 | 12.6 | 0.480 | < 0.500 | 35.1 |
| 20230705-H7-(SB05)@20-21.5 | 07/05/2023 | L1633274 | 2.2 | **6.48** | **8.36** | 0.269 | **6.96** | 112 | 0.393 | **< 1.00** | 10.2 | 7.21 | 10.8 | 0.293 | < 0.500 | 32.6 |
| 20230705-H7-(SB05)@30-31.5 | 07/05/2023 | L1633274 | 1.8 | **6.54** | 8.14 | 0.332 | **10.2** | 116 | 0.535 | **< 1.00** | 12.6 | 12.2 | 12.8 | 0.491 | 0.0871 | 42.8 |
| 20240412-H7-(SB06)@10-11 | 04/12/2024 | L1726707 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 20240412-H7-(SB06)@20-22 | 04/12/2024 | L1726707 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 20240412-H7-(SB06)@30-32 | 04/12/2024 | L1726707 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 20240412-H7-(SB07)@10-12 | 04/12/2024 | L1726707 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 20240412-H7-(SB07)@20-21 | 04/12/2024 | L1726707 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 20240412-H7-(SB07)@30-32 | 04/12/2024 | L1726707 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 20240412-H7-(SB08)@10-12 | 04/12/2024 | L1726707 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 20240412-H7-(SB08)@20-22 | 04/12/2024 | L1726707 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 20240412-H7-(SB08)@30-32 | 04/12/2024 | L1726707 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

*Key:*

Exceeding ECMC Residential Soil Screening Level Concentrations (RSSLC)

*< - less than laboratory minimum detection limit*

*EC - electrical conductivity*

*SAR - sodium adsorption ratio*

*umhos/cm - micromhos per centimeter*

*SU - standard units*

*mg/kg - miligram per kilogram*

*mg/l - milligram per liter*

***BOLD -** Table 915-1 exceedance*

*GRO - gasoline range organics*

*DRO - diesel range organics*

*ORO - oil range organics*

*TMB - trimethylbenzene*

*NA - not assessed*

# TABLE 1

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

| | | | Soil Analytical Results | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Analyte** | | | **GRO** | **DRO** | **ORO** | **Benzene** | **Toluene** | **Ethylbenzene** | **Total Xylenes** | **1,2,4-TMB** | **1,3,5-TMB** | **Acenaphthene** | **Anthracene** | **Benz(a)anthracene** | **Benzo(b)fluoranthene** | **Benzo(k)fluoranthene** | **Benzo(a)pyrene** | **Chrysene** | **Dibenz(a,h)anthracen** | **Fluoranthene** | **Fluorene** | **Indeno(1,2,3-cd)Pyre** | **1-Methylnaphthalene** | **2-Methylnaphthalene** | **Naphthalene** | **Pyrene** |
| **915-1 RESIDENTIAL SOIL** | | | 500 | 500 | 500 | 1.2 | 490 | 5.8 | 58 | 30 | 27 | 360 | 1800 | 1.1 | 1.1 | 11 | 0.11 | 110 | 0.11 | 240 | 240 | 1.1 | 18 | 24 | 2 | 180 |
| **Units** | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| **Sample Name** | **Sample Date** | **Lab Report** | | | | | | | | | | | | | | | | | | | | | | | | |
| 20230703-H7-(SB01) @ 10-12 | 07/03/2023 | L1633300 | **609** | 264 | 26.3 | 0.0228 | 1.44 | 1.41 | 15.2 | 4.47 | 3.97 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | 0.00876 | < 0.00600 | 0.154 | 0.416 | 0.219 | < 0.00600 |
| 20230703-H7-(SB01) @ 20-22 | 07/03/2023 | L1633300 | **1540** | < 4.00 | 5.28 | 0.0760 | 3.32 | 2.20 | 30.4 | 8.71 | 8.59 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | 0.0115 | < 0.00600 | 0.200 | 0.552 | 0.220 | < 0.00600 |
| 20230703-H7-(SB01) @ 30-32 | 07/03/2023 | L1633300 | 1.08 | 180 | 37.9 | < 0.00100 | < 0.00500 | < 0.00250 | 0.00701 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20230703-H7-(SB02) @ 10-12 | 07/03/2023 | L1633298 | 0.320 | 1.82 | 8.49 | < 0.00100 | 0.00673 | 0.00203 | 0.0386 | 0.0225 | 0.0211 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20230703-H7-(SB02) @ 20-21.5 | 07/03/2023 | L1633298 | 0.145 | 2.69 | 12.9 | 0.00138 | 0.00205 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20230703-H7-(SB02) @ 30-31.5 | 07/03/2023 | L1633298 | 0.135 | 8.68 | 46.5 | < 0.00100 | 0.00133 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20230705-H7-(SB03)@10-11.5 | 07/05/2023 | L1633275 | 0.0667 | 9.32 | 31.0 | < 0.00100 | < 0.00500 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20230705-H7-(SB03)@20-21.5 | 07/05/2023 | L1633275 | 0.0912 | 10.2 | 45.5 | < 0.00100 | < 0.00500 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20230705-H7-(SB03)@30-31.5 | 07/05/2023 | L1633275 | 0.0702 | 2.76 | 8.54 | < 0.00100 | < 0.00500 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20230705-H7-(SB04)@10-11.5 | 07/05/2023 | L1633276 | 0.0628 | 4.69 | 19.8 | < 0.00100 | < 0.00500 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | 0.0147 | 0.0155 | < 0.00600 |
| 20230705-H7-(SB04)@20-21.5 | 07/05/2023 | L1633276 | 0.112 | 20.5 | 27.6 | < 0.00100 | < 0.00500 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20230705-H7-(SB04)@30-31.5 | 07/05/2023 | L1633276 | 0.0952 | < 160 | 304 | < 0.00100 | < 0.00500 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20230705-H7-(SB05)@10-11.5 | 07/05/2023 | L1633274 | 0.0588 | 2.28 | 6.37 | < 0.00100 | < 0.00500 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | 0.0331 | 0.119 | 0.0552 | < 0.00600 |
| 20230705-H7-(SB05)@20-21.5 | 07/05/2023 | L1633274 | 0.0796 | 5.31 | 17.4 | < 0.00100 | < 0.00500 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20230705-H7-(SB05)@30-31.5 | 07/05/2023 | L1633274 | 0.0822 | 8.50 | 44.9 | < 0.00100 | < 0.00500 | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.00600 | < 0.0200 | < 0.0200 | < 0.0200 | < 0.00600 |
| 20240412-H7-(SB06)@10-11 | 04/12/2024 | L1726707 | < 0.100 | < 4.00 | < 4.00 | NA | NA | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | < 0.0125 | NA |
| 20240412-H7-(SB06)@20-22 | 04/12/2024 | L1726707 | < 0.100 | < 4.00 | 12.4 | NA | NA | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | < 0.0125 | NA |
| 20240412-H7-(SB06)@30-32 | 04/12/2024 | L1726707 | < 0.100 | < 4.00 | 5.02 | NA | NA | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | < 0.0125 | NA |
| 20240412-H7-(SB07)@10-12 | 04/12/2024 | L1726707 | < 0.100 | < 4.00 | < 4.00 | NA | NA | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | < 0.0125 | NA |
| 20240412-H7-(SB07)@20-21 | 04/12/2024 | L1726707 | < 0.100 | 14.8 | 84.1 | NA | NA | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | < 0.0125 | NA |
| 20240412-H7-(SB07)@30-32 | 04/12/2024 | L1726707 | 0.115 | 11.2 | 63.7 | NA | NA | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | < 0.0125 | NA |
| 20240412-H7-(SB08)@10-12 | 04/12/2024 | L1726707 | < 0.100 | < 4.00 | 21.7 | NA | NA | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | < 0.0125 | NA |
| 20240412-H7-(SB08)@20-22 | 04/12/2024 | L1726707 | 0.108 | 4.65 | 30.1 | NA | NA | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | < 0.0125 | NA |
| 20240412-H7-(SB08)@30-32 | 04/12/2024 | L1726707 | 0.132 | 6.72 | 39.6 | NA | NA | < 0.00250 | < 0.00650 | < 0.00500 | < 0.00500 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | < 0.0125 | NA |

*Key:*

Exceeding ECMC Residential Soil Screening Level Concentrations (RSSLC)

*< - less than laboratory minimum detection limit*

*EC - electrical conductivity*
*SAR - sodium adsorption ratio*
*umhos/cm - micromhos per centimeter*
*SU - standard units*
*mg/kg - miligram per kilogram*
*mg/l - milligram per liter*

***BOLD -** Table 915-1 exceedanc*
*GRO - gasoline range organics*
*DRO - diesel range organics*
*ORO - oil range organics*
*TMB - trimethylbenzene*
*NA - not assessed*

# ENCLOSURE A – PHOTOGRAPHIC LOG

# PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 1 | 4/11/2024 |

Potholing location

SB06

View northeast

| Photo No. | Date |
|---|---|
| 2 | 4/11/2024 |

Potholing location

SB07

View north

## PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 3 | 4/11/2024 |

Potholing location

SB08

View northeast

| Photo No. | Date |
|---|---|
| 4 | 4/11/2024 |

Site overview before leaving site

View west

## PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 5 | 4/12/2024 |

Drilling location

20240412-H7-(SB06)

View southeast

| Photo No. | Date |
|---|---|
| 6 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB06)@10-11

## PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 7 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB06)@15-17


| Photo No. | Date |
|---|---|
| 8 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB06)@20-22

## PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 9 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB06)@25-27


| Photo No. | Date |
|---|---|
| 10 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB06)@30-32

## PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 11 | 4/12/2024 |

Drilling location

20240412-H7-(SB07)

View north

| Photo No. | Date |
|---|---|
| 12 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB07)@10-12

## PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 13 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB07)@15-16


| Photo No. | Date |
|---|---|
| 14 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB07)@20-22

