October 27, 2023
Kleinfelder Project No. 20234315.001A

Mr. Andrew Verbonitz
Caerus Piceance, LLC
1001 17th Street #1600
Denver, Colorado 80202

SUBJECT: **Site Investigation Report**
Caerus Piceance, LLC
Remediation Project Number: 29978
Divide Creek Compressor Station
Garfield County, Colorado

Dear Mr. Verbonitz:

Kleinfelder Inc. (Kleinfelder) performed soil sampling activities at the Divide Creek Compressor Station blowdown tank located in Garfield County, Colorado under contract by Caerus Piceance LLC (Caerus). Enclosed is the report of work complete for this effort.

Please do not hesitate to contact me at (303) 319-2456 or by email at VDeCianne@kleinfelder.com should you have questions or concerns.

Respectfully submitted,
KLEINFELDER, INC.

Vince DeCianne
VP, Senior Principal Professional

KLEINFELDER 707 17th Street, Suite 3000, Denver, CO 80202 p | 303.237.6601 f | 303.237.6602

SITE INVESTIGATION REPORT
CAERUS PICEANCE, LLC
REMEDIATION PROJECT NUMBER: 29978
DIVIDE CREEK COMPRESSOR STATION
GARFIELD COUNTY, COLORADO

KLEINFELDER PROJECT NO. 20234315.001A

October 27, 2023

A Report Prepared for:

Caerus Piceance, LLC
1001 17th Street #1600
Denver, CO 80202

SITE INVESTIGATION REPORT
CAERUS PICEANCE, LLC
REMEDIATION PROJECT NUMBER: 29978
DIVIDE CREEK COMPRESSOR STATION
GARFIELD COUNTY, COLORADO

Prepared by:

Tristan Schmalz
Environmental Scientist/Staff Professional II

Reviewed by:

Vince DeCianne
VP, Senior Principal Professional

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Contents

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SITE INVESTIGATION REPORT

CAERUS PICEANCE, LLC

REMEDIATION PROJECT NUMBER: 29978

DIVIDE CREEK COMPRESSOR STATION

GARFIELD COUNTY, COLORADO

1 INTRODUCTION

This document was prepared by Kleinfelder Inc. (Kleinfelder) on behalf of Caerus Piceance, LLC (Caerus) to provide documentation of recent sampling support services conducted for the blowdown tank release located at the Divide Creek Compressor Station located in Garfield County, Colorado (**Figure 1**).

Kleinfelder has been contracted by Caerus to perform soil sampling support services to provide necessary information to complete the Colorado Energy and Carbon Management Commission (ECMC) (formerly Colorado Oil and Gas Conservation Commission (COGCC)) Form 27 for their upstream oil and gas production facilities located in the Piceance Basin. According to the ECMC Form 19 Spill / Release Report Approved (document # 403291201) provided to Kleinfelder by Caerus (**Appendix A),** during tank maintenance operations, historic staining was identified within the lined secondary containment. Caerus proposed soil sampling to characterize the approximate release area from the reported spill under ECMC 913.c.(3): Remediation of Spill and Release pursuant to Rule 912 (refer to **Appendix B**, Approved Form 27 Site Investigation and Remediation Workplan). Kleinfelder collected the soil samples. Samples were analyzed by Pace Analytical National (Pace) laboratory and results are reported herein.

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2 SITE LOCATION AND GEOLOGIC SETTING

The Divide Creek Compressor Station is located within the Piceance Basin in Garfield County, northwestern Colorado (SWNE, Section 1, Township 8 South, Range 92 West) (**Figure 1**). The Piceance Basin is a geologic structural basin consisting of sandstones and siltstones, containing reserves of coal, natural gas, and oil shale.

No surface water or groundwater were encountered during Kleinfelder's soil sampling activities. The general soil type within the release area was classified based on Kleinfelder's field observations using the Unified Soil Classification System (USCS) and were observed as clayey sands, sand-clay mixtures. Topographical information is provided in **Figure 1**.

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3 FIELD ACTIVITIES

As prescribed within the approved ECMC Form 27 Site Investigation and Remediation Workplan (**Appendix B**), Kleinfelder performed the following field activities at the Divide Creek Compressor Station on July 19, 2023, and August 16, 2023.

July 19, 2023

- Collected one (1) background soil sample from a location west of the Divide Creek Compressor Station from 1 foot below ground surface (bgs).
- Collected one (1) point of release (POR) soil sample from the approximate spill area at 2 feet bgs.
- Shipped the background soil sample to Pace to analyze for the contaminants of concern listed within ECMC Table 915-1, minus organics.
- Shipped the POR soil sample to Pace to analyze for the contaminants of concern listed within ECMC Table 915-1.

August 16, 2023

- Collected three (3) background soil samples from locations west, north, and east of the Divide Creek Compressor Station from 3 feet below ground surface (bgs).
- Collected one (1) POR soil sample from the approximate spill area at 3 feet bgs.
- Shipped background soil samples to Pace to analyze for the contaminants of concern listed within ECMC Table 915-1, minus organics.
- Shipped the POR soil samples to Pace to analyze for the contaminants of concern listed within ECMC Table 915-1.

Prior to Kleinfelder's soil screening and sampling activities on July 19, 2023, and August 16, 2023, Caerus identified all sample locations. On July 19, 2023, Caerus had indicated the need to collect at least one (1) background soil sample from an undisturbed and off-site location west of the Divide Creek Compressor Station from a depth of 1 foot bgs. Additionally, Caerus had indicated the need to collect one sample from the POR area. WCO Oilfield Services (WCO) was on-site relocating the tank and associated containment. Mike Knox of Caerus directed WCO to excavate down approximately 2 vertical feet directly beneath where the tank resided. Kleinfelder then collected one (1) soil sample from the POR area at 2 feet bgs. WCO then removed 2 vertical feet of soil from the area directly beneath where the lined containment resided.

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Kleinfelder field screened the north, east, south, and west walls of the excavation. Hydrocarbon odors and visible soil staining were not observed at any sample location and all photoionization detector (PID) readings were below 4 parts per million (PPM).

Kleinfelder returned to the site on August 16, 2023, and was directed by Caerus to collect additional background samples at a depth of 3 feet bgs. Kleinfelder collected one background soil sample from three locations west, north, and east of the Divide Creek Compressor Station at 3 feet bgs for a total of three (3) soil samples. Kleinfelder then collected one (1) soil sample from the POR area at a depth of 3 feet bgs. Soil sample conditions and locations from both sampling events are provided in **Table 1**.

Soil samples were collected from a stainless-steel hand auger or a stainless-steel hand trowel and placed into four laboratory-supplied, 9-ounce jars with Teflon lids per sample. Each sample was collected directly from the hand auger or trowel from the appropriate depth and placed into the glass jars. The samples were immediately placed on ice in a cooler. Standard chain-of-custody (COC) procedures were used during sampling and transportation to Pace in Mount Juliet, Tennessee (via FEDEX). Background soil samples were analyzed for contaminants of concern listed in ECMC Table 915-1 excluding organics. Site soil samples were analyzed for contaminants of concern listed in ECMC Table 915-1.

Sampling equipment (i.e., hand auger cutter head, soil sampler, etc.) was washed with a solution of Liquinox® detergent, rinsed with tap water, and then distilled water between samples. During soil sampling activities, Kleinfelder documented staining and/or odor observations, if any, and screened the soil with a PID. Kleinfelder placed the soil into a Ziploc® plastic bag directly from the hand auger for screening with the PID. The PID is a MiniRAE 3000®, which is owned and maintained by Caerus. Prior to use, Kleinfelder calibrated the PID, which passed calibration.

4 RESULTS

Kleinfelder observed soil conditions within the POR area during the soil sampling activities. Hydrocarbon odors and soil staining were not observed at the sample locations. PID readings were all below 4 PPM from the sample locations. **Table 1** summarizes the samples and associated field observations.

Excluding arsenic and pH, the sample analytical results did not exceed the ECMC Table 915-1 Residential Soil Screening Levels (RSSLs) (**see Table 2**).

- Arsenic was detected at concentrations above the Table 915-1 RSSLs from both POR area samples; however, both sample results for arsenic were below the site-specific background range for arsenic (1.51-4.07 mg/kg).
- pH was detected at a concentration above the Table 915-1 RSSLs and site-specific background from both POR area samples.

Analytical results are summarized in **Table 2** and were compared to ECMC Table 915-1 RSSLs as requested by Caerus. Site-specific and background laboratory reports are provided in **Appendix C**. Sample locations are provided in **Figure 2.**

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5 CONCLUSIONS AND RECOMMENDATIONS

Hydrocarbon odors and soil staining were not observed at the sample locations and PID readings were all below 4 PPM (**Table 1**). Excluding pH at both POR area samples, the sample analytical results did not exceed the ECMC Table 915-1 RSSLs and site-specific background levels (**Table 2**).

Kleinfelder recommends requesting approval to compare sample results to ECMC Table 915-1 RSSLs through a Supplemental ECMC Form 27. Based on field assessment and desktop review of the area, it is believed there is no reasonable pathway for groundwater within the investigation area. The nearest registered water well is located approximately 2,500 feet southwest of the Divide Creek Compressor Station and has a constructed depth of 120 feet. This well does not have a listed yield depth. The Divide Creek Compressor Station resides on an elevated point relative to the surrounding landscape and is approximately 800 feet higher in elevation than the nearest surface water, which is Divide Creek. Divide Creek is located approximately 3,000 feet northeast of the site. Kleinfelder also recommends requesting approval for a reduced analyte suite of pH only. pH will need to be vertically and horizontally delineated adjacent to the POR.

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6 LIMITATIONS

Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of different clients. It should be recognized that definition and evaluation of geologic and environmental conditions are a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions present due to the limitations of data from field studies. Although risk can never be eliminated, more detailed and extensive studies yield more information, which may help understand and manage the level of risk. Since detailed study and analysis involves greater expense, our clients participate in determining levels of service that provide adequate information for their purposes at acceptable levels of risk. More extensive studies, including subsurface studies or field tests, should be performed to reduce uncertainties. Acceptance of this report will indicate that Caerus has reviewed the document and determined that it does not need or want a greater level of service than provided.

During the course of the performance of Kleinfelder's services, hazardous materials may have been discovered. Kleinfelder assumes no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury that results from pre-existing hazardous materials being encountered or present on the project site, or from the discovery of such hazardous materials. Nothing contained in this report should be construed or interpreted as requiring Kleinfelder to assume the status of an owner, operator, or generator, or person who arranges for disposal, transport, storage, or treatment of hazardous materials within the meaning of any governmental statute, regulation, or order. Caerus is solely responsible for directing notification of all governmental agencies, and the public at large, of the existence, release, treatment, or disposal of any hazardous materials observed at the project site, either before or during performance of Kleinfelder's services. Caerus is responsible for directing all arrangements to lawfully store, treat, recycle, dispose, or otherwise handle hazardous materials, including cuttings and samples resulting from Kleinfelder’s services.

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FIGURES

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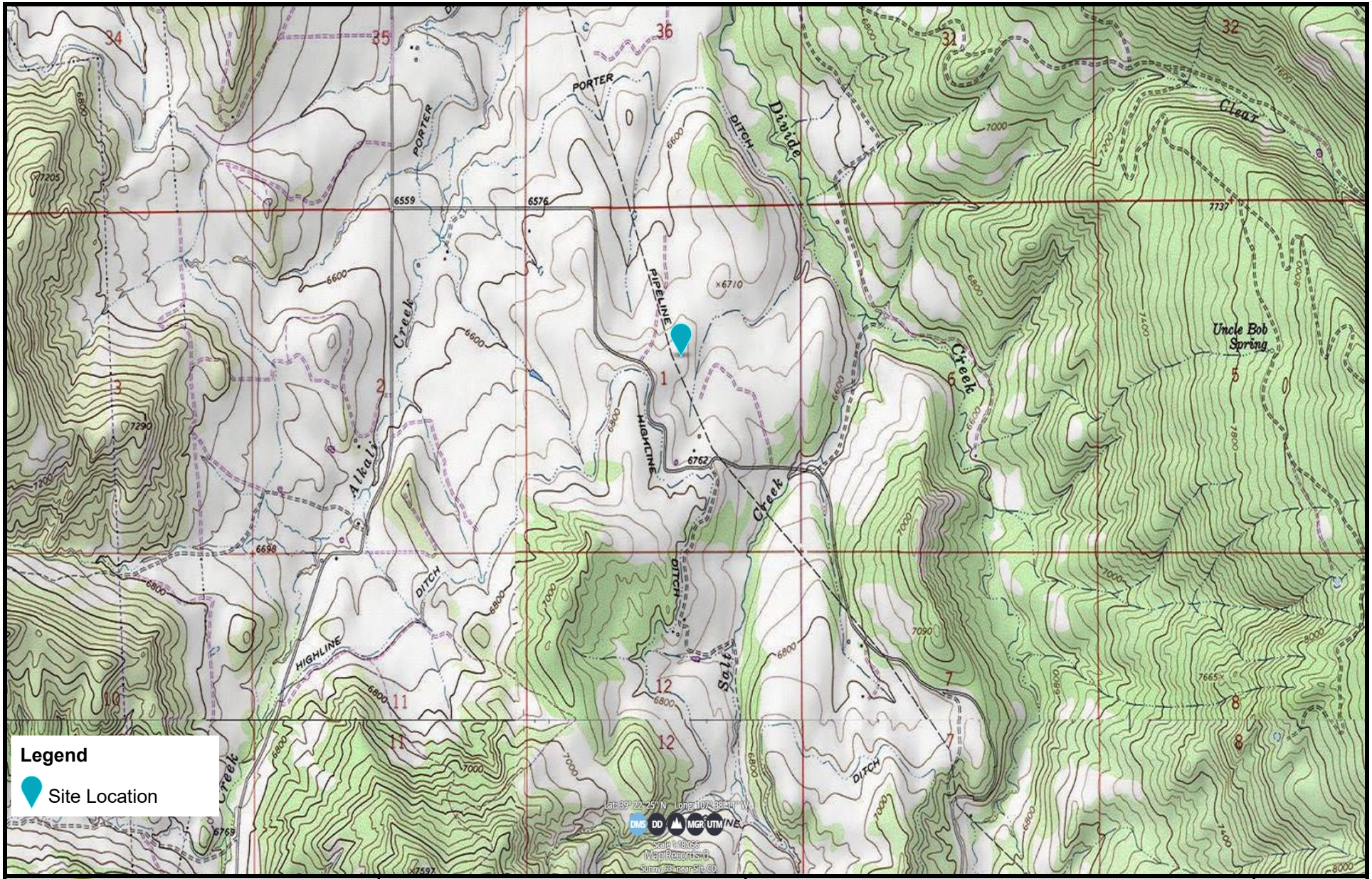

