June 2, 2022

Blair Rollins
Environmental Specialist
Caerus Oil & Gas LLC (Operator #: 10456)
brollins@caerusoilandgas.com

Report of Work Completed – Spill Remediation

COGCC Location Name (ID)	N PARACHUTE /WF01B-36A36A596 (335641)
Operator Location Name	A36A
COGCC Spill/Release Point Name	A36A Water Transfer Line
COGCC Spill/Release Point ID	482086
Legal Description	NENE Sec. 36 T5S-R96W
Coordinates (Lat/Long)	39.577975 / -108.108661

Mr. Rollins,

Confluence Compliance Companies, LLC (Confluence) prepared this Report of Work Completed (ROWC) for Caerus Oil & Gas LLC (Caerus) to document remedial investigation activities associated with a recent produced water release at the A36A 596 well pad (Location). The Location is 9.3 miles north-northwest of Parachute, Colorado, in Garfield County as illustrated in the attached Topographic Map. Additional information on the Location and the associated remediation project is provided in the title block above, the attached Site Diagrams, and laboratory analytical reports. This ROWC provides background on the Location, methods used to complete the remedial investigation, results of the investigation, and recommendations for how to proceed with this information.

Background

On April 21, 2022, while conducting monthly pressure testing, the lease operator determined the water transfer dumpline failed. The line was isolated, and the leak was stopped. The release was confined to the working surface of the pad and was reported in a Colorado Oil and Gas Conservation Commission (COGCC) Form 19 Document 403025320.

Methodology

On April 25, 2022, Confluence coordinated and oversaw initial site investigation activities associated with the recent release at the Location. Using a hydro vacuum truck, the point of release (POR) was exposed and identified as the T-joint. One soil sample was collected from the POR. The soil sample was characterized using visual and olfactory observations and field-screened for volatile organic compounds using a photoionization detector (PID). The PID measurement of the POR sample was 2.6 parts per million (ppm). No hydrocarbon odor or staining was observed within the excavation or the sample.

A groundwater sample was also collected from Solvay's well with Colorado Department of Water Resources Permit Number 23585-F. One water sample (20220425-A36A-SOLVAY_WELL3) was collected from a valve inside the well shed. No odor or sheen were noted in the sample.

On May 11, 2022, Confluence returned to the Location to continue remedial investigation activities of identified impacts to soil. Soil was removed from the POR area extending 5 feet bgs as well as horizontally to the west approximately 35 feet and to the east approximately 20 feet. Two additional soil samples were collected from the excavation: one from each end of the pipeline trench where the failed line connected to the equipment. Field screening did not indicate impacts to the soil. PID measurements ranged from 1.3 to 2.2 ppm. No staining or odor were noted in the samples or the excavation.

All soil samples were collected in laboratory provided jars, immediately placed on ice, and shipped for laboratory analysis of constituents listed in COGCC Table 915-1 for soil. The groundwater sample was submitted for analysis of COGCC Table 915-1 for water constituents. Excavation extents and soil sample locations are presented in the attached Site Diagram.

Results

These results summarize observations from onsite remedial investigation efforts and associated laboratory analytical results. For organizational and presentation purposes the results summary is divided between general observations of lithology and hydrogeology for the entire Location and site investigation activities.

Collected spatial data are depicted in the attached Site Diagram. Laboratory analytical reports are attached and summarized in the Laboratory Results Summary Table.

Lithology and Hydrogeology

Lithology at the Location is characterized by silty and sandy loam. Groundwater is expected to flow south toward Parachute Creek and ultimately to the Colorado River, located 8.6 miles southeast of the Location.

Excavation Results

Laboratory results of initial characterization of the POR soil sample indicates compliance with COGCC Table 915-1 Groundwater Protection Soil Screening Levels with the exception of arsenic and barium. Arsenic exceeded allowable limits at 5.26 milligrams per kilogram (mg/kg) and barium exceeded allowable limits at 227 mg/kg.

Laboratory results of the groundwater sample reported all volatile organic compounds (VOCs) below the laboratory detection limit. Results of the inorganic constituents appear to be consistent with baseline water quality results of the area.

Laboratory results of the May 11, 2022, excavation soil samples are compliant with COGCC Table 915-1 Groundwater Protection Soil Screening Levels with the exception of arsenic, barium, and pH. Arsenic exceeded allowable limits at range between 3.41 mg/kg in the east sidewall and 5.08 mg/kg in the west sidewall. Barium exceedances measured 202 mg/kg in the

west sidewall and 234 mg/kg in the east sidewall. One pH exceedance of 8.32 was observed in the east sidewall.

Analysis and Recommendations

Although some Soil Suitability for Reclamation (SSR) constituents and metals exceed COGCC Table 915-1 Groundwater Protection Soil Screening Levels, background sample data from the immediate area demonstrates that SSRs and metals are within naturally occurring levels at the location. Background samples associated with the J25A (COGCC Location ID 335650) indicate an arsenic concentration of 22.5 mg/kg, a barium concentration of 272 mg/kg, and a pH concentration of 8.84. Background sample 20210909 - J25A (BGS@6") was collected approximately 1,000 feet west-northwest of the Location, from the Torrifluvents soil type. The Location is in the Nihill channery loam. According to soil taxonomy, Torrifluvents and Nihill channery loam are in the same Order of Entisols, supporting the fact that the parent material is derived from the Roan Cliffs above the valley. Background sample 20210909 - J25A (BGN@2') was collected approximately 1,700 feet northwest of the location from Nihill channery loam. The COGCC GISOnline (COGIS) resource was used to identify these soil types.

Based on these results and analysis, Confluence recommends that Caerus use COGCC Table 915-1 Footnote 1 to request acceptance of this background data, closure of COGCC Spill/Release Point 482086, and a no further action (NFA) determination.

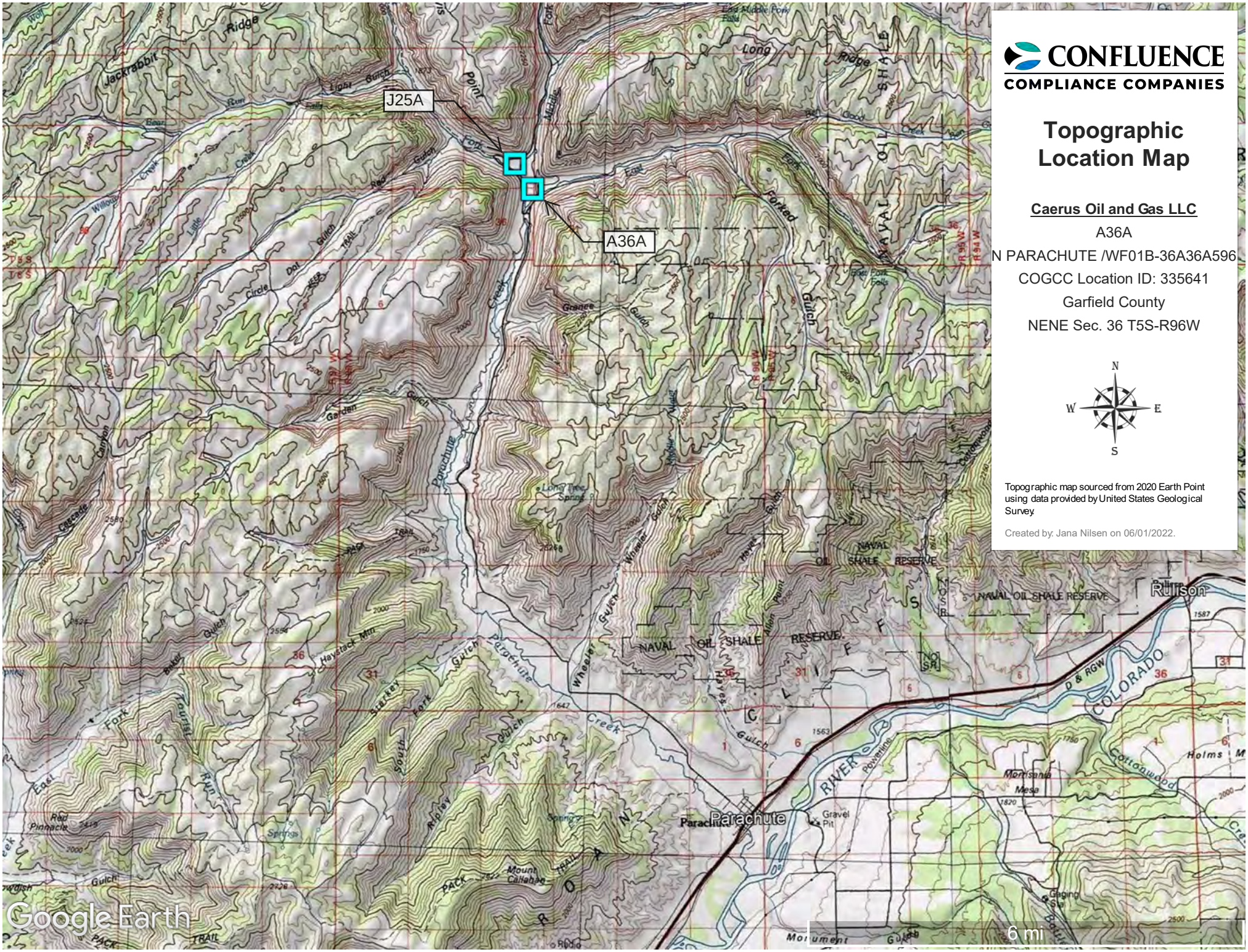
Confluence is grateful for the opportunity to support you with this project. If you have any questions about the methods, results or recommendations presented here, please do not hesitate to contact me.