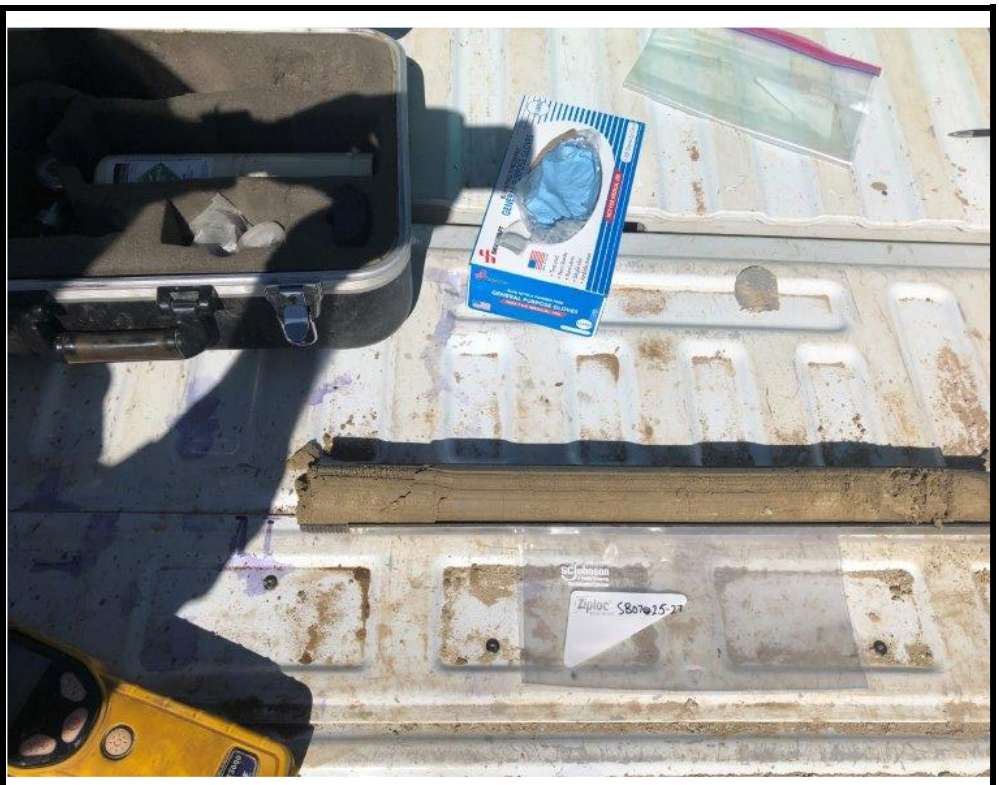
## PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 15 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB07)@25-27




| Photo No. | Date |
|---|---|
| 16 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB07)@30-32

## PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 17 | 4/12/2024 |

Drilling location

20240412-H7-(SB08)

View northwest

| Photo No. | Date |
|---|---|
| 18 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB08)@10-12

## PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 19 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB08)@15-17


| Photo No. | Date |
|---|---|
| 20 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB08)@20-22

## PHOTOGRAPHIC LOG

| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 21 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB08)@25-27


| Photo No. | Date |
|---|---|
| 22 | 4/12/2024 |

Split spoon sample

20240412-H7-(SB08)@30-32

## PHOTOGRAPHIC LOG

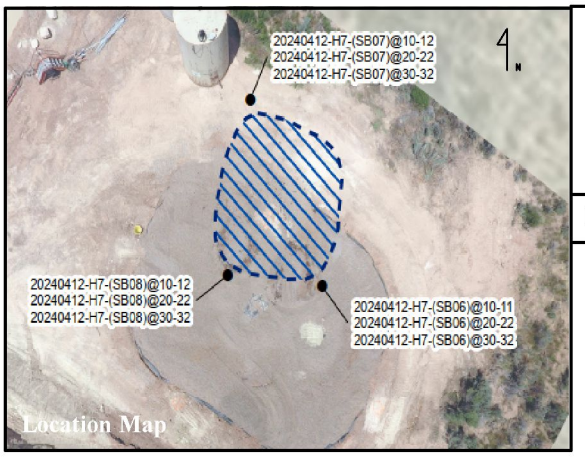
| Caerus Piceance LLC | H7 Tank Investigation | 31406292.017 |
|---|---|---|

| Photo No. | Date |
|---|---|
| 22 | 4/12/2024 |

Site overview

View southeast

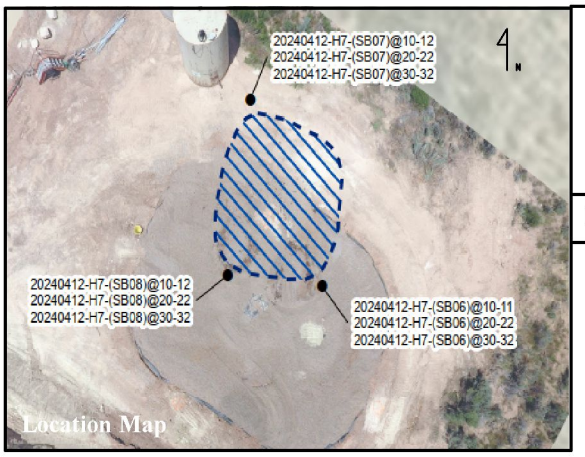
# ENCLOSURE B – SOIL BORNG LOGS




# BORING LOG/MONITORING WELL COMPLETION DIAGRAM

| | | | |
|---|---|---|---|
| **PROJECT NAME:** | H7 Tank Investigation | | |
| **PROJECT NO:** | 31406292.017 | **LOGGED BY:** | Ben Herrmann |
| **BORING/WELL ID:** | SB06 | **SAMPLE METHOD:** | Split Spoon |
| **COMPLETION DATE:** | 4/12/2024 | **DRILL METHOD:** | Solid Stem |
| **TD (ft bgs):** | 32' | **DRILLED BY:** | CD&S |
| **DTW (ft bgs):** | NA | **DETECTOR:** | MiniRAE 3000 |
| **SCREEN SLOT:** | NA | **FILTER PACK:** | NA |
| **CASING LENGTH:** | NA | **ANNULUS SEAL:** | Bentonite Chips |
| **SCREEN LENGTH:** | NA | **SURFACE SEAL:** | NA |
| **HOLE DIAMETER:** | 4.5" | | |
| **WELL DIAMETER:** | NA | | |
| **CASING TYPE:** | NA | | |
| **SCREEN TYPE:** | NA | | |

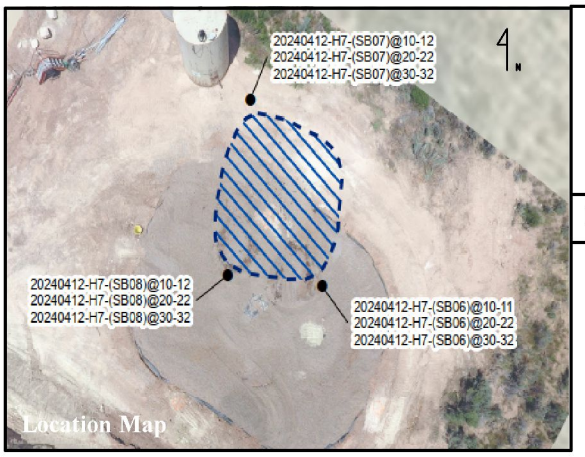
| PID (ppm) | Staining | Moisture Content | Sample ID | Recovery (%) | Depth (ft) | USCS | USCS Graphic | Lithology Description | Well Construction |
|---|---|---|---|---|---|---|---|---|---|
| 0.5 | | | | | 0 | | | 0' - 10' - potholed to 10' bgs, hand auger samples collected at 5' and 10', no staining or odor, predominantly SILT, trace gravels, and occasional (occ) fine grained sand. | |
| 3.9 | | dry | SB06 @10-11' | 40% | 10 | GM | | 10' - 11' - SANDY LOAM, brown - dark gray, abundant very fine - fine grained sands, occ silt, trace basalt gravels, no staining or odor. | |
| 1.5 | | dry | | 80% | 15 | ML | | 15' - 17' - SILT, light brown - dark gray, occ very fine - fine grained sands, trace basalt gravels, trace sand from 15' to 16', no staining or odor. | |
| 0.7 | | dry | SB06 @20-22' | 100% | 20 | ML | | 20' - 22' - SILT, light brown - dark gray, occ very fine - fine grained sands, trace shale gravels, 3" to 5" layers of clayey silts, no staining or odor. | |
| 0.7 | | moist | | 90% | 25 | ML | | 25' - 27' - SILT, brown - light gray, trace very fine - fine grained sands, trace basalt gravels, no staining or odor. | |
| 0.6 | | moist | SB06 @30-32' | 100% | 30 | ML | | 30' - 32' - SILT, brown - gray, trace very fine - fine grained sands, trace calcium precipitate mineral, no staining or odor. | |




# BORING LOG/MONITORING WELL COMPLETION DIAGRAM

| | | | |
|---|---|---|---|
| **PROJECT NAME:** | H7 Tank Investigation | | |
| **PROJECT NO:** | 31406292.017 | **LOGGED BY:** | Ben Herrmann |
| **BORING/WELL ID:** | SB07 | **SAMPLE METHOD:** | Split Spoon |
| **COMPLETION DATE:** | 4/12/2024 | **DRILL METHOD:** | Solid Stem |
| **TD (ft bgs):** | 32' | **DRILLED BY:** | CD&S |
| **DTW (ft bgs):** | NA | **DETECTOR:** | MiniRAE 3000 |
| **SCREEN SLOT:** | NA | **FILTER PACK:** | NA |
| **CASING LENGTH:** | NA | **ANNULUS SEAL:** | Bentonite Chips |
| **SCREEN LENGTH:** | NA | **SURFACE SEAL:** | NA |
| **HOLE DIAMETER:** | 4.5" | | |
| **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 |
|---|---|---|---|---|---|---|---|---|---|
| 0.2 | | | | | 0 | | | 0' - 10' - potholed to 10' bgs, hand auger samples collected at 5' and 10', no staining or odor, predominantly SILTY LOAM. | |
| 0.5 | | dry | SB07 @10-12' | 75% | 10 | ML | | 10' - 12' - SILT, brown - light gray, occasional (occ) very fine - fine grained sands, no staining or odor. | |
| 0.9 | | dry | | 60% | 15 | ML | | 15' - 16' - SILT, brown - tan, occ very fine - fine grained sands, trace basalt gravels, trace calcium precipitate veins, no staining or odor. | |
| 0.8 | | dry | SB07 @20-21' | 75% | 20 | ML | | 20' - 21' - SILT, brown - tan, trace very fine - fine grained sands, trace shale and basalt gravels, no staining or odor. | |
| 0.9 | | moist | | 100% | 25 | ML | | 25' - 27' - SILT, brown - light gray, occ very fine - fine grained sands, 1" to 2" interbedded layers of clay, trace calcium precipitate veins, no staining or odor. | |
| 0.4 | | moist | SB07 @30-32' | 98% | 30 | ML | | 30' - 32' - SILT, brown - tan, trace very fine - fine grained sands, 1" to 2" interbedded layers of clay, trace shale gravels, rare calcium inclusions, no staining or odor. | |