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PROJECT NO.	20234315.001A
DRAWN:	10/24/2023
DRAWN BY:	T. Schmalz
CHECKED BY:	J. Veith
FILE NAME:	Divide Creek CS Topographical Map.pub

Topographical Map

Caerus Piceance, LLC
Remediation Project Number: 29978
Divide Creek Compressor Station
SWNE Sec. 1 T8S R92W
Garfield County, Colorado

FIGURE

1

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PROJECT NO.	20234315.001A
DRAWN:	10/24/2023
DRAWN BY:	T. Schmalz
CHECKED BY:	J. Veith
FILE NAME:	Divide Creek CS Sample Locations.pub

Sample Location Map

Caerus Piceance, LLC
Remediation Project Number: 29978
Divide Creek Compressor Station
SWNE Sec. 1 T8S R92W
Garfield County, Colorado

FIGURE

2

TABLES

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Table 1- Soil Sample Summary

Caerus Piceance, LLC

Remediation Project #29978

Divide Creek Compressor Station

Garfield County, Colorado

Sample ID	Latitude (deg)	Longitude (deg)	Sample Type	Date	Time	Depth	PID (ppmv)	Odor	Staining	Comments
20230719-DCUBG-(DIVIDE CREEK TB-W)@1	39.390266	-107.616309	Background	07/19/2023	09:18 AM	1 to 1	0	N	N	
20230719-Divide Creek TB-(POR)@2	39.390106	-107.614310	Spill Area	07/19/2023	10:38 AM	2 to 2	3.1	N	N	
20230719-Divide Creek TB-(POR-EW)@2	39.390123	-107.614255	Spill Area	07/19/2023	10:59 AM	2 to 2	1.2	N	N	No sample collected
20230719-Divide Creek TB-(POR-NW)@2	39.390164	-107.614339	Spill Area	07/19/2023	11:05 AM	2 to 2	0.1	N	N	No sample collected
20230719-Divide Creek TB-(POR-SW)@2	39.390038	-107.614263	Spill Area	07/19/2023	11:31 AM	2 to 2	0.9	N	N	No sample collected
20230719-Divide Creek TB-(POR-WW)@2	39.390089	-107.614369	Spill Area	07/19/2023	11:37 AM	2 to 2	0.4	N	N	No sample collected
20230816-DCUBG-(DIVIDE CREEK TB-W)@3	39.390266	-107.616309	Background	08/16/2023	11:20 AM	3 to 3	0	N	N	
20230816-DCUBG-(DIVIDE CREEK TB-N)@3	39.390940	-107.614618	Background	08/16/2023	11:46 AM	3 to 3	0	N	N	
20230816-DCUBG-(DIVIDE CREEK TB-E)@3	39.390519	-107.613938	Background	08/16/2023	12:09 PM	3 to 3	0	N	N	
20230816-Divide Creek TB-(POR)@3	39.390106	-107.614310	Spill Area	08/16/2023	12:44 PM	3 to 3	0.6	N	N	

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Table 2 - Soil Analytical Results
Caerus Piceance, LLC
Remediation Project #29978
Divide Creek Compressor Station
Garfield County, Colorado

Sample Type		Background				Assessment	
Location ID		DCUBG-(DIVIDE CREEK TB-W)	DCUBG-(DIVIDE CREEK TB-W)	DCUBG-(DIVIDE CREEK TB-N)	DCUBG-(DIVIDE CREEK TB-E)	DIVIDE CREEK TB-(POR)	DIVIDE CREEK TB-(POR)
Sample Date		7/19/2023	8/16/2023	8/16/2023	8/16/2023	7/19/2023	8/16/2023
Sample ID		20230719-DCUBG-(DIVIDE CREEK TB-W)@1	20230816-DCUBG-(DIVIDE CREEK TB-W)3	20230816-DCUBG-(DIVIDE CREEK TB-N) @3	20230816-DCUBG-(DIVIDE CREEK TB-E) @3	20230719-DIVIDE CREEK TB-(POR)@2	20230816-DIVIDECREEKTB-(POR)@3
Sample Depth (ft bgs)		1	3	3	3	2	3
Contaminant of Concern	**Cleanup Concentration (mg/kg unless otherwise noted)**						
Soil TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons)	500	NM	NM	NM	NM	46.460	1.5303 J J3 B
TPH Low Fraction GRO (C6-C10)		NM	NM	NM	NM	0.360	0.0903 J J3
DRO (C10-C28)		NM	NM	NM	NM	17.0	<1.61 U
MRO (C28-C36)		NM	NM	NM	NM	29.1	1.44 B J
Soils and Groundwater - liquid hydrocarbons including condensate and oil	Below Visual Detection Limits	Below Visual Detection Limits	Below Visual Detection Limits	Below Visual Detection Limits	Below Visual Detection Limits	Below Visual Detection Limits	Below Visual Detection Limits
Electrical conductivity (EC) (by saturated paste method)	<4mmhos/cm	0.0313	0.2350	0.1040	0.2250	0.190	0.239
Sodium adsorption ratio (SAR) (by saturated paste method)	<6 SAR units	0.146	0.131	0.169	0.196	3.27	1.91
pH (by saturated paste method)	6–8.3 pH units	6.88 T8	7.83 T8	8.04 T8	8.02 T8	9.37 T8	8.90 T8
Boron (hot water soluble soil extract)	2 mg/L	0.321	0.260	0.207	0.182 J	0.164 J	0.0819 J
Organic Compounds in Soils	**Residential Soil Screening Level Concentrations**						
benzene	1.2	NM	NM	NM	NM	<0.000467 U	<0.000467 U
toluene	490	NM	NM	NM	NM	<0.00130 U	<0.00130 U
ethylbenzene	5.8	NM	NM	NM	NM	<0.000737 U	<0.000737 U
xylenes (sum of o-, m- and p- isomers = total xylenes)	58	NM	NM	NM	NM	<0.000880 U	0.00113 J
1,2,4-trimethylbenzene	30	NM	NM	NM	NM	<0.00158 U	<0.00158 U
1,3,5-trimethylbenzene	27	NM	NM	NM	NM	<0.00200 U	<0.00200 U
acenaphthene	360	NM	NM	NM	NM	<0.00209 U	<0.00209 U
anthracene	1800	NM	NM	NM	NM	<0.00230 U	<0.00230 U
benz(a)anthracene	1.1	NM	NM	NM	NM	<0.00173 U	<0.00173 U
benzo(b)fluoranthene	1.1	NM	NM	NM	NM	<0.00153 U	<0.00153 U
benzo(k)fluoranthene	11	NM	NM	NM	NM	<0.00215 U	<0.00215 U
benzo(a)pyrene	0.11	NM	NM	NM	NM	<0.00179 U	<0.00179 U
chrysene	110	NM	NM	NM	NM	<0.00232 U	<0.00232 U
dibenz(a,h)anthracene	0.11	NM	NM	NM	NM	<0.00172 U	<0.00172 U
fluoranthene	240	NM	NM	NM	NM	<0.00227 U	<0.00227 U
fluorene	240	NM	NM	NM	NM	0.00593 J	<0.00205 U
indeno(1,2,3-cd)pyrene	1.1	NM	NM	NM	NM	<0.00181 U	<0.00181 U
pyrene	180	NM	NM	NM	NM	<0.00200 U	<0.00200 U
1-methylnaphthalene	18	NM	NM	NM	NM	0.00470 J	<0.00449 U
2-methylnaphthalene	24	NM	NM	NM	NM	<0.00427 U	<0.00427 U
naphthalene	2	NM	NM	NM	NM	<0.00408 U	<0.00408 U
Metals in Soils	**Residential Soil Screening Level Concentrations**						
arsenic	0.68	3.30	4.07 O1	2.01	1.51	1.15	1.37
barium	15000	151	239 O1	165	172	128	165
cadmium	71	0.170 J	0.243 J	0.224 J	0.163 J	0.163 J	0.234 J
chromium (VI)	0.3	<0.255 U	<0.255 U	<0.255 U	<0.255 U	<0.255 U	<0.255 U
copper	3100	8.13	10.2	6.72	6.18	5.12	5.78
lead	400	8.85	13.4 O1	7.42	6.33	5.32	5.63
nickel	1500	10.3	14.5 O1	11.6	8.57	7.01	7.52
selenium	390	0.441	0.43 J	0.258 J	9.271 J	0.246 J	0.246 J
silver	390	<0.0865 U	<0.0865 U	<0.0865 U	<0.0865 U	<0.0865 U	<0.0865 U
zinc	23000	38.3	55.1 O1	39.5	30.7	30.3	30.5

NOTES:

Greater than Table 915-1 Residential Soil Screening Level (RSSL) Concentrations

Greater than Table 915-1 Standards, but less than adjusted standards (Highest background level is the adjusted standard for inorganics; 1.25X highest background level for metals).

B = The same analyte is found in the associated blank.
BG = background sample
ft bgs = feet below ground surface
GS = Ground surface
J = The identification of the analyte is acceptable: the reported value is an estimate
J3 = The associated batch quality control was outside the established quality control range for precision
MCL = maximum contaminant level
mg/kg = milligram per kilogram
mg/L = milligram per liter
mmhos/cm = millimhos per centimeter
NM = Not measured
O1 = The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference
POR = Point of release
T8 = Samples received past/too close to holding time expiration
U = Not detected at the Reporting Limit (or MDL where applicable)

APPENDIX A

ECMC FORM 19 SPILL/RELEASE REPORT (SUPPLEMENTAL)

KLEINFELDER 707 17th Street, Suite 3000, Denver, CO 80202 p | 303.237.6601 f | 303.237.6602

FORM 19 Rev 03/21

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number: 403291201
Date Received: 01/16/2023

Spill report taken by: Arauza, Steven

Spill/Release Point ID: 483468

SPILL/RELEASE REPORT (SUPPLEMENTAL)

This form is to be submitted by the party responsible for the oil and gas spill or release. Refer to COGCC Rule 912.b. for reporting requirements of spills or releases of E&P Waste, produced Fluids, or unauthorized Releases of natural gas. Submit a Site Investigation and Remediation Workplan (Form 27) if Rule 913.c. applies.

OPERATOR INFORMATON

Name of Operator: CAERUS PICEANCE LLC Operator No: 10456

Address: 1001 17TH STREET #1600

City: DENVER State: CO Zip: 80202

Contact Person: Blair Rollins

Phone Numbers

Phone: (970) 285-2925

Mobile: (970) 640-6919

Email: brollins@caerusoilandgas.com

☐ Transfer of Operatorship: Pursuant to Rule 912.f, this Supplemental Form 19 is being submitted to designate the Buying Operator as the responsible Operator for this Spill and Release.

INITIAL SPILL/RELEASE REPORT

Initial Spill/Release Report Doc# 403262436

Initial Report Date: 12/15/2022 Date of Discovery: 12/15/2022 Spill Type: Historical Release

Spill/Release Point Location:

QTRQTR SWNE SEC 1 TWP 8S RNG 92W MERIDIAN 6

Latitude: 39.390126 Longitude: -107.614336

Municipality (if within municipal boundaries): County: GARFIELD

Enter Lat./long measurement of the actual Spill/Release Point. Lat./Long. Data shall meet standards of Rule 216.

Reference Location:

Facility Type: OTHER ☐ Facility/Location ID No

Spill/Release Point Name: Divide Creek CS Blowdown Tank ☐ Well API No. (Only if the reference facility is well) 05- -

☒ No Existing Facility or Location ID No.

Estimated Total Spill Volume: use same ranges as others for values

Estimated Oil Spill Volume(bbl): 0 Estimated Condensate Spill Volume(bbl): Unknown

Estimated Flow Back Fluid Spill Volume(bbl): 0 Estimated Produced Water Spill Volume(bbl): Unknown

Estimated Other E&P Waste Spill Volume(bbl): 0 Estimated Drilling Fluid Spill Volume(bbl): 0

Specify:

Has the subject Spill/Release been controlled at the time of reporting? Yes

Land Use:

Current Land Use: NON-CROP LAND Other(Specify):

Weather Condition: Partly cloudy

Surface Owner: FEE Other(Specify):

Describe what is known about the spill/release event (what happened -- including how it was stopped, contained, and recovered):

While conducting maintenance operations on the tank, historic staining was identified within the lined secondary containment. Caerus is in the process of removing the stained gravel and assessing the liner.

List of Agencies and Other Parties Notified Pursuant to Rule 912.b.(7)-(11):

OTHER NOTIFICATIONS

Date	Agency/Party	Contact	Phone	Response
12/15/2022	Garfield County	Kirby Wynn	970-625-5905	
12/15/2022	Colorado Parks and Wildlife	Taylor Elm	970-986-9767	
12/15/2022	COGCC	Steven Arauza	720-498-5298	

REPORT CRITERIA

Rule 912.b.(1) Report to the Director (select all criteria that apply):

No — Rule 912.b.(1).A: A Spill or Release of any size that impacts or threatens to impact any Waters of the State, Public Water System, residence or occupied structure, livestock, wildlife, or publicly-maintained road.

Waters of the State: _____ Public Water System: _____

Residence or Occupied Structure: _____ Livestock: _____

Wildlife: _____ Publicly-Maintained Road: _____

No — Rule 912.b.(1).B: A Spill or Release in which 1 barrel or more of E&P Waste or produced fluids is spilled or released outside of berms or other secondary containment.

Yes — Rule 912.b.(1).C: A Spill or Release of 5 barrels or more of E&P Waste or produced Fluids regardless of whether the Spill or Release is completely contained within berms or other secondary containment.

No — Rule 912.b.(1).D: Within 6 hours of discovery, a Grade 1 Gas Leak. For a Grade 1 Gas Leak from a Flowline, the Operator also must submit the Form 19 – Initial, document number on a Form 44, Flowline Report, for the Grade 1 Gas Leak

Enter the approximate time of discovery _____ (HH:MM)

Enter the Document Number of the Grade 1 Gas Leak Report, Form 44 _____

Was there a reportable accident associated with either a Grade 1 Gas Leak or an E&P waste spill or release? _____

Enter the Document Number of the Initial Accident Report, Form 22 _____

Was there damage during excavation? _____

Was CO 811 notified prior to excavation? _____

No — Rule 912.b.(1).E: The discovery of 10 cubic yards or more of impacted material resulting from a current or historic Spill or Release. Discovery and reporting will not be contingent upon confirmation samples demonstrating exceedance of Table 915-1 standards.