Regards,

Chris McKisson
Managing Partner
(720) 490-6758
chris.mckisson@confluence-cc.com

Attachments

- Topographic Location Diagram
- Site Diagram – Sample Locations
- Site Diagram – Background Sample Locations
- Analytical Results Summary Table - Soil
- Analytical Results Summary Table - Water
- Laboratory Reports



CONFLUENCE
COMPLIANCE COMPANIES

Topographic Location Map

Caerus Oil and Gas LLC

A36A

N PARACHUTE /WF01B-36A36A596

COGCC Location ID: 335641

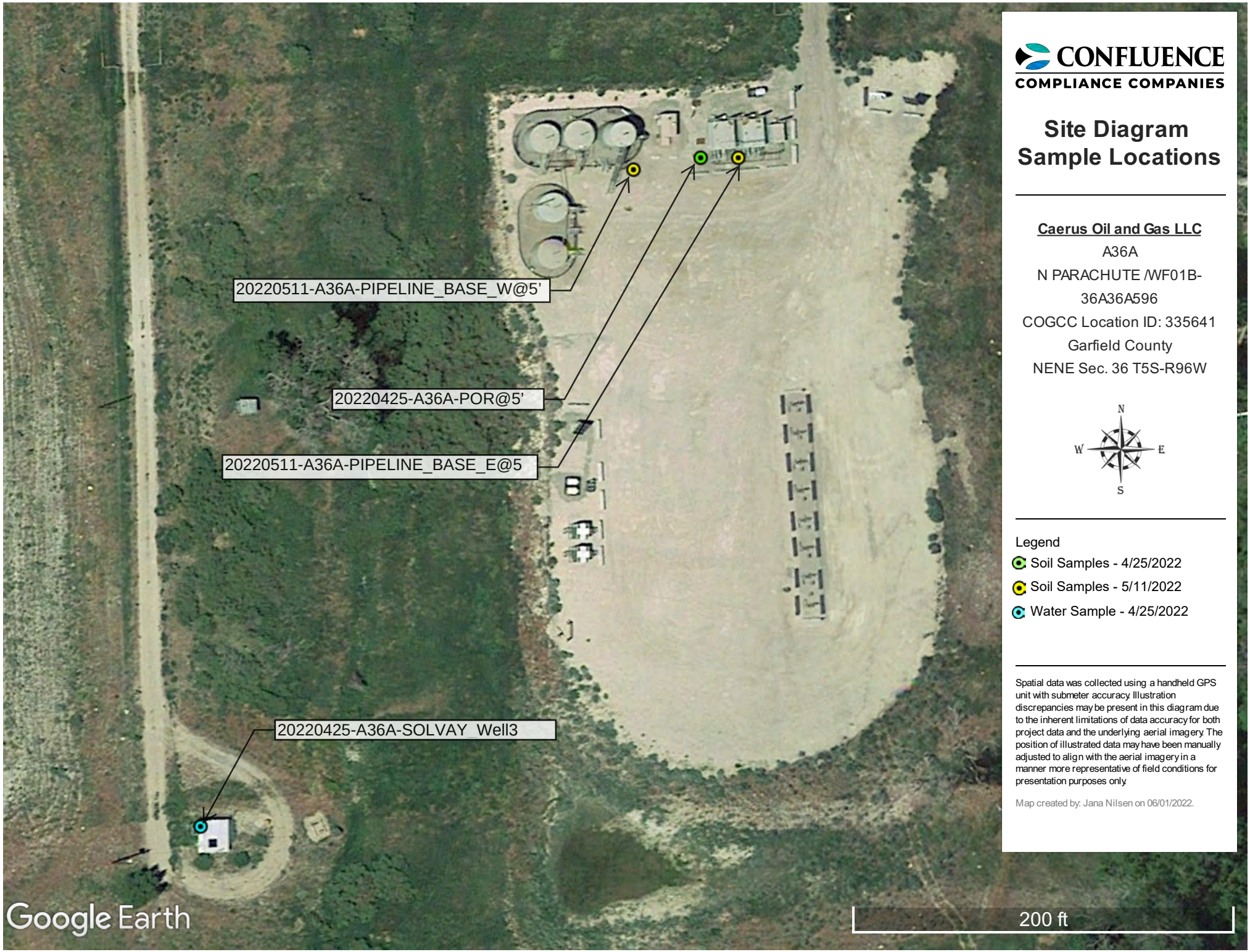
Garfield County

NENE Sec. 36 T5S-R96W

N
W E
S

Topographic map sourced from 2020 Earth Point using data provided by United States Geological Survey

Created by: Jana Nilsen on 06/01/2022.



CONFLUENCE
COMPLIANCE COMPANIES

Site Diagram
Sample Locations

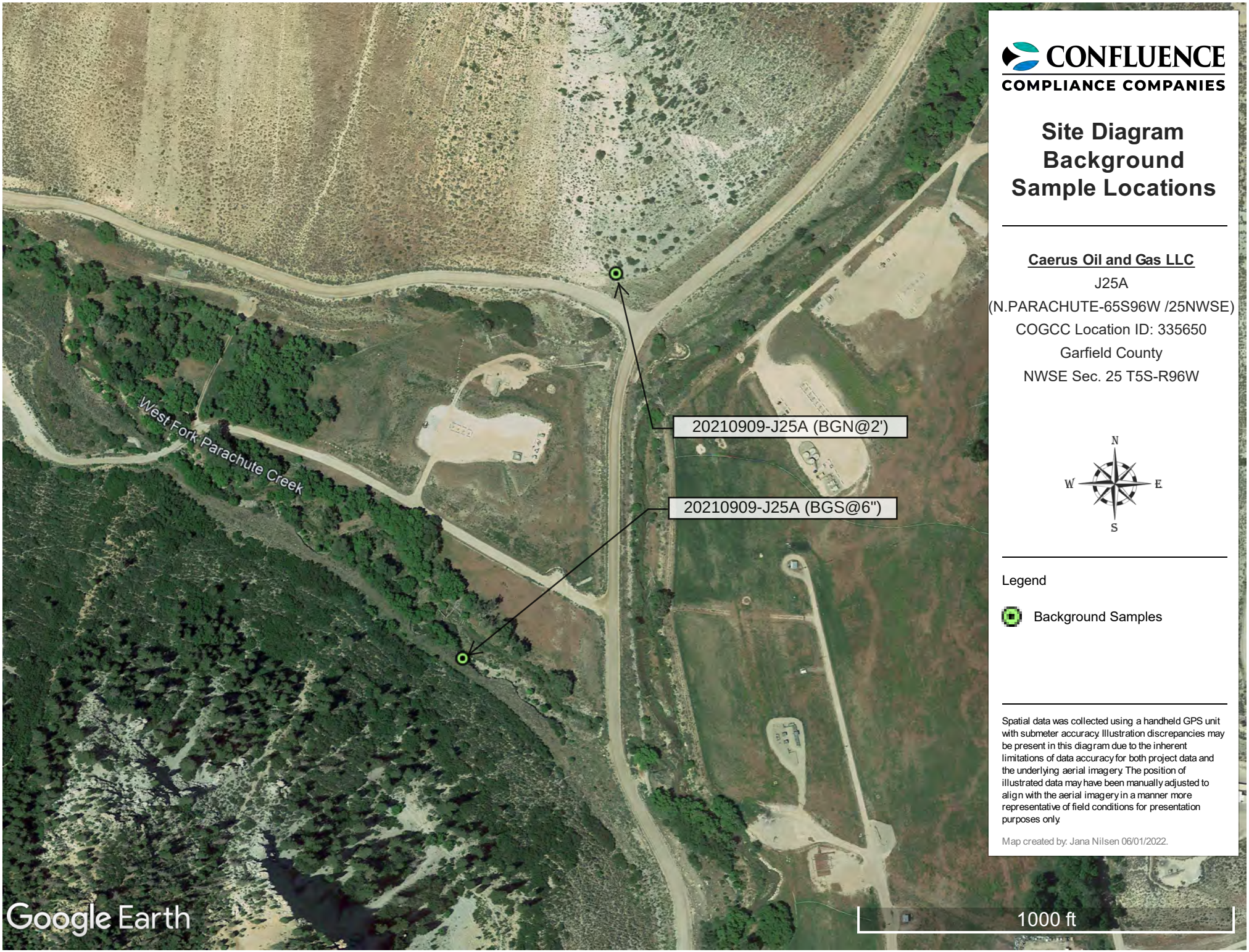
Caerus Oil and Gas LLC
A36A
N PARACHUTE /WF01B-36A36A596
COGCC Location ID: 335641
Garfield County
NENE Sec. 36 T5S-R96W

N
W E
S

Legend
- Soil Samples - 4/25/2022
- Soil Samples - 5/11/2022
- Water Sample - 4/25/2022

Spatial data was collected using a handheld GPS unit with submeter accuracy. Illustration discrepancies may be present in this diagram due to the inherent limitations of data accuracy for both project data and the underlying aerial imagery. The position of illustrated data may have been manually adjusted to align with the aerial imagery in a manner more representative of field conditions for presentation purposes only.

Map created by: Jana Nilsen on 06/01/2022.



CONFLUENCE
COMPLIANCE COMPANIES

Site Diagram Background Sample Locations

Caerus Oil and Gas LLC
J25A
(N.PARACHUTE-65S96W /25NWSE)
COGCC Location ID: 335650
Garfield County
NWSE Sec. 25 T5S-R96W

N
W E
S

Legend

Background Samples

Spatial data was collected using a handheld GPS unit with submeter accuracy. Illustration discrepancies may be present in this diagram due to the inherent limitations of data accuracy for both project data and the underlying aerial imagery. The position of illustrated data may have been manually adjusted to align with the aerial imagery in a manner more representative of field conditions for presentation purposes only.

Map created by: Jana Nilsen 06/01/2022.

Soil Screening and Remediation Limits				Organic Compounds (mg/kg [ppm])																										
COGCC Table 915-1 Groundwater Protection -->			NA	500	NA	NA	NA	0.0026	0.69	0.78	9.9	0.0081	0.0087	0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	0.006	0.019	0.0038	1.3
Sample Date	Solid/Soil Source (Equipment) [Dumpline, Berm, Separator, Tank Battery, Dump Line, Pit, Cuttings, Background, etc.]	Sample ID	PID (ppm)	TPH (total volatile and extractable petroleum hydrocarbons) (GRO+DRO+ORO)	TPH-GRO (C6-C10) Low Fraction	TPH-DRO (C10-C28) High Fraction	TPH-ORO (C28-C36) High Fraction	Benzene	Toluene	Ethylbenzene	Xylenes - total (sum of o-, m-, p- isomers)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Acenaphthene	Anthracene	Benzo(A)anthracene	Benzo(A)pyrene	Benzo(B)fluoranthene	Benzo(K)fluoranthene	Chrysene	Dibenzo(A,H)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3,C,D)pyrene	1- Methylnaphthalene	2- Methylnaphthalene	Naphthalene	Pyrene
4/25/2022	Dumpline	20220425-A36A-POR@5'	2.6	113.6	9.00	38.1	66.5	<0.00100	<0.00500	<0.00250	<0.00650	<0.00500	<0.00500	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.0200	<0.0200	<0.0200	<0.00600
5/11/2022	Dumpline	20220511-A36A-PIPELINE_BASE_E@5'	1.3	45.2	0.109	17.6	27.5	<0.00100	<0.00500	<0.00250	<0.00650	<0.00500	<0.00500	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.0200	<0.0200	<0.0200	<0.00600
5/11/2022	Dumpline	20220511-A36A-PIPELINE_BASE_W@5'	2.2	29.9	<0.100	6.27	23.6	<0.00100	<0.00500	<0.00250	<0.00650	<0.00500	<0.00500	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.0200	<0.0200	<0.0200	<0.00600
9/9/2021	Background	20210909 - J25A (BGN@2')	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/9/2021	Background	20210909 - J25A (BGS@6")	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/31/2011	Background	A36A-BGS-083111	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/31/2011	Background	A36A-BGSE-083111	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/31/2011	Background	A36A-BGSW-083111	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Blue Fill = Exceedance
Dark Gray Italics = Below Reporting Detection Limit (RDL)
"NA" = Not Analyzed
mg/kg = milligrams per kilogram / parts per million