# BORING LOG/MONITORING WELL COMPLETION DIAGRAM

| | | | |
|---|---|---|---|
| **PROJECT NAME:** | H7 Tank Investigation | | |
| **PROJECT NO:** | 31406292.017 | **LOGGED BY:** | Ben Herrmann |
| **BORING/WELL ID:** | SB08 | **SAMPLE METHOD:** | Split Spoon |
| **COMPLETION DATE:** | 4/12/2024 | **DRILL METHOD:** | Solid Stem |
| **TD (ft bgs):** | 32 | **DRILLED BY:** | CD&S |
| **DTW (ft bgs):** | NA | **DETECTOR:** | MiniRAE 3000 |
| **SCREEN SLOT:** | NA | **FILTER PACK:** | NA |
| **CASING LENGTH:** | NA | **ANNULUS SEAL:** | Bentonite Chips |
| **SCREEN LENGTH:** | NA | **SURFACE SEAL:** | NA |
| **HOLE DIAMETER:** | 4.5" | | |
| **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 |
|---|---|---|---|---|---|---|---|---|---|
| 0.8 | | | | | 0 | | | 0' - 10' - potholed to 10' bgs, hand auger samples collected at 5' and 10', no staining or odor, predominantly SILTY LOAM. | |
| 0.5 | | dry | SB08 @10-12' | 95% | 10 | ML | | 10' - 12' - SANDY LOAM, light gray - brown, occasional (occ) silt grains, trace clays, trace gravels, no staining or odor. | |
| | | dry | | 100% | 15 | ML | | 15' - 17' - SILT, brown - light gray, occ very fine - fine grained sands, trace basalt gravels, no staining or odor. | |
| 0.9 | | dry | SB08 @20-22' | 100% | 20 | ML | | 20' - 22' - SILT, brown - tan, occ clay, trace very fine - fine grained sands, no staining or odor. | |
| 1.0 | | moist | | 98% | 25 | ML | | 25' - 27' - SILT, dark gray - brown, occ very fine - fine grained sands, trace calcium precipitate veins, no staining or odor. | |
| 0.5 | | dry | SB08 @30-32' | 90% | 30 | ML | | 30' - 32' - SILT, dark gray - brown, occ very fine - fine grained sands, trace clay, trace shale gravels, no staining or odor. | |

# ENCLOSURE C – LABORATORY ANALYTICAL REPORTS

# ANALYTICAL REPORT

April 25, 2024



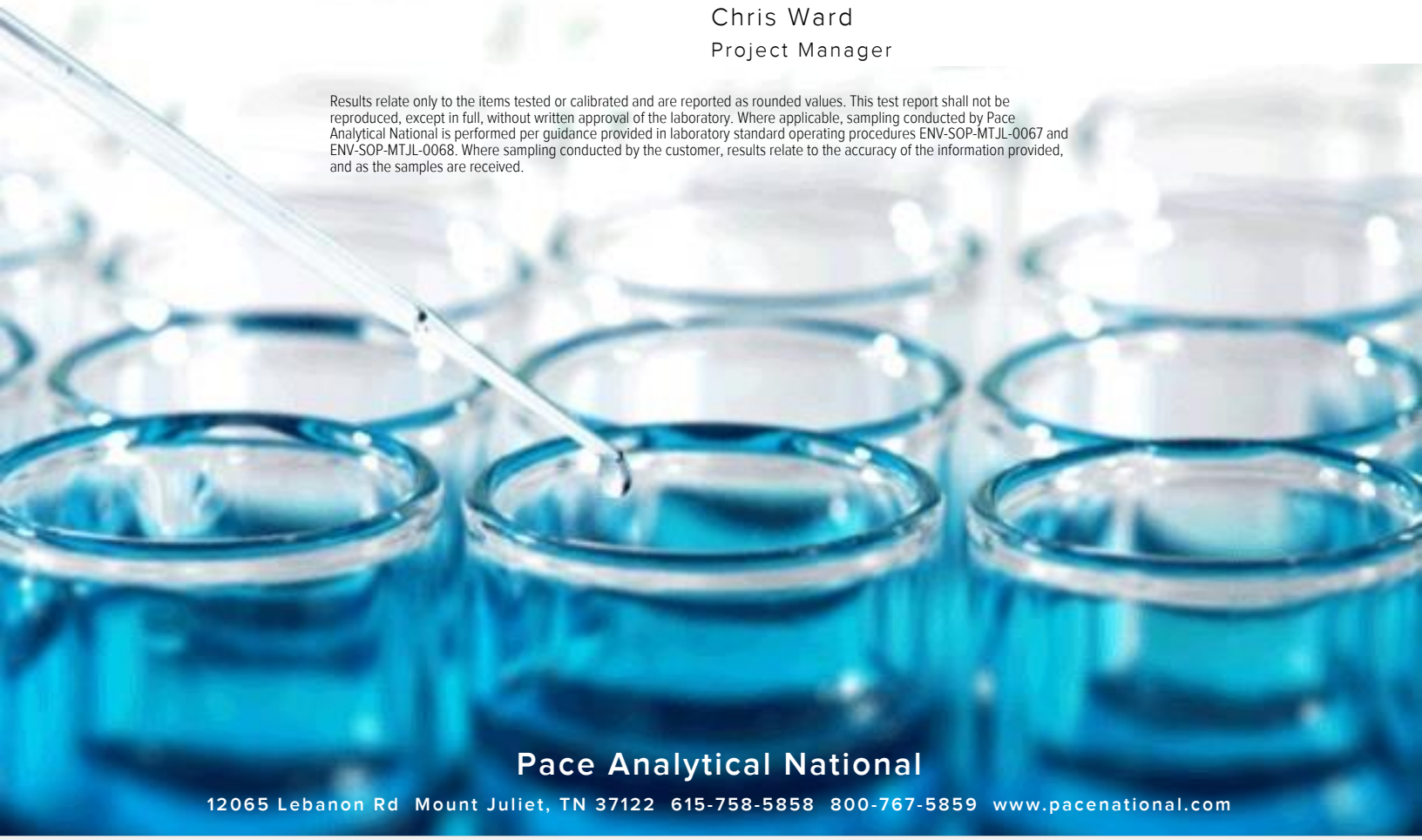
## Caerus Oil and Gas

| | |
|---|---|
| Sample Delivery Group: | L1726707 |
| Samples Received: | 04/17/2024 |
| Project Number: | H7 |
| Description: | H7-Tank Battery |
| Site: | H7 |
| Report To: | Jake J. / Brett M. / Blair R. / Andy V.<br>143 Diamond Avenue<br>Parachute, CO 81635 |

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager





Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

# TABLE OF CONTENTS

## 20240412-H7-(SB06)@10-11 L1726707-01 Solid

Collected by: Ben Herrmann | Collected date/time: 04/12/24 08:30 | Received date/time: 04/17/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG2271517 | 1 | 04/21/24 11:12 | 04/21/24 18:04 | JAH | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG2271547 | 1 | 04/21/24 11:12 | 04/21/24 23:49 | GLN | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M | WG2272900 | 1 | 04/24/24 15:36 | 04/25/24 00:03 | KKS | Mt. Juliet, TN |

## 20240412-H7-(SB06)@20-22 L1726707-02 Solid

Collected by: Ben Herrmann | Collected date/time: 04/12/24 09:15 | Received date/time: 04/17/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG2271517 | 1 | 04/21/24 11:12 | 04/21/24 18:27 | JAH | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG2271547 | 1 | 04/21/24 11:12 | 04/22/24 00:08 | GLN | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M | WG2272900 | 1 | 04/24/24 15:36 | 04/25/24 01:53 | KKS | Mt. Juliet, TN |

## 20240412-H7-(SB06)@30-32 L1726707-03 Solid

Collected by: Ben Herrmann | Collected date/time: 04/12/24 10:00 | Received date/time: 04/17/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG2272570 | 1 | 04/21/24 11:12 | 04/23/24 23:23 | DWR | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG2271547 | 1 | 04/21/24 11:12 | 04/22/24 00:27 | GLN | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M | WG2272900 | 1 | 04/24/24 15:36 | 04/25/24 01:28 | KKS | Mt. Juliet, TN |

## 20240412-H7-(SB07)@10-12 L1726707-04 Solid

Collected by: Ben Herrmann | Collected date/time: 04/12/24 10:15 | Received date/time: 04/17/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG2271517 | 1 | 04/21/24 11:12 | 04/21/24 19:13 | JAH | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG2271547 | 1 | 04/21/24 11:12 | 04/22/24 00:46 | GLN | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M | WG2272041 | 1 | 04/23/24 07:43 | 04/24/24 01:25 | TJD | Mt. Juliet, TN |

## 20240412-H7-(SB07)@20-21 L1726707-05 Solid

Collected by: Ben Herrmann | Collected date/time: 04/12/24 10:50 | Received date/time: 04/17/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG2272570 | 1 | 04/21/24 11:12 | 04/23/24 23:46 | DWR | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG2271547 | 1 | 04/21/24 11:12 | 04/22/24 01:06 | GLN | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M | WG2272041 | 1 | 04/23/24 07:43 | 04/24/24 07:14 | TJD | Mt. Juliet, TN |

## 20240412-H7-(SB07)@30-32 L1726707-06 Solid

Collected by: Ben Herrmann | Collected date/time: 04/12/24 11:30 | Received date/time: 04/17/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG2271517 | 1 | 04/21/24 11:12 | 04/21/24 19:59 | JAH | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG2271547 | 1 | 04/21/24 11:12 | 04/22/24 01:25 | GLN | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M | WG2272041 | 1 | 04/23/24 07:43 | 04/24/24 06:37 | TJD | Mt. Juliet, TN |