Estimated Volume of Impacted Solids (cu. yd.): _____

No — Rule 912.b.(1).F: The discovery of impacted Waters of the State, including Groundwater. Discovery and reporting will not be contingent upon confirmation samples demonstrating exceedance of Table 915-1 standards. The presence of free product or hydrocarbon sheen on Groundwater or surface water is reportable. The presence of contaminated soil in contact with Groundwater or surface water is reportable. Check all that apply:

- ☐ The presence of free product or hydrocarbon sheen Surface Water
- ☐ The presence of free product or hydrocarbon sheen on Groundwater
- ☐ The presence of contaminated soil in contact with Groundwater
- ☐ The presence of contaminated soil in contact with Surface water

No — Rule 912.b.(1).G: A suspected or actual Spill or Release of any volume where the volume cannot be immediately determined, including a spill or release of any volume that daylights from the subsurface.

No — Rule 912.b.(1).H: Spill or Release resulting in vaporized hydrocarbon mists that leave the Oil and Gas Location or Off-Location Flowline right of way from an Oil and Gas Location and impacts or threatens to impact off-location property.

☐ Areas offsite of Oil & Gas Location ☐ Off-Location Flowline right of way

No — Rule 912.b.(1).I: A Release of natural gas that results in an accumulation of soil gas or gas seeps.

No — Rule 912.b.(1).J: A Release that results in natural gas in Groundwater.

SPILL/RELEASE DETAIL REPORTS

#1 Supplemental Report Date: 01/16/2023

FLUIDS	BBL's SPILLED	BBL's RECOVERED	Unknown
OIL	0	0	☐
CONDENSATE			☒
PRODUCED WATER			☒
DRILLING FLUID	0	0	☐
FLOW BACK FLUID	0	0	☐
OTHER E&P WASTE	0	0	☐

specify:

Was spill/release completely contained within berms or secondary containment? NO Was an Emergency Pit constructed? NO

*Secondary containment, **including walls & floor regardless of construction material**, must be sufficiently impervious to contain any discharge from primary containment until cleanup occurs.*

A Form 15 Pit Report shall be submitted within 30 calendar days after the construction of an emergency pit

Impacted Media (Check all that apply) ☐ Soil ☐ Groundwater ☐ Surface Water ☐ Dry Drainage Feature

Surface Area Impacted: Length of Impact (feet): Width of Impact (feet):

Depth of Impact (feet BGS): Depth of Impact (inches BGS):

How was extent determined?

Caerus is in the process of determining the extent of contamination associated with the project, and will confirm it through field investigation and laboratory analysis.

Soil/Geology Description:

Villa Grove-Zoltay loams, 15 to 30 percent slopes

Depth to Groundwater (feet BGS) 25 Number Water Wells within 1/2 mile radius: 2

If less than 1 mile, distance in feet to nearest

Water Well	2600	None ☐	Surface Water	350	None ☐
Wetlands	350	None ☐	Springs		None ☒
Livestock	1250	None ☐	Occupied Building	1350	None ☐

Additional Spill Details Not Provided Above:

CORRECTIVE ACTIONS

#1 Supplemental Report Date: 01/16/2023

Root Cause of Spill/Release: Unknown (Historical)

Other (specify):

Type of Equipment at Point of Spill/Release: Other

If "Other" selected above, specify or describe here:

Blowdown storage tank

Describe Incident & Root Cause (include specific equipment and point of failure)

Assumed internal corrosion (historic impacts identified).

Describe measures taken to prevent the problem(s) from reoccurring:

Tank was taken out of service and historic impacts will be delineated.

Volume of Soil Excavated (cubic yards): 0

Disposition of Excavated Soil (attach documentation) ☐ Offsite Disposal ☐ Onsite Treatment

☐ Other (specify)

Volume of Impacted Ground Water Removed (bbls): 0

Volume of Impacted Surface Water Removed (bbls): 0

REQUEST FOR CLOSURE

Spill/Release Reports should be closed when impacts have been remediated or when further investigation and corrective actions will take place under an approved Form 27.

Basis for Closure:

☐ Corrective Actions Completed (documentation attached, check all that apply)

☐ Horizontal and Vertical extents of impacts have been delineated.

☐ Documentation of compliance with Table 915-1 is attached.

☐ All E&P Waste has been properly treated or disposed.

☐ Work proceeding under an approved Form 27 (Rule 912.c).

Form 27 Remediation Project No:

☐ SUSPECTED Spill/Release did not occur or was below Rule 912.a.(5) reporting thresholds.

OPERATOR COMMENTS:

Caerus is submitting this Supplemental Form 19 after the 10 day reporting timeline because Caerus incorrectly tracked the Initial Form 19 (COGCC Document # 403262436) as an Initial / Supplemental Form 19 as this Spill/Release Point is related to historic impacts.

I hereby certify all statements made in this form are to the best of my knowledge true, correct, and complete.

Signed: Print Name: Blair Rollins

Title: EHS Specialist Date: 01/16/2023 Email: brollins@caerusoilandgas.com

COA Type	Description

0 COA

Attachment List

Att Doc Num	Name
403291201	SPILL/RELEASE REPORT(SUPPLEMENTAL)
403291500	AERIAL IMAGE
403291502	TOPOGRAPHIC MAP
403292564	FORM 19 SUBMITTED

Total Attach: 4 Files

General Comments

User Group	Comment	Comment Date
Environmental	Comply with outstanding COAs.	01/17/2023

Total: 1 comment(s)

APPENDIX B

ECMC FORM 27 SITE INVESTIGATION AND REMEDIATION WORKPLAN (INITIAL)

KLEINFELDER 707 17th Street, Suite 3000, Denver, CO 80202 p | 303.237.6601 f | 303.237.6602

FORM 27 Rev 5/22

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number: 403360853
Receive Date: 05/23/2023
Report taken by: Steven Arauza

Site Investigation and Remediation Workplan (Initial Form)

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. However, this shall not preclude the Operator from taking immediate action to protect public health or safety, the environment, wildlife, or livestock.
This Form 27 describes site conditions as currently understood by the Operator; approval of this Form 27 by COGCC is based on the site conditions accurately described herein; any changes in site conditions identified during or subsequent to the performance of the approved workplan may necessitate additional investigation or remediation which shall be described on a supplemental Form 27.
This Form 27 is intended to provide basic information regarding the proposed site investigation and remediation actions, but the workplan may be more fully described in attached documentation.
Closure request is not available for an Initial Site Investigation and Remediation Workplan.

OPERATOR INFORMATON

Name of Operator: CAERUS PICEANCE LLC Operator No: 10456
Address: 1001 17TH STREET #1600
City: DENVER State: CO Zip: 80202
Contact Person: Andy Verbonitz Email: averbonitz@caerusoilandgas.com

Phone Numbers
Phone: (970) 902-3598
Mobile: (970) 902-3598

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 29978 Initial Form 27 Document #: 403360853

PURPOSE INFORMATION

- [ ] Rule 913.c.(1): Pit or Cuttings Trench closure.
- [ ] Rule 913.c.(2): Buried or partially buried vessel closure, which will be by removal.
- [X] Rule 913.c.(3): Remediation of Spill and Releases pursuant to Rule 912.
- [ ] Rule 913.c.(4): Land treatment of Oily Waste pursuant to Rule 905.e.
- [ ] Rule 913.c.(5): Closure of Centralized E&P Waste Management Facilities pursuant to Rule 907.h.
- [ ] Rule 913.c.(6): Remediation of impacted Groundwater pursuant to Rule 915.e.(3).D, and the contaminant concentrations in Table 915-1.
- [ ] Rule 913.c.(7): Investigation and remediation of natural gas in soil or Groundwater.
- [ ] Rule 913.c.(8): When requested by the Director due to any potential risk to soil, Groundwater, or surface water.
- [ ] Rule 913.c.(9): Decommissioning of Oil and Gas Facilities.
- [ ] Rule 913.g: Changes of Operator.
- [ ] Rule 915.b: Request to leave elevated inorganics in situ.
- [ ] Other:

SITE INFORMATION

No Multiple Facilities

Facility Type: SPILL OR RELEASE Facility ID: 483468 API #: County Name: GARFIELD
Facility Name: Divide Creek CS Blowdown Tank Latitude: 39.390126 Longitude: -107.614336
** correct Lat/Long if needed: Latitude: Longitude:
QtrQtr: SWNE Sec: 1 Twp: 8S Range: 92W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SC
Most Sensitive Adjacent Land Use Cropland
Is domestic water well within 1/4 mile? Yes
Is surface water within 1/4 mile? Yes
Is groundwater less than 20 feet below ground surface? No

Other Potential Receptors within 1/4 mile

The surface water identified above is a stock pond found on the intermittent drainage feature east of the project which flows north to West Divide Creek.

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- [X] **E&P Waste**
  - [X] Produced Water
  - [ ] Oil
  - [X] Condensate
  - [ ] Drilling Fluids
  - [ ] Drill Cuttings
- [ ] **Other E&P Waste**
  - [ ] Workover Fluids
  - [ ] Tank Bottoms
  - [ ] Pigging Waste
  - [ ] Rig Wash
  - [ ] Spent Filters
  - [ ] Pit Bottoms
  - [ ] Other (as described by EPA) _____
- [ ] **Non-E&P Waste** _____

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	To be determined	Field assessment and laboratory analysis

INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

During tank maintenance staining was encountered inside the secondary containment. Upon inspection, it was determined that the secondary containment liner is likely jeopardized and historical contamination is present. Upon discovery of historical impacts the, tank was bottomed out and isolated from use so that no additional contamination would occur. Following assessment the secondary containment will be re-built and the tank will be repaired and re-lined. Please refer to Form 19 Document numbers 403262436 and 403291201 for complete list of initial actions taken associated with the project.

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

[X] Will soil samples be collected as part of this investigation? (Number, type (grab/composite), analyses, and locations of samples):

Following removal of effected equipment (tank and secondary containment), a full assessment will be undertaken. Soil samples will be collected to define vertical and lateral extents of any contamination that is present. Samples will be submitted for full Table 915-1 analysis list. Please see attached aerial photo, which defines initial area to be assessed.

Proposed Groundwater Sampling

[ ] Will groundwater samples be collected as part of this investigation? (Number, analyses, and locations of samples):

In the event that groundwater is encountered, Caerus will immediately notify the COGCC and attempt to collect a representative sample for analysis of COGCC Table 915-1 groundwater standards.

Proposed Surface Water Sampling

[ ] Will surface water samples be collected as part of this investigation? (Number, analyses, and locations of samples):

Additional Investigative Actions

[ ] Additional alternative investigative actions described in attached Site Investigation Plan (summary):

Soil samples will be collected from an adjacent, undisturbed area to document background inorganic levels and concentration of the region.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 0

Number of soil samples exceeeding 915-1

Was the areal and vertical extent of soil contamination delineated?

Approximate areal extent (square feet)

NA / ND

Highest concentration of TPH (mg/kg)

Highest concentration of SAR

BTEX > 915-1

Vertical Extent > 915-1 (in feet)

Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet)

Number of groundwater monitoring wells installed

Number of groundwater samples exceeding 915-1

Highest concentration of Benzene (µg/l)

Highest concentration of Toluene (µg/l)

Highest concentration of Ethylbenzene (µg/l)

Highest concentration of Xylene (µg/l)

Highest concentration of Methane (mg/l)

Surface Water

0 Number of surface water samples collected

Number of surface water samples exceeding 915-1

If surface water is impacted, other agency notification may be required.

OTHER INVESTIGATION INFORMATION

☐ Were impacts to adjacent property or offsite impacts identified?

☐ Were background samples collected as part of this site investigation?

☐ Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards)

Volume of liquid waste (barrels)

☒ Is further site investigation required?

Following removal of effected equipment (tank and secondary containment), a full assessment will be undertaken. Soil samples will be collected to define vertical and lateral extents of any contamination that is present. Samples will be submitted for full Table 915-1 analysis list. Please see attached aerial photo, which defines initial area to be assessed.

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Once the extent of contamination has been delineated. Soil will either be excavated and hauled offsite for disposal, or in-situ remedial options will be evaluated.

REMEDIATION SUMMARY

Describe how remediation of existing impacts to soil and groundwater is to be accomplished (i.e. summarize remedial action plan). Provide a brief narrative description including: technical justification, schedule for implementation, estimated time to attain NFA status, plus plans and specifications for the selected remedial action technology.

Once the extent of contamination has been delineated. Soil will either be excavated and hauled offsite for disposal, or in-situ remedial options will be evaluated.

Soil Remediation Summary

☐ **In Situ**

Bioremediation (or enhanced bioremediation)

Chemical oxidation

☐ **Ex Situ**

Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards)

_____ Air sparge / Soil vapor extraction

_____ Natural Attenuation

_____ Other _____

Name of Licensed Disposal Facility or COGCC Facility ID # _____

_____ Excavate and onsite remediation

_____ Land Treatment

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

_____ Other _____

Groundwater Remediation Summary

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

_____ Air sparge / Soil vapor extraction

_____ Natural Attenuation

_____ Other _____

GROUNDWATER MONITORING

If groundwater has been impacted, describe proposed monitoring plan, including # of wells or sample points, monitoring schedule, analytical methods, points of compliance. Attach a groundwater monitoring location diagram.

In the event that groundwater is encountered at the site during field investigation activities, Caerus will immediately notify the COGCC and attempt to collect a representative sample for COGCC Table 915-1 analysis.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

[X] Quarterly [ ] Semi-Annually [ ] Annually [ ] Other

[ ] **Request Alternative Reporting Schedule:**

[ ] Semi-Annually [ ] Annually [ ] Other

Rule 913.e:
After initial approval of a Form 27, the Operator will provide quarterly update reports in a Supplemental Form 27 to document progress of site investigation and remediation, unless an alternative reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule based on site-specific conditions.

Report Type: [ ] Groundwater Monitoring [ ] Land Treatment Progress Report [ ] O&M Report

[ ] Other

Adequacy of Operator's General Liability Insurance and Financial Assurance

Describe the adequacy of the Operator's general liability insurance and Financial Assurance to fully address the anticipated costs of Remediation, including the estimated remaining cost for this project (below).
If this information has been provided on a Form 27 within the last 12 months, provide the Document Number of that form.

Per Rule 705.b, and in line with guidance laid out in the SBAP, Caerus has general liability insurance in the amount of $1M, and Caerus has umbrella insurance, which sits over the general liability insurance in the amount of $75M. The umbrella and general liability insurance covers property damage, bodily injury to third parties, and sudden or accidental pollution under a combined $76M.

Operator anticipates the remaining cost for this project to be: $ 15000

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation?

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

Volume of E&P Waste (solid) in cubic yards

E&P waste (solid) description

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

Volume of E&P Waste (liquid) in barrels

E&P waste (liquid) description

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

RECLAMATION PLAN

RECLAMATION PLANNING

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing.

Caerus will return any excavations to the active working surface for continued operation.

Is the described reclamation complete?

Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?

☐ Interim ☐ Final

Did the Surface Owner provide the seed mix?