CONFLUENCE

Laboratory Results Summary Table - Soil
A36A

7/7/2022

Soil Screening and Remediation Limits				Soil Suitability for Reclamation				Metals (mg/kg [ppm])									
COGCC Table 915-1 Groundwater Protection -->			NA	4	6	6-8.3	2	0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
Sample Date	Solid/Soil Source (Equipment) [Vault/Sump, Separator, Tank Battery, Dump Line, Pit, Cuttings, Background, etc.]	Sample ID	PID (ppm)	EC (Specific Conductance) (millimhos/centimeter) (by saturated paste method)	SAR (Sodium Adsorption Ratio) (calculation) (by saturated paste method)	pH (pH Units) (by saturated paste method)	Boron - Hot Water Soluble (mg/L)	Arsenic	Barium	Cadmium (mg/kg)	Chromium (VI)	Copper	Lead	Nickel	Selenium	Silver	Zinc
4/25/2022	Dumpline	20220425-A36A-POR@5'	2.6	0.602	4.56	8.23	0.310	5.26	227	<0.500	<1.00	8.42	9.54	7.92	<2.00	<1.00	27.2
5/11/2022	Dumpline	20220511-A36A-PIPELINE_BASE_E@5'	1.3	0.310	2.27	8.32	<0.200	3.41	234	<0.568	<1.00	10.7	6.97	7.98	<2.27	<1.14	25.6
5/11/2022	Dumpline	20220511-A36A-PIPELINE_BASE_W@5'	2.2	0.508	1.61	7.88	<0.0200	5.08	202	<0.500	<1.00	11.5	9.62	13.1	<2.00	<1.00	36.7
9/9/2021	Background	20210909 - J25A (BGN@2')	NA	0.437	0.581	8.53	NA	9.01	219	0.820	<1.00	12.0	6.94	25.1	<2.00	<1.00	66.6
9/9/2021	Background	20210909 - J25A (BGS@6")	NA	0.733	2.29	8.84	NA	22.5	272	0.887	<1.00	27.1	16.2	19.1	<2.00	<1.00	0.832
8/31/2011	Background	A36A-BGS-083111	NA	NA	NA	NA	NA	15	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/31/2011	Background	A36A-BGSE-083111	NA	NA	NA	NA	NA	15	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/31/2011	Background	A36A-BGSW-083111	NA	NA	NA	NA	NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA

Confluence Compliance Companies, LLC
info@confluence-cc.com

Blue Fill = Exceedance
Dark Gray Italics = Below Reporting Detection Limit (RDL)
"NA" = Not Analyzed
mg/kg = milligrams per kilogram / parts per million

Laboratory Results Summary Table - Water
A36A

6/1/2022

			Organic Compounds (µg/L)							Inorganics (mg/L)		
COGCC Allowable Concentration (915-Groundwater)			5	560-1,000	700	1,400-10,000	140	67	67	1.25xBG	250 or 1.25xBG	250 or 1.25xBG
Sample Date	**Sample ID**	**Free Product Present?** (Yes/No)	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylenes - total**	**Naphthalene**	**1,2,4-trimethylbenzene**	**1,3,5-trimethylbenzene**	**TDS 1.25 x background**	**Chlorides 1.25 x background**	**Sulfates 1.25 x background**
4/25/22	**20220425-A36A-SOLVAY_WELL3**	No	*<0.00100*	*<0.00100*	*<0.00100*	*<0.00300*	*<0.00500*	*<0.00100*	*<0.00100*	**518**	**9.02**	**155**

Blue Fill = Exceedance
Italics = Below Reporting Detection Limit (RDL)
"NA" = Not Analyzed
µg/L = micrograms per liter
mg/L = milligrams per liter

Confluence Compliance Companies, LLC
info@confluence-cc.com

ANALYTICAL REPORT

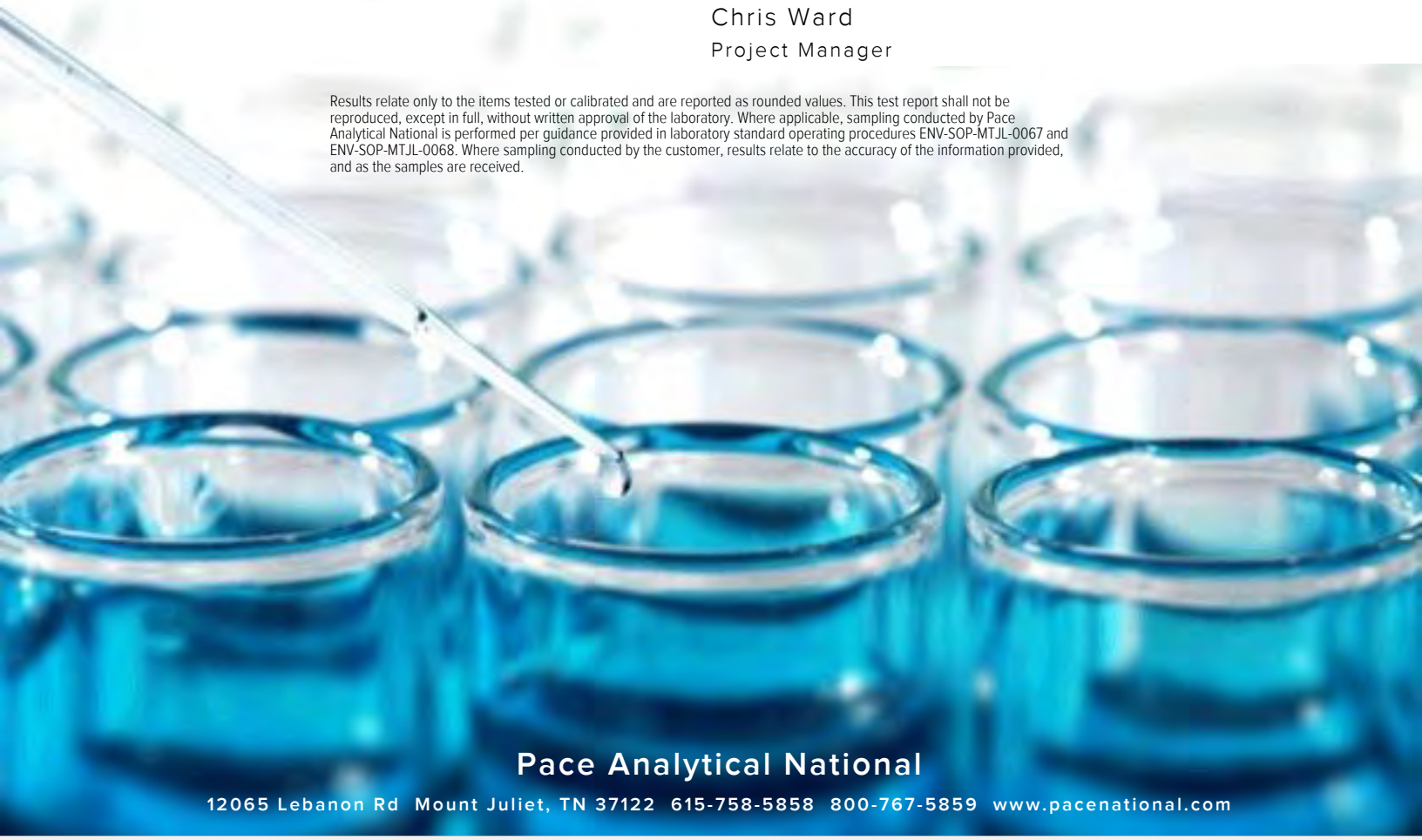
May 03, 2022

Caerus Oil and Gas

Sample Delivery Group:	L1486462
Samples Received:	04/26/2022
Project Number:	A36A
Description:	A36A Dumpline Release
Site:	A36A
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

20220425-A36A-POR@5' L1486462-01 Solid

Collected by: Alex Slorby
Collected date/time: 04/25/22 11:10
Received date/time: 04/26/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1854800	1	05/02/22 23:29	05/02/22 23:29	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1856067	1	05/01/22 16:00	05/02/22 16:01	JER	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1856776	1	04/30/22 10:00	04/30/22 12:00	GI	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1856022	1	05/01/22 15:19	05/01/22 18:35	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1856006	1	04/28/22 16:07	04/29/22 21:31	RDS	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1854799	1	05/01/22 19:27	05/03/22 13:40	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1857788	5	05/03/22 08:48	05/03/22 11:38	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1855561	1	04/27/22 16:38	04/29/22 04:34	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1855730	1	04/27/22 16:38	04/28/22 16:12	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1857025	1	05/02/22 09:30	05/02/22 21:41	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1857239	1	05/02/22 06:15	05/02/22 15:44	AMG	Mt. Juliet, TN

CASE NARRATIVE

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

Chris Ward
Project Manager

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	4.56		1	05/02/2022 23:29	WG1854800

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	05/02/2022 16:01	WG1856067

Wet Chemistry by Method 9045D

Analyte	Result pH	Qualifier	Dilution	Analysis date / time	Batch
pH	8.23	T8	1	04/30/2022 12:00	WG1856776

Sample Narrative:

L1486462-01 WG1856776: 8.23 at 20.3C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	602		10.0	1	05/01/2022 18:35	WG1856022

Sample Narrative:

L1486462-01 WG1856022: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	227		0.500	1	04/29/2022 21:31	WG1856006
Cadmium	ND		0.500	1	04/29/2022 21:31	WG1856006
Copper	8.42		2.00	1	04/29/2022 21:31	WG1856006
Lead	9.54		0.500	1	04/29/2022 21:31	WG1856006
Nickel	7.92		2.00	1	04/29/2022 21:31	WG1856006
Selenium	ND		2.00	1	04/29/2022 21:31	WG1856006
Silver	ND		1.00	1	04/29/2022 21:31	WG1856006
Zinc	27.2		5.00	1	04/29/2022 21:31	WG1856006

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.310		0.200	1	05/03/2022 13:40	WG1854799