## 20240412-H7-(SB08)@10-12 L1726707-07 Solid

Collected by: Ben Herrmann
Collected date/time: 04/12/24 11:45
Received date/time: 04/17/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG2271517 | 1 | 04/21/24 11:12 | 04/21/24 20:21 | JAH | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG2271547 | 1 | 04/21/24 11:12 | 04/22/24 01:44 | GLN | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M | WG2272041 | 1 | 04/23/24 07:43 | 04/24/24 06:13 | TJD | Mt. Juliet, TN |

## 20240412-H7-(SB08)@20-22 L1726707-08 Solid

Collected by: Ben Herrmann
Collected date/time: 04/12/24 12:15
Received date/time: 04/17/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG2271517 | 1 | 04/21/24 11:12 | 04/21/24 20:44 | JAH | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG2271547 | 1 | 04/21/24 11:12 | 04/22/24 02:03 | GLN | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M | WG2272041 | 1 | 04/23/24 07:43 | 04/24/24 01:49 | TJD | Mt. Juliet, TN |

## 20240412-H7-(SB08)@30-32 L1726707-09 Solid

Collected by: Ben Herrmann
Collected date/time: 04/12/24 12:50
Received date/time: 04/17/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG2271517 | 1 | 04/21/24 11:12 | 04/21/24 21:07 | JAH | Mt. Juliet, TN |
| Volatile Organic Compounds (GC/MS) by Method 8260B | WG2271547 | 1 | 04/21/24 11:12 | 04/22/24 02:22 | GLN | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method 8015M | WG2272041 | 1 | 04/23/24 07:43 | 04/24/24 06:25 | TJD | 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

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | ND | | 0.100 | 1 | 04/21/2024 18:04 | WG2271517 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *99.9* | | *77.0-120* | | *04/21/2024 18:04* | WG2271517 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| Ethylbenzene | ND | | 0.00250 | 1 | 04/21/2024 23:49 | WG2271547 |
| Xylenes, Total | ND | | 0.00650 | 1 | 04/21/2024 23:49 | WG2271547 |
| Naphthalene | ND | | 0.0125 | 1 | 04/21/2024 23:49 | WG2271547 |
| 1,2,4-Trimethylbenzene | ND | | 0.00500 | 1 | 04/21/2024 23:49 | WG2271547 |
| 1,3,5-Trimethylbenzene | ND | | 0.00500 | 1 | 04/21/2024 23:49 | WG2271547 |
| *(S) Toluene-d8* | *110* | | *75.0-131* | | *04/21/2024 23:49* | WG2271547 |
| *(S) 4-Bromofluorobenzene* | *97.4* | | *67.0-138* | | *04/21/2024 23:49* | WG2271547 |
| *(S) 1,2-Dichloroethane-d4* | *97.8* | | *70.0-130* | | *04/21/2024 23:49* | WG2271547 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | ND | | 4.00 | 1 | 04/25/2024 00:03 | WG2272900 |
| C28-C36 Motor Oil Range | ND | | 4.00 | 1 | 04/25/2024 00:03 | WG2272900 |
| *(S) o-Terphenyl* | *52.4* | | *18.0-148* | | *04/25/2024 00:03* | WG2272900 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | ND | | 0.100 | 1 | 04/21/2024 18:27 | WG2271517 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *99.6* | | *77.0-120* | | *04/21/2024 18:27* | WG2271517 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| Ethylbenzene | ND | | 0.00250 | 1 | 04/22/2024 00:08 | WG2271547 |
| Xylenes, Total | ND | | 0.00650 | 1 | 04/22/2024 00:08 | WG2271547 |
| Naphthalene | ND | | 0.0125 | 1 | 04/22/2024 00:08 | WG2271547 |
| 1,2,4-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 00:08 | WG2271547 |
| 1,3,5-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 00:08 | WG2271547 |
| *(S) Toluene-d8* | *109* | | *75.0-131* | | *04/22/2024 00:08* | WG2271547 |
| *(S) 4-Bromofluorobenzene* | *95.4* | | *67.0-138* | | *04/22/2024 00:08* | WG2271547 |
| *(S) 1,2-Dichloroethane-d4* | *93.9* | | *70.0-130* | | *04/22/2024 00:08* | WG2271547 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | ND | | 4.00 | 1 | 04/25/2024 01:53 | WG2272900 |
| C28-C36 Motor Oil Range | 12.4 | | 4.00 | 1 | 04/25/2024 01:53 | WG2272900 |
| *(S) o-Terphenyl* | *60.0* | | *18.0-148* | | *04/25/2024 01:53* | WG2272900 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | ND | | 0.100 | 1 | 04/23/2024 23:23 | WG2272570 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *91.0* | | *77.0-120* | | *04/23/2024 23:23* | WG2272570 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| Ethylbenzene | ND | | 0.00250 | 1 | 04/22/2024 00:27 | WG2271547 |
| Xylenes, Total | ND | | 0.00650 | 1 | 04/22/2024 00:27 | WG2271547 |
| Naphthalene | ND | | 0.0125 | 1 | 04/22/2024 00:27 | WG2271547 |
| 1,2,4-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 00:27 | WG2271547 |
| 1,3,5-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 00:27 | WG2271547 |
| *(S) Toluene-d8* | *108* | | *75.0-131* | | *04/22/2024 00:27* | WG2271547 |
| *(S) 4-Bromofluorobenzene* | *98.0* | | *67.0-138* | | *04/22/2024 00:27* | WG2271547 |
| *(S) 1,2-Dichloroethane-d4* | *91.0* | | *70.0-130* | | *04/22/2024 00:27* | WG2271547 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | ND | | 4.00 | 1 | 04/25/2024 01:28 | WG2272900 |
| C28-C36 Motor Oil Range | 5.02 | | 4.00 | 1 | 04/25/2024 01:28 | WG2272900 |
| *(S) o-Terphenyl* | *40.6* | | *18.0-148* | | *04/25/2024 01:28* | WG2272900 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | ND | | 0.100 | 1 | 04/21/2024 19:13 | WG2271517 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *99.7* | | *77.0-120* | | *04/21/2024 19:13* | WG2271517 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| Ethylbenzene | ND | | 0.00250 | 1 | 04/22/2024 00:46 | WG2271547 |
| Xylenes, Total | ND | | 0.00650 | 1 | 04/22/2024 00:46 | WG2271547 |
| Naphthalene | ND | | 0.0125 | 1 | 04/22/2024 00:46 | WG2271547 |
| 1,2,4-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 00:46 | WG2271547 |
| 1,3,5-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 00:46 | WG2271547 |
| *(S) Toluene-d8* | *107* | | *75.0-131* | | *04/22/2024 00:46* | WG2271547 |
| *(S) 4-Bromofluorobenzene* | *95.6* | | *67.0-138* | | *04/22/2024 00:46* | WG2271547 |
| *(S) 1,2-Dichloroethane-d4* | *99.4* | | *70.0-130* | | *04/22/2024 00:46* | WG2271547 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | ND | | 4.00 | 1 | 04/24/2024 01:25 | WG2272041 |
| C28-C36 Motor Oil Range | ND | | 4.00 | 1 | 04/24/2024 01:25 | WG2272041 |
| *(S) o-Terphenyl* | *73.9* | | *18.0-148* | | *04/24/2024 01:25* | WG2272041 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | ND | | 0.100 | 1 | 04/23/2024 23:46 | WG2272570 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *90.6* | | *77.0-120* | | *04/23/2024 23:46* | WG2272570 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| Ethylbenzene | ND | | 0.00250 | 1 | 04/22/2024 01:06 | WG2271547 |
| Xylenes, Total | ND | | 0.00650 | 1 | 04/22/2024 01:06 | WG2271547 |
| Naphthalene | ND | | 0.0125 | 1 | 04/22/2024 01:06 | WG2271547 |
| 1,2,4-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 01:06 | WG2271547 |
| 1,3,5-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 01:06 | WG2271547 |
| *(S) Toluene-d8* | *108* | | *75.0-131* | | *04/22/2024 01:06* | WG2271547 |
| *(S) 4-Bromofluorobenzene* | *97.9* | | *67.0-138* | | *04/22/2024 01:06* | WG2271547 |
| *(S) 1,2-Dichloroethane-d4* | *95.4* | | *70.0-130* | | *04/22/2024 01:06* | WG2271547 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | 14.8 | | 4.00 | 1 | 04/24/2024 07:14 | WG2272041 |
| C28-C36 Motor Oil Range | 84.1 | | 4.00 | 1 | 04/24/2024 07:14 | WG2272041 |
| *(S) o-Terphenyl* | *58.4* | | *18.0-148* | | *04/24/2024 07:14* | WG2272041 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 0.115 | | 0.100 | 1 | 04/21/2024 19:59 | WG2271517 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *98.8* | | *77.0-120* | | *04/21/2024 19:59* | WG2271517 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| Ethylbenzene | ND | | 0.00250 | 1 | 04/22/2024 01:25 | WG2271547 |
| Xylenes, Total | ND | | 0.00650 | 1 | 04/22/2024 01:25 | WG2271547 |
| Naphthalene | ND | | 0.0125 | 1 | 04/22/2024 01:25 | WG2271547 |
| 1,2,4-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 01:25 | WG2271547 |
| 1,3,5-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 01:25 | WG2271547 |
| *(S) Toluene-d8* | *110* | | *75.0-131* | | *04/22/2024 01:25* | WG2271547 |
| *(S) 4-Bromofluorobenzene* | *101* | | *67.0-138* | | *04/22/2024 01:25* | WG2271547 |
| *(S) 1,2-Dichloroethane-d4* | *96.9* | | *70.0-130* | | *04/22/2024 01:25* | WG2271547 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | 11.2 | | 4.00 | 1 | 04/24/2024 06:37 | WG2272041 |
| C28-C36 Motor Oil Range | 63.7 | | 4.00 | 1 | 04/24/2024 06:37 | WG2272041 |
| *(S) o-Terphenyl* | *52.9* | | *18.0-148* | | *04/24/2024 06:37* | WG2272041 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | ND | | 0.100 | 1 | 04/21/2024 20:21 | WG2271517 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *99.7* | | *77.0-120* | | *04/21/2024 20:21* | WG2271517 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| Ethylbenzene | ND | | 0.00250 | 1 | 04/22/2024 01:44 | WG2271547 |
| Xylenes, Total | ND | | 0.00650 | 1 | 04/22/2024 01:44 | WG2271547 |
| Naphthalene | ND | | 0.0125 | 1 | 04/22/2024 01:44 | WG2271547 |
| 1,2,4-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 01:44 | WG2271547 |
| 1,3,5-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 01:44 | WG2271547 |
| *(S) Toluene-d8* | *108* | | *75.0-131* | | *04/22/2024 01:44* | WG2271547 |
| *(S) 4-Bromofluorobenzene* | *96.9* | | *67.0-138* | | *04/22/2024 01:44* | WG2271547 |
| *(S) 1,2-Dichloroethane-d4* | *97.6* | | *70.0-130* | | *04/22/2024 01:44* | WG2271547 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | ND | | 4.00 | 1 | 04/24/2024 06:13 | WG2272041 |
| C28-C36 Motor Oil Range | 21.7 | | 4.00 | 1 | 04/24/2024 06:13 | WG2272041 |
| *(S) o-Terphenyl* | *57.3* | | *18.0-148* | | *04/24/2024 06:13* | WG2272041 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 0.108 | | 0.100 | 1 | 04/21/2024 20:44 | WG2271517 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *98.8* | | *77.0-120* | | *04/21/2024 20:44* | WG2271517 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| Ethylbenzene | ND | | 0.00250 | 1 | 04/22/2024 02:03 | WG2271547 |
| Xylenes, Total | ND | | 0.00650 | 1 | 04/22/2024 02:03 | WG2271547 |
| Naphthalene | ND | | 0.0125 | 1 | 04/22/2024 02:03 | WG2271547 |
| 1,2,4-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 02:03 | WG2271547 |
| 1,3,5-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 02:03 | WG2271547 |
| *(S) Toluene-d8* | *109* | | *75.0-131* | | *04/22/2024 02:03* | WG2271547 |
| *(S) 4-Bromofluorobenzene* | *101* | | *67.0-138* | | *04/22/2024 02:03* | WG2271547 |
| *(S) 1,2-Dichloroethane-d4* | *96.6* | | *70.0-130* | | *04/22/2024 02:03* | WG2271547 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | 4.65 | | 4.00 | 1 | 04/24/2024 01:49 | WG2272041 |
| C28-C36 Motor Oil Range | 30.1 | | 4.00 | 1 | 04/24/2024 01:49 | WG2272041 |
| *(S) o-Terphenyl* | *57.6* | | *18.0-148* | | *04/24/2024 01:49* | WG2272041 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 0.132 | | 0.100 | 1 | 04/21/2024 21:07 | WG2271517 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *98.5* | | *77.0-120* | | *04/21/2024 21:07* | WG2271517 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| Ethylbenzene | ND | | 0.00250 | 1 | 04/22/2024 02:22 | WG2271547 |
| Xylenes, Total | ND | | 0.00650 | 1 | 04/22/2024 02:22 | WG2271547 |
| Naphthalene | ND | | 0.0125 | 1 | 04/22/2024 02:22 | WG2271547 |
| 1,2,4-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 02:22 | WG2271547 |
| 1,3,5-Trimethylbenzene | ND | | 0.00500 | 1 | 04/22/2024 02:22 | WG2271547 |
| *(S) Toluene-d8* | *109* | | *75.0-131* | | *04/22/2024 02:22* | WG2271547 |
| *(S) 4-Bromofluorobenzene* | *101* | | *67.0-138* | | *04/22/2024 02:22* | WG2271547 |
| *(S) 1,2-Dichloroethane-d4* | *100* | | *70.0-130* | | *04/22/2024 02:22* | WG2271547 |

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

| Analyte | Result mg/kg | Qualifier | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | 6.72 | | 4.00 | 1 | 04/24/2024 06:25 | WG2272041 |
| C28-C36 Motor Oil Range | 39.6 | | 4.00 | 1 | 04/24/2024 06:25 | WG2272041 |
| *(S) o-Terphenyl* | *49.7* | | *18.0-148* | | *04/24/2024 06:25* | WG2272041 |

## Method Blank (MB)

(MB) R4060934-3 04/21/24 12:50

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | U | | 0.0217 | 0.100 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *105* | | | *77.0-120* |

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

(LCS) R4060934-1 04/21/24 11:41 • (LCSD) R4060934-2 04/21/24 12:04

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCSD Result mg/kg | LCS Rec. % | LCSD Rec. % | Rec. Limits % | LCS Qualifier | LCSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 5.00 | 5.37 | 5.37 | 107 | 107 | 72.0-127 | | | 0.000 | 20 |
| *(S) a,a,a-Trifluorotoluene(FID)* | | | | *107* | *107* | *77.0-120* | | | | |

## Method Blank (MB)

(MB) R4061449-3 04/23/24 21:06

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 0.0444 | J | 0.0217 | 0.100 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *96.2* | | | *77.0-120* |

## Laboratory Control Sample (LCS)

(LCS) R4061449-2 04/23/24 20:21

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 5.00 | 5.14 | 103 | 72.0-127 | |
| *(S) a,a,a-Trifluorotoluene(FID)* | | | *118* | *77.0-120* | |

## Method Blank (MB)

(MB) R4061092-3 04/21/24 22:03

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Ethylbenzene | U | | 0.000737 | 0.00250 |
| Xylenes, Total | U | | 0.000880 | 0.00650 |
| Naphthalene | U | | 0.00488 | 0.0125 |
| 1,2,4-Trimethylbenzene | U | | 0.00158 | 0.00500 |
| 1,3,5-Trimethylbenzene | U | | 0.00200 | 0.00500 |
| *(S) Toluene-d8* | *108* | | | *75.0-131* |
| *(S) 4-Bromofluorobenzene* | *97.5* | | | *67.0-138* |
| *(S) 1,2-Dichloroethane-d4* | *100* | | | *70.0-130* |

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

(LCS) R4061092-1 04/21/24 20:27 • (LCSD) R4061092-2 04/21/24 20:46

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCSD Result mg/kg | LCS Rec. % | LCSD Rec. % | Rec. Limits % | LCS Qualifier | LCSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 0.125 | 0.139 | 0.122 | 111 | 97.6 | 74.0-126 | | | 13.0 | 20 |
| Xylenes, Total | 0.375 | 0.403 | 0.360 | 107 | 96.0 | 72.0-127 | | | 11.3 | 20 |
| Naphthalene | 0.125 | 0.0909 | 0.0829 | 72.7 | 66.3 | 59.0-130 | | | 9.21 | 20 |
| 1,2,4-Trimethylbenzene | 0.125 | 0.115 | 0.106 | 92.0 | 84.8 | 70.0-126 | | | 8.14 | 20 |
| 1,3,5-Trimethylbenzene | 0.125 | 0.109 | 0.101 | 87.2 | 80.8 | 73.0-127 | | | 7.62 | 20 |
| *(S) Toluene-d8* | | | | *103* | *104* | *75.0-131* | | | | |
| *(S) 4-Bromofluorobenzene* | | | | *102* | *97.4* | *67.0-138* | | | | |
| *(S) 1,2-Dichloroethane-d4* | | | | *92.5* | *106* | *70.0-130* | | | | |

## L1726707-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1726707-01 04/21/24 23:49 • (MS) R4061092-4 04/22/24 04:55 • (MSD) R4061092-5 04/22/24 05:14

| Analyte | Spike Amount mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 0.124 | ND | 0.146 | 0.150 | 118 | 121 | 1 | 10.0-160 | | | 2.70 | 38 |
| Xylenes, Total | 0.372 | ND | 0.415 | 0.418 | 112 | 112 | 1 | 10.0-160 | | | 0.720 | 38 |
| Naphthalene | 0.124 | ND | 0.121 | 0.119 | 97.6 | 96.0 | 1 | 10.0-160 | | | 1.67 | 36 |
| 1,2,4-Trimethylbenzene | 0.124 | ND | 0.120 | 0.121 | 96.8 | 97.6 | 1 | 10.0-160 | | | 0.830 | 36 |
| 1,3,5-Trimethylbenzene | 0.124 | ND | 0.116 | 0.117 | 93.5 | 94.4 | 1 | 10.0-160 | | | 0.858 | 38 |
| *(S) Toluene-d8* | | | | | *107* | *104* | | *75.0-131* | | | | |
| *(S) 4-Bromofluorobenzene* | | | | | *98.4* | *99.0* | | *67.0-138* | | | | |
| *(S) 1,2-Dichloroethane-d4* | | | | | *96.8* | *95.0* | | *70.0-130* | | | | |

## Method Blank (MB)

(MB) R4061710-1 04/24/24 00:08

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| C10-C28 Diesel Range | U | | 1.61 | 4.00 |
| C28-C36 Motor Oil Range | U | | 0.274 | 4.00 |
| *(S) o-Terphenyl* | *79.4* | | | *18.0-148* |

## Laboratory Control Sample (LCS)

(LCS) R4061710-2 04/24/24 00:24

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| C10-C28 Diesel Range | 50.0 | 37.6 | 75.2 | 50.0-150 | |
| *(S) o-Terphenyl* | | | *75.1* | *18.0-148* | |

## L1726753-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1726753-04 04/24/24 07:38 • (MS) R4061710-3 04/24/24 07:51 • (MSD) R4061710-4 04/24/24 08:03

| Analyte | Spike Amount mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | 50.0 | 22.3 | 40.7 | 38.6 | 36.8 | 32.6 | 1 | 50.0-150 | J6 | J6 | 5.30 | 20 |
| *(S) o-Terphenyl* | | | | | *65.2* | *63.1* | | *18.0-148* | | | | |

## Method Blank (MB)

(MB) R4061892-1 04/24/24 23:26

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| C10-C28 Diesel Range | U | | 1.61 | 4.00 |
| C28-C36 Motor Oil Range | U | | 0.274 | 4.00 |
| *(S) o-Terphenyl* | *82.9* | | | *18.0-148* |

## Laboratory Control Sample (LCS)

(LCS) R4061892-2 04/24/24 23:38

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| C10-C28 Diesel Range | 50.0 | 33.2 | 66.4 | 50.0-150 | |
| *(S) o-Terphenyl* | | | *68.6* | *18.0-148* | |

## L1727838-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1727838-05 04/25/24 03:06 • (MS) R4061892-3 04/25/24 03:18 • (MSD) R4061892-4 04/25/24 03:31

| Analyte | Spike Amount mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | 49.4 | ND | 22.6 | 24.0 | 40.0 | 43.1 | 1 | 50.0-150 | J6 | J6 | 6.01 | 20 |
| *(S) o-Terphenyl* | | | | | *48.0* | *46.2* | | *18.0-148* | | | | |

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

| | |
|---|---|
| MDL | Method Detection Limit. |
| ND | Not detected at the Reporting Limit (or MDL where applicable). |
| RDL | Reported Detection Limit. |
| Rec. | Recovery. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| (S) | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media. |
| 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. |
| J6 | The sample matrix interfered with the ability to make any accurate determination; spike value is low. |

# 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 [1] | TN00003 |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina [1] | DW21704 |
| Georgia | NELAP | North Carolina [3] | 41 |
| Georgia [1] | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio–VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN200002 |
| Iowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LA000356 |
| Kentucky [1 6] | KY90010 | South Carolina | 84004002 |
| Kentucky [2] | 16 | South Dakota | n/a |
| Louisiana | AI30792 | Tennessee [1 4] | 2006 |
| Louisiana | LA018 | Texas | T104704245-20-18 |
| Maine | TN00003 | Texas [5] | 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 [5] | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |
| EPA–Crypto | TN00003 | | |

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

* 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**

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):

Immediately Packed on Ice N ___ Y X

***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**

Pace Analytical® National Center for Testing & Innovation

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

Chain of Custody Page ___ of ___

L # 1726707
A102

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | TPH- GRO,DRO,ORO | Total xylenes, ethylbenzene, | 1,2,4 & 1,3,5 TMB's | Naphthalene | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20240412-H7-(SB06)@10-11 | Grab | SS | 10-11 | 4/12/2024 | 830 | 1 | X | X | X | X | | -01 |
| 20240412-H7-(SB06)@20-22 | Grab | SS | 20-22 | 4/12/2024 | 915 | 1 | X | X | X | X | | -02 |
| 20240412-H7-(SB06)@30-32 | Grab | SS | 30-32 | 4/12/2024 | 1000 | 1 | X | X | X | X | | -03 |
| 20240412-H7-(SB07)@10-12 | Grab | SS | 10-12 | 4/12/2024 | 1015 | 1 | X | X | X | X | | -04 |
| 20240412-H7-(SB07)@20-21 | Grab | SS | 20-21 | 4/12/2024 | 1050 | 1 | X | X | X | X | | -05 |
| 20240412-H7-(SB07)@30-32 | Grab | SS | 30-32 | 4/12/2024 | 1130 | 1 | X | X | X | X | | -06 |
| 20240412-H7-(SB08)@10-12 | Grab | SS | 10-12 | 4/12/2024 | 1145 | 1 | X | X | X | X | | -07 |
| 20240412-H7-(SB08)@20-22 | Grab | SS | 20-22 | 4/12/2024 | 1215 | 1 | X | X | X | X | | -08 |
| 20240412-H7-(SB08)@30-32 | Grab | SS | 30-32 | 4/12/2024 | 1250 | 1 | X | X | X | X | | -09 |
| | | | | | | | | | | | | |

* 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 # 1642 6830 6845 8

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

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR |
|---|---|---|---|---|
| | 4 15 24 | 1200 | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: |
| | 4 15 24 | 1600 | | TAB 1.1.1.1.2 |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: Time: |
| | | | | 4-17-24 9:00 |

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

# ANALYTICAL REPORT

July 18, 2023

Revised Report

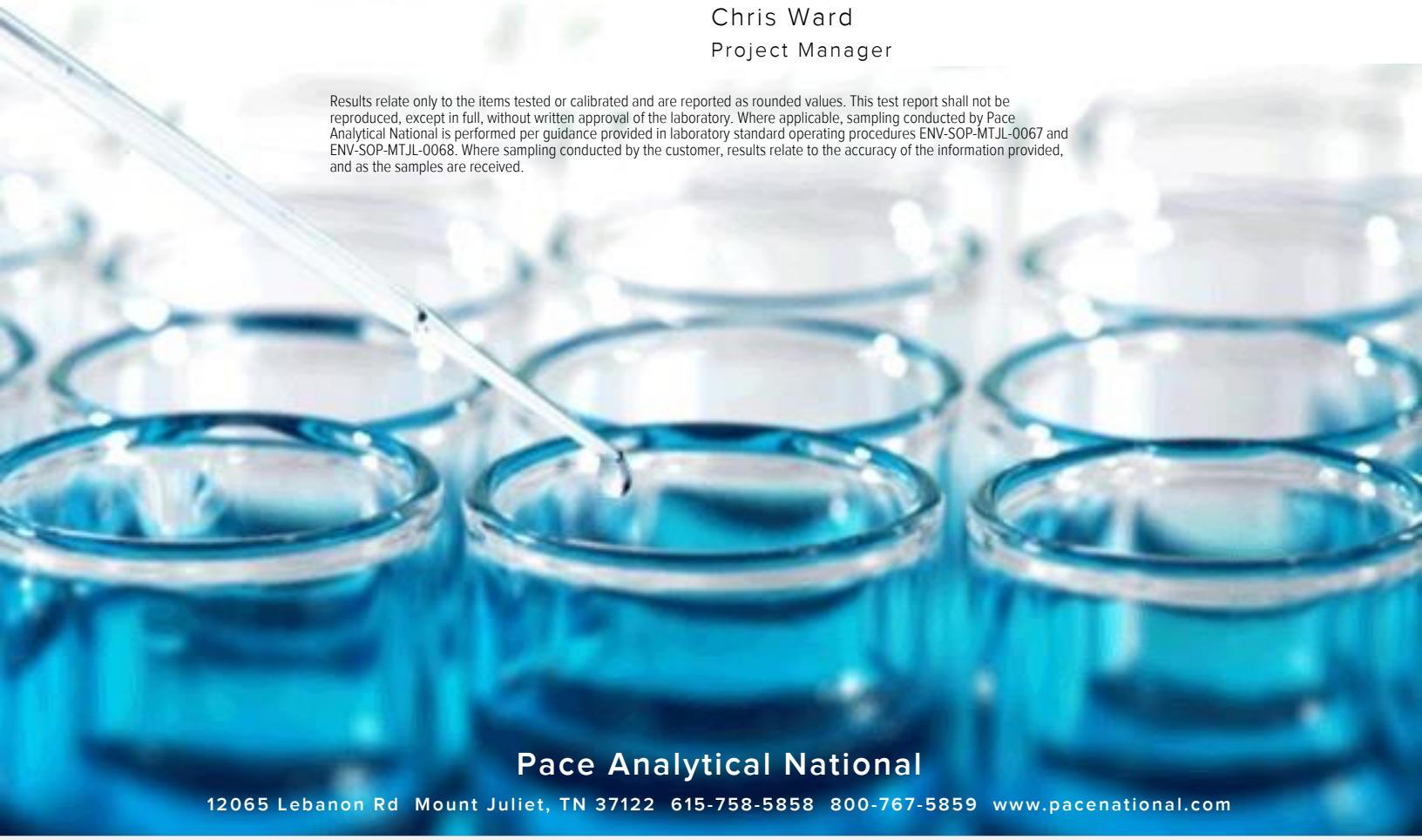
## Caerus Oil and Gas

| | |
|---|---|
| Sample Delivery Group: | L1633300 |
| Samples Received: | 07/07/2023 |
| Project Number: | H7 |
| Description: | |
| Site: | H7 |
| Report To: | Jake Janicek<br>143 Diamond Avenue<br>Parachute, CO 81635 |

Entire Report Reviewed By:

Chris Ward
Project Manager





Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

# TABLE OF CONTENTS

## 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

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|
| Sodium Adsorption Ratio | 2.29 | | 1 | 07/17/2023 12:06 | 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 15:14 | WG2091346 |

## Wet Chemistry by Method 9045D

| Analyte | Result pH | Qualifier | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|
| pH | 8.73 | T8 | 1 | 07/10/2023 11:00 | WG2091619 |

Sample Narrative:

L1633300-01 WG2091619: 8.73 at 20.9C

## Wet Chemistry by Method 9050AMod

| Analyte | Result umhos/cm | Qualifier | RDL umhos/cm | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| Specific Conductance | 356 | | 10.0 | 1 | 07/10/2023 12:40 | WG2091873 |

Sample Narrative:

L1633300-01 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 | 0.188 | J | 0.0167 | 0.200 | 1 | 07/17/2023 14:05 | WG2091364 |

## Metals (ICPMS) by Method 6020

| Analyte | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Arsenic | 4.02 | | 0.100 | 1.00 | 5 | 07/13/2023 14:49 | WG2091599 |
| Barium | 191 | | 0.152 | 2.50 | 5 | 07/13/2023 14:49 | WG2091599 |
| Cadmium | 0.381 | J | 0.0855 | 1.00 | 5 | 07/13/2023 14:49 | WG2091599 |
| Copper | 9.01 | | 0.132 | 5.00 | 5 | 07/13/2023 14:49 | WG2091599 |
| Lead | 6.97 | | 0.0990 | 2.00 | 5 | 07/13/2023 14:49 | WG2091599 |
| Nickel | 9.04 | | 0.197 | 2.50 | 5 | 07/13/2023 14:49 | WG2091599 |
| Selenium | 0.395 | J | 0.180 | 2.50 | 5 | 07/13/2023 14:49 | WG2091599 |
| Silver | U | | 0.0865 | 0.500 | 5 | 07/13/2023 14:49 | WG2091599 |
| Zinc | 24.9 | J | 0.740 | 25.0 | 5 | 07/13/2023 14:49 | WG2091599 |

## 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 | 609 | | 4.34 | 20.0 | 200 | 07/12/2023 18:24 | WG2093007 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *96.9* | | | *77.0-120* | | *07/12/2023 18:24* | WG2093007 |

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

| Analyte | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0228 | | 0.00934 | 0.0200 | 20 | 07/11/2023 04:11 | WG2092297 |
| Toluene | 1.44 | | 0.0260 | 0.100 | 20 | 07/11/2023 04:11 | WG2092297 |
| Ethylbenzene | 1.41 | | 0.0147 | 0.0500 | 20 | 07/11/2023 04:11 | WG2092297 |
| Xylenes, Total | 15.2 | J5 | 0.0176 | 0.130 | 20 | 07/11/2023 04:11 | WG2092297 |
| 1,2,4-Trimethylbenzene | 4.47 | J5 | 0.0316 | 0.100 | 20 | 07/11/2023 04:11 | WG2092297 |
| 1,3,5-Trimethylbenzene | 3.97 | J5 | 0.0400 | 0.100 | 20 | 07/11/2023 04:11 | WG2092297 |
| *(S) Toluene-d8* | *111* | | | *75.0-131* | | *07/11/2023 04:11* | WG2092297 |
| *(S) 4-Bromofluorobenzene* | *102* | | | *67.0-138* | | *07/11/2023 04:11* | WG2092297 |
| *(S) 1,2-Dichloroethane-d4* | *97.9* | | | *70.0-130* | | *07/11/2023 04:11* | WG2092297 |

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

| Analyte | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | 264 | | 1.61 | 4.00 | 1 | 07/13/2023 15:06 | WG2093536 |
| C28-C36 Motor Oil Range | 26.3 | | 0.274 | 4.00 | 1 | 07/13/2023 15:06 | WG2093536 |
| *(S) o-Terphenyl* | *45.4* | | | *18.0-148* | | *07/13/2023 15:06* | WG2093536 |

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

| Analyte | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Acenaphthene | U | | 0.00209 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| Anthracene | U | | 0.00230 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| Benzo(a)anthracene | U | | 0.00173 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| Benzo(b)fluoranthene | U | | 0.00153 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| Benzo(k)fluoranthene | U | | 0.00215 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| Benzo(a)pyrene | U | | 0.00179 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| Chrysene | U | | 0.00232 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| Dibenz(a,h)anthracene | U | | 0.00172 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| Fluoranthene | U | | 0.00227 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| Fluorene | 0.00876 | | 0.00205 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00181 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| 1-Methylnaphthalene | 0.154 | | 0.00449 | 0.0200 | 1 | 07/13/2023 05:25 | WG2093557 |
| 2-Methylnaphthalene | 0.416 | | 0.00427 | 0.0200 | 1 | 07/13/2023 05:25 | WG2093557 |
| Naphthalene | 0.219 | | 0.00408 | 0.0200 | 1 | 07/13/2023 05:25 | WG2093557 |
| Pyrene | U | | 0.00200 | 0.00600 | 1 | 07/13/2023 05:25 | WG2093557 |
| *(S) p-Terphenyl-d14* | *88.0* | | | *23.0-120* | | *07/13/2023 05:25* | WG2093557 |
| *(S) Nitrobenzene-d5* | *162* | J1 | | *14.0-149* | | *07/13/2023 05:25* | WG2093557 |
| *(S) 2-Fluorobiphenyl* | *79.4* | | | *34.0-125* | | *07/13/2023 05:25* | WG2093557 |

## Calculated Results

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|
| Sodium Adsorption Ratio | 6.27 | | 1 | 07/17/2023 12:09 | 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 15:19 | WG2091346 |

## Wet Chemistry by Method 9045D

| Analyte | Result pH | Qualifier | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|
| pH | 8.95 | T8 | 1 | 07/10/2023 11:00 | WG2091619 |

Sample Narrative:

L1633300-02 WG2091619: 8.95 at 20.9C

## 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 | WG2092223 |

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 | WG2091364 |

## 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 | WG2091599 |
| Barium | 141 | | 0.152 | 2.50 | 5 | 07/13/2023 14:53 | WG2091599 |
| Cadmium | 0.435 | J | 0.0855 | 1.00 | 5 | 07/13/2023 14:53 | WG2091599 |
| Copper | 11.9 | | 0.132 | 5.00 | 5 | 07/13/2023 14:53 | WG2091599 |
| Lead | 8.75 | | 0.0990 | 2.00 | 5 | 07/13/2023 14:53 | WG2091599 |
| Nickel | 11.9 | | 0.197 | 2.50 | 5 | 07/13/2023 14:53 | WG2091599 |
| Selenium | 0.319 | J | 0.180 | 2.50 | 5 | 07/13/2023 14:53 | WG2091599 |
| Silver | U | | 0.0865 | 0.500 | 5 | 07/13/2023 14:53 | WG2091599 |
| Zinc | 35.0 | | 0.740 | 25.0 | 5 | 07/13/2023 14:53 | WG2091599 |

## 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 | WG2093007 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *97.3* | | | *77.0-120* | | *07/12/2023 18:42* | WG2093007 |

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

| Analyte | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0760 | | 0.00934 | 0.0200 | 20 | 07/11/2023 04:29 | WG2092297 |
| Toluene | 3.32 | | 0.0260 | 0.100 | 20 | 07/11/2023 04:29 | WG2092297 |
| Ethylbenzene | 2.20 | J3 | 0.0147 | 0.0500 | 20 | 07/11/2023 04:29 | WG2092297 |
| Xylenes, Total | 30.4 | | 0.0176 | 0.130 | 20 | 07/11/2023 04:29 | WG2092297 |
| 1,2,4-Trimethylbenzene | 8.71 | | 0.0316 | 0.100 | 20 | 07/11/2023 04:29 | WG2092297 |
| 1,3,5-Trimethylbenzene | 8.59 | | 0.0400 | 0.100 | 20 | 07/11/2023 04:29 | WG2092297 |
| *(S) Toluene-d8* | *114* | | | *75.0-131* | | *07/11/2023 04:29* | WG2092297 |
| *(S) 4-Bromofluorobenzene* | *104* | | | *67.0-138* | | *07/11/2023 04:29* | WG2092297 |
| *(S) 1,2-Dichloroethane-d4* | *96.1* | | | *70.0-130* | | *07/11/2023 04:29* | WG2092297 |

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

| Analyte | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | U | | 1.61 | 4.00 | 1 | 07/13/2023 14:17 | WG2093536 |
| C28-C36 Motor Oil Range | 5.28 | | 0.274 | 4.00 | 1 | 07/13/2023 14:17 | WG2093536 |
| *(S) o-Terphenyl* | *41.6* | | | *18.0-148* | | *07/13/2023 14:17* | WG2093536 |

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

| Analyte | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Acenaphthene | U | | 0.00209 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| Anthracene | U | | 0.00230 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| Benzo(a)anthracene | U | | 0.00173 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| Benzo(b)fluoranthene | U | | 0.00153 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| Benzo(k)fluoranthene | U | | 0.00215 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| Benzo(a)pyrene | U | | 0.00179 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| Chrysene | U | | 0.00232 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| Dibenz(a,h)anthracene | U | | 0.00172 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| Fluoranthene | U | | 0.00227 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| Fluorene | 0.0115 | | 0.00205 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00181 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| 1-Methylnaphthalene | 0.200 | | 0.00449 | 0.0200 | 1 | 07/13/2023 05:45 | WG2093557 |
| 2-Methylnaphthalene | 0.552 | | 0.00427 | 0.0200 | 1 | 07/13/2023 05:45 | WG2093557 |
| Naphthalene | 0.220 | | 0.00408 | 0.0200 | 1 | 07/13/2023 05:45 | WG2093557 |
| Pyrene | U | | 0.00200 | 0.00600 | 1 | 07/13/2023 05:45 | WG2093557 |
| *(S) p-Terphenyl-d14* | *75.0* | | | *23.0-120* | | *07/13/2023 05:45* | WG2093557 |
| *(S) Nitrobenzene-d5* | *345* | J1 | | *14.0-149* | | *07/13/2023 05:45* | WG2093557 |
| *(S) 2-Fluorobiphenyl* | *69.4* | | | *34.0-125* | | *07/13/2023 05:45* | WG2093557 |

**Sample Narrative:**

L1633300-02 WG2093557: Surrogate failure due to matrix interference

## Calculated Results

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|
| | SAR | | | | |
| Sodium Adsorption Ratio | 4.06 | | 1 | 07/17/2023 12:12 | 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 15:24 | WG2091346 |

## Wet Chemistry by Method 9045D

| Analyte | Result pH | Qualifier | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|
| pH | 8.74 | T8 | 1 | 07/10/2023 11:00 | WG2091619 |

Sample Narrative:

L1633300-03 WG2091619: 8.74 at 21C

## 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 | WG2092223 |

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 | J | 0.0167 | 0.200 | 1 | 07/17/2023 14:16 | WG2091364 |

## 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 | WG2091599 |
| Barium | 85.5 | | 0.152 | 2.50 | 5 | 07/13/2023 14:56 | WG2091599 |
| Cadmium | 0.482 | J | 0.0855 | 1.00 | 5 | 07/13/2023 14:56 | WG2091599 |
| Copper | 10.3 | | 0.132 | 5.00 | 5 | 07/13/2023 14:56 | WG2091599 |
| Lead | 8.50 | | 0.0990 | 2.00 | 5 | 07/13/2023 14:56 | WG2091599 |
| Nickel | 12.5 | | 0.197 | 2.50 | 5 | 07/13/2023 14:56 | WG2091599 |
| Selenium | 0.208 | J | 0.180 | 2.50 | 5 | 07/13/2023 14:56 | WG2091599 |
| Silver | U | | 0.0865 | 0.500 | 5 | 07/13/2023 14:56 | WG2091599 |
| Zinc | 35.4 | | 0.740 | 25.0 | 5 | 07/13/2023 14:56 | WG2091599 |

## 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 | WG2092833 |
| *(S) a,a,a-Trifluorotoluene(FID)* | *81.7* | | | *77.0-120* | | *07/11/2023 21:15* | WG2092833 |

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

| Analyte | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Benzene | U | | 0.000467 | 0.00100 | 1 | 07/11/2023 03:14 | WG2092297 |
| Toluene | U | | 0.00130 | 0.00500 | 1 | 07/11/2023 03:14 | WG2092297 |
| Ethylbenzene | U | J3 | 0.000737 | 0.00250 | 1 | 07/11/2023 03:14 | WG2092297 |
| Xylenes, Total | 0.00701 | | 0.000880 | 0.00650 | 1 | 07/11/2023 03:14 | WG2092297 |
| 1,2,4-Trimethylbenzene | U | | 0.00158 | 0.00500 | 1 | 07/11/2023 03:14 | WG2092297 |
| 1,3,5-Trimethylbenzene | U | | 0.00200 | 0.00500 | 1 | 07/11/2023 03:14 | WG2092297 |
| *(S) Toluene-d8* | *114* | | | *75.0-131* | | *07/11/2023 03:14* | WG2092297 |
| *(S) 4-Bromofluorobenzene* | *94.6* | | | *67.0-138* | | *07/11/2023 03:14* | WG2092297 |
| *(S) 1,2-Dichloroethane-d4* | *93.9* | | | *70.0-130* | | *07/11/2023 03:14* | WG2092297 |

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

| Analyte | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| C10-C28 Diesel Range | 180 | | 1.61 | 4.00 | 1 | 07/13/2023 15:19 | WG2093536 |
| C28-C36 Motor Oil Range | 37.9 | | 0.274 | 4.00 | 1 | 07/13/2023 15:19 | WG2093536 |
| *(S) o-Terphenyl* | *37.0* | | | *18.0-148* | | *07/13/2023 15:19* | WG2093536 |

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

| Analyte | Result mg/kg | Qualifier | MDL mg/kg | RDL mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Acenaphthene | U | | 0.00209 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| Anthracene | U | | 0.00230 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| Benzo(a)anthracene | U | | 0.00173 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| Benzo(b)fluoranthene | U | | 0.00153 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| Benzo(k)fluoranthene | U | | 0.00215 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| Benzo(a)pyrene | U | | 0.00179 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| Chrysene | U | | 0.00232 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| Dibenz(a,h)anthracene | U | | 0.00172 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| Fluoranthene | U | | 0.00227 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| Fluorene | U | | 0.00205 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00181 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| 1-Methylnaphthalene | U | | 0.00449 | 0.0200 | 1 | 07/13/2023 06:05 | WG2093557 |
| 2-Methylnaphthalene | U | | 0.00427 | 0.0200 | 1 | 07/13/2023 06:05 | WG2093557 |
| Naphthalene | U | | 0.00408 | 0.0200 | 1 | 07/13/2023 06:05 | WG2093557 |
| Pyrene | U | | 0.00200 | 0.00600 | 1 | 07/13/2023 06:05 | WG2093557 |
| *(S) p-Terphenyl-d14* | *70.4* | | | *23.0-120* | | *07/13/2023 06:05* | WG2093557 |
| *(S) Nitrobenzene-d5* | *63.6* | | | *14.0-149* | | *07/13/2023 06:05* | WG2093557 |
| *(S) 2-Fluorobiphenyl* | *62.5* | | | *34.0-125* | | *07/13/2023 06:05* | WG2093557 |

## Method Blank (MB)

(MB) R3947843-1 07/12/23 12:52

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL 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

| Analyte | Original Result mg/kg | DUP Result mg/kg | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| 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

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

## Laboratory Control Sample (LCS)

(LCS) R3947843-2 07/12/23 12:59

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| 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

| Analyte | Spike Amount mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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

| Analyte | Spike Amount mg/kg | Original Result mg/kg | MS Result mg/kg | MS Rec. % | Dilution | Rec. Limits % | MS Qualifier |
|---|---|---|---|---|---|---|---|
| Hexavalent Chromium | 643 | U | 872 | 136 | 50 | 75.0-125 | J5 |

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

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

| Analyte | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---|---|---|---|---|---|---|
| | 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

| Analyte | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---|---|---|---|---|---|---|
| | 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

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

Sample Narrative:

LCS: 10.01 at 20.5C

## Method Blank (MB)

(MB) R3946650-1 07/10/23 12:40

| Analyte | MB Result umhos/cm | MB Qualifier | MB MDL umhos/cm | MB RDL 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 umhos/cm | DUP Result umhos/cm | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| 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 umhos/cm | DUP Result umhos/cm | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| 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 umhos/cm | LCS Result umhos/cm | LCS Rec. % | Rec. Limits % | 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 umhos/cm | MB Qualifier | MB MDL umhos/cm | MB RDL 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 umhos/cm | DUP Result umhos/cm | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| 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 umhos/cm | DUP Result umhos/cm | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| 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 umhos/cm | LCS Result umhos/cm | LCS Rec. % | Rec. Limits % | 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) R3949375-1 07/17/23 13:41

| Analyte | MB Result mg/l | MB Qualifier | MB MDL mg/l | MB RDL 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 mg/l | LCS Result mg/l | LCSD Result mg/l | LCS Rec. % | LCSD Rec. % | Rec. Limits % | LCS Qualifier | LCSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|
| Hot Water Sol. Boron | 1.00 | 0.955 | 0.969 | 95.5 | 96.9 | 80.0-120 | | | 1.41 | 20 |

# QUALITY CONTROL SUMMARY

L1633300-01,02,03

## Method Blank (MB)

(MB) R3946975-1 07/11/23 09:44

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL 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 |

## Method Blank (MB)

(MB) R3948357-1 07/13/23 13:52

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Zinc | U | | 0.740 | 25.0 |

## Laboratory Control Sample (LCS)

(LCS) R3946975-2 07/11/23 09:48

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | 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 mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | 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 mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 100 | 0.442 | 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 mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Zinc | 100 | 2.03 | 90.4 | 89.0 | 88.4 | 87.0 | 5 | 75.0-125 | | | 1.56 | 20 |

## Method Blank (MB)

(MB) R3947537-2 07/11/23 15:40

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 0.0294 | J | 0.0217 | 0.100 |
| *(S) 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 mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 5.50 | 4.53 | 82.4 | 72.0-127 | |
| *(S) a,a,a-Trifluorotoluene(FID)* | | | *100* | *77.0-120* | |

## Method Blank (MB)

(MB) R3947941-2 07/12/23 11:23

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 0.697 | J | 0.543 | 2.50 |
| *(S) 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 mg/kg | LCS Result mg/kg | LCSD Result mg/kg | LCS Rec. % | LCSD Rec. % | Rec. Limits % | LCS Qualifier | LCSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 5.50 | 6.28 | 6.39 | 114 | 116 | 72.0-127 | | | 1.74 | 20 |
| *(S) 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 mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH (GC/FID) Low Fraction | 323 | 3.38 | 373 | 337 | 114 | 103 | 58.8 | 10.0-151 | | | 10.1 | 28 |
| *(S) a,a,a-Trifluorotoluene(FID)* | | | | | *105* | *102* | | *77.0-120* | | | | |

## Method Blank (MB)

(MB) R3947915-3 07/10/23 21:18

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL 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 mg/kg | LCS Result mg/kg | LCSD Result mg/kg | LCS Rec. % | LCSD Rec. % | Rec. Limits % | LCS Qualifier | LCSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.125 | 0.127 | 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 mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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* | | | | |

## Method Blank (MB)

(MB) R3948300-2 07/13/23 16:25

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL 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 mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| C10-C28 Diesel Range | 50.0 | 31.6 | 63.2 | 50.0-150 | |
| *(S) o-Terphenyl* | | | *58.0* | *18.0-148* | |

## Method Blank (MB)

(MB) R3948583-2 07/13/23 02:07

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL 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* |

## Laboratory Control Sample (LCS)

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

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | 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 mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | 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 mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 0.0788 | 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* | | | | |

# 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. |

## 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 [1] | TN00003 |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina [1] | DW21704 |
| Georgia | NELAP | North Carolina [3] | 41 |
| Georgia [1] | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio–VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN200002 |
| Iowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LA000356 |
| Kentucky [1 6] | KY90010 | South Carolina | 84004002 |
| Kentucky [2] | 16 | South Dakota | n/a |
| Louisiana | AI30792 | Tennessee [1 4] | 2006 |
| Louisiana | LA018 | Texas | T104704245-20-18 |
| Maine | TN00003 | Texas [5] | 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 [5] | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |
| EPA–Crypto | TN00003 | | |

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

* 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.

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

L # L1633300
Table # B156
Acctn
Template:
Prelogin:
TSR:
PB:
Shipped Via:

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

Billing Information: **Same as above**

Pres Chk

Report to: **bmiddleton@caerusoilandgas.com**

Email To: **bmiddleton@caerusoilandgas.com**

Project Description: H7 - TANK BATTERY

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

Phone: 949 374 2506
Fax:

Client Project # **H7**

Lab Project # **H7**

Collected by (print): K. MORELAND

Site/Facility ID # **H7**

P.O. # **H7**

Collected by (signature): K. Moreland
Immediately Packed on Ice N ___ Y X

***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**

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth' | Date | Time | No. of Cntrs | TPH- GRO,DRO,ORO | BTEX | Table 915-1 Metals | SAR, pH, EC, Boron (water soluble) | Table 915-1 PAHs | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20230703-H7-(SB01)@10-12 | GRAB | SS | 10-12 | 7/3/23 | 1010 | 3 | X | X | X | X | X | | -01 |
| 20230703-H7-(SB01)20-22 | | | 20-22 | | 1050 | | | | | | | | -02 |
| 20230703-H7-(SB01)30-32 | | | 30-32 | | 1140 | | | | | | | | -03 |

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

**Remarks:** x2 8oz and x1 16oz per sample

pH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist
COC Seal Present/Intact: NP (Y) N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: (Y) N

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 6426 8306 6558

Trip Blank Received: Yes / (No)
HCL / MeoH
TBR

Temp: GBAC °C Bottles Received: 9
5.1 0=5.1

If preservation required by Login: Date/Time

Hold: Condition: NCF / (OK)

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| K. Moreland | 7/5/23 | 1200 | |
| Relinquished by: (Signature) | Date: 7/5/23 | Time: 1500 | Received by: (Signature) |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) |

Date: 7.7.23 Time: 9:00