If YES, does the seed mix comply with local soil conservation district recommendations?

Did the local soil conservation district provide the seed mix?

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation.

Proposed date of completion of Reclamation.

IMPLEMENTATION SCHEDULE

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

PRIOR DATES

Date of Surface Owner notification/consultation, if required.

Actual Spill or Release date, or date of discovery.

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 12/14/2022

Proposed site investigation commencement. 06/01/2023

Proposed completion of site investigation. 08/01/2023

REMEDIAL ACTION DATES

Proposed start date of Remediation. 06/01/2023

Proposed date of completion of Remediation. 09/01/2023

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

☐ Change from approved implementation schedule per Rule 913.d.(2).

Basis for change in implementation schedule:

OPERATOR COMMENT

I hereby certify all statements made in this form are to the best of my knowledge true, correct, and complete.

Signed: Andy Verbonitz Title: EHS Specialist

Submit Date: 05/23/2023 Email: averbonitz@caerusoilandgas.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Steven Arauza Date: 06/27/2023

Remediation Project Number: 29978

COA Type	Description
	Submit Supplemental eForm 19 to request closure of Spill/Release ID #483468. Supplemental report shall comply with outstanding COAs, indicate that work is proceeding under an approved eForm 27 and shall reference the Remediation Project number assigned upon approval of this report.
	Operator shall collect soil samples from areas most likely to be impacted and shall collect an appropriate number of representative soil samples to delineate the horizontal and vertical extents of contamination, per Rule 915.e.(2).B.
	Operator shall collect sample(s) from comparable, nearby non-impacted native soil for purposes of establishing background soil conditions including pH, electrical conductivity (EC) and sodium adsorption ratio (SAR), per Rule 915.e.(2).D.
	Per Rule 913.b.(2), the Operator will conduct sampling and analysis of soil, and groundwater--if encountered, to determine the horizontal and vertical extent of any contamination in excess of the cleanup concentrations in Table 915-1 for soil and groundwater. The Operator shall analyze samples for the complete Table 915-1 list and shall compare analytical results for site investigation samples to both the Table 915-1 Residential Soil Screening Level Concentrations and the Protection of Groundwater Soil Screening Level Concentrations. Submit an assessment of potential pathways to groundwater via a Supplemental Form 27.
4 COAs	

Attachment Check List

Upon approval, the approved Form 27 and all listed attachments will be indexed to the Remediation Project file. Only the approved Form 27 will also be indexed to the related Facilities.

Att Doc Num	Name
403360853	FORM 27-INITIAL-SUBMITTED
403410404	SITE INVESTIGATION PLAN

Total Attach: 2 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)

APPENDIX C

LABORATORY ANALYTICAL REPORTS

KLEINFELDER 707 17th Street, Suite 3000, Denver, CO 80202 p | 303.237.6601 f | 303.237.6602

ANALYTICAL REPORT

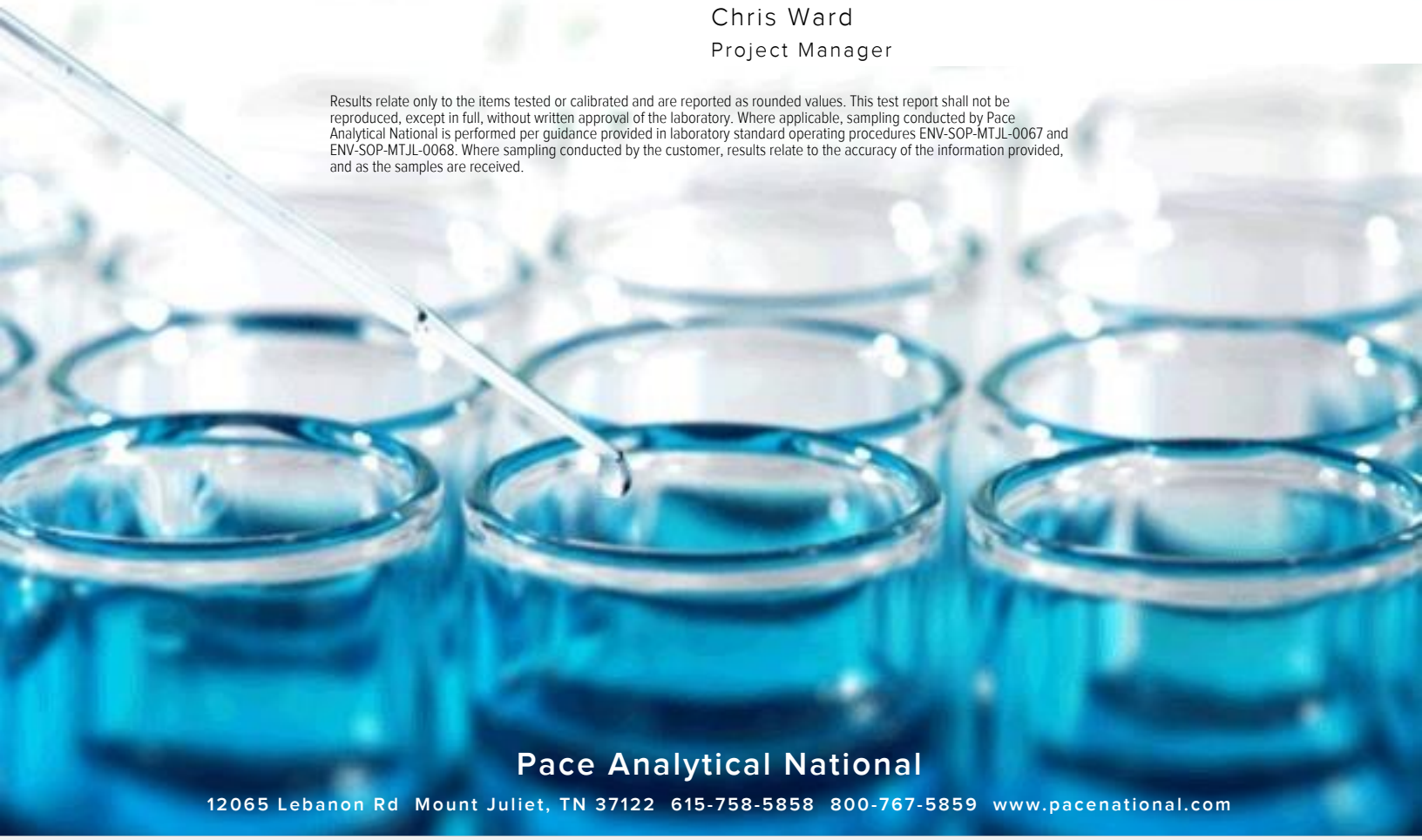
July 31, 2023

Caerus Oil and Gas

Sample Delivery Group:	L1637303
Samples Received:	07/20/2023
Project Number:	
Description:	Divide Creek Tank Breakout Investigation
Site:	DIVIDE CREEK TB
Report To:	Jake J. , Brett M. , Blair R. 143 Diamond Avenue 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

SAMPLE SUMMARY

20230719-DCUBG-(DIVIDE CREEK TB-W)@1 L1637303-01 Solid

Collected by: Tristan Schmalz
Collected date/time: 07/19/23 09:13
Received date/time: 07/20/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2102823	1	07/28/23 17:36	07/28/23 17:36	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2101368	1	07/25/23 16:26	07/26/23 11:17	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2099152	1	07/21/23 11:36	07/21/23 13:00	MCC	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2099491	1	07/22/23 07:50	07/22/23 09:45	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2102867	1	07/27/23 12:20	07/28/23 11:02	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2099561	5	07/21/23 20:05	07/27/23 00:56	SJM	Mt. Juliet, TN

CASE NARRATIVE

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

Chris Ward
Project Manager

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	0.146		1	07/28/2023 17:36	WG2102823

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	07/26/2023 11:17	WG2101368

Wet Chemistry by Method 9045D

Analyte	Result pH	Qualifier	Dilution	Analysis date / time	Batch
pH	6.88	T8	1	07/21/2023 13:00	WG2099152

Sample Narrative:

L1637303-01 WG2099152: 6.88 at 23.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	31.3		10.0	1	07/22/2023 09:45	WG2099491

Sample Narrative:

L1637303-01 WG2099491: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.321		0.0167	0.200	1	07/28/2023 11:02	WG2102867

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.30		0.100	1.00	5	07/27/2023 00:56	WG2099561
Barium	151		0.152	2.50	5	07/27/2023 00:56	WG2099561
Cadmium	0.170	J	0.0855	1.00	5	07/27/2023 00:56	WG2099561
Copper	8.13		0.132	5.00	5	07/27/2023 00:56	WG2099561
Lead	8.85		0.0990	2.00	5	07/27/2023 00:56	WG2099561
Nickel	10.3		0.197	2.50	5	07/27/2023 00:56	WG2099561
Selenium	0.441	J	0.180	2.50	5	07/27/2023 00:56	WG2099561
Silver	U		0.0865	0.500	5	07/27/2023 00:56	WG2099561
Zinc	38.3		0.740	25.0	5	07/27/2023 00:56	WG2099561

QUALITY CONTROL SUMMARY

L1637303-01

Method Blank (MB)

(MB) R3952975-1 07/26/23 11:05

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

L1637974-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1637974-06 07/26/23 12:25 • (DUP) R3952975-7 07/26/23 12:30

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

L1637996-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1637996-02 07/26/23 13:12 • (DUP) R3952975-8 07/26/23 13:17

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) R3952975-2 07/26/23 11:12

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

L1637305-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637305-01 07/26/23 11:23 • (MS) R3952975-3 07/26/23 11:28 • (MSD) R3952975-4 07/26/23 11:33

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	22.1	20.6	110	103	1	75.0-125			6.90	20

L1637305-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1637305-01 07/26/23 11:23 • (MS) R3952975-5 07/26/23 11:38

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	651	U	734	113	50	75.0-125	

L1636895-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1636895-06 07/21/23 13:00 • (DUP) R3951304-2 07/21/23 13:00

Analyte	Original Result su	DUP Result su	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
pH	7.74	7.70	1	0.518		1

Sample Narrative:

OS: 7.74 at 24.4C

DUP: 7.7 at 24.3C

L1637309-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1637309-06 07/21/23 13:00 • (DUP) R3951304-3 07/21/23 13:00

Analyte	Original Result pH	DUP Result su	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
pH	8.32	8.32	1	0.000		1

Sample Narrative:

OS: 8.32 at 22.9C

DUP: 8.32 at 22.8C

Laboratory Control Sample (LCS)

(LCS) R3951304-1 07/21/23 13:00

Analyte	Spike Amount su	LCS Result su	LCS Rec. %	Rec. Limits %	LCS Qualifier
pH	10.0	9.99	99.9	99.0-101	

Sample Narrative:

LCS: 9.99 at 22.9C

Method Blank (MB)

(MB) R3951535-1 07/22/23 09:45

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

L1637493-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1637493-05 07/22/23 09:45 • (DUP) R3951535-3 07/22/23 09:45

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	93.9	94.3	1	0.425		20

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

L1637773-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1637773-16 07/22/23 09:45 • (DUP) R3951535-4 07/22/23 09:45

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	501	493	1	1.61		20

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

Laboratory Control Sample (LCS)

(LCS) R3951535-2 07/22/23 09:45

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	732	722	98.6	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3953962-1 07/28/23 10:48

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) R3953962-2 07/28/23 10:51 • (LCSD) R3953962-3 07/28/23 10:53

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.08	1.08	108	108	80.0-120			0.406	20

QUALITY CONTROL SUMMARY

L1637303-01

Method Blank (MB)

(MB) R3953305-1 07/26/23 23:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00
Barium	0.321	J	0.152	2.50
Cadmium	U		0.0855	1.00
Copper	0.144	J	0.133	5.00
Lead	0.118	J	0.0990	2.00
Nickel	U		0.197	2.50
Selenium	U		0.180	2.50
Silver	U		0.0865	0.500
Zinc	U		0.740	25.0

Laboratory Control Sample (LCS)

(LCS) R3953305-2 07/27/23 00:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	96.1	96.1	80.0-120	
Barium	100	96.0	96.0	80.0-120	
Cadmium	100	96.5	96.5	80.0-120	
Copper	100	88.7	88.7	80.0-120	
Lead	100	92.5	92.5	80.0-120	
Nickel	100	95.1	95.1	80.0-120	
Selenium	100	98.5	98.5	80.0-120	
Silver	20.0	19.4	97.0	80.0-120	
Zinc	100	93.2	93.2	80.0-120	

L1637493-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637493-06 07/27/23 00:03 • (MS) R3953305-5 07/27/23 00:13 • (MSD) R3953305-6 07/27/23 00:23

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	30.9	119	125	88.0	93.6	5	75.0-125			4.59	20
Barium	100	485	558	644	72.6	159	5	75.0-125	V	V	14.3	20
Cadmium	100	0.696	99.5	102	98.8	102	5	75.0-125			2.66	20
Copper	100	18.6	111	110	92.7	91.1	5	75.0-125			1.41	20
Lead	100	21.6	117	114	95.4	92.7	5	75.0-125			2.35	20
Nickel	100	28.6	123	121	94.2	92.6	5	75.0-125			1.33	20
Selenium	100	1.06	103	104	102	103	5	75.0-125			1.41	20
Silver	20.0	0.105	20.1	20.1	100	100	5	75.0-125			0.0249	20
Zinc	100	58.7	172	156	113	97.3	5	75.0-125			9.63	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [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 Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

Billing Information: SAME AS LEFT

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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

Report to: ~~Jake Janicek~~ Andrew Verbonitz

Email To: averbonitz ~~jjanicek~~@caerusoilandgas.com

Project Description: Divide Creek Tank Breakout Investigation

City/State Collected: Piceance Crk, CO

Please Circle: PT MT CT ET

Phone: (970) ~~778-2314~~ 902-3598

Client Project #

Lab Project # L1137308

SDG # L1137308

Table G189

Collected by (print): Tristan Schmalz

Site/Facility ID #: Divide Creek TB

P.O. #

Acctnum:

Template:

Prelogin:

PM:

PB:

Collected by (signature): Tristan Schmalz

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

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	COGCC Table 915-1 Minus Organics	EC, pH, SAR	Arsenic, Boron	COGCC Table 910-1	Remarks	Sample # (lab only)
230719-DCWBG-(DIVIDECREEKTB-WIP)	Grab	SS	1ft	7/19/2023	9:15	4	X					-01

Tristan Schmalz
7/19/2023

* 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 # 6525 5572 0494

Sample Receipt Checklist

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

	Date:	Time:			
Relinquished by: (Signature) Tristan Schmalz	7/19/2023	16:45	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by: (Signature)	7/19/23	1730	Received by: (Signature)	Temp: 6.8 °C 2.0+0=2.0	Bottles Received: 4
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/20/23	Time: 0915