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.26		1.00	5	05/03/2022 11:38	WG1857788

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	9.00		0.100	1	04/29/2022 04:34	WG1855561
(S) a,a,a-Trifluorotoluene(FID)	*107*		*77.0-120*		*04/29/2022 04:34*	WG1855561

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	04/28/2022 16:12	WG1855730
Toluene	ND	J3	0.00500	1	04/28/2022 16:12	WG1855730
Ethylbenzene	ND	J3	0.00250	1	04/28/2022 16:12	WG1855730
Xylenes, Total	ND	J3	0.00650	1	04/28/2022 16:12	WG1855730
1,2,4-Trimethylbenzene	ND	J3	0.00500	1	04/28/2022 16:12	WG1855730
1,3,5-Trimethylbenzene	ND	J3	0.00500	1	04/28/2022 16:12	WG1855730
(S) Toluene-d8	*94.1*		*75.0-131*		*04/28/2022 16:12*	WG1855730
(S) 4-Bromofluorobenzene	*89.9*		*67.0-138*		*04/28/2022 16:12*	WG1855730
(S) 1,2-Dichloroethane-d4	*95.2*		*70.0-130*		*04/28/2022 16:12*	WG1855730

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	38.1		4.00	1	05/02/2022 21:41	WG1857025
C28-C36 Motor Oil Range	66.5		4.00	1	05/02/2022 21:41	WG1857025
(S) o-Terphenyl	*67.6*		*18.0-148*		*05/02/2022 21:41*	WG1857025

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00600	1	05/02/2022 15:44	WG1857239
Anthracene	ND		0.00600	1	05/02/2022 15:44	WG1857239
Benzo(a)anthracene	ND		0.00600	1	05/02/2022 15:44	WG1857239
Benzo(b)fluoranthene	ND		0.00600	1	05/02/2022 15:44	WG1857239
Benzo(k)fluoranthene	ND		0.00600	1	05/02/2022 15:44	WG1857239
Benzo(a)pyrene	ND		0.00600	1	05/02/2022 15:44	WG1857239
Chrysene	ND		0.00600	1	05/02/2022 15:44	WG1857239
Dibenz(a,h)anthracene	ND		0.00600	1	05/02/2022 15:44	WG1857239
Fluoranthene	ND		0.00600	1	05/02/2022 15:44	WG1857239
Fluorene	ND		0.00600	1	05/02/2022 15:44	WG1857239
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	05/02/2022 15:44	WG1857239
1-Methylnaphthalene	ND		0.0200	1	05/02/2022 15:44	WG1857239
2-Methylnaphthalene	ND		0.0200	1	05/02/2022 15:44	WG1857239
Naphthalene	ND		0.0200	1	05/02/2022 15:44	WG1857239
Pyrene	ND		0.00600	1	05/02/2022 15:44	WG1857239
(S) p-Terphenyl-d14	*78.4*		*23.0-120*		*05/02/2022 15:44*	WG1857239
(S) Nitrobenzene-d5	*87.6*		*14.0-149*		*05/02/2022 15:44*	WG1857239
(S) 2-Fluorobiphenyl	*68.4*		*34.0-125*		*05/02/2022 15:44*	WG1857239

Method Blank (MB)

(MB) R3787277-1 05/02/22 14:35

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

L1485904-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1485904-06 05/02/22 14:53 • (DUP) R3787277-3 05/02/22 14:58

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

L1486829-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1486829-03 05/02/22 16:16 • (DUP) R3787277-4 05/02/22 16:21

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	8.83		20

Laboratory Control Sample (LCS)

(LCS) R3787277-2 05/02/22 14:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.2	102	80.0-120	

L1486966-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1486966-01 05/02/22 16:26 • (MS) R3787277-5 05/02/22 16:42 • (MSD) R3787277-6 05/02/22 16:47

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	ND	21.7	21.5	103	102	1	75.0-125			0.888	20

L1486966-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1486966-01 05/02/22 16:26 • (MS) R3787277-7 05/02/22 16:52

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	641	ND	654	102	50	75.0-125	

L1486361-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1486361-02 04/30/22 12:00 • (DUP) R3786724-2 04/30/22 12:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.10	8.11	1	0.123		1

Sample Narrative:

OS: 8.1 at 20.7C

DUP: 8.11 at 20.7C

L1486737-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1486737-01 04/30/22 12:00 • (DUP) R3786724-3 04/30/22 12:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.19	8.15	1	0.490		1

Sample Narrative:

OS: 8.19 at 20.5C

DUP: 8.15 at 20.6C

Laboratory Control Sample (LCS)

(LCS) R3786724-1 04/30/22 12:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	9.92	99.2	99.0-101	

Sample Narrative:

LCS: 9.92 at 20.3C

Method Blank (MB)

(MB) R3786907-1 05/01/22 18:35

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

L1486361-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1486361-03 05/01/22 18:35 • (DUP) R3786907-3 05/01/22 18:35

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	124	123	1	0.486		20

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

L1486829-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1486829-04 05/01/22 18:35 • (DUP) R3786907-4 05/01/22 18:35

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	192	188	1	1.89		20

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

Laboratory Control Sample (LCS)

(LCS) R3786907-2 05/01/22 18:35

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	268	279	104	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3786847-1 04/29/22 20:43

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

Laboratory Control Sample (LCS)

(LCS) R3786847-2 04/29/22 20:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	94.2	94.2	80.0-120	
Cadmium	100	92.2	92.2	80.0-120	
Copper	100	96.9	96.9	80.0-120	
Lead	100	96.1	96.1	80.0-120	
Nickel	100	95.6	95.6	80.0-120	
Selenium	100	95.2	95.2	80.0-120	
Silver	20.0	18.0	89.9	80.0-120	
Zinc	100	91.5	91.5	80.0-120	

L1487072-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1487072-01 04/29/22 20:48 • (MS) R3786847-5 04/29/22 20:55 • (MSD) R3786847-6 04/29/22 20:57

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 %
Barium	100	39.0	150	145	111	106	1	75.0-125			3.65	20
Cadmium	100	ND	107	103	107	103	1	75.0-125			3.39	20
Copper	100	30.5	146	142	116	112	1	75.0-125			2.69	20
Lead	100	21.3	143	137	121	115	1	75.0-125			4.35	20
Nickel	100	26.8	138	134	111	107	1	75.0-125			3.05	20
Selenium	100	ND	110	107	110	107	1	75.0-125			2.45	20
Silver	20.0	ND	21.0	20.3	105	101	1	75.0-125			3.33	20
Zinc	100	46.6	154	153	107	106	1	75.0-125			0.797	20

Method Blank (MB)

(MB) R3787632-1 05/03/22 12:52

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) R3787632-2 05/03/22 12:54 • (LCSD) R3787632-3 05/03/22 12:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	0.968	0.992	96.8	99.2	80.0-120			2.46	20

Method Blank (MB)

(MB) R3787471-1 05/03/22 11:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Arsenic	U		0.100	1.00

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

(LCS) R3787471-2 05/03/22 11:31 • (LCSD) R3787471-3 05/03/22 11:35

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	83.2	85.2	83.2	85.2	80.0-120			2.31	20

Method Blank (MB)

(MB) R3786335-3 04/28/22 20:06

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)	*112*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3786335-1 04/28/22 19:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.51	82.0	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*77.0-120*	

Method Blank (MB)

(MB) R3786072-2 04/28/22 10:39

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	*97.4*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.1*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*88.8*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3786072-1 04/28/22 09:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.122	97.6	70.0-123	
Toluene	0.125	0.108	86.4	75.0-121	
Ethylbenzene	0.125	0.104	83.2	74.0-126	
Xylenes, Total	0.375	0.299	79.7	72.0-127	
1,2,4-Trimethylbenzene	0.125	0.104	83.2	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.103	82.4	73.0-127	
(S) Toluene-d8			*94.9*	*75.0-131*	
(S) 4-Bromofluorobenzene			*99.9*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*93.3*	*70.0-130*	

L1486462-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1486462-01 04/28/22 16:12 • (MS) R3786072-3 04/28/22 19:28 • (MSD) R3786072-4 04/28/22 19:48

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	0.125	ND	0.0703	0.101	56.2	80.8	1	10.0-149			35.8	37
Toluene	0.125	ND	0.0616	0.0932	49.3	74.6	1	10.0-156		J3	40.8	38
Ethylbenzene	0.125	ND	0.0572	0.0883	45.8	70.6	1	10.0-160		J3	42.7	38
Xylenes, Total	0.375	ND	0.175	0.258	46.7	68.8	1	10.0-160		J3	38.3	38
1,2,4-Trimethylbenzene	0.125	ND	0.0643	0.0947	51.4	75.8	1	10.0-160		J3	38.2	36
1,3,5-Trimethylbenzene	0.125	ND	0.0597	0.0935	47.8	74.8	1	10.0-160		J3	44.1	38
(S) Toluene-d8					*96.0*	*95.4*		*75.0-131*				
(S) 4-Bromofluorobenzene					*92.4*	*95.9*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*92.7*	*92.3*		*70.0-130*				

Method Blank (MB)

(MB) R3787389-1 05/02/22 19:31

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	*57.7*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3787389-2 05/02/22 19:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	33.5	67.0	50.0-150	
(S) o-Terphenyl			*41.9*	*18.0-148*	

Method Blank (MB)

(MB) R3787183-2 05/02/22 13:25

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	*105*			*23.0-120*
(S) Nitrobenzene-d5	*98.6*			*14.0-149*
(S) 2-Fluorobiphenyl	*86.0*			*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R3787183-1 05/02/22 13:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0577	72.1	50.0-120	
Anthracene	0.0800	0.0593	74.1	50.0-126	
Benzo(a)anthracene	0.0800	0.0614	76.8	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0578	72.3	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0559	69.9	49.0-125	
Benzo(a)pyrene	0.0800	0.0516	64.5	42.0-120	
Chrysene	0.0800	0.0604	75.5	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0582	72.8	47.0-125	
Fluoranthene	0.0800	0.0612	76.5	49.0-129	
Fluorene	0.0800	0.0602	75.3	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0597	74.6	46.0-125	
1-Methylnaphthalene	0.0800	0.0585	73.1	51.0-121	
2-Methylnaphthalene	0.0800	0.0554	69.3	50.0-120	
Naphthalene	0.0800	0.0602	75.3	50.0-120	
Pyrene	0.0800	0.0590	73.8	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R3787183-1 05/02/22 13:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			*93.8*	*23.0-120*	
(S) Nitrobenzene-d5			*91.8*	*14.0-149*	
(S) 2-Fluorobiphenyl			*79.1*	*34.0-125*	

L1486833-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1486833-03 05/02/22 18:04 • (MS) R3787183-3 05/02/22 18:23 • (MSD) R3787183-4 05/02/22 18:43

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	ND	0.0463	0.0497	59.7	64.0	1	14.0-127			7.08	27
Anthracene	0.0776	ND	0.0459	0.0501	59.1	64.6	1	10.0-145			8.75	30
Benzo(a)anthracene	0.0776	ND	0.0476	0.0527	61.3	67.9	1	10.0-139			10.2	30
Benzo(b)fluoranthene	0.0776	ND	0.0428	0.0460	55.2	59.3	1	10.0-140			7.21	36
Benzo(k)fluoranthene	0.0776	ND	0.0410	0.0461	52.8	59.4	1	10.0-137			11.7	31
Benzo(a)pyrene	0.0776	ND	0.0441	0.0488	56.8	62.9	1	10.0-141			10.1	31
Chrysene	0.0776	ND	0.0466	0.0505	60.1	65.1	1	10.0-145			8.03	30
Dibenz(a,h)anthracene	0.0776	ND	0.0435	0.0476	56.1	61.3	1	10.0-132			9.00	31
Fluoranthene	0.0776	ND	0.0471	0.0519	60.7	66.9	1	10.0-153			9.70	33
Fluorene	0.0776	ND	0.0474	0.0506	61.1	65.2	1	11.0-130			6.53	29
Indeno(1,2,3-cd)pyrene	0.0776	ND	0.0468	0.0512	60.3	66.0	1	10.0-137			8.98	32
1-Methylnaphthalene	0.0776	ND	0.0509	0.0559	65.6	72.0	1	10.0-142			9.36	28
2-Methylnaphthalene	0.0776	ND	0.0509	0.0533	65.6	68.7	1	10.0-137			4.61	28
Naphthalene	0.0776	ND	0.0553	0.0567	71.3	73.1	1	10.0-135			2.50	27
Pyrene	0.0776	ND	0.0456	0.0492	58.8	63.4	1	10.0-148			7.59	35
(S) p-Terphenyl-d14					*78.0*	*79.0*		*23.0-120*				
(S) Nitrobenzene-d5					*81.5*	*84.2*		*14.0-149*				
(S) 2-Fluorobiphenyl					*70.7*	*70.5*		*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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
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	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

J115

ALL BOLD OUTLINED AREAS are for LAB USE ONLY

Company: Caerus Oil and Gas LLC	Billing Information: Info on file
Address: Info on file	
Report To: Jake Janicek, Brett Middleton, Blair Rollins	Email To: info on file
Copy To: Chris McKisson, remediation@confluence-cc.com	Site Collection Info/Address:
Customer Project Name/Number: A36A Dumpline Release	State: CO / County/City: Garfield / Time Zone Collected: [ ]PT [X]MT [ ]CT [ ]ET

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Phone: / Email:	Site/Facility ID #: A36A	Compliance Monitoring? [ ] Yes [X] No
Collected By (print): Alex Slorby	Purchase Order # : / Quote #:	DW PWS ID #: / DW Location Code:
Collected By (signature):	Turnaround Date Required: Standard 5-day	Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: (Expedite Charges Apply) [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day	Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Analyses

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	Table 915-1 VOCs	TPH (ORO, GRO, DRO)	Table 915-1 Metal's	Table 915-1 PAHs	pH, EC, SAR, Arsenic	Boron (Hot Water Soluble Soil)
20220425-A36A-POR@5'	SL	G	4/25/2022	1110				2	G	X	X	X	X	X	X

Lab Profile/Line:

Lab Sample Receipt Checklist:
Custody Seals Present/Intact Y N NA
Custody Signatures Present Y N NA
Collector Signature Present Y N NA
Bottles Intact Y N NA
Correct Bottles Y N NA
Sufficient Volume Y N NA
Samples Received on Ice Y N NA
VOA - Headspace Acceptable Y N NA
USDA Regulated Soils Y N NA
Samples in Holding Time Y N NA
Residual Chlorine Present Y N NA
Cl Strips: _____
Sample pH Acceptable Y N NA
pH Strips: _____
Sulfide Present Y N NA
Lead Acetate Strips: _____

LAB USE ONLY:
Lab Sample # / Comments:
L1486462
-01

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: __oC
Cooler 1 Therm Corr. Factor: __oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 4/25/2022 4:00	Received by/Company: (Signature)	Date/Time: 4/25 1600
Relinquished by/Company: (Signature)	Date/Time: 4/25/22 1730	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature) Temp 10to1.0 Cont 2	Date/Time:	Received by/Company: (Signature)	Date/Time: 4-26-22 9:00

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

ANALYTICAL REPORT

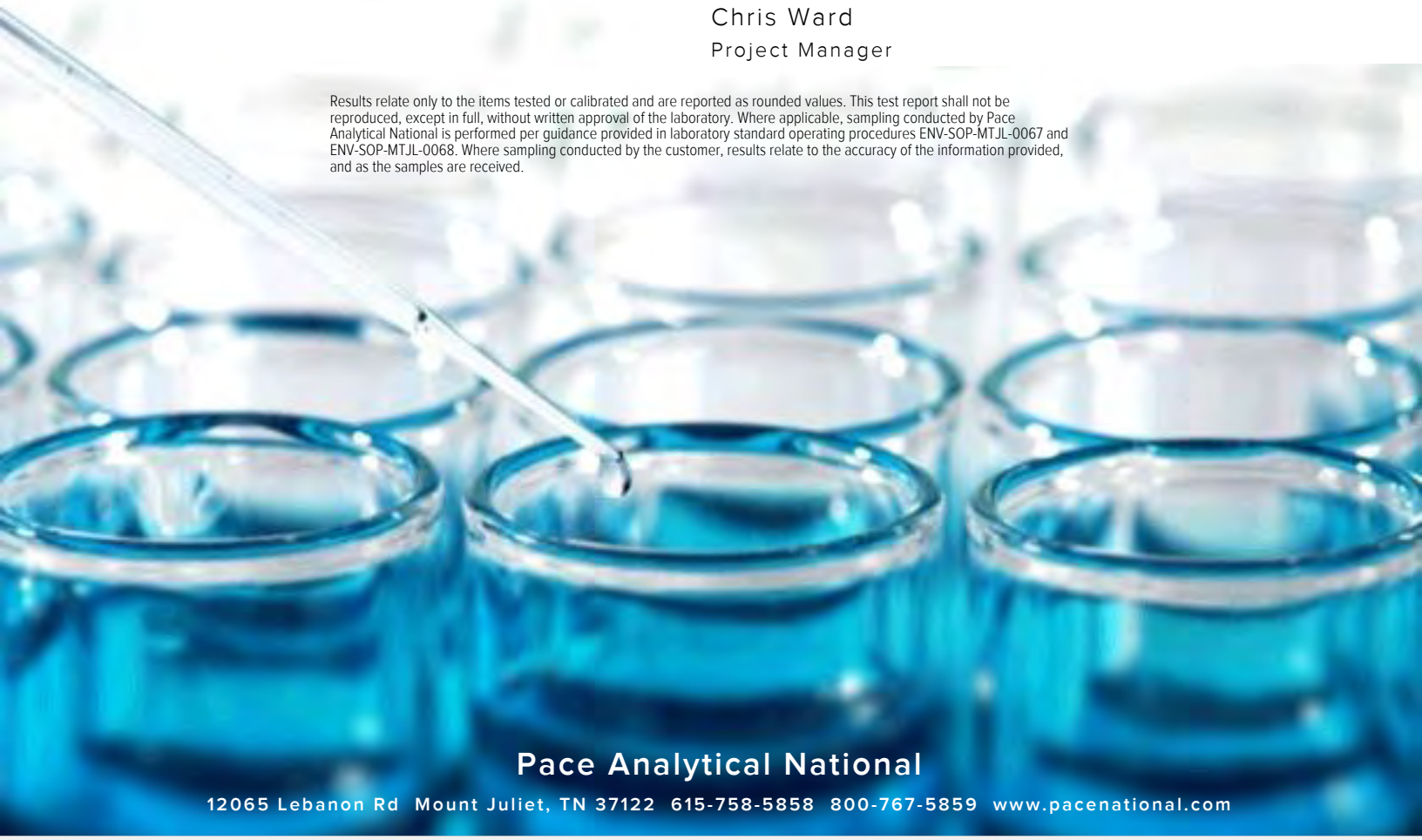
May 04, 2022

Caerus Oil and Gas

Sample Delivery Group:	L1486466
Samples Received:	04/26/2022
Project Number:	A36A
Description:	A36A Dumpline Release
Site:	A36A
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

TABLE OF CONTENTS

SAMPLE SUMMARY

20220425-A36A-SOLVAY_WELL3 L1486466-01 GW

Collected by: Alex Slorby
Collected date/time: 04/25/22 10:30
Received date/time: 04/26/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1855785	1	04/28/22 13:00	04/28/22 14:15	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1856370	1	05/01/22 15:32	05/01/22 15:32	LBR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1856370	5	05/03/22 13:42	05/03/22 13:42	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1855511	1	04/28/22 02:45	04/28/22 02:45	DWR	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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	518		10.0	1	04/28/2022 14:15	WG1855785

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	9.02		1.00	1	05/01/2022 15:32	WG1856370
Sulfate	155	J6	25.0	5	05/03/2022 13:42	WG1856370

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	04/28/2022 02:45	WG1855511
Toluene	ND		0.00100	1	04/28/2022 02:45	WG1855511
Ethylbenzene	ND		0.00100	1	04/28/2022 02:45	WG1855511
Xylenes, Total	ND		0.00300	1	04/28/2022 02:45	WG1855511
Naphthalene	ND		0.00500	1	04/28/2022 02:45	WG1855511
1,2,4-Trimethylbenzene	ND		0.00100	1	04/28/2022 02:45	WG1855511
1,3,5-Trimethylbenzene	ND		0.00100	1	04/28/2022 02:45	WG1855511
(S) Toluene-d8	*109*		*80.0-120*		*04/28/2022 02:45*	WG1855511
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*04/28/2022 02:45*	WG1855511
(S) 1,2-Dichloroethane-d4	*97.1*		*70.0-130*		*04/28/2022 02:45*	WG1855511

Method Blank (MB)

(MB) R3786738-1 04/28/22 14:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1485558-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1485558-10 04/28/22 14:15 • (DUP) R3786738-3 04/28/22 14:15

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1790	1900	1	5.95	J3	5

L1486248-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1486248-13 04/28/22 14:15 • (DUP) R3786738-4 04/28/22 14:15