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

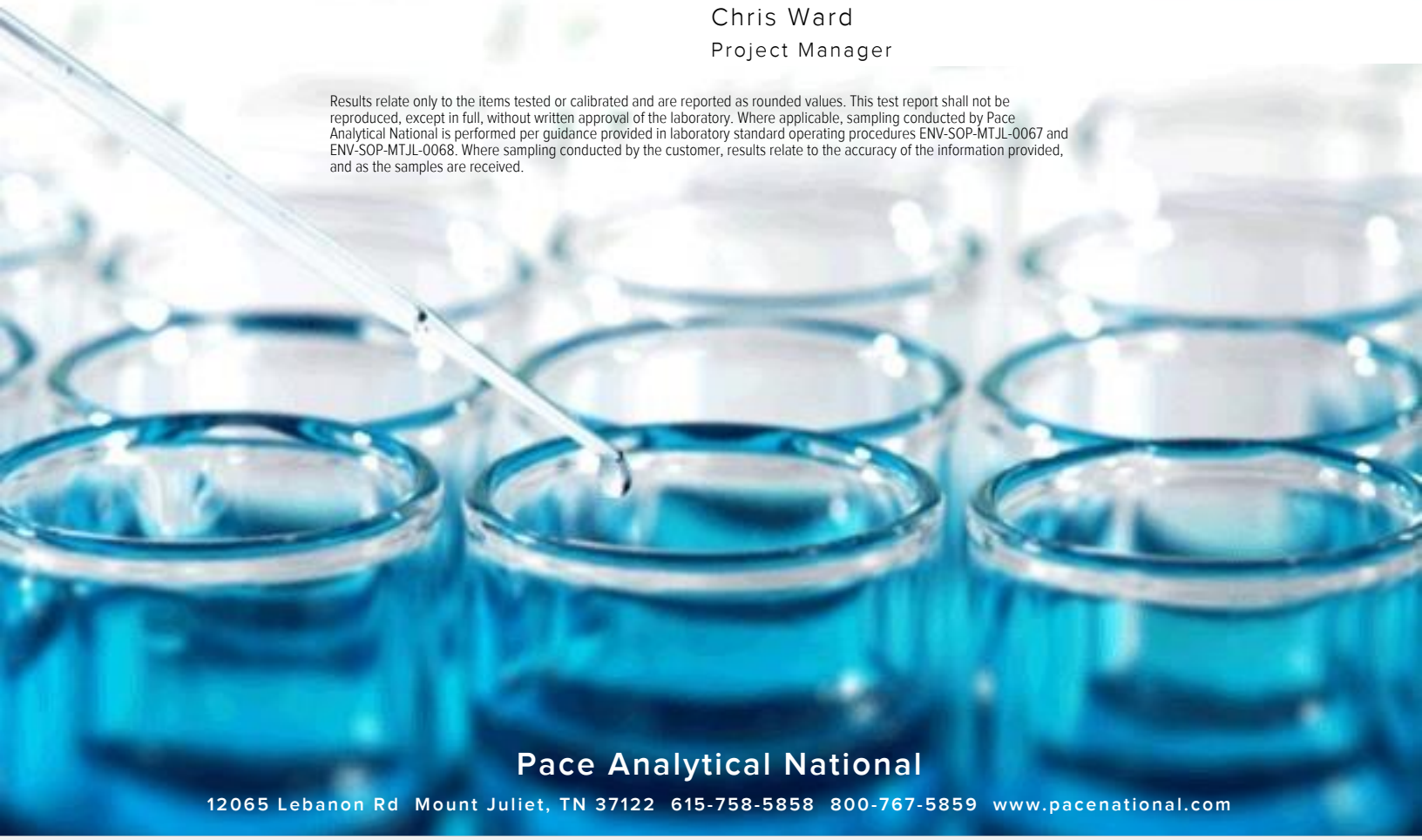
July 31, 2023

Caerus Oil and Gas

Sample Delivery Group:	L1637305
Samples Received:	07/20/2023
Project Number:	
Description:	Divide Creek Tank Breakout Investigation
Site:	DIVIDE CREEK TB
Report To:	Andy Verbonitz 143 Diamond Avenue 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

SAMPLE SUMMARY

20230719-DIVIDE CREEK TB-(POR)@2 L1637305-01 Solid

Collected by: Tristan Schmalz
Collected date/time: 07/19/23 10:40
Received date/time: 07/20/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2102823	1	07/28/23 17:39	07/28/23 17:39	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2101368	1	07/25/23 16:26	07/26/23 11:23	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2100321	1	07/24/23 08:00	07/24/23 10:00	SJA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2099491	1	07/22/23 07:50	07/22/23 09:45	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2102867	1	07/27/23 12:20	07/28/23 11:04	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2099561	5	07/21/23 20:05	07/27/23 00:59	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100146	1	07/22/23 16:13	07/24/23 02:48	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2100101	1	07/22/23 16:13	07/23/23 19:40	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2100858	1	07/25/23 15:57	07/26/23 03:01	KAP	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2103306	1	07/28/23 05:43	07/28/23 19:54	AMM	Mt. Juliet, TN

CASE NARRATIVE

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

Chris Ward
Project Manager

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	3.27		1	07/28/2023 17:39	WG2102823

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	07/26/2023 11:23	WG2101368

Wet Chemistry by Method 9045D

Analyte	Result pH	Qualifier	Dilution	Analysis date / time	Batch
pH	9.37	T8	1	07/24/2023 10:00	WG2100321

Sample Narrative:

L1637305-01 WG2100321: 9.37 at 23C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	190		10.0	1	07/22/2023 09:45	WG2099491

Sample Narrative:

L1637305-01 WG2099491: 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	0.164	J	0.0167	0.200	1	07/28/2023 11:04	WG2102867

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.15		0.100	1.00	5	07/27/2023 00:59	WG2099561
Barium	128		0.152	2.50	5	07/27/2023 00:59	WG2099561
Cadmium	0.163	J	0.0855	1.00	5	07/27/2023 00:59	WG2099561
Copper	5.12		0.132	5.00	5	07/27/2023 00:59	WG2099561
Lead	5.32		0.0990	2.00	5	07/27/2023 00:59	WG2099561
Nickel	7.01		0.197	2.50	5	07/27/2023 00:59	WG2099561
Selenium	0.246	J	0.180	2.50	5	07/27/2023 00:59	WG2099561
Silver	U		0.0865	0.500	5	07/27/2023 00:59	WG2099561
Zinc	30.3		0.740	25.0	5	07/27/2023 00:59	WG2099561

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.360		0.0217	0.100	1	07/24/2023 02:48	WG2100146
(S) a,a,a-Trifluorotoluene(FID)	*94.5*			*77.0-120*		*07/24/2023 02:48*	WG2100146

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	07/23/2023 19:40	WG2100101
Toluene	U		0.00130	0.00500	1	07/23/2023 19:40	WG2100101
Ethylbenzene	U		0.000737	0.00250	1	07/23/2023 19:40	WG2100101
Xylenes, Total	U		0.000880	0.00650	1	07/23/2023 19:40	WG2100101
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	07/23/2023 19:40	WG2100101
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	07/23/2023 19:40	WG2100101
(S) Toluene-d8	*108*			*75.0-131*		*07/23/2023 19:40*	WG2100101
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*07/23/2023 19:40*	WG2100101
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*07/23/2023 19:40*	WG2100101

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	17.0		1.61	4.00	1	07/26/2023 03:01	WG2100858
C28-C36 Motor Oil Range	29.1		0.274	4.00	1	07/26/2023 03:01	WG2100858
(S) o-Terphenyl	*70.8*			*18.0-148*		*07/26/2023 03:01*	WG2100858

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	07/28/2023 19:54	WG2103306
Anthracene	U		0.00230	0.00600	1	07/28/2023 19:54	WG2103306
Benzo(a)anthracene	U		0.00173	0.00600	1	07/28/2023 19:54	WG2103306
Benzo(b)fluoranthene	U		0.00153	0.00600	1	07/28/2023 19:54	WG2103306
Benzo(k)fluoranthene	U		0.00215	0.00600	1	07/28/2023 19:54	WG2103306
Benzo(a)pyrene	U		0.00179	0.00600	1	07/28/2023 19:54	WG2103306
Chrysene	U		0.00232	0.00600	1	07/28/2023 19:54	WG2103306
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	07/28/2023 19:54	WG2103306
Fluoranthene	U		0.00227	0.00600	1	07/28/2023 19:54	WG2103306
Fluorene	0.00593	J	0.00205	0.00600	1	07/28/2023 19:54	WG2103306
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	07/28/2023 19:54	WG2103306
1-Methylnaphthalene	0.00470	J	0.00449	0.0200	1	07/28/2023 19:54	WG2103306
2-Methylnaphthalene	U		0.00427	0.0200	1	07/28/2023 19:54	WG2103306
Naphthalene	U		0.00408	0.0200	1	07/28/2023 19:54	WG2103306
Pyrene	U		0.00200	0.00600	1	07/28/2023 19:54	WG2103306
(S) p-Terphenyl-d14	*88.2*			*23.0-120*		*07/28/2023 19:54*	WG2103306
(S) Nitrobenzene-d5	*99.9*			*14.0-149*		*07/28/2023 19:54*	WG2103306
(S) 2-Fluorobiphenyl	*90.1*			*34.0-125*		*07/28/2023 19:54*	WG2103306

Method Blank (MB)

(MB) R3952975-1 07/26/23 11:05

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

L1637974-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1637974-06 07/26/23 12:25 • (DUP) R3952975-7 07/26/23 12:30

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

L1637996-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1637996-02 07/26/23 13:12 • (DUP) R3952975-8 07/26/23 13:17

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) R3952975-2 07/26/23 11:12

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

L1637305-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637305-01 07/26/23 11:23 • (MS) R3952975-3 07/26/23 11:28 • (MSD) R3952975-4 07/26/23 11:33

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	22.1	20.6	110	103	1	75.0-125			6.90	20

L1637305-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1637305-01 07/26/23 11:23 • (MS) R3952975-5 07/26/23 11:38

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	651	U	734	113	50	75.0-125	

L1636838-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1636838-08 07/24/23 10:00 • (DUP) R3951879-2 07/24/23 10:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.77	7.77	1	0.000		1

Sample Narrative:

OS: 7.77 at 22.8C

DUP: 7.77 at 22.7C

Laboratory Control Sample (LCS)

(LCS) R3951879-1 07/24/23 10:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	9.99	99.9	99.0-101	

Sample Narrative:

LCS: 9.99 at 21.5C

Method Blank (MB)

(MB) R3951535-1 07/22/23 09:45

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

L1637493-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1637493-05 07/22/23 09:45 • (DUP) R3951535-3 07/22/23 09:45

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	93.9	94.3	1	0.425		20

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

L1637773-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1637773-16 07/22/23 09:45 • (DUP) R3951535-4 07/22/23 09:45

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	501	493	1	1.61		20

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

Laboratory Control Sample (LCS)

(LCS) R3951535-2 07/22/23 09:45

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	732	722	98.6	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3953962-1 07/28/23 10:48

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) R3953962-2 07/28/23 10:51 • (LCSD) R3953962-3 07/28/23 10:53

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.08	1.08	108	108	80.0-120			0.406	20

QUALITY CONTROL SUMMARY

L1637305-01

Method Blank (MB)

(MB) R3953305-1 07/26/23 23:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00
Barium	0.321	J	0.152	2.50
Cadmium	U		0.0855	1.00
Copper	0.144	J	0.133	5.00
Lead	0.118	J	0.0990	2.00
Nickel	U		0.197	2.50
Selenium	U		0.180	2.50
Silver	U		0.0865	0.500
Zinc	U		0.740	25.0

Laboratory Control Sample (LCS)

(LCS) R3953305-2 07/27/23 00:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	96.1	96.1	80.0-120	
Barium	100	96.0	96.0	80.0-120	
Cadmium	100	96.5	96.5	80.0-120	
Copper	100	88.7	88.7	80.0-120	
Lead	100	92.5	92.5	80.0-120	
Nickel	100	95.1	95.1	80.0-120	
Selenium	100	98.5	98.5	80.0-120	
Silver	20.0	19.4	97.0	80.0-120	
Zinc	100	93.2	93.2	80.0-120	

L1637493-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637493-06 07/27/23 00:03 • (MS) R3953305-5 07/27/23 00:13 • (MSD) R3953305-6 07/27/23 00:23

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	30.9	119	125	88.0	93.6	5	75.0-125			4.59	20
Barium	100	485	558	644	72.6	159	5	75.0-125	V	V	14.3	20
Cadmium	100	0.696	99.5	102	98.8	102	5	75.0-125			2.66	20
Copper	100	18.6	111	110	92.7	91.1	5	75.0-125			1.41	20
Lead	100	21.6	117	114	95.4	92.7	5	75.0-125			2.35	20
Nickel	100	28.6	123	121	94.2	92.6	5	75.0-125			1.33	20
Selenium	100	1.06	103	104	102	103	5	75.0-125			1.41	20
Silver	20.0	0.105	20.1	20.1	100	100	5	75.0-125			0.0249	20
Zinc	100	58.7	172	156	113	97.3	5	75.0-125			9.63	20

Method Blank (MB)

(MB) R3952730-2 07/23/23 21:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0217	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*96.9*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3952730-1 07/23/23 20:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.32	78.5	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*98.4*	*77.0-120*	

Method Blank (MB)

(MB) R3952591-2 07/23/23 13:38

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	*107*			*75.0-131*
(S) 4-Bromofluorobenzene	*93.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3952591-1 07/23/23 12:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.119	95.2	70.0-123	
Toluene	0.125	0.118	94.4	75.0-121	
Ethylbenzene	0.125	0.118	94.4	74.0-126	
Xylenes, Total	0.375	0.340	90.7	72.0-127	
1,2,4-Trimethylbenzene	0.125	0.0987	79.0	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.0979	78.3	73.0-127	
(S) Toluene-d8			*106*	*75.0-131*	
(S) 4-Bromofluorobenzene			*101*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*112*	*70.0-130*	

L1636895-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1636895-01 07/23/23 13:58 • (MS) R3952591-3 07/23/23 20:18 • (MSD) R3952591-4 07/23/23 20:37

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	0.155	0.0100	0.149	0.158	94.6	101	1.18	10.0-149			5.86	37
Toluene	0.155	0.0532	0.194	0.205	95.8	103	1.18	10.0-156			5.51	38
Ethylbenzene	0.155	0.0122	0.154	0.159	96.5	99.9	1.18	10.0-160			3.19	38
Xylenes, Total	0.468	0.0735	0.477	0.507	91.1	97.9	1.18	10.0-160			6.10	38
1,2,4-Trimethylbenzene	0.155	0.0212	0.145	0.155	84.2	91.0	1.18	10.0-160			6.67	36
1,3,5-Trimethylbenzene	0.155	0.00451	0.122	0.131	79.9	86.0	1.18	10.0-160			7.11	38
(S) Toluene-d8					*107*	*108*		*75.0-131*				
(S) 4-Bromofluorobenzene					*98.0*	*99.7*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*104*	*105*		*70.0-130*				

Method Blank (MB)

(MB) R3952690-1 07/26/23 01:41

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	*67.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3952690-2 07/26/23 01:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	31.9	63.8	50.0-150	
(S) o-Terphenyl			*86.8*	*18.0-148*	

L1637397-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637397-02 07/26/23 03:27 • (MS) R3952690-3 07/26/23 03:40 • (MSD) R3952690-4 07/26/23 04:00

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	U	34.7	30.1	69.4	60.2	1	50.0-150			14.2	20
(S) o-Terphenyl					*90.2*	*76.9*		*18.0-148*				

Method Blank (MB)

(MB) R3954693-2 07/28/23 15:57

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	*96.8*			*23.0-120*
(S) Nitrobenzene-d5	*90.4*			*14.0-149*
(S) 2-Fluorobiphenyl	*89.7*			*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R3954693-1 07/28/23 15:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0738	92.3	50.0-120	
Anthracene	0.0800	0.0720	90.0	50.0-126	
Benzo(a)anthracene	0.0800	0.0728	91.0	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0733	91.6	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0729	91.1	49.0-125	
Benzo(a)pyrene	0.0800	0.0711	88.9	42.0-120	
Chrysene	0.0800	0.0790	98.8	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0709	88.6	47.0-125	
Fluoranthene	0.0800	0.0756	94.5	49.0-129	
Fluorene	0.0800	0.0797	99.6	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0722	90.3	46.0-125	
1-Methylnaphthalene	0.0800	0.0736	92.0	51.0-121	
2-Methylnaphthalene	0.0800	0.0774	96.8	50.0-120	
Naphthalene	0.0800	0.0736	92.0	50.0-120	
Pyrene	0.0800	0.0789	98.6	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R3954693-1 07/28/23 15:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			*102*	*23.0-120*	
(S) Nitrobenzene-d5			*113*	*14.0-149*	
(S) 2-Fluorobiphenyl			*101*	*34.0-125*	

L1637288-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637288-16 07/28/23 16:16 • (MS) R3954693-3 07/28/23 16:36 • (MSD) R3954693-4 07/28/23 16:56

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	0.0776	U	0.0539	0.0602	69.5	76.8	1	14.0-127			11.0	27
Anthracene	0.0776	U	0.0478	0.0513	61.6	65.4	1	10.0-145			7.06	30
Benzo(a)anthracene	0.0776	U	0.0467	0.0506	60.2	64.5	1	10.0-139			8.02	30
Benzo(b)fluoranthene	0.0776	U	0.0489	0.0538	63.0	68.6	1	10.0-140			9.54	36
Benzo(k)fluoranthene	0.0776	U	0.0491	0.0511	63.3	65.2	1	10.0-137			3.99	31
Benzo(a)pyrene	0.0776	U	0.0517	0.0546	66.6	69.6	1	10.0-141			5.46	31
Chrysene	0.0776	U	0.0543	0.0580	70.0	74.0	1	10.0-145			6.59	30
Dibenz(a,h)anthracene	0.0776	U	0.0484	0.0494	62.4	63.0	1	10.0-132			2.04	31
Fluoranthene	0.0776	U	0.0485	0.0532	62.5	67.9	1	10.0-153			9.24	33
Fluorene	0.0776	U	0.0568	0.0624	73.2	79.6	1	11.0-130			9.40	29
Indeno(1,2,3-cd)pyrene	0.0776	U	0.0475	0.0516	61.2	65.8	1	10.0-137			8.27	32
1-Methylnaphthalene	0.0776	U	0.0574	0.0626	74.0	79.8	1	10.0-142			8.67	28
2-Methylnaphthalene	0.0776	U	0.0613	0.0664	79.0	84.7	1	10.0-137			7.99	28
Naphthalene	0.0776	U	0.0608	0.0650	78.4	82.9	1	10.0-135			6.68	27
Pyrene	0.0776	U	0.0530	0.0598	68.3	76.3	1	10.0-148			12.1	35
(S) p-Terphenyl-d14					*67.4*	*83.0*		*23.0-120*				
(S) Nitrobenzene-d5					*95.8*	*101*		*14.0-149*				
(S) 2-Fluorobiphenyl					*69.6*	*83.4*		*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
J	The identification of the analyte is acceptable; the reported value is an estimate.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [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	LAO000356
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 Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

Billing Information: SAME AS LEFT

Report to: ~~Jake Janicek~~ Andrew Verbonitz

Email To: averbonitz ~~jjanicek~~@caerusoilandgas.com

Project Description: Divide Creek Tank Treatment Investigation

City/State Collected: Piceance Crk, CO

Please Circle: PT (MT) CT ET

Phone: (970) 778-2314

Client Project #

Lab Project #

Collected by (print): Tristan Schmalz

Site/Facility ID #: Divide Creek TB

P.O. #

Collected by (signature): Tristan Schmalz

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

Pres Chk

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	COGCC Table 915-1	EC, pH, SAR	Arsenic, Boron	COGCC Table 910-1	Remarks	Sample # (lab only)
20230719-DIVIDE CREEK TB-(PDB)@2	Grab	SS	2ft	7/19/2023	10:40	4	X					-01

Tristan Schmalz 7/19/2023

Chain of Custody Page ___ of ___

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

SDG # L1657305

Table # G191

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

* 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 # 6525 5572 0494

Sample Receipt Checklist

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

Relinquished by : (Signature) Tristan Schmalz	Date: 7/19/2023	Time: 16:45	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by : (Signature)	Date: 7/19/23	Time: 1730	Received by: (Signature)	Temp: GBAG °C 2.0+0=2.0	Bottles Received: 4	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/20/23	Time: 0915	Hold:	Condition: NCF / OK

ANALYTICAL REPORT

August 25, 2023

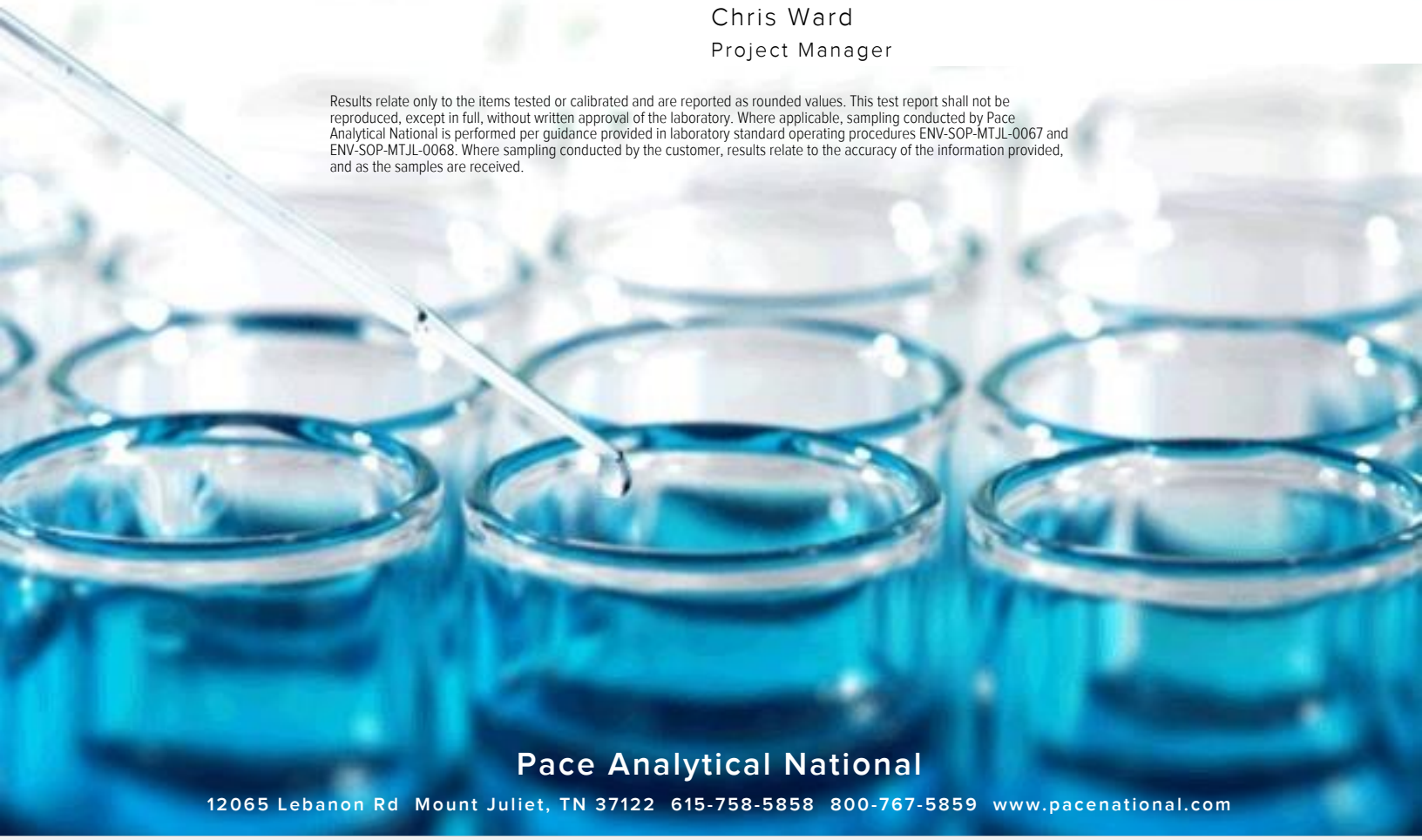
Caerus Oil and Gas

Sample Delivery Group:	L1646994
Samples Received:	08/17/2023
Project Number:	
Description:	DivideCreek TB Background Samples
Site:	DIVIDE CREEK TB
Report To:	Brett Middleton 143 Diamond Avenue 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

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SAMPLE SUMMARY

20230816-DCUBG-(DIVIDECREETHE-W) @3 L1646994-01 Solid

Collected by: Tristan Schmalz
Collected date/time: 08/16/23 11:20
Received date/time: 08/17/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2117695	1	08/24/23 10:16	08/24/23 10:16	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2115503	1	08/18/23 11:06	08/21/23 14:07	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2116585	1	08/18/23 15:07	08/19/23 14:50	NTG	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2116515	1	08/18/23 07:15	08/18/23 09:57	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2117697	1	08/20/23 20:48	08/24/23 10:47	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2117158	5	08/19/23 16:52	08/24/23 20:47	LD	Mt. Juliet, TN

20230816-DCUBG-(DIVIDECREETHE-N) @3 L1646994-02 Solid

Collected by: Tristan Schmalz
Collected date/time: 08/16/23 11:46
Received date/time: 08/17/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2117695	1	08/24/23 10:19	08/24/23 10:19	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2115503	1	08/18/23 11:06	08/21/23 14:12	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2116585	1	08/18/23 15:07	08/19/23 14:50	NTG	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2116693	1	08/18/23 15:00	08/18/23 17:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2117697	1	08/20/23 20:48	08/24/23 10:49	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2117202	5	08/19/23 19:53	08/23/23 00:46	SJM	Mt. Juliet, TN

20230816-DCUBG-(DIVIDECREETHE-E) @3 L1646994-03 Solid

Collected by: Tristan Schmalz
Collected date/time: 08/16/23 12:09
Received date/time: 08/17/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2117695	1	08/24/23 10:42	08/24/23 10:42	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2115503	1	08/18/23 11:06	08/21/23 14:17	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2116585	1	08/18/23 15:07	08/19/23 14:50	NTG	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2116515	1	08/18/23 07:15	08/18/23 09:57	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2117697	1	08/20/23 20:48	08/24/23 09:53	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2117202	5	08/19/23 19:53	08/23/23 00:49	SJM	Mt. Juliet, TN

CASE NARRATIVE

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

Chris Ward
Project Manager

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	0.131		1	08/24/2023 10:16	WG2117695

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	08/21/2023 14:07	WG2115503

Wet Chemistry by Method 9045D

Analyte	Result pH	Qualifier	Dilution	Analysis date / time	Batch
pH	7.83	T8	1	08/19/2023 14:50	WG2116585

Sample Narrative:

L1646994-01 WG2116585: 7.83 at 20.3C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	235		10.0	1	08/18/2023 09:57	WG2116515

Sample Narrative:

L1646994-01 WG2116515: 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	0.260		0.0167	0.200	1	08/24/2023 10:47	WG2117697

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.07	O1	0.100	1.00	5	08/24/2023 20:47	WG2117158
Barium	239	O1	0.152	2.50	5	08/24/2023 20:47	WG2117158
Cadmium	0.243	J	0.0855	1.00	5	08/24/2023 20:47	WG2117158
Copper	10.2		0.132	5.00	5	08/24/2023 20:47	WG2117158
Lead	13.4	O1	0.0990	2.00	5	08/24/2023 20:47	WG2117158
Nickel	14.5	O1	0.197	2.50	5	08/24/2023 20:47	WG2117158
Selenium	0.463	J	0.180	2.50	5	08/24/2023 20:47	WG2117158
Silver	U		0.0865	0.500	5	08/24/2023 20:47	WG2117158
Zinc	55.1	O1	0.740	25.0	5	08/24/2023 20:47	WG2117158

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.169		1	08/24/2023 10:19	WG2117695

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	08/21/2023 14:12	WG2115503

Wet Chemistry by Method 9045D

Analyte	Result pH	Qualifier	Dilution	Analysis date / time	Batch
pH	8.04	T8	1	08/19/2023 14:50	WG2116585

Sample Narrative:

L1646994-02 WG2116585: 8.04 at 20.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	104		10.0	1	08/18/2023 17:06	WG2116693

Sample Narrative:

L1646994-02 WG2116693: 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	0.207		0.0167	0.200	1	08/24/2023 10:49	WG2117697

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.01		0.100	1.00	5	08/23/2023 00:46	WG2117202
Barium	165		0.152	2.50	5	08/23/2023 00:46	WG2117202
Cadmium	0.224	J	0.0855	1.00	5	08/23/2023 00:46	WG2117202
Copper	6.72		0.132	5.00	5	08/23/2023 00:46	WG2117202
Lead	7.42		0.0990	2.00	5	08/23/2023 00:46	WG2117202
Nickel	11.6		0.197	2.50	5	08/23/2023 00:46	WG2117202
Selenium	0.258	J	0.180	2.50	5	08/23/2023 00:46	WG2117202
Silver	U		0.0865	0.500	5	08/23/2023 00:46	WG2117202
Zinc	39.5		0.740	25.0	5	08/23/2023 00:46	WG2117202