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1020	1070	1	5.36	J3	5

Laboratory Control Sample (LCS)

(LCS) R3786738-2 04/28/22 14:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	2460	2470	100	81.7-118	

Method Blank (MB)

(MB) R3787618-1 05/01/22 09:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Sulfate	U		0.594	5.00

L1486466-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1486466-01 05/01/22 15:32 • (DUP) R3787618-6 05/01/22 15:45

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	9.02	9.12	1	1.14		15

L1486147-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1486147-01 05/01/22 10:50 • (DUP) R3787618-3 05/01/22 11:04

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	59.9	59.6	1	0.479		15
Sulfate	118	115	1	2.78	E	15

L1486466-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1486466-01 05/03/22 13:42 • (DUP) R3787648-1 05/03/22 14:31

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	155	156	5	0.924		15

Laboratory Control Sample (LCS)

(LCS) R3787618-2 05/01/22 09:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.0	97.6	80.0-120	
Sulfate	40.0	40.3	101	80.0-120	

L1486147-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1486147-01 05/01/22 10:50 • (MS) R3787618-4 05/01/22 11:17 • (MSD) R3787618-5 05/01/22 11:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	59.9	109	109	98.9	98.3	1	80.0-120	E	E	0.302	15
Sulfate	50.0	118	155	160	74.1	84.3	1	80.0-120	E J6	E	3.23	15

L1486466-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1486466-01 05/01/22 15:32 • (MS) R3787618-7 05/01/22 15:58

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	9.02	58.9	99.8	1	80.0-120	
Sulfate	50.0	158	188	59.3	1	80.0-120	E J6

Method Blank (MB)

(MB) R3785954-3 04/27/22 21:36

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Toluene	U		0.000278	0.00100
Ethylbenzene	U		0.000137	0.00100
Xylenes, Total	U		0.000174	0.00300
Naphthalene	U		0.00100	0.00500
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
(S) Toluene-d8	*111*			*80.0-120*
(S) 4-Bromofluorobenzene	*107*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*

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

(LCS) R3785954-1 04/27/22 20:12 • (LCSD) R3785954-4 04/27/22 22:36

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 %
Benzene	0.00500	0.00458	0.00465	91.6	93.0	70.0-123			1.52	20
Toluene	0.00500	0.00480	0.00478	96.0	95.6	79.0-120			0.418	20
Ethylbenzene	0.00500	0.00491	0.00494	98.2	98.8	79.0-123			0.609	20
Xylenes, Total	0.0150	0.0151	0.0149	101	99.3	79.0-123			1.33	20
Naphthalene	0.00500	0.00376	0.00353	75.2	70.6	54.0-135			6.31	20
1,2,4-Trimethylbenzene	0.00500	0.00486	0.00454	97.2	90.8	76.0-121			6.81	20
1,3,5-Trimethylbenzene	0.00500	0.00504	0.00491	101	98.2	76.0-122			2.61	20
(S) Toluene-d8				*108*	*110*	*80.0-120*				
(S) 4-Bromofluorobenzene				*103*	*104*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*100*	*97.2*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
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.

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.

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

J116

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL BOLD OUTLINED AREAS are for LAB USE ONLY

Company: Caerus Oil and Gas LLC	Billing Information: Info on file
Address: Info on file	
Report To: Jake Janicek, Brett Middleton, Blair Rollins	Email To: Info on file
Copy To: Chris McKisson, remediation@confluence-cc.com	Site Collection Info/Address:
Customer Project Name/Number: A36A Dumpline Release	State: CO / County/City: Garfield / Time Zone Collected: [ ]PT [X]MT [ ]CT [ ]ET
Phone: / Email:	Site/Facility ID #: A36A / Compliance Monitoring? [ ] Yes [X] No
Collected By (print): Alex Slorby	Purchase Order # : / Quote #: / DW PWS ID #: / DW Location Code:
Collected By (signature):	Turnaround Date Required: Standard 5-day / Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: (Expedite Charges Apply) [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day / Field Filtered (if applicable): [ ] Yes [ ] No / Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Lab Project Manager:

Analyses

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	BTEX	naphthalene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	TDS	chloride, sulfate
20220425-A36A-SOLVAY_WELL3	GW	G	4/25/2022	1030				5	P/G	X	X	X	X	X	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Sulfide Present	Y	N	NA

Cl Strips: _____ pH Strips: _____ Lead Acetate Strips: _____

LAB USE ONLY:
Lab Sample # / Comments:
L1486466
-01

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: __oC
Cooler 1 Therm Corr. Factor: __oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 4/25/2022 4:00	Received by/Company: (Signature)	Date/Time: 4/25 1600
Relinquished by/Company: (Signature)	Date/Time: 4/25/22 1730	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature) Temp 1.0 to 1.0 Cond. 5	Date/Time:	Received by/Company: (Signature)	Date/Time: 4.26-22

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

ANALYTICAL REPORT

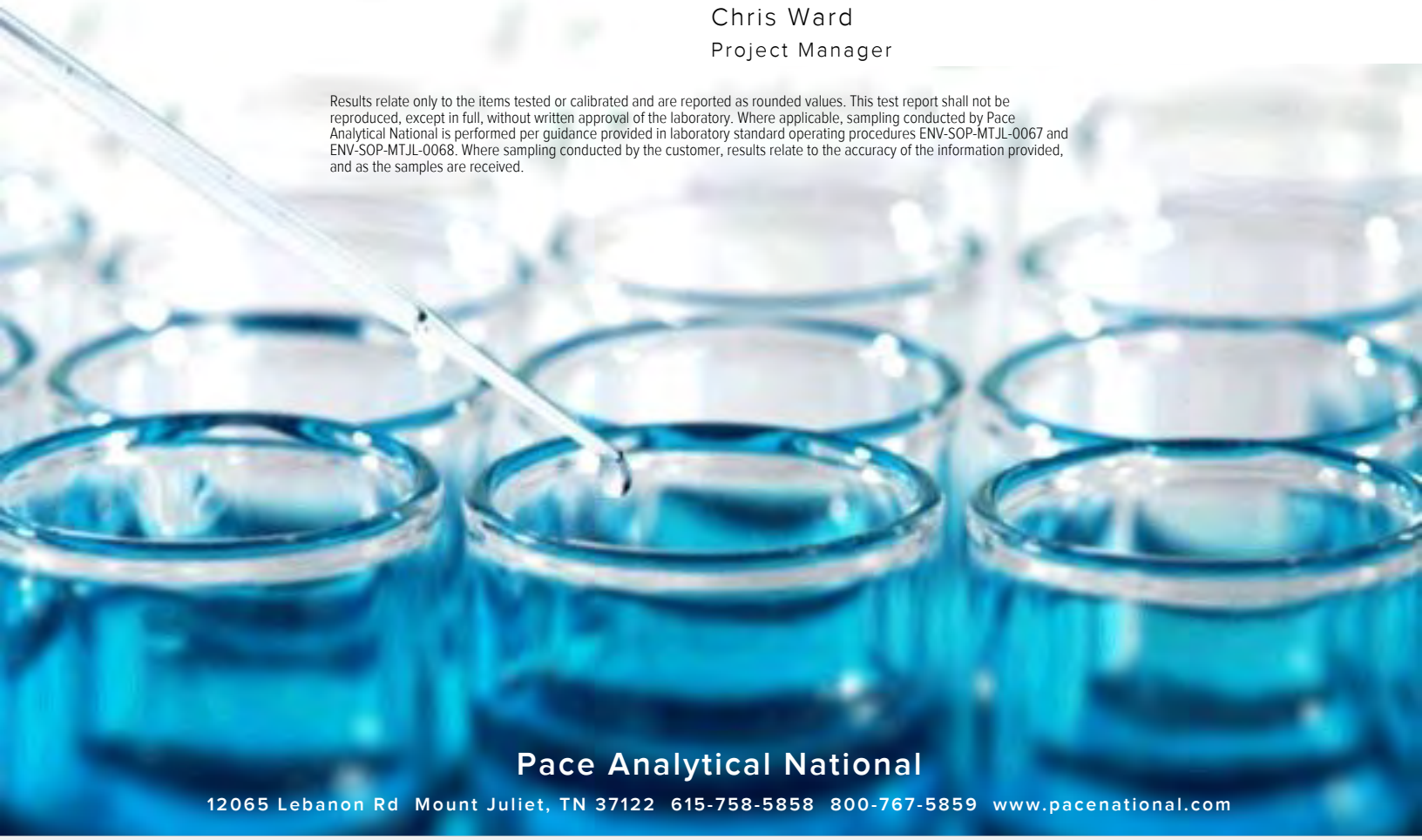
May 24, 2022

Caerus Oil and Gas

Sample Delivery Group:	L1493667
Samples Received:	05/13/2022
Project Number:	
Description:	Pipeline Removal
Site:	A36A 595
Report To:	Jake Janicek 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

20220511-A36A-PIPELINE_BASE_E@5' L1493667-01 Solid

Collected by	Collected date/time	Received date/time
	05/11/22 14:45	05/13/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1863789	1	05/22/22 18:07	05/22/22 18:07	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1867789	1	05/23/22 03:24	05/23/22 11:28	SCM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1866232	1	05/19/22 11:10	05/19/22 11:15	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1866299	1	05/20/22 08:08	05/20/22 16:22	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1866033	1.136364	05/19/22 07:19	05/20/22 08:26	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1863790	1	05/19/22 14:57	05/22/22 17:10	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1866039	5.681818	05/19/22 07:14	05/20/22 10:53	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1864792	1	05/16/22 14:02	05/19/22 22:53	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1864989	1	05/16/22 14:02	05/19/22 04:25	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1867117	1	05/21/22 07:59	05/23/22 14:01	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1866214	1	05/19/22 08:42	05/19/22 17:03	AMM	Mt. Juliet, TN

20220511-A36A-PIPELINE_BASE_W@5' L1493667-02 Solid

Collected by	Collected date/time	Received date/time
	05/11/22 15:00	05/13/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1863789	1	05/22/22 18:10	05/22/22 18:10	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1867789	1	05/23/22 03:24	05/23/22 11:33	SCM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1866232	1	05/19/22 11:10	05/19/22 11:15	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1866299	1	05/20/22 08:08	05/20/22 16:22	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1866033	1	05/19/22 07:19	05/20/22 08:29	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1863790	1	05/19/22 14:57	05/22/22 17:13	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1866039	5	05/19/22 07:14	05/20/22 10:57	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1864792	1	05/16/22 14:02	05/19/22 23:14	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1864989	1	05/16/22 14:02	05/19/22 04:44	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1867117	1	05/21/22 07:59	05/23/22 14:14	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1866214	1	05/19/22 08:42	05/19/22 19:43	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	2.27		1	05/22/2022 18:07	WG1863789

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	05/23/2022 11:28	WG1867789

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.32	T8	1	05/19/2022 11:15	WG1866232

Sample Narrative:

L1493667-01 WG1866232: 8.32 at 22.9C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	310		10.0	1	05/20/2022 16:22	WG1866299

Sample Narrative:

L1493667-01 WG1866299: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	234		0.568	1.136364	05/20/2022 08:26	WG1866033
Cadmium	ND		0.568	1.136364	05/20/2022 08:26	WG1866033
Copper	10.7		2.27	1.136364	05/20/2022 08:26	WG1866033
Lead	6.97		0.568	1.136364	05/20/2022 08:26	WG1866033
Nickel	7.98		2.27	1.136364	05/20/2022 08:26	WG1866033
Selenium	ND		2.27	1.136364	05/20/2022 08:26	WG1866033
Silver	ND		1.14	1.136364	05/20/2022 08:26	WG1866033
Zinc	25.6		5.68	1.136364	05/20/2022 08:26	WG1866033

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	ND		0.200	1	05/22/2022 17:10	WG1863790

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	3.41		1.14	5.681818	05/20/2022 10:53	WG1866039

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.109		0.100	1	05/19/2022 22:53	WG1864792
(S) a,a,a-Trifluorotoluene(FID)	*108*		*77.0-120*		*05/19/2022 22:53*	WG1864792

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	05/19/2022 04:25	WG1864989
Toluene	ND		0.00500	1	05/19/2022 04:25	WG1864989
Ethylbenzene	ND		0.00250	1	05/19/2022 04:25	WG1864989
Xylenes, Total	ND		0.00650	1	05/19/2022 04:25	WG1864989
1,2,4-Trimethylbenzene	ND		0.00500	1	05/19/2022 04:25	WG1864989
1,3,5-Trimethylbenzene	ND		0.00500	1	05/19/2022 04:25	WG1864989
(S) Toluene-d8	*105*		*75.0-131*		*05/19/2022 04:25*	WG1864989
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*05/19/2022 04:25*	WG1864989
(S) 1,2-Dichloroethane-d4	*97.3*		*70.0-130*		*05/19/2022 04:25*	WG1864989

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	17.6		4.00	1	05/23/2022 14:01	WG1867117
C28-C36 Motor Oil Range	27.5		4.00	1	05/23/2022 14:01	WG1867117
(S) o-Terphenyl	*60.8*		*18.0-148*		*05/23/2022 14:01*	WG1867117

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00600	1	05/19/2022 17:03	WG1866214
Anthracene	ND		0.00600	1	05/19/2022 17:03	WG1866214
Benzo(a)anthracene	ND		0.00600	1	05/19/2022 17:03	WG1866214
Benzo(b)fluoranthene	ND		0.00600	1	05/19/2022 17:03	WG1866214
Benzo(k)fluoranthene	ND		0.00600	1	05/19/2022 17:03	WG1866214
Benzo(a)pyrene	ND		0.00600	1	05/19/2022 17:03	WG1866214
Chrysene	ND		0.00600	1	05/19/2022 17:03	WG1866214
Dibenz(a,h)anthracene	ND		0.00600	1	05/19/2022 17:03	WG1866214
Fluoranthene	ND		0.00600	1	05/19/2022 17:03	WG1866214
Fluorene	ND		0.00600	1	05/19/2022 17:03	WG1866214
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	05/19/2022 17:03	WG1866214
1-Methylnaphthalene	ND		0.0200	1	05/19/2022 17:03	WG1866214
2-Methylnaphthalene	ND		0.0200	1	05/19/2022 17:03	WG1866214
Naphthalene	ND		0.0200	1	05/19/2022 17:03	WG1866214
Pyrene	ND		0.00600	1	05/19/2022 17:03	WG1866214
(S) p-Terphenyl-d14	*103*		*23.0-120*		*05/19/2022 17:03*	WG1866214
(S) Nitrobenzene-d5	*71.1*		*14.0-149*		*05/19/2022 17:03*	WG1866214
(S) 2-Fluorobiphenyl	*81.7*		*34.0-125*		*05/19/2022 17:03*	WG1866214

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.61		1	05/22/2022 18:10	WG1863789

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	05/23/2022 11:33	WG1867789

Wet Chemistry by Method 9045D

Analyte	Result pH	Qualifier	Dilution	Analysis date / time	Batch
pH	7.88	T8	1	05/19/2022 11:15	WG1866232

Sample Narrative:
L1493667-02 WG1866232: 7.88 at 22.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	508		10.0	1	05/20/2022 16:22	WG1866299

Sample Narrative:
L1493667-02 WG1866299: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	202		0.500	1	05/20/2022 08:29	WG1866033
Cadmium	ND		0.500	1	05/20/2022 08:29	WG1866033
Copper	11.5		2.00	1	05/20/2022 08:29	WG1866033
Lead	9.62		0.500	1	05/20/2022 08:29	WG1866033
Nickel	13.1		2.00	1	05/20/2022 08:29	WG1866033
Selenium	ND		2.00	1	05/20/2022 08:29	WG1866033
Silver	ND		1.00	1	05/20/2022 08:29	WG1866033
Zinc	36.7		5.00	1	05/20/2022 08:29	WG1866033

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		0.200	1	05/22/2022 17:13	WG1863790

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.08		1.00	5	05/20/2022 10:57	WG1866039

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	05/19/2022 23:14	WG1864792
(S) a,a,a-Trifluorotoluene(FID)	*109*		*77.0-120*		*05/19/2022 23:14*	WG1864792

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	05/19/2022 04:44	WG1864989
Toluene	ND		0.00500	1	05/19/2022 04:44	WG1864989
Ethylbenzene	ND		0.00250	1	05/19/2022 04:44	WG1864989
Xylenes, Total	ND		0.00650	1	05/19/2022 04:44	WG1864989
1,2,4-Trimethylbenzene	ND		0.00500	1	05/19/2022 04:44	WG1864989
1,3,5-Trimethylbenzene	ND		0.00500	1	05/19/2022 04:44	WG1864989
(S) Toluene-d8	*104*		*75.0-131*		*05/19/2022 04:44*	WG1864989
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*05/19/2022 04:44*	WG1864989
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*05/19/2022 04:44*	WG1864989

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	6.27		4.00	1	05/23/2022 14:14	WG1867117
C28-C36 Motor Oil Range	23.6		4.00	1	05/23/2022 14:14	WG1867117
(S) o-Terphenyl	*53.1*		*18.0-148*		*05/23/2022 14:14*	WG1867117

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00600	1	05/19/2022 19:43	WG1866214
Anthracene	ND		0.00600	1	05/19/2022 19:43	WG1866214
Benzo(a)anthracene	ND		0.00600	1	05/19/2022 19:43	WG1866214
Benzo(b)fluoranthene	ND		0.00600	1	05/19/2022 19:43	WG1866214
Benzo(k)fluoranthene	ND		0.00600	1	05/19/2022 19:43	WG1866214
Benzo(a)pyrene	ND		0.00600	1	05/19/2022 19:43	WG1866214
Chrysene	ND		0.00600	1	05/19/2022 19:43	WG1866214
Dibenz(a,h)anthracene	ND		0.00600	1	05/19/2022 19:43	WG1866214
Fluoranthene	ND		0.00600	1	05/19/2022 19:43	WG1866214
Fluorene	ND		0.00600	1	05/19/2022 19:43	WG1866214
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	05/19/2022 19:43	WG1866214
1-Methylnaphthalene	ND		0.0200	1	05/19/2022 19:43	WG1866214
2-Methylnaphthalene	ND		0.0200	1	05/19/2022 19:43	WG1866214
Naphthalene	ND		0.0200	1	05/19/2022 19:43	WG1866214
Pyrene	ND		0.00600	1	05/19/2022 19:43	WG1866214
(S) p-Terphenyl-d14	*72.5*		*23.0-120*		*05/19/2022 19:43*	WG1866214
(S) Nitrobenzene-d5	*49.8*		*14.0-149*		*05/19/2022 19:43*	WG1866214
(S) 2-Fluorobiphenyl	*58.6*		*34.0-125*		*05/19/2022 19:43*	WG1866214

Method Blank (MB)

(MB) R3795014-1 05/23/22 10:44

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

L1494266-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1494266-02 05/23/22 12:04 • (DUP) R3795014-3 05/23/22 12:10

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	30.0	P1	20

L1495823-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1495823-02 05/23/22 13:22 • (DUP) R3795014-8 05/23/22 13:27

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

Laboratory Control Sample (LCS)

(LCS) R3795014-2 05/23/22 10:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	9.56	95.6	80.0-120	

L1495416-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1495416-01 05/23/22 12:36 • (MS) R3795014-4 05/23/22 12:51 • (MSD) R3795014-5 05/23/22 12:56

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 %
Hexavalent Chromium	20.0	ND	15.4	17.4	74.9	85.0	1	75.0-125	J6		12.3	20

L1495416-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1495416-01 05/23/22 12:36 • (MS) R3795014-6 05/23/22 13:02

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	685	ND	617	90.0	50	75.0-125	

L1493651-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1493651-01 05/19/22 11:15 • (DUP) R3793911-2 05/19/22 11:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.04	8.08	1	0.496		1

Sample Narrative:

OS: 8.04 at 22.9C

DUP: 8.08 at 22.7C

Laboratory Control Sample (LCS)

(LCS) R3793911-1 05/19/22 11:15

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	9.93	99.3	99.0-101	

Sample Narrative:

LCS: 9.93 at 22.7C

Method Blank (MB)

(MB) R3794359-1 05/20/22 16:22

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

L1493441-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1493441-01 05/20/22 16:22 • (DUP) R3794359-3 05/20/22 16:22

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	934	929	1	0.537		20

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

L1493667-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1493667-01 05/20/22 16:22 • (DUP) R3794359-4 05/20/22 16:22

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	310	359	1	14.6		20

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

Laboratory Control Sample (LCS)

(LCS) R3794359-2 05/20/22 16:22

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	268	286	107	85.0-115	

Sample Narrative:
LCS: at 25C

QUALITY CONTROL SUMMARY

L1493667-01,02

Method Blank (MB)

(MB) R3794240-1 05/20/22 07:47

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Lead	0.269	J	0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R3794240-2 05/20/22 07:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	94.4	94.4	80.0-120	
Cadmium	100	90.8	90.8	80.0-120	
Copper	100	93.1	93.1	80.0-120	
Lead	100	112	112	80.0-120	
Nickel	100	91.0	91.0	80.0-120	
Selenium	100	87.6	87.6	80.0-120	
Silver	20.0	16.8	84.0	80.0-120	
Zinc	100	88.5	88.5	80.0-120	

L1493652-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1493652-04 05/20/22 07:52 • (MS) R3794240-5 05/20/22 08:01 • (MSD) R3794240-6 05/20/22 08:04

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 %
Barium	100	102	230	198	128	95.6	1	75.0-125	J5		15.3	20
Cadmium	100	ND	113	100	113	100	1	75.0-125			11.8	20
Copper	100	10.9	124	111	113	100	1	75.0-125			10.9	20
Lead	100	8.09	117	107	109	99.0	1	75.0-125			8.59	20
Nickel	100	9.97	121	108	111	98.5	1	75.0-125			10.8	20
Selenium	100	ND	108	96.9	108	96.9	1	75.0-125			10.6	20
Silver	20.0	ND	20.7	18.6	104	93.1	1	75.0-125			10.6	20
Zinc	100	36.1	137	124	101	87.9	1	75.0-125			10.3	20

Method Blank (MB)

(MB) R3794739-1 05/22/22 16:27

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) R3794739-2 05/22/22 16:29 • (LCSD) R3794739-3 05/22/22 16:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.01	0.999	101	99.9	80.0-120			1.26	20

Method Blank (MB)

(MB) R3794159-1 05/20/22 10:02

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00

Laboratory Control Sample (LCS)

(LCS) R3794159-2 05/20/22 10:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	87.9	87.9	80.0-120	

L1493652-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1493652-04 05/20/22 10:09 • (MS) R3794159-5 05/20/22 10:21 • (MSD) R3794159-6 05/20/22 10:24

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	3.77	108	102	104	97.9	5	75.0-125			5.81	20

Method Blank (MB)

(MB) R3794154-2 05/19/22 13:51

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)	*112*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3794154-1 05/19/22 12:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.70	104	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*98.6*	*77.0-120*	

L1493426-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1493426-01 05/19/22 16:25 • (MS) R3794154-3 05/19/22 23:36 • (MSD) R3794154-4 05/19/22 23:57

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	5.02	4.86	91.3	88.4	1	10.0-151			3.24	28
(S) a,a,a-Trifluorotoluene(FID)					*101*	*102*		*77.0-120*				

Method Blank (MB)

(MB) R3793814-3 05/19/22 02:12

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	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*105*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*

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

(LCS) R3793814-1 05/19/22 00:37 • (LCSD) R3793814-2 05/19/22 00:56

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	0.121	0.125	96.8	100	70.0-123			3.25	20
Toluene	0.125	0.112	0.121	89.6	96.8	75.0-121			7.73	20
Ethylbenzene	0.125	0.120	0.127	96.0	102	74.0-126			5.67	20
Xylenes, Total	0.375	0.368	0.369	98.1	98.4	72.0-127			0.271	20
1,2,4-Trimethylbenzene	0.125	0.119	0.115	95.2	92.0	70.0-126			3.42	20
1,3,5-Trimethylbenzene	0.125	0.121	0.120	96.8	96.0	73.0-127			0.830	20
(S) Toluene-d8				*95.4*	*102*	*75.0-131*				
(S) 4-Bromofluorobenzene				*106*	*102*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*102*	*102*	*70.0-130*				

L1493831-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1493831-01 05/19/22 10:08 • (MS) R3793814-4 05/19/22 10:27 • (MSD) R3793814-5 05/19/22 10:46

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	1.00	0.0316	0.710	0.904	67.8	87.2	8	10.0-149			24.0	37
Toluene	1.00	1.04	2.06	2.32	102	128	8	10.0-156			11.9	38
Ethylbenzene	1.00	2.83	4.52	4.79	169	196	8	10.0-160	J5	J5	5.80	38
Xylenes, Total	3.00	9.29	14.5	15.4	174	204	8	10.0-160	J5	J5	6.02	38
1,2,4-Trimethylbenzene	1.00	12.8	17.1	16.7	430	390	8	10.0-160	V	V	2.37	36
1,3,5-Trimethylbenzene	1.00	3.62	5.40	5.37	178	175	8	10.0-160	J5	J5	0.557	38
(S) Toluene-d8					*104*	*106*		*75.0-131*				
(S) 4-Bromofluorobenzene					*138*	*146*		*67.0-138*		J1		
(S) 1,2-Dichloroethane-d4					*106*	*104*		*70.0-130*				

Method Blank (MB)

(MB) R3795087-1 05/23/22 12:39

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	*69.7*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3795087-2 05/23/22 12:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	33.9	67.8	50.0-150	
(S) o-Terphenyl			*57.4*	*18.0-148*	

Method Blank (MB)

(MB) R3794341-2 05/19/22 14:22

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	*106*			*23.0-120*
(S) Nitrobenzene-d5	*66.5*			*14.0-149*
(S) 2-Fluorobiphenyl	*80.7*			*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R3794341-1 05/19/22 14:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0713	89.1	50.0-120	
Anthracene	0.0800	0.0716	89.5	50.0-126	
Benzo(a)anthracene	0.0800	0.0710	88.8	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0674	84.3	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0710	88.8	49.0-125	
Benzo(a)pyrene	0.0800	0.0625	78.1	42.0-120	
Chrysene	0.0800	0.0734	91.8	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0701	87.6	47.0-125	
Fluoranthene	0.0800	0.0710	88.8	49.0-129	
Fluorene	0.0800	0.0743	92.9	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0694	86.8	46.0-125	
1-Methylnaphthalene	0.0800	0.0719	89.9	51.0-121	
2-Methylnaphthalene	0.0800	0.0686	85.8	50.0-120	
Naphthalene	0.0800	0.0720	90.0	50.0-120	
Pyrene	0.0800	0.0707	88.4	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R3794341-1 05/19/22 14:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			*107*	*23.0-120*	
(S) Nitrobenzene-d5			*74.8*	*14.0-149*	
(S) 2-Fluorobiphenyl			*87.3*	*34.0-125*	

L1493667-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1493667-02 05/19/22 19:43 • (MS) R3794341-3 05/19/22 20:01 • (MSD) R3794341-4 05/19/22 20:19

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0768	ND	0.0634	0.0571	82.6	72.8	1	14.0-127			10.5	27
Anthracene	0.0768	ND	0.0631	0.0551	82.2	70.3	1	10.0-145			13.5	30
Benzo(a)anthracene	0.0768	ND	0.0622	0.0544	81.0	69.4	1	10.0-139			13.4	30
Benzo(b)fluoranthene	0.0768	ND	0.0610	0.0546	79.4	69.6	1	10.0-140			11.1	36
Benzo(k)fluoranthene	0.0768	ND	0.0612	0.0529	79.7	67.5	1	10.0-137			14.5	31
Benzo(a)pyrene	0.0768	ND	0.0619	0.0539	80.6	68.8	1	10.0-141			13.8	31
Chrysene	0.0768	ND	0.0651	0.0570	84.8	72.7	1	10.0-145			13.3	30
Dibenz(a,h)anthracene	0.0768	ND	0.0614	0.0531	79.9	67.7	1	10.0-132			14.5	31
Fluoranthene	0.0768	ND	0.0637	0.0562	82.9	71.7	1	10.0-153			12.5	33
Fluorene	0.0768	ND	0.0648	0.0581	84.4	74.1	1	11.0-130			10.9	29
Indeno(1,2,3-cd)pyrene	0.0768	ND	0.0611	0.0547	79.6	69.8	1	10.0-137			11.1	32
1-Methylnaphthalene	0.0768	ND	0.0660	0.0595	85.9	75.9	1	10.0-142			10.4	28
2-Methylnaphthalene	0.0768	ND	0.0612	0.0557	79.7	71.0	1	10.0-137			9.41	28
Naphthalene	0.0768	ND	0.0640	0.0580	83.3	74.0	1	10.0-135			9.84	27
Pyrene	0.0768	ND	0.0639	0.0561	83.2	71.6	1	10.0-148			13.0	35
(S) p-Terphenyl-d14					*101*	*89.2*		*23.0-120*				
(S) Nitrobenzene-d5					*71.2*	*60.5*		*14.0-149*				
(S) 2-Fluorobiphenyl					*82.4*	*71.6*		*34.0-125*				

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL BOLD OUTLINED AREAS are for LAB USE ONLY

Company: Caerus Oil and Gas LLC	Billing Information: Info on file
Address: Info on file	
Report To: Jake Janicek, Brett Middleton, Blair Rollins	Email To: info on file
Copy To: Chris McKisson, remediation@confluence-cc.com	Site Collection Info/Address:
Customer Project Name/Number: Pipeline Removal	State: CO / County/City: Garfield / Time Zone Collected: [ ]PT [X]MT [ ]CT [ ]ET
Phone: / Email:	Site/Facility ID #: A36A 595 / Compliance Monitoring? [ ] Yes [X] No
Collected By (print): Alex Slorby	Purchase Order # : / Quote #: / DW PWS ID #: / DW Location Code:
Collected By (signature):	Turnaround Date Required: Standard 5 Day / Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: ____ [ ] Hold: ____	Rush: (Expedite Charges Apply) [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day / Field Filtered (if applicable): [ ] Yes [ ] No Analysis: ____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	Table 915-1 VOCs	TPH (ORO, GRO, DRO)	Table 915-1 Metal's	Table 915-1 PAHs	EC, SAR, Arsenic	Boron (Hot Water Soluble Soil)	Analyses	Analyses	Analyses	Analyses
20220511-A36A-PIPELINE_BASE_E@5'	SL	G	5/11/2022	1445				2	G	X	X	X	X	X	X				
20220511-A36A-PIPELINE_BASE_W@5'	SL	G	5/11/2022	1500				2	G	X	X	X	X	X	X				

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: ____			
Sample pH Acceptable	Y	N	NA
pH Strips: ____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: ____			

LAB USE ONLY:
Lab Sample # / Comments:
44936d67
-01
-02

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: (Wet) Blue Dry None

Packing Material Used: 5755 8084 8639

Radchem sample(s) screened (<500 cpm): (Y) N NA

SHORT HOLDS PRESENT (<72 hours): Y (N) N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: ____
Cooler 1 Temp Upon Receipt: ___oC
Cooler 1 Therm Corr. Factor: ___oC
Cooler 1 Corrected Temp: ___oC
Comments:

Relinquished by/Company: (Signature) Alex Slorby	Date/Time: 5/12/22 1020	Received by/Company: (Signature)	Date/Time: 5/12
Relinquished by/Company: (Signature)	Date/Time: 5/12 1700	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 5/13/22 900

A135

Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y (N) NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____