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.196		1	08/24/2023 10:42	WG2117695

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	08/21/2023 14:17	WG2115503

Wet Chemistry by Method 9045D

Analyte	Result pH	Qualifier	Dilution	Analysis date / time	Batch
pH	8.02	T8	1	08/19/2023 14:50	WG2116585

Sample Narrative:

L1646994-03 WG2116585: 8.02 at 20.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	225		10.0	1	08/18/2023 09:57	WG2116515

Sample Narrative:

L1646994-03 WG2116515: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.182	J	0.0167	0.200	1	08/24/2023 09:53	WG2117697

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.51		0.100	1.00	5	08/23/2023 00:49	WG2117202
Barium	172		0.152	2.50	5	08/23/2023 00:49	WG2117202
Cadmium	0.163	J	0.0855	1.00	5	08/23/2023 00:49	WG2117202
Copper	6.18		0.132	5.00	5	08/23/2023 00:49	WG2117202
Lead	6.33		0.0990	2.00	5	08/23/2023 00:49	WG2117202
Nickel	8.57		0.197	2.50	5	08/23/2023 00:49	WG2117202
Selenium	0.271	J	0.180	2.50	5	08/23/2023 00:49	WG2117202
Silver	U		0.0865	0.500	5	08/23/2023 00:49	WG2117202
Zinc	30.7		0.740	25.0	5	08/23/2023 00:49	WG2117202

Method Blank (MB)

(MB) R3963559-1 08/21/23 12:00

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

L1646298-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1646298-01 08/21/23 12:44 • (DUP) R3963559-7 08/21/23 12:49

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

L1646782-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1646782-01 08/21/23 13:41 • (DUP) R3963559-8 08/21/23 13:46

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) R3963559-2 08/21/23 12:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	11.3	113	80.0-120	

L1646269-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1646269-01 08/21/23 12:13 • (MS) R3963559-3 08/21/23 12:18 • (MSD) R3963559-4 08/21/23 12:23

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	0.611	21.5	21.6	105	105	1	75.0-125			0.170	20

L1646269-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1646269-01 08/21/23 12:13 • (MS) R3963559-5 08/21/23 12:28

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	643	0.611	529	82.2	50	75.0-125	

L1645741-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1645741-01 08/19/23 14:50 • (DUP) R3962879-2 08/19/23 14:50

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	9.43	9.44	1	0.106		1

Sample Narrative:

OS: 9.43 at 21C

DUP: 9.44 at 21C

L1646892-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1646892-02 08/19/23 14:50 • (DUP) R3962879-3 08/19/23 14:50

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	5.04	5.04	1	0.000		1

Sample Narrative:

OS: 5.04 at 20.9C

DUP: 5.04 at 20.8C

Laboratory Control Sample (LCS)

(LCS) R3962879-1 08/19/23 14:50

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 21C

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

Method Blank (MB)

(MB) R3962395-1 08/18/23 09:57

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

L1646269-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1646269-02 08/18/23 09:57 • (DUP) R3962395-3 08/18/23 09:57

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	211	212	1	0.709		20

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

L1646994-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1646994-03 08/18/23 09:57 • (DUP) R3962395-4 08/18/23 09:57

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	225	229	1	1.76		20

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

Laboratory Control Sample (LCS)

(LCS) R3962395-2 08/18/23 09:57

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	732	744	102	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3962785-1 08/18/23 17:06

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

L1647546-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1647546-05 08/18/23 17:06 • (DUP) R3962785-3 08/18/23 17:06

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	2250	2280	1	1.19		20

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

L1647549-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1647549-01 08/18/23 17:06 • (DUP) R3962785-4 08/18/23 17:06

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	6330	6390	1	0.943		20

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

Laboratory Control Sample (LCS)

(LCS) R3962785-2 08/18/23 17:06

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	732	744	102	85.0-115	

Sample Narrative:
LCS: at 25C

QUALITY CONTROL SUMMARY

L1646994-01,02,03

Method Blank (MB)

(MB) R3964879-1 08/24/23 10:13

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) R3964879-2 08/24/23 10:15 • (LCSD) R3964879-3 08/24/23 10:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.04	1.03	104	103	80.0-120			0.601	20

Method Blank (MB)

(MB) R3965242-1 08/24/23 20:40

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

Laboratory Control Sample (LCS)

(LCS) R3965242-2 08/24/23 20:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	101	101	80.0-120	
Barium	100	97.6	97.6	80.0-120	
Cadmium	100	98.3	98.3	80.0-120	
Copper	100	90.9	90.9	80.0-120	
Lead	100	100	100	80.0-120	
Nickel	100	98.3	98.3	80.0-120	
Selenium	100	103	103	80.0-120	
Silver	20.0	19.5	97.5	80.0-120	
Zinc	100	94.9	94.9	80.0-120	

L1646994-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1646994-01 08/24/23 20:47 • (MS) R3965242-5 08/24/23 20:57 • (MSD) R3965242-6 08/24/23 21:00

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	4.07	92.3	89.9	88.2	85.9	5	75.0-125			2.62	20
Barium	100	239	320	333	81.2	94.2	5	75.0-125			3.95	20
Cadmium	100	0.243	92.4	90.6	92.2	90.4	5	75.0-125			2.00	20
Copper	100	10.2	93.8	93.1	83.6	82.9	5	75.0-125			0.778	20
Lead	100	13.4	105	106	91.6	92.3	5	75.0-125			0.679	20
Nickel	100	14.5	101	97.0	86.7	82.5	5	75.0-125			4.29	20
Selenium	100	0.463	98.6	96.1	98.1	95.6	5	75.0-125			2.55	20
Silver	20.0	U	18.3	18.1	91.3	90.5	5	75.0-125			0.912	20
Zinc	100	55.1	138	135	82.7	79.6	5	75.0-125			2.31	20

Method Blank (MB)

(MB) R3964287-1 08/22/23 23:12

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	0.205	J	0.0990	2.00
Nickel	U		0.197	2.50
Selenium	U		0.180	2.50
Silver	U		0.0865	0.500
Zinc	U		0.740	25.0

Laboratory Control Sample (LCS)

(LCS) R3964287-2 08/22/23 23:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	87.8	87.8	80.0-120	
Barium	100	83.2	83.2	80.0-120	
Cadmium	100	86.9	86.9	80.0-120	
Copper	100	83.0	83.0	80.0-120	
Lead	100	87.5	87.5	80.0-120	
Nickel	100	85.2	85.2	80.0-120	
Selenium	100	89.5	89.5	80.0-120	
Silver	20.0	19.8	99.0	80.0-120	
Zinc	100	83.7	83.7	80.0-120	

L1647566-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1647566-01 08/22/23 23:19 • (MS) R3964287-5 08/22/23 23:29 • (MSD) R3964287-6 08/22/23 23:32

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	3.89	85.9	98.4	82.0	94.5	5	75.0-125			13.6	20
Barium	100	93.3	147	173	54.0	80.0	5	75.0-125	J6		16.2	20
Cadmium	100	0.578	85.2	99.2	84.6	98.6	5	75.0-125			15.1	20
Copper	100	34.2	104	121	70.1	87.1	5	75.0-125	J6		15.1	20
Lead	100	167	225	244	58.0	77.3	5	75.0-125	J6		8.25	20
Nickel	100	7.39	85.2	100	77.8	92.7	5	75.0-125			16.0	20
Selenium	100	0.193	86.9	97.9	86.7	97.7	5	75.0-125			11.9	20
Silver	20.0	0.145	19.3	21.0	95.6	104	5	75.0-125			8.38	20
Zinc	100	124	176	196	51.8	71.9	5	75.0-125	J6	J6	10.8	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [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	LAO000356
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.

Pg 1 of 1

Caerus Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

Billing Information: SAME AS LEFT

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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

Report to: Andrew Verbonitz

Email To: averbonitz@caerusoilandgas.com

Project Description: DivideCreek TB Background Samples

City/State Collected: Piceance Crk, CO

Please Circle: PT (MT) CT ET

Phone: (970) 902-3598

Client Project #

Lab Project #

SDG # L1618994

H094

Collected by (print): Tristan Schmalz

Site/Facility ID #: Divide Creek TB

P.O. #

Collected by (signature): Tristan Schmalz

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

Acctnum:
Template:
Prelogin:
PM:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	ECMC Table 915-1 Minus Organics	Remarks	Sample # (lab only)
20230816-DCUBG-(DIVIDECREEKTB-W)	G23 grab	SS	3 FT	8/16/23	11:20	3	X		-01
20230816-DCUBG-(DIVIDECREEKTB-N)	G23 grab	↓	↓	↓	11:46	3	X		-02
20230816-DCUBG-(DIVIDECREEKTB-E)	G23 grab				12:09	3	X		-03

Tristan Schmalz

8/16/2023

* 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 # 6525 5612 0233

Sample Receipt Checklist

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes (No) HCL / MeoH TBR	
Tristan Schmalz	8/16/2023	14:30			
Relinquished by : (Signature)	Date: 8/16/23	Time: 1500	Received by: (Signature)	Temp: 5.8 A 9 °C Bottles Received: 2.7+0=2.7 9	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) (18)	Date: 8/17/23 Time: 0900	Hold: / Condition: NCF / OK

ANALYTICAL REPORT

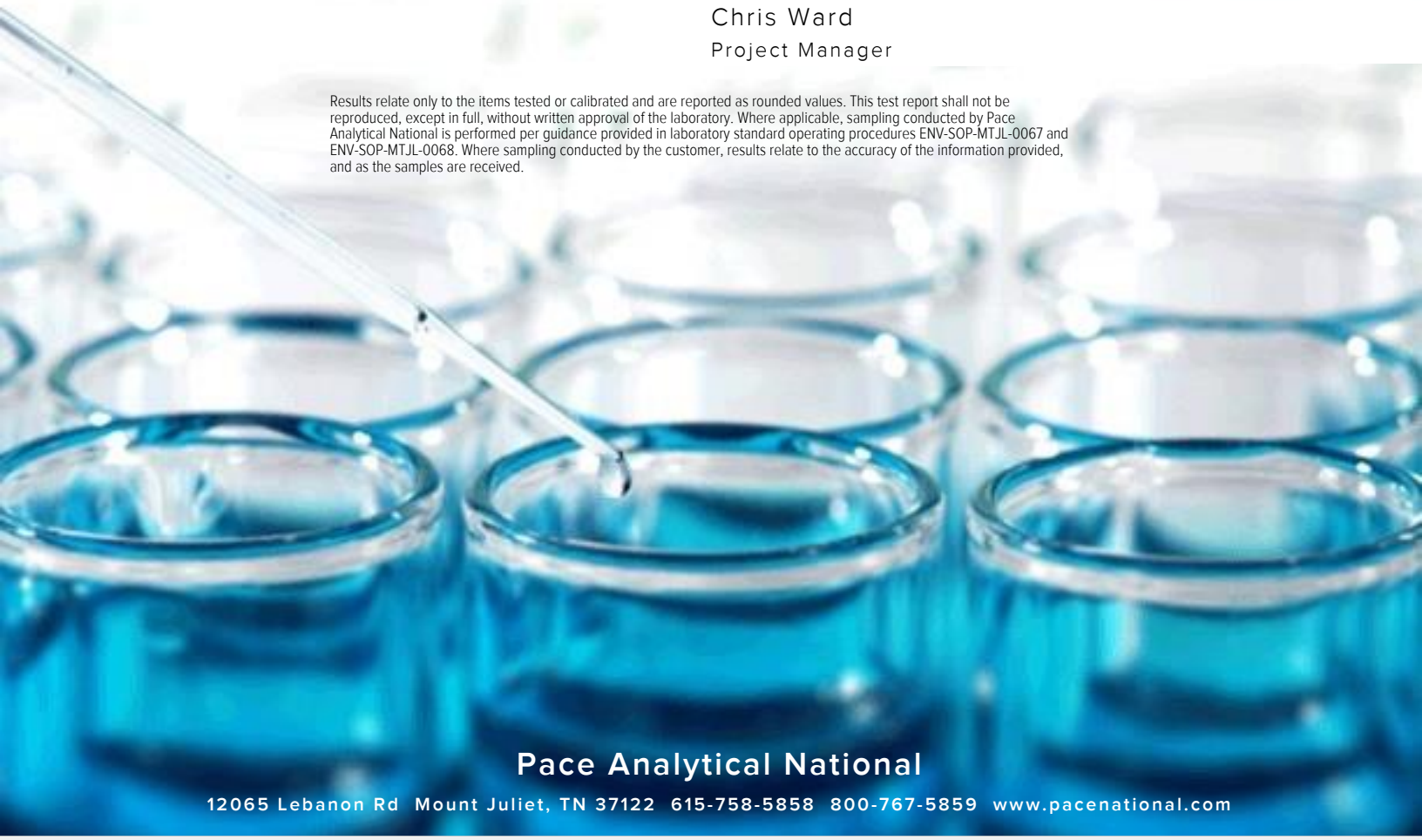
August 25, 2023

Caerus Oil and Gas

Sample Delivery Group:	L1647013
Samples Received:	08/17/2023
Project Number:	
Description:	Divide Creek TB Tank Pull
Site:	DIVIDE CREEK TB
Report To:	Blair Rollins 143 Diamond Avenue 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

SAMPLE SUMMARY

20230816-DIVIDECREEKTB-(POR)@3 L1647013-01 Solid

Collected by: Tristan Schmalz
Collected date/time: 08/16/23 12:44
Received date/time: 08/17/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2117695	1	08/24/23 10:45	08/24/23 10:45	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2116647	1	08/18/23 10:56	08/23/23 00:07	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2116585	1	08/18/23 15:07	08/19/23 14:50	NTG	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2116693	1	08/18/23 15:00	08/18/23 17:06	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2117697	1	08/20/23 20:48	08/24/23 09:56	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2117202	5	08/19/23 19:53	08/23/23 00:53	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2119974	1	08/21/23 09:18	08/24/23 03:47	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2118141	1	08/21/23 09:18	08/21/23 16:06	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2117899	1	08/21/23 21:37	08/22/23 10:14	KAP	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2117920	1	08/22/23 08:21	08/22/23 17:43	AMM	Mt. Juliet, TN

CASE NARRATIVE

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

Chris Ward
Project Manager

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	1.91		1	08/24/2023 10:45	WG2117695

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	08/23/2023 00:07	WG2116647

Wet Chemistry by Method 9045D

Analyte	Result pH	Qualifier	Dilution	Analysis date / time	Batch
pH	8.90	T8	1	08/19/2023 14:50	WG2116585

Sample Narrative:

L1647013-01 WG2116585: 8.9 at 20.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	239		10.0	1	08/18/2023 17:06	WG2116693

Sample Narrative:

L1647013-01 WG2116693: 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	0.0819	J	0.0167	0.200	1	08/24/2023 09:56	WG2117697

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.37		0.100	1.00	5	08/23/2023 00:53	WG2117202
Barium	165		0.152	2.50	5	08/23/2023 00:53	WG2117202
Cadmium	0.234	J	0.0855	1.00	5	08/23/2023 00:53	WG2117202
Copper	5.78		0.132	5.00	5	08/23/2023 00:53	WG2117202
Lead	5.63		0.0990	2.00	5	08/23/2023 00:53	WG2117202
Nickel	7.52		0.197	2.50	5	08/23/2023 00:53	WG2117202
Selenium	0.246	J	0.180	2.50	5	08/23/2023 00:53	WG2117202
Silver	U		0.0865	0.500	5	08/23/2023 00:53	WG2117202
Zinc	30.5		0.740	25.0	5	08/23/2023 00:53	WG2117202

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0903	J J3	0.0217	0.100	1	08/24/2023 03:47	WG2119974
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*77.0-120*		*08/24/2023 03:47*	WG2119974

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	08/21/2023 16:06	WG2118141
Toluene	U		0.00130	0.00500	1	08/21/2023 16:06	WG2118141
Ethylbenzene	U		0.000737	0.00250	1	08/21/2023 16:06	WG2118141
Xylenes, Total	0.00113	J	0.000880	0.00650	1	08/21/2023 16:06	WG2118141
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/21/2023 16:06	WG2118141
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/21/2023 16:06	WG2118141
(S) Toluene-d8	*101*			*75.0-131*		*08/21/2023 16:06*	WG2118141
(S) 4-Bromofluorobenzene	*90.1*			*67.0-138*		*08/21/2023 16:06*	WG2118141
(S) 1,2-Dichloroethane-d4	*84.6*			*70.0-130*		*08/21/2023 16:06*	WG2118141

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	08/22/2023 10:14	WG2117899
C28-C36 Motor Oil Range	1.44	B J	0.274	4.00	1	08/22/2023 10:14	WG2117899
(S) o-Terphenyl	*64.9*			*18.0-148*		*08/22/2023 10:14*	WG2117899

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	08/22/2023 17:43	WG2117920
Anthracene	U		0.00230	0.00600	1	08/22/2023 17:43	WG2117920
Benzo(a)anthracene	U		0.00173	0.00600	1	08/22/2023 17:43	WG2117920
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/22/2023 17:43	WG2117920
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/22/2023 17:43	WG2117920
Benzo(a)pyrene	U		0.00179	0.00600	1	08/22/2023 17:43	WG2117920
Chrysene	U		0.00232	0.00600	1	08/22/2023 17:43	WG2117920
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/22/2023 17:43	WG2117920
Fluoranthene	U		0.00227	0.00600	1	08/22/2023 17:43	WG2117920
Fluorene	U		0.00205	0.00600	1	08/22/2023 17:43	WG2117920
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/22/2023 17:43	WG2117920
1-Methylnaphthalene	U		0.00449	0.0200	1	08/22/2023 17:43	WG2117920
2-Methylnaphthalene	U		0.00427	0.0200	1	08/22/2023 17:43	WG2117920
Naphthalene	U		0.00408	0.0200	1	08/22/2023 17:43	WG2117920
Pyrene	U		0.00200	0.00600	1	08/22/2023 17:43	WG2117920
(S) p-Terphenyl-d14	*93.5*			*23.0-120*		*08/22/2023 17:43*	WG2117920
(S) Nitrobenzene-d5	*82.5*			*14.0-149*		*08/22/2023 17:43*	WG2117920
(S) 2-Fluorobiphenyl	*78.1*			*34.0-125*		*08/22/2023 17:43*	WG2117920

QUALITY CONTROL SUMMARY

L1647013-01

Method Blank (MB)

(MB) R3964125-1 08/22/23 23:18

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

L1646786-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1646786-01 08/22/23 23:31 • (DUP) R3964125-3 08/22/23 23:36

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

L1647175-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1647175-25 08/23/23 01:30 • (DUP) R3964125-8 08/23/23 01:35

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	1.03	1.58	1	41.6	P1	20

Laboratory Control Sample (LCS)

(LCS) R3964125-2 08/22/23 23:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	11.3	113	80.0-120	

L1647175-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1647175-23 08/23/23 00:49 • (MS) R3964125-5 08/23/23 00:59 • (MSD) R3964125-6 08/23/23 01:04

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 %
Hexavalent Chromium	20.0	1.37	21.0	21.9	98.3	103	1	75.0-125			4.13	20

L1647175-23 Original Sample (OS) • Matrix Spike (MS)

(OS) L1647175-23 08/23/23 00:49 • (MS) R3964125-7 08/23/23 01:09

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	643	1.37	684	106	50	75.0-125	

L1645741-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1645741-01 08/19/23 14:50 • (DUP) R3962879-2 08/19/23 14:50

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	9.43	9.44	1	0.106		1

Sample Narrative:

OS: 9.43 at 21C

DUP: 9.44 at 21C

L1646892-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1646892-02 08/19/23 14:50 • (DUP) R3962879-3 08/19/23 14:50

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	5.04	5.04	1	0.000		1

Sample Narrative:

OS: 5.04 at 20.9C

DUP: 5.04 at 20.8C

Laboratory Control Sample (LCS)

(LCS) R3962879-1 08/19/23 14:50

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 21C

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

Method Blank (MB)

(MB) R3962785-1 08/18/23 17:06

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

L1647546-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1647546-05 08/18/23 17:06 • (DUP) R3962785-3 08/18/23 17:06

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	2250	2280	1	1.19		20

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

L1647549-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1647549-01 08/18/23 17:06 • (DUP) R3962785-4 08/18/23 17:06

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	6330	6390	1	0.943		20

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

Laboratory Control Sample (LCS)

(LCS) R3962785-2 08/18/23 17:06

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	732	744	102	85.0-115	

Sample Narrative:
LCS: at 25C

QUALITY CONTROL SUMMARY

L1647013-01

Method Blank (MB)

(MB) R3964879-1 08/24/23 10:13

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) R3964879-2 08/24/23 10:15 • (LCSD) R3964879-3 08/24/23 10:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.04	1.03	104	103	80.0-120			0.601	20

QUALITY CONTROL SUMMARY

L1647013-01

Method Blank (MB)

(MB) R3964287-1 08/22/23 23:12

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	0.205	J	0.0990	2.00
Nickel	U		0.197	2.50
Selenium	U		0.180	2.50
Silver	U		0.0865	0.500
Zinc	U		0.740	25.0

Laboratory Control Sample (LCS)

(LCS) R3964287-2 08/22/23 23:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	87.8	87.8	80.0-120	
Barium	100	83.2	83.2	80.0-120	
Cadmium	100	86.9	86.9	80.0-120	
Copper	100	83.0	83.0	80.0-120	
Lead	100	87.5	87.5	80.0-120	
Nickel	100	85.2	85.2	80.0-120	
Selenium	100	89.5	89.5	80.0-120	
Silver	20.0	19.8	99.0	80.0-120	
Zinc	100	83.7	83.7	80.0-120	

L1647566-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1647566-01 08/22/23 23:19 • (MS) R3964287-5 08/22/23 23:29 • (MSD) R3964287-6 08/22/23 23:32

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	3.89	85.9	98.4	82.0	94.5	5	75.0-125			13.6	20
Barium	100	93.3	147	173	54.0	80.0	5	75.0-125	J6		16.2	20
Cadmium	100	0.578	85.2	99.2	84.6	98.6	5	75.0-125			15.1	20
Copper	100	34.2	104	121	70.1	87.1	5	75.0-125	J6		15.1	20
Lead	100	167	225	244	58.0	77.3	5	75.0-125	J6		8.25	20
Nickel	100	7.39	85.2	100	77.8	92.7	5	75.0-125			16.0	20
Selenium	100	0.193	86.9	97.9	86.7	97.7	5	75.0-125			11.9	20
Silver	20.0	0.145	19.3	21.0	95.6	104	5	75.0-125			8.38	20
Zinc	100	124	176	196	51.8	71.9	5	75.0-125	J6	J6	10.8	20

Method Blank (MB)

(MB) R3964929-3 08/24/23 02:58

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)	*99.3*			*77.0-120*

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

(LCS) R3964929-1 08/24/23 00:58 • (LCSD) R3964929-2 08/24/23 01:23

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	6.64	4.22	121	76.7	72.0-127		J3	44.6	20
(S) a,a,a-Trifluorotoluene(FID)				*105*	*105*	*77.0-120*				

Method Blank (MB)

(MB) R3963403-3 08/21/23 08:08

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	*102*			*75.0-131*
(S) 4-Bromofluorobenzene	*92.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*87.8*			*70.0-130*

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

(LCS) R3963403-1 08/21/23 06:32 • (LCSD) R3963403-2 08/21/23 06:51

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	0.119	0.119	95.2	95.2	70.0-123			0.000	20
Toluene	0.125	0.113	0.117	90.4	93.6	75.0-121			3.48	20
Ethylbenzene	0.125	0.119	0.125	95.2	100	74.0-126			4.92	20
Xylenes, Total	0.375	0.351	0.331	93.6	88.3	72.0-127			5.87	20
1,2,4-Trimethylbenzene	0.125	0.123	0.130	98.4	104	70.0-126			5.53	20
1,3,5-Trimethylbenzene	0.125	0.126	0.130	101	104	73.0-127			3.12	20
(S) Toluene-d8				*96.6*	*97.6*	*75.0-131*				
(S) 4-Bromofluorobenzene				*98.7*	*96.9*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*100*	*96.5*	*70.0-130*				

Method Blank (MB)

(MB) R3963792-1 08/22/23 08:55

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	0.433	J	0.274	4.00
(S) o-Terphenyl	*48.9*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3963792-2 08/22/23 09:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	35.9	71.8	50.0-150	
(S) o-Terphenyl			*69.8*	*18.0-148*	

Method Blank (MB)

(MB) R3964413-2 08/22/23 12:27

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	*99.6*			*23.0-120*
(S) Nitrobenzene-d5	*90.0*			*14.0-149*
(S) 2-Fluorobiphenyl	*82.5*			*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R3964413-1 08/22/23 12:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0814	102	50.0-120	
Anthracene	0.0800	0.0800	100	50.0-126	
Benzo(a)anthracene	0.0800	0.0823	103	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0803	100	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0789	98.6	49.0-125	
Benzo(a)pyrene	0.0800	0.0843	105	42.0-120	
Chrysene	0.0800	0.0846	106	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0806	101	47.0-125	
Fluoranthene	0.0800	0.0814	102	49.0-129	
Fluorene	0.0800	0.0835	104	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0857	107	46.0-125	
1-Methylnaphthalene	0.0800	0.0836	105	51.0-121	
2-Methylnaphthalene	0.0800	0.0865	108	50.0-120	
Naphthalene	0.0800	0.0866	108	50.0-120	
Pyrene	0.0800	0.0921	115	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R3964413-1 08/22/23 12:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			*105*	*23.0-120*	
(S) Nitrobenzene-d5			*116*	*14.0-149*	
(S) 2-Fluorobiphenyl			*95.6*	*34.0-125*	

L1646914-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1646914-11 08/22/23 13:54 • (MS) R3964413-3 08/22/23 14:12 • (MSD) R3964413-4 08/22/23 14:30

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	0.0621	0.0678	78.8	85.6	1	14.0-127			8.78	27
Anthracene	0.0788	U	0.0585	0.0634	74.2	80.1	1	10.0-145			8.04	30
Benzo(a)anthracene	0.0788	U	0.0575	0.0646	73.0	81.6	1	10.0-139			11.6	30
Benzo(b)fluoranthene	0.0788	U	0.0573	0.0633	72.7	79.9	1	10.0-140			9.95	36
Benzo(k)fluoranthene	0.0788	U	0.0567	0.0634	72.0	80.1	1	10.0-137			11.2	31
Benzo(a)pyrene	0.0788	U	0.0628	0.0703	79.7	88.8	1	10.0-141			11.3	31
Chrysene	0.0788	U	0.0614	0.0689	77.9	87.0	1	10.0-145			11.5	30
Dibenz(a,h)anthracene	0.0788	U	0.0525	0.0584	66.6	73.7	1	10.0-132			10.6	31
Fluoranthene	0.0788	U	0.0593	0.0654	75.3	82.6	1	10.0-153			9.78	33
Fluorene	0.0788	U	0.0611	0.0668	77.5	84.3	1	11.0-130			8.91	29
Indeno(1,2,3-cd)pyrene	0.0788	U	0.0566	0.0615	71.8	77.7	1	10.0-137			8.30	32
1-Methylnaphthalene	0.0788	U	0.0641	0.0709	80.7	88.9	1	10.0-142			10.1	28
2-Methylnaphthalene	0.0788	U	0.0657	0.0721	82.6	90.3	1	10.0-137			9.29	28
Naphthalene	0.0788	U	0.0675	0.0742	85.7	93.7	1	10.0-135			9.46	27
Pyrene	0.0788	U	0.0703	0.0792	89.2	100	1	10.0-148			11.9	35
(S) p-Terphenyl-d14					*78.4*	*93.7*		*23.0-120*				
(S) Nitrobenzene-d5					*73.1*	*91.0*		*14.0-149*				
(S) 2-Fluorobiphenyl					*69.1*	*82.2*		*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
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.

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	LAO000356
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.

Pg 1 of 1

Caerus Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

Billing Information: SAME AS LEFT

Report to: Andrew Verbonitz

Email To: averbonitz@caerusoilandgas.com

Project Description: DIVIDE CREEK TB TANK PULL

City/State Collected: Piceance Crk, CO

Please Circle: PT (MT) CT ET

Phone: (970) 902-3598

Client Project #

Lab Project #

Collected by (print): Tristan Schmalz

Site/Facility ID #: DIVIDE CREEK TB

P.O. #

Collected by (signature): Tristan Schmalz

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

Pres Chk

ECMC Table 915-1

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	
20230816-DIVIDECREEKTB(POR)SS	Grab	SS	3A	8/16/23	12:44	4	X

Tristan Schmalz
8/16/2023

Chain of Custody Page ___ of ___

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

SDG # L1647013

H095

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

Remarks	Sample # (lab only)
	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 # 6525 5572 0233

Sample Receipt Checklist

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

	Date:	Time:		
Relinquished by : (Signature) Tristan Schmalz	8/16/2023	14:30	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	8/17/23	1500	Received by: (Signature)	Temp: GRAB °C 2.7+0=2.7 Bottles Received: 4
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/17/23 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK