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## Report of Work Completed – Tank Release

<b>ECMC Location Name (ID)</b>	PRF-63N97W/21NESE (315979)
<b>Operator Location Name</b>	Pinyon Ridge Federal C-1W
<b>Remediation Project Number</b>	23348
<b>Legal Description</b>	NESE Sec. 21 T3N-R97W
<b>Coordinates (Lat/Long)</b>	40.212478 / -108.276409
<b>County</b>	Rio Blanco County, Colorado

Mr. Hamilton,

Confluence Compliance Companies, LLC (Confluence) prepared Report of Work Completed (ROWC) for Anschutz Exploration Corporation (Anschutz) to document the findings of site investigation conducted to delineate the vertical extents of soil impacts associated with a release of produced water at the Pinyon Ridge Federal C-1W well pad (Location). The Location is 22.7 miles northwest of Meeker, Colorado in Rio Blanco County as illustrated in the attached Topographic Location Map. Additional information on the Location and associated remediation project is provided in the title block above and in the attached topographic location map and site diagrams. The ROWC provides a brief background on the incident and remediation project, methods used to complete the drilling assessment, results of the assessment, and recommendations for how to proceed with this information.

### Background

On March 27, 2022, an unknown volume of produced water overflowed from a tank and spilled inside lined secondary containment. Standing fluids were observed both inside and outside of secondary containment. Fluids were recovered via vacuum truck, resulting in the recovery of approximately 19 barrels of produced water. Energy & Carbon Management Commission (ECMC) Initial Form 19 Document 403000387 was submitted to document the release and to open Spill/Release Point ID 481972. ECMC Initial Form 27 Document 403056825 was later submitted to open Remediation Project Number 23348.

Initial site investigation efforts, including soil and water sampling, were completed on May 10, 2022. Eight soil samples were collected from the point of release (POR) and from visibly saturated areas of the pad surface. Analytical results of soil samples indicated exceedances of ECMC Table 915-1 Residential Screening Levels (RSSLs) for total petroleum hydrocarbons (TPH), pH, sodium adsorption ratio (SAR), and arsenic. Three water samples were also collected from the Location. 220510-PREFCIW-WW was collected from equipment on site as a produced water waste characterization sample. 220510-PREFCIW-OFLOW POND was collected as a surface water sample from the overflow pond on location, and 220510-PREFCIW-STOCK was collected from the surface water downgradient of the location. The waste characterization sample demonstrated levels of benzene, chloride, and sulfate above ECMC Table 915-1 RSSLs. Analytical results of both surface water samples were within ECMC Table 915-1 allowable limits for all constituents of concern.

On July 25, 2022, Confluence coordinated and oversaw drilling activities to delineate the extents of confirmed soil impacts. A total of 10 soil borings (SB01-SB10) were advanced using a direct push drill rig. With the exception of SB04, two soil samples were collected from each soil boring: one from the most impacted interval as determined by field observations and one from the terminus of the boring. No sample was collected from SB04 due to encountering refusal at 4 feet below ground surface (bgs). Analytical results of the soil boring samples indicate compliance with ECMC Table 915-1 RSSLs except for SAR, pH, and arsenic.

On September 28, 2022, Confluence returned to the Location to delineate the extent of soil impacts within secondary containment. Three soil borings (PHNE, PHNW, and PHS) were advanced with a hand auger to total depths ranging from 4 to 12 feet bgs. Two soil samples were collected from each boring with the exception of PHNW: one from the most impacted interval as determined by field observations and one from the terminus of the boring. One soil sample was collected from PHNW as field screening did not indicate soil impacts. Additionally, five background soil samples were collected from nearby, native, non-impacted soil. Analytical results of soil boring samples exceed ECMC Table 915-1 RSSLs for TPH, SAR, pH, and arsenic. Analytical results of background samples exceed ECMC Table 915-1 RSSLs for pH and arsenic.

## Methodology

From July 11 to July 13, 2023, Confluence returned to the Location to continue delineation efforts. Six delineation soil borings (SB11-SB13 and SB15-SB17) were advanced using a direct push drill rig to total depths ranging from 4 to 18 feet bgs. Two soil samples were collected from each soil boring: one from the most impacted interval as determined by field observations and one from the terminus of the boring. A third sample was collected from SB16 to characterize additional potential impacts. Four additional soil borings (SB14, SB18, SB19, and SB20) were advanced around the Location in native, non-impacted soil to further characterize native levels of inorganic constituents. Twelve soil samples were collected from the background investigation borings. Soil samples were field screened using visual and olfactory observations and using a photoionization detector (PID).

On October 3, 2023, Confluence returned to the Location to collect a produced water characterization sample. The fluid sample was collected from a produced water tank at the Location.

All collected soil samples were placed in laboratory provided containers, immediately placed on ice, and shipped for laboratory analysis under a completed chain-of-custody form to Pace Analytical Services (Pace). Characterization soil samples were submitted for analysis of the approved reduced suite of TPH, pH, SAR, and arsenic. Background samples were submitted for analysis of ECMC Table 915-1 inorganic constituents. The produced water sample was submitted for analysis of pH and metals. Sample locations are illustrated in the attached Site Diagrams.

## Results

These results summarize findings from the site investigation. 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 Diagrams. Laboratory analytical reports are attached and summarized in the Laboratory Results Summary Table.



## Lithology and Hydrogeology

Lithology at the Location is characterized by clay loam with interbedded mudstone lenses between 4 feet bgs to 22.5 feet bgs. Groundwater is expected to flow northeast towards Open Gulch and ultimately to the White River, located 4.7 miles south of the Location. During the course of site investigation, multiple soil borings have been advanced to refusal around the Location with a maximum depth of 25 feet bgs. Groundwater has not been encountered during site investigation to date. For this reason, depth to groundwater at the Location is assumed to be greater than 25 feet bgs, beneath a lithologic confining layer.

## Delineation Soil Borings

Potential soil impacts were observed in SB11 and SB16; hydrocarbon staining and odor were noted within SB11 at 8 feet bgs, and hydrocarbon odor was noted within SB16 at 4 feet bgs. PID measurements of these samples ranged from 162.0 to 2,154 parts per million (ppm). Field screening of the remaining soil samples did not indicate impacts with PID measurements ranging from 0.2 ppm to 30.1 ppm. Analytical results of the delineation soil boring samples exceed ECMC Table 915-1 RSSLs for SAR, pH, and arsenic. Exceedances of SAR range from 7.70 to 21.8, and pH exceedances range from 8.32 to 9.68. Arsenic exceedances range from 4.32 to 14.2 milligrams per kilogram (mg/kg).

## Background Investigation

Analytical results of background samples exceed ECMC Table 915-1 RSSLs for EC, SAR, pH, arsenic, and hexavalent chromium. EC exceedances range from 4.160 to 8.510 millimhos per centimeter (mmhos/cm), SAR exceedances range from 8.15 to 18.8, and pH exceedances range from 8.35 to 9.00. Arsenic exceedances range from 4.75 to 14.3 mg/kg, and hexavalent chromium exceedances range from 0.303 to 0.453 mg/kg.

## Produced Water Characterization

Analytical results of the produced water characterization indicate an arsenic value below laboratory detection limits and near-neutral pH at 6.46. See the attached Laboratory Results Summary Table for additional details and results.

## Analysis and Recommendations

Although levels of SAR exceeding ECMC Table 915-1 RSSL remain at the Location, analytical results of background sample 230713-PR\_C-1W\_SB18@12-15 indicates a native SAR value of 18.8. SB18 shares the same elevation and soil type as the Location (Kobase silty clay loam) therefore, it is reasonable to conclude that SB18 is representative of native soil conditions at the Location. Confluence recommends that Anschutz request consideration of ECMC Table 915-1 Footnote 1 to establish an alternative allowable limit for SAR of 18.8. Additionally, although levels of pH and arsenic exceeding ECMC Table 915-1 Residential Soil Screening Levels remain at the Location, produced water characterization data indicates the release was not a significant source of arsenic or pH.

Confluence recommends that Anschutz request consideration of ECMC Rule 915.e.(2).C. to remove arsenic, pH, and SAR as constituents of concern based on operator knowledge that the produced water at the Location is not a significant source of arsenic and contains near-neutral pH. Additionally, this is supported by analytical results from the initial point of release samples, which are below native SAR levels observed at the Location.



Assuming the proposed alternative allowable limit, operator knowledge, and source characterization are accepted, all constituents of concern are within allowable limits or alternative allowable limits except for TPH. Exceedances of TPH remain in the release area, and have been delineated vertically and horizontally. Confluence recommends that TPH impacts be removed and properly disposed or remediated in place. Confluence also recommends that Anschutz request an updated reduced analyte list of TPH prior to additional sampling.

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 us.

Regards,



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#### Attachments

- Topographic Location Map
- Site Diagram – Site Investigation
- Site Diagram – Supporting Samples
- Analytical Results Summary Table – Soil
- Analytical Results Summary Table – Water
- Laboratory Report





## Topographic Location Map

**Anschutz Exploration Corp**

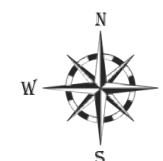
Pinyon Ridge Federal C-1W

(PRF-63N97W 21NESE)

COGCC Location ID: 315979

Rio Blanco County

NWSE Sec. 21 T3N-R75W



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

Created by: Chris McKisson on 05/23/2022.

Pinyon Ridge Federal C-1W

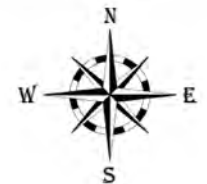





## Site Diagram Site Investigation

**Anschutz Exploration Corporation**

PRF-63N97W /21 NESE  
(Pinyon Ridge Federal C-1 W)  
ECMC Location ID: 315979  
Rio Blanco County  
NESE Sec. 21 T3N-R97W

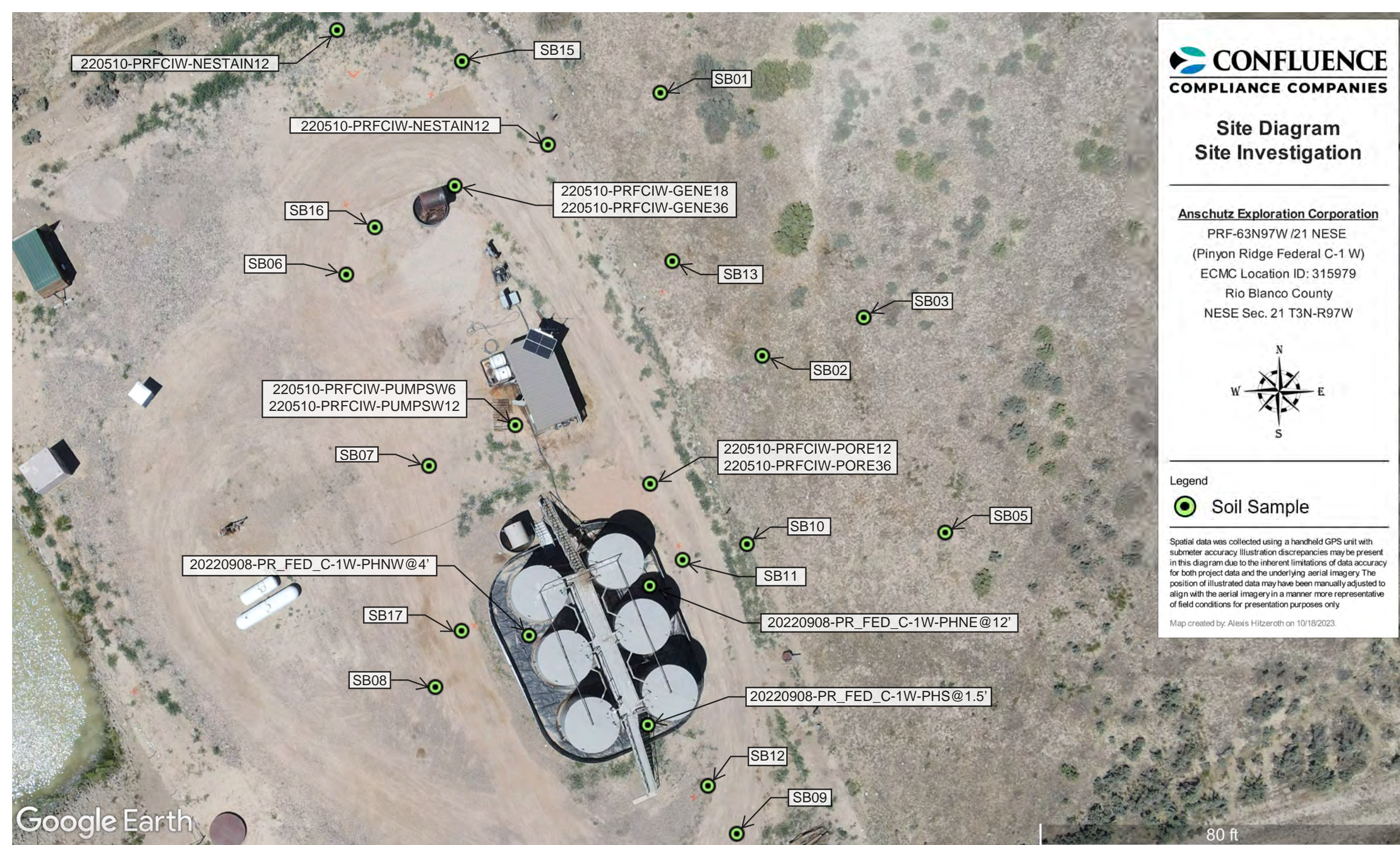


### Legend

 Soil Sample

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.

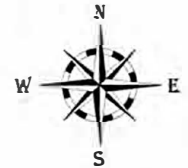
Map created by: Alexis Hitzeroth on 10/18/2023.







## Site Diagram Supporting Samples

**Caerus Oil and Gas LLC**  
PRF-63N97W/21NESE  
(Pinyon Ridge Federal C-1W)  
ECMC Location ID: 315979  
Rio Blanco County  
NESE Sec. 21 T3N-R97W



### Legend

-  Background Soil Sample
-  Water Sample

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: Miranda Beard on 10/24/2023.



Orange 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 - Soil  
Soil Pinyon Ridge Federal C-1

ECMC Soil Screening Levels				Soil Suitability for Reclamation					Metals (mg/kg [ppm])									
ECMC Table 915-1 Residential →				NA	4	6	6-8.3	2	0.68	15000	71	0.3	3100	400	1500	390	390	23000
Sample Date	Solid/Soil Source (Equipment, Dump Line, Pit, Cullings, Background, etc.)	Depth - Z' (feet) <b>(NEGATIVE VALUE)</b> below ground surface (bgs)	Sample ID	PID (ppm)	EC (Specific Conductance) (micromhos/centimeter) (by saturated paste method)	SAR (Sodium Adsorption Ratio) (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
7/13/2023	Tank Battery	-4	230713-PR_C-1W_SB17@0-4	4.6	NA	2.91	8.89	NA	4.72	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/13/2023	Tank Battery	-11	230713-PR_C-1W_SB17@8-11	1.1	NA	10.5	7.48	NA	4.32	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-8	230712-PR_C-1W_SB11@4-8	2154	NA	11.8	8.30	NA	5.93	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-18	230712-PR_C-1W_SB11@16-18	8.9	NA	7.70	7.74	NA	4.78	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-8	230712-PR_C-1W_SB12@4-8	1.6	NA	21.8	8.61	NA	6.05	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-14	230712-PR_C-1W_SB12@12-14	0.8	NA	11.6	8.32	NA	8.86	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-8	230712-PR_C-1W_SB13@4-8	0.5	NA	11.6	8.29	NA	6.87	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-12	230712-PR_C-1W_SB13@8-12	9.9	NA	13.7	8.23	NA	5.96	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-4	230712-PR_C-1W_SB15@0-4	30.1	NA	2.46	8.47	NA	6.45	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-11	230712-PR_C-1W_SB15@8-11	0.2	NA	2.50	9.68	NA	7.40	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-4	230712-PR_C-1W_SB16@0-4	162.0	NA	3.53	7.80	NA	6.94	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-8	230712-PR_C-1W_SB16@4-8	5.5	NA	1.09	7.93	NA	5.55	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Tank Battery	-11	230712-PR_C-1W_SB16@8-11	3.0	NA	0.753	7.91	NA	14.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/28/2022	Tank Battery	-12	20220928-PR_FED_C-1W-PHNE@12'	2148	NA	25.7	8.69	NA	5.67	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/28/2022	Tank Battery	-4	20220928-PR_FED_C-1W-PHNE@4'	2702	NA	20.6	8.27	NA	6.26	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/28/2022	Tank Battery	-4	20220928-PR_FED_C-1W-PHS@4'	5.9	NA	18.4	8.61	NA	6.21	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/28/2022	Tank Battery	-4	20220928-PR_FED_C-1W-PHNW@4'	1.5	NA	3.74	8.24	NA	6.07	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/28/2022	Tank Battery	-1.5	20220928-PR_FED_C-1W-PHS@1.5'	309.2	NA	70.2	8.35	NA	6.88	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-25	220725-C1W-SB05@22'-25'	NA	NA	10.6	7.94	NA	8.70	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-22.5	220725-C1W-SB01@20'-22.5'	NA	NA	14.2	6.54	NA	6.14	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-22.5	220725-C1W-SB03@20'-22.5'	NA	NA	7.02	6.66	NA	38.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-20	220725-C1W-SB06@17.5'-20'	NA	NA	23.5	7.19	NA	6.59	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-20	220725-C1W-SB01@17.5'-20'	NA	NA	17.5	5.45	NA	30.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-20	220725-C1W-SB05@17.5'-20'	NA	NA	4.60	7.82	NA	6.30	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-19.5	220725-C1W-SB09@17'-19.5'	NA	NA	6.44	7.98	NA	7.09	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-19.5	220725-C1W-SB10@17.5'-19.5'	NA	NA	5.78	7.51	NA	5.25	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-19	220725-C1W-SB03@16'-19'	NA	NA	8.23	8.08	NA	19.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-17.5	220725-C1W-SB07@15'-17.5'	NA	NA	34.7	5.55	NA	4.65	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-17.5	220725-C1W-SB02@15'-17.5'	NA	NA	5.90	7.52	NA	26.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-15	220725-C1W-SB07@12.5'-15'	NA	NA	26.8	5.03	NA	12.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-15	220725-C1W-SB10@12.5'-15'	NA	NA	21.2	7.94	NA	8.86	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-15	220725-C1W-SB06@12.5'-15'	NA	NA	14.3	4.81	NA	49.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-15	220725-C1W-SB09@12.5'-15'	NA	NA	9.55	8.05	NA	6.50	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-15	220725-C1W-SB02@10'-15'	NA	NA	8.11	8.12	NA	6.43	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-14.5	220725-C1W-SB08@12'-14.5'	NA	NA	19.6	6.73	NA	11.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Tank Battery	-10	220725-C1W-SB08@8'-10'	NA	NA	15.3	7.14	NA	21.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/10/2022	Tank Battery	-3	220510-PRFCIW-PORE36	1470	2.810	17.6	7.77	1.040	5.15	95.3	0.285	<1.00	14.3	8.26	12.2	<2.00	<1.00	44.7
5/10/2022	Tank Battery	-3	220510-PRFCIW-GENE36	438.9	0.443	3.46	7.67	0.647	7.12	114	0.388	<1.00	21.2	10.7	16.2	<2.00	<1.00	57.8
5/10/2022	Tank Battery	-1.5	220510-PRFCIW-GENE18	397.6	0.955	1.14	7.38	0.573	4.52	80.6	0.289	<1.00	15	10.7	11.6	<2.00	<1.00	44.3
5/10/2022	Tank Battery	-1	220510-PRFCIW-PUMPSW12	0.8	1.560	12.4	8.85	0.812	5.92	132	0.289	<0.255	15.3	8.65	15.5	<2.00	<1.00	44.4
5/10/2022	Tank Battery	-1	220510-PRFCIW-NESTAIN12	88.8	0.729	8.25	8.38	0.696	6.44	193	0.323	<1.00	15.3	10.2	18	<2.00	<1.00	46.1
5/10/2022	Tank Battery	-1	220510-PRFCIW-PORE12	28.7	1.060	4.63	8.45	0.903	4.46	95.8	0.261	0.3	17.5	6.94	22.5	<2.00	<1.00	40.2
5/10/2022	Tank Battery	-1	220510-PRFCIW-NSTAIN12	138.7	1.390	0.871	7.69	0.423	7.85	114	0.308	<1.00	18.3	11	18.8	0.838	<1.00	53.1
5/10/2022	Tank Battery	-0.5	220510-PRFCIW-PUMPSW6	40	1.300	2.02	8.84	0.138	5.45	105	0.281	0.261	14.6	8.62	12.9	<2.00	<1.00	43.9

ECMC Soil Screening Levels				Organic Compounds (mg/kg (ppm))																									
ECMC Table 915-1 Residential -->				NA	500	NA	NA	NA	1.2	490	5.8	58	30	27	360	1800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	18	24	2	180
Sample Date	Soil (Soil Source: Equipment Vials/Same, Separator, Tank Battery, Dump Line, Pit, Cuttings, Background, etc.)	Depth - Z' (feet) <b>(NEGATIVE VALUE)</b> below ground surface (pgs)	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	Benzof(A)anthracene	Benzof(A)pyrene	Benzof(B)fluoranthene	Benzof(K)fluoranthene	Chrysene	Dibenz(A,H)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-CD)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Pyrene
7/13/2023	Background	-4	230713-PR_C-1W_SB18@4-8	1.5	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
7/13/2023	Background	-12	230713-PR_C-1W_SB18@8-12	1.3	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
7/13/2023	Background	-15	230713-PR_C-1W_SB18@12-15	0.6	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
7/13/2023	Background	-8	230713-PR_C-1W_SB20@4-8	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
7/13/2023	Background	-10	230713-PR_C-1W_SB20@8-10	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
7/13/2023	Background	-8	230713-PR_C-1W_SB19@4-8	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
7/13/2023	Background	-12	230713-PR_C-1W_SB19@8-12	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
7/13/2023	Background	-15	230713-PR_C-1W_SB19@12-15	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
7/12/2023	Background	-8	230712-PR_C-1W_SB14@5-8	1.0	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
7/12/2023	Background	-12	230712-PR_C-1W_SB14@8-12	0.0	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
7/12/2023	Background	-14	230712-PR_C-1W_SB14@12-14	0.4	10.44	0.0680	4.01	6.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Background	-18	230712-PR_C-1W_SB14@14-18	0.0	4.18	0.0604	1.85	2.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Background	-14	230712-PR_C-1W_SB14@12-14	0.4	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
7/12/2023	Background	-18	230712-PR_C-1W_SB14@14-18	0.0	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
9/28/2022	Background	-1	20220928-PR_FED_C-1W-BG(1455) @ 1'	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
9/28/2022	Background	-1	20220928-PR_FED_C-1W-BG(1450) @ 1'	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
9/28/2022	Background	-1	20220928-PR_FED_C-1W-BG(1515) @ 1'	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
9/28/2022	Background	-1	20220928-PR_FED_C-1W-BG (1520) @ 1'	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
9/28/2022	Background	-1	20220928-PR_FED_C-1W-BG (1440) @ 1'	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



Laboratory Results Summary Table - Backgrounds  
Pinyon Ridge Federal C-1W

10/23/2023

ECMC Soil Screening Levels					Soil Suitability for Reclamation				Metals (mg/kg [ppm])									
ECMC Table 915-1 Residential -->				NA	4	6	6-8.3	2	0.68	15000	71	0.3	3100	400	1500	390	390	23000
Sample Date	Solid/Soil Source (Equipment) [Vault/Sump, Separator, Tank Battery, Dump Line, Pit, Cuttings, Background, etc.]	Depth - Z (feet) <b>(NEGATIVE VALUE)</b> below ground surface (bgs)	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
7/13/2023	Background	-4	230713-PR_C-1W_SB18@4-8	1.5	6.820	12.5	8.16	1.17	7.12	122	0.248	0.303	16.5	9.45	11.7	1.69	<0.500	44.7
7/13/2023	Background	-12	230713-PR_C-1W_SB18@8-12	1.3	8.510	8.15	7.97	0.808	14.3	142	0.651	0.453	19.6	12.3	11.5	0.996	0.109	50.3
7/13/2023	Background	-15	230713-PR_C-1W_SB18@12-15	0.6	2.740	18.8	8.79	0.46	14.2	37.1	<1.00	0.309	13.0	8.86	3.89	1.810	<0.500	52.4
7/13/2023	Background	-8	230713-PR_C-1W_SB20@4-8	NA	1.850	17.0	8.58	0.693	7.52	62.3	0.396	<1.00	26.8	12.5	18.3	0.813	0.110	65.7
7/13/2023	Background	-10	230713-PR_C-1W_SB20@8-10	NA	2.490	9.94	8.09	0.726	13.9	129	0.425	<1.00	28.0	16.2	17.3	1.14	0.116	72.7
7/13/2023	Background	-8	230713-PR_C-1W_SB19@4-8	NA	1.380	5.46	8.03	0.515	4.90	117	0.284	0.289	20.6	10.6	14.7	0.612	0.0987	53.2
7/13/2023	Background	-12	230713-PR_C-1W_SB19@8-12	NA	4.560	3.07	7.84	0.936	4.75	149	0.488	<1.00	13.5	9.06	12.1	0.669	<0.500	40.1
7/13/2023	Background	-15	230713-PR_C-1W_SB19@12-15	NA	4.160	1.87	7.65	0.802	6.15	52.1	0.273	0.268	16.9	9.12	15.1	0.504	0.0912	49.2
7/12/2023	Background	-8	230712-PR_C-1W_SB14@5-8	1.0	0.284	4.72	9.00	0.437	8.34	79.0	0.453	<1.00	16.4	10.3	13.1	0.604	<0.500	46.6
7/12/2023	Background	-12	230712-PR_C-1W_SB14@8-12	0.0	1.980	11.2	8.35	0.700	6.82	92.3	0.350	0.335	21.6	13.0	17.8	0.670	0.0916	68.7
7/12/2023	Background	-14	230712-PR_C-1W_SB14@12-14	0.4	NA	9.18	8.11	NA	7.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Background	-18	230712-PR_C-1W_SB14@14-18	0.0	NA	10.1	8.20	NA	11.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/12/2023	Background	-14	230712-PR_C-1W_SB14@12-14	0.4	1.030	NA	8.09	0.462	7.05	213	0.452	<1.00	17.8	11.3	15.4	0.733	0.112	53.5
7/12/2023	Background	-18	230712-PR_C-1W_SB14@14-18	0.0	1.220	NA	8.19	0.418	12.4	69.0	0.461	0.319	31.4	15.8	19.9	0.952	0.177	73.7
9/28/2022	Background	-1	20220928-PR_FED_C-1W-BG(1455) @ 1'	NA	NA	4.26	8.75	NA	8.05	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/28/2022	Background	-1	20220928-PR_FED_C-1W-BG(1450) @ 1'	NA	NA	0.108	8.33	NA	3.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/28/2022	Background	-1	20220928-PR_FED_C-1W-BG(1515) @ 1'	NA	NA	0.0659	8.29	NA	4.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/28/2022	Background	-1	20220928-PR_FED_C-1W-BG (1520) @ 1'	NA	NA	0.0772	8.37	NA	5.32	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/28/2022	Background	-1	20220928-PR_FED_C-1W-BG (1440) @ 1'	NA	NA	0.0894	8.19	NA	8.16	NA	NA	NA	NA	NA	NA	NA	NA	NA



ECMC Allowable Concentration (915-Groundwater)		Organic Compounds (µg/L)							Inorganics (mg/L)			ECMC Standard Not Applicable											
		5	560-1,000	700	1,400-10,000	140	67	67	1.25xBG	250 or 1.25xBG	250 or 1.25xBG	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date	Sample ID	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	Arsenic, dissolved	Barium, dissolved	Boron	Cadmium, dissolved	Chromium (VI)	Copper, dissolved	Lead, dissolved	Nickel	pH	Selenium, dissolved	Silver, dissolved	Zinc
10/3/23	231003_PINYONRIDGE_PW	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.00500	72.9	26.5	<0.00500	<0.000500	0.0621	0.00440	<0.0100	6.46	<0.0100	<0.00500	<0.100
5/10/22	220510-PREFCIW-WW	6.73	6.01	0.243	2.35	<2.50	0.317	0.0845	46000	27400	<500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/10/22	220510-PREFCIW-OFLOW POND	<0.00100	<0.00100	<0.00100	<0.00300	<0.00500	<0.00100	<0.00100	600	18.1	233	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/10/22	220510-PREFCIW-STOCK	<0.00100	<0.00100	<0.00100	<0.00300	<0.00500	<0.00100	<0.00100	521	1.33	1.28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA



# ANALYTICAL REPORT

August 22, 2023

Revised Report

## Anschutz Exploration Corporation

Sample Delivery Group: L1635892  
Samples Received: 07/15/2023  
Project Number:  
Description: Tank Battery Release  
  
Report To: Schuyler Hamilton  
555 17th Street Suite 2400  
Denver, CO 80202

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Entire Report Reviewed By:

*Chris Ward*

Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

ACCOUNT:

Anschutz Exploration Corporation

PROJECT:

SDG:

L1635892

DATE/TIME:

08/22/23 15:35

PAGE:

1 of 13

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

# SAMPLE SUMMARY

230713-PR\_C-1W\_SB17@0-4 L1635892-01 Solid

Collected by  
Alex Slorby

Collected date/time  
07/13/23 09:05

Received date/time  
07/15/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2096651	1	07/25/23 18:16	07/25/23 18:16	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2097668	1	07/19/23 10:51	07/19/23 13:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2097070	5	07/18/23 16:19	07/21/23 19:29	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2097676	1	07/19/23 09:02	07/19/23 16:22	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2098204	1	07/21/23 10:16	07/22/23 11:52	JAS	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

230713-PR\_C-1W\_SB17@8-11 L1635892-02 Solid

Collected by  
Alex Slorby

Collected date/time  
07/13/23 09:20

Received date/time  
07/15/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2096651	1	07/25/23 18:19	07/25/23 18:19	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2097668	1	07/19/23 10:51	07/19/23 13:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2097070	5	07/18/23 16:19	07/21/23 19:33	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2097676	1	07/19/23 09:02	07/19/23 16:45	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2098204	1	07/21/23 10:16	07/22/23 11:39	JAS	Mt. Juliet, TN

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

# CASE NARRATIVE

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



Chris Ward  
Project Manager

## Report Revision History

---

Level II Report - Version 1: 07/26/23 11:35

## Project Narrative

---

Report reissued 8/22 for corrected client info



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	2.91		1	07/25/2023 18:16	WG2096651

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.89	T8	1	07/19/2023 13:00	WG2097668

## Sample Narrative:

L1635892-01 WG2097668: 8.89 at 22.1C

## Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.72		0.100	1.00	5	07/21/2023 19:29	WG2097070

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0614	B J	0.0217	0.100	1	07/19/2023 16:22	WG2097676
(S) a,a,a-Trifluorotoluene(FID)	95.3			77.0-120		07/19/2023 16:22	WG2097676

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	6.44		1.61	4.00	1	07/22/2023 11:52	WG2098204
C28-C36 Motor Oil Range	2.45	J	0.274	4.00	1	07/22/2023 11:52	WG2098204
(S) o-Terphenyl	40.7			18.0-148		07/22/2023 11:52	WG2098204

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	10.5		1	07/25/2023 18:19	WG2096651

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.48	<u>T8</u>	1	07/19/2023 13:00	<a href="#">WG2097668</a>

## Sample Narrative:

L1635892-02 WG2097668: 7.48 at 21.9C

## Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.32		0.100	1.00	5	07/21/2023 19:33	<a href="#">WG2097070</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0457	<u>B J</u>	0.0217	0.100	1	07/19/2023 16:45	<a href="#">WG2097676</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	96.7			77.0-120		07/19/2023 16:45	<a href="#">WG2097676</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.90	<u>J</u>	1.61	4.00	1	07/22/2023 11:39	<a href="#">WG2098204</a>
C28-C36 Motor Oil Range	2.01	<u>J</u>	0.274	4.00	1	07/22/2023 11:39	<a href="#">WG2098204</a>
(S) <i>o</i> -Terphenyl	40.1			18.0-148		07/22/2023 11:39	<a href="#">WG2098204</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L1635933-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1635933-01 07/19/23 13:00 • (DUP) R3950290-2 07/19/23 13:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.64	7.66	1	0.261		1

Sample Narrative:

OS: 7.64 at 21.4C

DUP: 7.66 at 21.4C

Laboratory Control Sample (LCS)

(LCS) R3950290-1 07/19/23 13:00

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

Sample Narrative:

LCS: 10 at 21C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3951471-1 07/21/23 18:42

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

Laboratory Control Sample (LCS)

(LCS) R3951471-2 07/21/23 18:45

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	89.1	89.1	80.0-120	

L1635890-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1635890-01 07/21/23 18:49 • (MS) R3951471-5 07/21/23 18:59 • (MSD) R3951471-6 07/21/23 19:02

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	3.13	84.6	84.2	81.4	81.1	5	75.0-125			0.435	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3951152-2 07/19/23 10:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0261	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.4			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3951152-1 07/19/23 10:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.35	79.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			103	77.0-120	

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3951597-1 07/22/23 09:52

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	49.2			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3951597-2 07/22/23 10:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	32.6	65.2	50.0-150	
(S) o-Terphenyl			64.1	18.0-148	

L1635647-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1635647-06 07/22/23 14:43 • (MS) R3951597-3 07/22/23 14:56 • (MSD) R3951597-4 07/22/23 15:09

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	48.0	29600	13900	25100	0.000	0.000	500	50.0-150	V	J3 V	57.4	20
(S) o-Terphenyl					0.000	0.000		18.0-148	J7	J7		

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

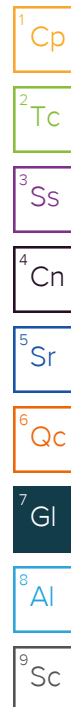
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

## Abbreviations and Definitions

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

## Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.



# ACCREDITATIONS & LOCATIONS

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

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

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

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

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



<b>CHAIN-OF-CUSTODY Analytical Request Document</b> <small>Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <a href="https://info.pacelabs.com/hubfs/pas-standard-terms.pdf">https://info.pacelabs.com/hubfs/pas-standard-terms.pdf</a>  Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields</small>										<b>LAB USE ONLY- Affix Workorder/Login Label Here or List Pace workorder Number or MTJL Log-in Number Here</b>																																							
Company: <b>Ceres Oil and Gas LLC</b> <i>Aschute</i>					Billing Information:					<b>ALL BOLD OUTLINED AREAS are for LAB USE ONLY</b>																																							
Address: Info on file					Info on file																																												
Report To: Chris McKisson					Email To: <a href="mailto:chris.mckisson@confluence-cc.com">chris.mckisson@confluence-cc.com</a>					<b>Container Preservative Type **</b> ** 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 _____																																							
Copy To: <a href="mailto:remediation@confluence-cc.com">remediation@confluence-cc.com</a>					Site Collection Info/Address:																																												
Customer Project Name/Number: Tank Battery Release					State: _____ County/City: _____ Time Zone Collected: _____ CO / Rio Blanco [ ] PT [X] MT [ ] CT [ ] ET					<b>Analyses</b> Lab Profile/Line: Lab Sample Receipt Checklist: Custody Seals Present/Intact Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA Custody Signatures Present Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA Collector Signature Present Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA Bottles Intact Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA Correct Bottles Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA Sufficient Volume Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA Samples Received on Ice Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA VOA - Headspace Acceptable Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA USDA Regulated Soils Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA Samples in Holding Time Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA Residual Chlorine Present Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA Cl Strips: _____ Sample pH Acceptable Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA pH Strips: _____ Sulfide Present Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA Lead Acetate Strips: _____  LAB USE ONLY: Lab Sample # / Comments: <i>U1055892</i> <i>-01</i> <i>-02</i>																																							
Phone: _____		Site/Facility ID #: Pinyon Ridge Federal C-1W		Compliance Monitoring? [ ] Yes [X] No			Container Type: Plastic (P) or Glass (G) TPH (ORO, GRO, DRO) pH, SAR Arsenic																																										
Email: _____		Purchase Order #:		DW PWS ID #:																																													
Collected By (print): Alex Slorby		Quote #:		DW Location Code:																																													
Collected By (signature): <i>Alex Slorby</i>		Turnaround Date Required: Standard		Immediately Packed on Ice:																																													
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:		Turnaround [ ] 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)										Lab Sample # / Comments: <i>U1055892</i> <i>-01</i> <i>-02</i>																																							
Customer Sample ID		Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns																																								
				Date Time		Date Time																																											
230713-PR C-1W_SB17@0-4		SL	G			7/13/2023 0905			3																																								
230713-PR C-1W_SB17@8-11		SL	G			7/13/2023 0920			3																																								
<b>Sample Receipt Checklist</b> COC Seal Present/Intact: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> IF Applicable COC Signed/Accurate: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> VOA Zero Headspace: Y <input type="checkbox"/> N Bottles arrive intact: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Pres. Correct/Check: Y <input type="checkbox"/> N Correct bottles used: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Sufficient volume sent: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> RAD Screen <0.5 mR/hr: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> <i>5.0e+0 = 5.0e</i>										Lab Sample # / Comments: <i>U1055892</i> <i>-01</i> <i>-02</i>																																							
																				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									
Relinquished by/Company: (Signature) <i>Alex Slorby</i>		Date/Time: 7/14/2023 1600		Received by/Company: (Signature) <i>[Signature]</i>		Date/Time: _____		<b>MTJL LAB USE ONLY</b> Table #: Acctnum: Template: Prelogin: PM: PB:																																									
Relinquished by/Company: (Signature) <i>AA</i>		Date/Time: 7/14/23 1700		Received by/Company: (Signature)		Date/Time: _____																																											
Relinquished by/Company: (Signature)		Date/Time: _____		Received by/Company: (Signature) <i>Hana Mwachung</i>		Date/Time: 7.15.25																																											
Non Conformance(s): YES / NO										Page: _____ of: _____																																							





# ANALYTICAL REPORT

September 01, 2023

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

## Anschutz Exploration Corporation

Sample Delivery Group: L1648717  
Samples Received: 07/14/2023  
Project Number: 315979  
Description: AECO05-Pinyon Ridge Fed C-1W

Report To: Schuyler Hamilton  
555 17th Street Suite 2400  
Denver, CO 80202

Entire Report Reviewed By:

*Chris Ward*

Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

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# SAMPLE SUMMARY

230712-PR\_C-1W\_SB14@12-14 L1648717-01 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 13:45

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2119912	1	08/24/23 00:20	08/25/23 11:57	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2121252	1	08/26/23 15:00	08/26/23 15:45	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2121183	1	08/26/23 07:25	08/26/23 12:18	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2124219	1	08/31/23 16:01	09/01/23 10:05	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2123590	20	08/30/23 12:17	08/30/23 23:41	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2123590	5	08/30/23 12:17	08/30/23 22:09	LD	Mt. Juliet, TN

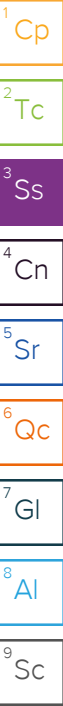
230712-PR\_C-1W\_SB14@14-18 L1648717-02 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 15:00

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2119912	1	08/24/23 00:20	08/25/23 12:06	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2121252	1	08/26/23 15:00	08/26/23 15:45	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2121183	1	08/26/23 07:25	08/26/23 12:18	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2124219	1	08/31/23 16:01	09/01/23 10:07	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2123590	5	08/30/23 12:17	08/30/23 22:49	LD	Mt. Juliet, TN



ACCOUNT:

Anschutz Exploration Corporation

PROJECT:

315979

SDG:

L1648717

DATE/TIME:

09/01/23 15:32

PAGE:

3 of 15

# 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



## Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	08/25/2023 11:57	<a href="#">WG2119912</a>

## Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.09	<a href="#">T8</a>	1	08/26/2023 15:45	<a href="#">WG2121252</a>

## Sample Narrative:

L1648717-01 WG2121252: 8.09 at 23.3C

## Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	<u>Qualifier</u>	RDL umhos/cm	Dilution	Analysis date / time	<u>Batch</u>
Specific Conductance	1030	T8	10.0	1	08/26/2023 12:18	WG2121183

## Sample Narrative:

L1648717-01 WG2121183: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.462		0.0167	0.200	1	09/01/2023 10:05	<a href="#">WG2124219</a>

## Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.05		0.100	1.00	5	08/30/2023 22:09	<a href="#">WG2123590</a>
Barium	213		0.608	10.0	20	08/30/2023 23:41	<a href="#">WG2123590</a>
Cadmium	0.452	<a href="#">J</a>	0.0855	1.00	5	08/30/2023 22:09	<a href="#">WG2123590</a>
Copper	17.8		0.132	5.00	5	08/30/2023 22:09	<a href="#">WG2123590</a>
Lead	11.3		0.0990	2.00	5	08/30/2023 22:09	<a href="#">WG2123590</a>
Nickel	15.4		0.197	2.50	5	08/30/2023 22:09	<a href="#">WG2123590</a>
Selenium	0.733	<a href="#">J O1</a>	0.180	2.50	5	08/30/2023 22:09	<a href="#">WG2123590</a>
Silver	0.112	<a href="#">J</a>	0.0865	0.500	5	08/30/2023 22:09	<a href="#">WG2123590</a>
Zinc	53.5	<a href="#">O1</a>	0.740	25.0	5	08/30/2023 22:09	<a href="#">WG2123590</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.319	J	0.255	1.00	1	08/25/2023 12:06	<a href="#">WG2119912</a>

## Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.19	T8	1	08/26/2023 15:45	<a href="#">WG2121252</a>

## Sample Narrative:

L1648717-02 WG2121252: 8.19 at 23.1C

## Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1220	T8	10.0	1	08/26/2023 12:18	<a href="#">WG2121183</a>

## Sample Narrative:

L1648717-02 WG2121183: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.418		0.0167	0.200	1	09/01/2023 10:07	<a href="#">WG2124219</a>

## Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	12.4		0.100	1.00	5	08/30/2023 22:49	<a href="#">WG2123590</a>
Barium	69.0		0.152	2.50	5	08/30/2023 22:49	<a href="#">WG2123590</a>
Cadmium	0.461	J	0.0855	1.00	5	08/30/2023 22:49	<a href="#">WG2123590</a>
Copper	31.4		0.132	5.00	5	08/30/2023 22:49	<a href="#">WG2123590</a>
Lead	15.8		0.0990	2.00	5	08/30/2023 22:49	<a href="#">WG2123590</a>
Nickel	19.9		0.197	2.50	5	08/30/2023 22:49	<a href="#">WG2123590</a>
Selenium	0.952	J	0.180	2.50	5	08/30/2023 22:49	<a href="#">WG2123590</a>
Silver	0.177	J	0.0865	0.500	5	08/30/2023 22:49	<a href="#">WG2123590</a>
Zinc	73.7		0.740	25.0	5	08/30/2023 22:49	<a href="#">WG2123590</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3965626-1 08/25/23 11:39

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

L1648779-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1648779-01 08/25/23 12:23 • (DUP) R3965626-3 08/25/23 12:32

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

L1648827-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1648827-01 08/25/23 15:31 • (DUP) R3965626-8 08/25/23 15:40

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

Laboratory Control Sample (LCS)

(LCS) R3965626-2 08/25/23 11:48

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Hexavalent Chromium	10.0	11.0	110	80.0-120	

L1648784-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1648784-01 08/25/23 13:26 • (MS) R3965626-4 08/25/23 13:35 • (MSD) R3965626-5 08/25/23 13:44

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Hexavalent Chromium	20.0	U	21.8	22.8	109	114	1	75.0-125			4.45	20

L1648784-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1648784-01 08/25/23 13:26 • (MS) R3965626-6 08/25/23 13:53

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Hexavalent Chromium	638	U	1110	174	50	75.0-125	J5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L1648647-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1648647-02 08/26/23 15:45 • (DUP) R3965795-2 08/26/23 15:45

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.30	7.36	1	0.819		1

Sample Narrative:

OS: 7.3 at 23.8C

DUP: 7.36 at 23.9C

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1648785-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1648785-01 08/26/23 15:45 • (DUP) R3965795-3 08/26/23 15:45

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	pH	su		%		%
pH	8.02	8.02	1	0.000		1

Sample Narrative:

OS: 8.02 at 22.9C

DUP: 8.02 at 23.1C

Laboratory Control Sample (LCS)

(LCS) R3965795-1 08/26/23 15:45

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

Sample Narrative:

LCS: 10 at 23.6C

Method Blank (MB)

(MB) R3965763-1 08/26/23 12:18

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

L1649401-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1649401-04 08/26/23 12:18 • (DUP) R3965763-3 08/26/23 12:18

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	511	515	1	0.780		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1649406-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1649406-04 08/26/23 12:18 • (DUP) R3965763-4 08/26/23 12:18

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	186	185	1	0.647		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3965763-2 08/26/23 12:18

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	732	729	99.6	85.0-115	

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R3968354-1 09/01/23 09:57

Analyte	MB Result mg/l	<u>MB Qualifier</u>	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) R3968354-2 09/01/23 09:59 • (LCSD) R3968354-3 09/01/23 10:02

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.05	1.06	105	106	80.0-120			0.990	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3967541-1 08/30/23 22:02

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

Laboratory Control Sample (LCS)

(LCS) R3967541-2 08/30/23 22:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	96.5	96.5	80.0-120	
Barium	100	92.3	92.3	80.0-120	
Cadmium	100	95.6	95.6	80.0-120	
Copper	100	90.6	90.6	80.0-120	
Lead	100	91.6	91.6	80.0-120	
Nickel	100	95.0	95.0	80.0-120	
Selenium	100	99.7	99.7	80.0-120	
Silver	20.0	19.6	97.8	80.0-120	
Zinc	100	92.9	92.9	80.0-120	

L1648717-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1648717-01 08/30/23 22:09 • (MS) R3967541-5 08/30/23 22:19 • (MSD) R3967541-6 08/30/23 22:22

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	7.05	110	104	103	96.8	5	75.0-125			5.47	20
Barium	100	212	290	236	78.0	24.0	5	75.0-125	E	E J3 J6	20.6	20
Cadmium	100	0.452	112	103	112	102	5	75.0-125			8.53	20
Copper	100	17.8	122	110	104	91.8	5	75.0-125			10.9	20
Lead	100	11.3	119	109	108	97.7	5	75.0-125			8.78	20
Nickel	100	15.4	115	110	100	94.6	5	75.0-125			4.79	20
Selenium	100	0.733	118	107	118	106	5	75.0-125			10.1	20
Silver	20.0	0.112	23.0	20.7	115	103	5	75.0-125			10.5	20
Zinc	100	53.5	151	151	97.3	97.3	5	75.0-125			0.00285	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

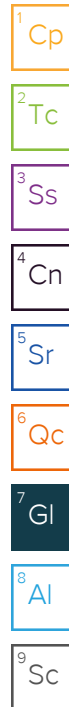
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

## Abbreviations and Definitions

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
T8	Sample(s) received past/too close to holding time expiration.



# ACCREDITATIONS & LOCATIONS

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

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

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

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

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





# CHAIN-OF-CUSTODY Analytical Request Document

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 SHADED AREAS are for LAB USE ONLY

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

Analyses

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  
VGA - 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:

L16355 99 N  
8/23/23

-01  
-02  
-03  
-04  
-05  
-06  
-07  
-08  
-09  
-10 L16VB 7/7-01  
-02

Company: Confluence Compliance Companies Billing Information: Info on file  
Address: Info on file  
Report To: Chris McKisson, remediation@confluence-cc.com Email To: Info on file  
Copy To: same Site Collection Info/Address: NESE Sec. 21 3497W 40.212620/-108.276390  
Customer Project Name/Number: AE005-Pinyon Ridge Fed C-1W(815979) State: 1 County/City: 1 Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET  
Phone: ON File Site/Facility ID #: same as above Compliance Monitoring? [ ] Yes [ ] No  
Email: ON File Purchase Order #: same as above DW PWS ID #: same as above  
Collected By (print): Alex Storby Quote #: same as above DW Location Code: same as above  
Collected By (signature): AS Turnaround Date Required: same as above Immediately Packed on Ice: [ ] Yes [ ] No  
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive [ ] Hold Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day Field Filtered (if applicable): [ ] Yes [ ] No  
(Expedite Charges Apply) Analysis: same as above

\* 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)		Composite End		Res Cl	# of Ctns										
			Date	Time	Date	Time												
230712-PR-C1W-SB1104-8	SL		7/12	10:15				2	X	X	X							
230712-PR-C1W-SB1106-18	SL			10:35				2	X	X	X							
230712-PR-C1W-SB1204-8	SL			11:25				2	X	X	X							
230712-PR-C1W-SB1202-14	SL			11:40				2	X	X	X							
230712-PR-C1W-SB1304-8	SL			12:20				2	X	X	X							
230712-PR-C1W-SB1308-12	SL			12:30				2	X	X	X							
230712-PR-C1W-SB1405-8	SL			13:20				2		X		X	X					
230712-PR-C1W-SB1408-12	SL			13:30				2		X		X	X					
230712-PR-C1W-SB1402-14	SL			13:45				2	X	X	X							
230712-PR-C1W-SB1404-18	SL			15:00				2	X	X	X							

Customer Remarks / Special Conditions / Possible Hazards: Type of Ice Used: Wet Blue Dry None

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

Packing Material Used:

Lab Tracking #:

6426 8306 6694

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

Samples received via:

FEDEX UPS Client Courier Pace Courier

Relinquished by/Company: (Signature)

Date/Time:

7/13/23-1300

Received by/Company: (Signature)

Date/Time:

L-094

Relinquished by/Company: (Signature)

Date/Time:

7/13/23 1600

Received by/Company: (Signature)

Date/Time:

Acctnum:

Template:

Prelogin:

Relinquished by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

PM:

PB:

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: GRAB

0.7 to 0.7

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s):

YES / NO

Page:

of: 2

L1635599-09, -10

R5

Please relog -09 and -10 to a new SDG for

- PH
- SPCON
- AGG
- ASG
- BAG
- CDG
- CR6IC
- CUG
- HWBICP
- NIG
- PBG
- SAR
- SEG
- ZNG

Thanks,

[Description: ESC Leaf for Email Signature Line] Chris Ward (He/him/his)  
Project Manager2  
Pace Analytical National  
12065 Lebanon Road | Mt. Juliet, TN 37122  
Chris.ward@pacelabs.com<mailto:Chris.ward@pacelabs.com> |  
www.pacenational.com<<http://www.pacenational.com/>>  
615.773.9712

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P Please consider the environment before printing this email

Time estimate: oh

Time spent: oh

Members

CW Chris Ward (responsible)





# ANALYTICAL REPORT

August 17, 2023

Revised Report

## Anschutz Exploration Corporation

Sample Delivery Group: L1635599  
Samples Received: 07/14/2023  
Project Number: 315979  
Description: AECO05-Pinyon Ridge Fed C-1W

Report To: Schuyler Hamilton  
555 17th Street Suite 2400  
Denver, CO 80202

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Entire Report Reviewed By:

*Chris Ward*

Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

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

# SAMPLE SUMMARY

## 230712-PR\_C-1W\_SB11@4-8 L1635599-01 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 10:15

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095327	1	07/25/23 16:59	07/25/23 16:59	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 19:38	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2097190	100	07/17/23 15:04	07/19/23 01:35	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2097491	1	07/20/23 00:02	07/20/23 11:48	JAS	Mt. Juliet, TN

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

## 230712-PR\_C-1W\_SB11@16-18 L1635599-02 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 10:35

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095327	1	07/25/23 17:02	07/25/23 17:02	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095590	5	07/15/23 16:58	07/17/23 12:51	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2097196	1	07/17/23 15:04	07/19/23 12:53	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2097491	1	07/20/23 00:02	07/20/23 10:42	JAS	Mt. Juliet, TN

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

## 230712-PR\_C-1W\_SB12@4-8 L1635599-03 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 11:25

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095327	1	07/25/23 17:05	07/25/23 17:05	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095590	5	07/15/23 16:58	07/17/23 12:54	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 03:18	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2097491	1	07/20/23 00:02	07/20/23 10:55	JAS	Mt. Juliet, TN

<sup>9</sup> Sc

## 230712-PR\_C-1W\_SB12@12-14 L1635599-04 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 11:40

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095327	1	07/25/23 17:08	07/25/23 17:08	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095590	5	07/15/23 16:58	07/17/23 14:18	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 03:41	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2097491	1	07/20/23 00:02	07/20/23 10:02	JAS	Mt. Juliet, TN

## 230712-PR\_C-1W\_SB13@4-8 L1635599-05 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 12:20

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095327	1	07/25/23 17:16	07/25/23 17:16	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 19:41	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 04:04	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2097491	1	07/20/23 00:02	07/20/23 10:15	JAS	Mt. Juliet, TN

# SAMPLE SUMMARY

230712-PR\_C-1W\_SB13@8-12 L1635599-06 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 12:30

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095328	1	07/23/23 16:19	07/23/23 16:19	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 19:44	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 04:28	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2097491	1	07/20/23 00:02	07/20/23 15:59	JAS	Mt. Juliet, TN

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

230712-PR\_C-1W\_SB14@5-8 L1635599-07 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 13:20

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095328	1	07/23/23 16:22	07/23/23 16:22	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2095093	1	07/16/23 21:26	07/17/23 14:44	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2096073	1	07/17/23 10:32	07/17/23 14:32	MCC	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2097897	1	08/02/23 13:28	08/02/23 22:30	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 19:47	JPD	Mt. Juliet, TN

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

230712-PR\_C-1W\_SB14@8-12 L1635599-08 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 13:30

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095328	1	07/23/23 16:25	07/23/23 16:25	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2095093	1	07/16/23 21:26	07/17/23 14:49	SET	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2096073	1	07/17/23 10:32	07/17/23 14:32	MCC	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2097897	1	08/02/23 13:28	08/02/23 22:33	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 19:51	JPD	Mt. Juliet, TN

230712-PR\_C-1W\_SB14@12-14 L1635599-09 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 13:45

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095328	1	07/23/23 16:27	07/23/23 16:27	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 20:04	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 04:51	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2097491	1	07/20/23 00:02	07/20/23 11:08	JAS	Mt. Juliet, TN

230712-PR\_C-1W\_SB14@14-18 L1635599-10 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 15:00

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095328	1	07/23/23 16:30	07/23/23 16:30	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 20:07	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 05:14	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2098203	1	07/21/23 09:04	07/21/23 14:22	JAS	Mt. Juliet, TN

ACCOUNT:

Anschutz Exploration Corporation

PROJECT:

315979

SDG:

L1635599

DATE/TIME:

08/17/23 13:00

PAGE:

4 of 40

# SAMPLE SUMMARY

## 230712-PR\_C-1W\_SB15@0-4 L1635599-11 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 14:35

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095328	1	07/23/23 16:33	07/23/23 16:33	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2095847	1	07/16/23 16:04	07/17/23 10:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 20:11	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 05:37	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2098203	1	07/21/23 09:04	07/21/23 14:35	JAS	Mt. Juliet, TN

## 230712-PR\_C-1W\_SB15@8-11 L1635599-12 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 15:05

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095328	1	07/23/23 16:36	07/23/23 16:36	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2096058	1	07/17/23 09:05	07/17/23 12:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 20:14	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 06:00	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2098203	1	07/21/23 09:04	07/21/23 14:10	JAS	Mt. Juliet, TN

## 230712-PR\_C-1W\_SB16@0-4 L1635599-13 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 15:10

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095328	1	07/23/23 16:38	07/23/23 16:38	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2096058	1	07/17/23 09:05	07/17/23 12:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 20:17	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 06:23	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2098203	1	07/21/23 09:04	07/21/23 15:02	JAS	Mt. Juliet, TN

## 230712-PR\_C-1W\_SB16@4-8 L1635599-14 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 15:20

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095328	1	07/23/23 16:41	07/23/23 16:41	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2096058	1	07/17/23 09:05	07/17/23 12:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 20:20	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 06:46	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2098203	1	07/21/23 09:04	07/21/23 14:10	JAS	Mt. Juliet, TN

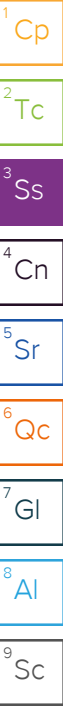
## 230712-PR\_C-1W\_SB16@8-11 L1635599-15 Solid

Collected by  
Alex Slorby

Collected date/time  
07/12/23 15:30

Received date/time  
07/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2095328	1	07/23/23 16:49	07/23/23 16:49	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2096058	1	07/17/23 09:05	07/17/23 12:00	SJA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2095886	5	07/16/23 18:14	07/18/23 18:48	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2096505	1	07/17/23 15:04	07/18/23 07:09	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2098203	1	07/21/23 09:04	07/21/23 14:22	JAS	Mt. Juliet, TN



# CASE NARRATIVE

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



Chris Ward  
Project Manager

## Report Revision History

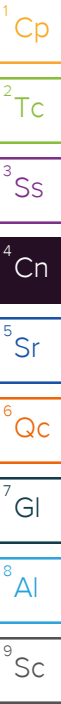
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Level II Report - Version 1: 08/03/23 15:10

## Project Narrative

---

Changed to correct project -SC



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	11.8		1	07/25/2023 16:59	WG2095327

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.30	<u>T8</u>	1	07/17/2023 10:00	<a href="#">WG2095847</a>

## Sample Narrative:

L1635599-01 WG2095847: 8.3 at 21.8C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	5.93		0.100	1.00	5	07/18/2023 19:38	<a href="#">WG2095886</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	374		2.17	10.0	100	07/19/2023 01:35	<a href="#">WG2097190</a>
(S)							
<i>a,a,a</i> -Trifluorotoluene(FID)	91.5			77.0-120		07/19/2023 01:35	<a href="#">WG2097190</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	37.4		1.61	4.00	1	07/20/2023 11:48	<a href="#">WG2097491</a>
C28-C36 Motor Oil Range	17.1		0.274	4.00	1	07/20/2023 11:48	<a href="#">WG2097491</a>
(S) <i>o</i> -Terphenyl	40.3			18.0-148		07/20/2023 11:48	<a href="#">WG2097491</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Calculated Results

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte					
Sodium Adsorption Ratio	7.70		1	07/25/2023 17:02	WG2095327

Wet Chemistry by Method 9045D

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte	su				
pH	7.74	T8	1	07/17/2023 10:00	WG2095847

Sample Narrative:  
L1635599-02 WG2095847: 7.74 at 21.6C

Metals (ICPMS) by Method 6020

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
Arsenic	4.78		0.100	1.00	5	07/17/2023 12:51	WG2095590

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0907	B J	0.0217	0.100	1	07/19/2023 12:53	WG2097196
(S) a,a,a-Trifluorotoluene(FID)	98.2			77.0-120		07/19/2023 12:53	WG2097196

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	2.15	J	1.61	4.00	1	07/20/2023 10:42	WG2097491
C28-C36 Motor Oil Range	1.79	B J	0.274	4.00	1	07/20/2023 10:42	WG2097491
(S) o-Terphenyl	60.2			18.0-148		07/20/2023 10:42	WG2097491

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Calculated Results

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte					
Sodium Adsorption Ratio	21.8		1	07/25/2023 17:05	WG2095327

Wet Chemistry by Method 9045D

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte	su				
pH	8.61	T8	1	07/17/2023 10:00	WG2095847

Sample Narrative:  
L1635599-03 WG2095847: 8.61 at 21.5C

Metals (ICPMS) by Method 6020

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
Arsenic	6.05		0.100	1.00	5	07/17/2023 12:54	WG2095590

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.160	B	0.0217	0.100	1	07/18/2023 03:18	WG2096505
(S) a,a,a-Trifluorotoluene(FID)	96.3			77.0-120		07/18/2023 03:18	WG2096505

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	2.13	J	1.61	4.00	1	07/20/2023 10:55	WG2097491
C28-C36 Motor Oil Range	2.70	B J	0.274	4.00	1	07/20/2023 10:55	WG2097491
(S) o-Terphenyl	43.3			18.0-148		07/20/2023 10:55	WG2097491

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	11.6		1	07/25/2023 17:08	WG2095327

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.32	<u>T8</u>	1	07/17/2023 10:00	<a href="#">WG2095847</a>

## Sample Narrative:

L1635599-04 WG2095847: 8.32 at 21.5C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	8.86		0.100	1.00	5	07/17/2023 14:18	<a href="#">WG2095590</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.109	<u>B</u>	0.0217	0.100	1	07/18/2023 03:41	<a href="#">WG2096505</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	95.7			77.0-120		07/18/2023 03:41	<a href="#">WG2096505</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	2.70	<u>J</u>	1.61	4.00	1	07/20/2023 10:02	<a href="#">WG2097491</a>
C28-C36 Motor Oil Range	3.65	<u>B J</u>	0.274	4.00	1	07/20/2023 10:02	<a href="#">WG2097491</a>
(S) <i>o</i> -Terphenyl	55.7			18.0-148		07/20/2023 10:02	<a href="#">WG2097491</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte					
Sodium Adsorption Ratio	11.6		1	07/25/2023 17:16	WG2095327

Wet Chemistry by Method 9045D

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte	su				
pH	8.29	T8	1	07/17/2023 10:00	WG2095847

Sample Narrative:  
L1635599-05 WG2095847: 8.29 at 21.5C

Metals (ICPMS) by Method 6020

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
Arsenic	6.87		0.100	1.00	5	07/18/2023 19:41	WG2095886

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0798	B J	0.0217	0.100	1	07/18/2023 04:04	WG2096505
(S) a,a,a-Trifluorotoluene(FID)	95.7			77.0-120		07/18/2023 04:04	WG2096505

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	3.65	J	1.61	4.00	1	07/20/2023 10:15	WG2097491
C28-C36 Motor Oil Range	6.31	B	0.274	4.00	1	07/20/2023 10:15	WG2097491
(S) o-Terphenyl	62.8			18.0-148		07/20/2023 10:15	WG2097491

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	13.7		1	07/23/2023 16:19	WG2095328

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.23	T8	1	07/17/2023 10:00	WG2095847

Sample Narrative:  
L1635599-06 WG2095847: 8.23 at 21.5C

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.96		0.100	1.00	5	07/18/2023 19:44	WG2095886

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0688	B J	0.0217	0.100	1	07/18/2023 04:28	WG2096505
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		07/18/2023 04:28	WG2096505

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.36	J	1.61	4.00	1	07/20/2023 15:59	WG2097491
C28-C36 Motor Oil Range	4.98	B	0.274	4.00	1	07/20/2023 15:59	WG2097491
(S) o-Terphenyl	53.2			18.0-148		07/20/2023 15:59	WG2097491

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte					
Sodium Adsorption Ratio	4.72		1	07/23/2023 16:22	WG2095328

Wet Chemistry by Method 7199

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
Hexavalent Chromium	U		0.255	1.00	1	07/17/2023 14:44	<a href="#">WG2095093</a>

Wet Chemistry by Method 9045D

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte	su				
pH	9.00	<a href="#">T8</a>	1	07/17/2023 10:00	<a href="#">WG2095847</a>

Sample Narrative:  
L1635599-07 WG2095847: 9 at 21.5C

Wet Chemistry by Method 9050AMod

	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	umhos/cm		umhos/cm			
Specific Conductance	284		10.0	1	07/17/2023 14:32	<a href="#">WG2096073</a>

Sample Narrative:  
L1635599-07 WG2096073: at 25C

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Hot Water Sol. Boron	0.437		0.0167	0.200	1	08/02/2023 22:30	<a href="#">WG2097897</a>

Metals (ICPMS) by Method 6020

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
Arsenic	8.34		0.100	1.00	5	07/18/2023 19:47	<a href="#">WG2095886</a>
Barium	79.0		0.152	2.50	5	07/18/2023 19:47	<a href="#">WG2095886</a>
Cadmium	0.453	<a href="#">J</a>	0.0855	1.00	5	07/18/2023 19:47	<a href="#">WG2095886</a>
Copper	16.4		0.132	5.00	5	07/18/2023 19:47	<a href="#">WG2095886</a>
Lead	10.3		0.0990	2.00	5	07/18/2023 19:47	<a href="#">WG2095886</a>
Nickel	13.1		0.197	2.50	5	07/18/2023 19:47	<a href="#">WG2095886</a>
Selenium	0.604	<a href="#">J</a>	0.180	2.50	5	07/18/2023 19:47	<a href="#">WG2095886</a>
Silver	U		0.0865	0.500	5	07/18/2023 19:47	<a href="#">WG2095886</a>
Zinc	46.6		0.740	25.0	5	07/18/2023 19:47	<a href="#">WG2095886</a>

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	11.2		1	07/23/2023 16:25	WG2095328

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.335	J	0.255	1.00	1	07/17/2023 14:49	WG2095093

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.35	T8	1	07/17/2023 10:00	WG2095847

Sample Narrative:  
L1635599-08 WG2095847: 8.35 at 21.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1980		10.0	1	07/17/2023 14:32	WG2096073

Sample Narrative:  
L1635599-08 WG2096073: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.700		0.0167	0.200	1	08/02/2023 22:33	WG2097897

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.82		0.100	1.00	5	07/18/2023 19:51	WG2095886
Barium	92.3		0.152	2.50	5	07/18/2023 19:51	WG2095886
Cadmium	0.350	J	0.0855	1.00	5	07/18/2023 19:51	WG2095886
Copper	21.6		0.132	5.00	5	07/18/2023 19:51	WG2095886
Lead	13.0		0.0990	2.00	5	07/18/2023 19:51	WG2095886
Nickel	17.8		0.197	2.50	5	07/18/2023 19:51	WG2095886
Selenium	0.670	J	0.180	2.50	5	07/18/2023 19:51	WG2095886
Silver	0.0916	J	0.0865	0.500	5	07/18/2023 19:51	WG2095886
Zinc	68.7		0.740	25.0	5	07/18/2023 19:51	WG2095886

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	9.18		1	07/23/2023 16:27	WG2095328

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.11	T8	1	07/17/2023 10:00	WG2095847

Sample Narrative:  
L1635599-09 WG2095847: 8.11 at 21.7C

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.02		0.100	1.00	5	07/18/2023 20:04	WG2095886

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0680	B J	0.0217	0.100	1	07/18/2023 04:51	WG2096505
(S) a,a,a-Trifluorotoluene(FID)	95.3			77.0-120		07/18/2023 04:51	WG2096505

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.01		1.61	4.00	1	07/20/2023 11:08	WG2097491
C28-C36 Motor Oil Range	6.36	B	0.274	4.00	1	07/20/2023 11:08	WG2097491
(S) o-Terphenyl	61.1			18.0-148		07/20/2023 11:08	WG2097491

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	10.1		1	07/23/2023 16:30	WG2095328

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.20	<u>T8</u>	1	07/17/2023 10:00	<a href="#">WG2095847</a>

## Sample Narrative:

L1635599-10 WG2095847: 8.2 at 22.1C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	11.3		0.100	1.00	5	07/18/2023 20:07	<a href="#">WG2095886</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0604	<u>B J</u>	0.0217	0.100	1	07/18/2023 05:14	<a href="#">WG2096505</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	96.4			77.0-120		07/18/2023 05:14	<a href="#">WG2096505</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	1.85	<u>J</u>	1.61	4.00	1	07/21/2023 14:22	<a href="#">WG2098203</a>
C28-C36 Motor Oil Range	2.27	<u>J</u>	0.274	4.00	1	07/21/2023 14:22	<a href="#">WG2098203</a>
(S) <i>o</i> -Terphenyl	65.0			18.0-148		07/21/2023 14:22	<a href="#">WG2098203</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	2.46		1	07/23/2023 16:33	WG2095328

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.47	<u>T8</u>	1	07/17/2023 10:00	<a href="#">WG2095847</a>

## Sample Narrative:

L1635599-11 WG2095847: 8.47 at 21.6C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.45		0.100	1.00	5	07/18/2023 20:11	<a href="#">WG2095886</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0846	<u>B J</u>	0.0217	0.100	1	07/18/2023 05:37	<a href="#">WG2096505</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	94.3			77.0-120		07/18/2023 05:37	<a href="#">WG2096505</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	148		1.61	4.00	1	07/21/2023 14:35	<a href="#">WG2098203</a>
C28-C36 Motor Oil Range	134		0.274	4.00	1	07/21/2023 14:35	<a href="#">WG2098203</a>
(S) <i>o</i> -Terphenyl	61.2			18.0-148		07/21/2023 14:35	<a href="#">WG2098203</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	2.50		1	07/23/2023 16:36	WG2095328

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	9.68	T8	1	07/17/2023 12:00	WG2096058

Sample Narrative:  
L1635599-12 WG2096058: 9.68 at 22.5C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	7.40		0.100	1.00	5	07/18/2023 20:14	WG2095886

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0820	B J	0.0217	0.100	1	07/18/2023 06:00	WG2096505
(S) a,a,a-Trifluorotoluene(FID)	95.6			77.0-120		07/18/2023 06:00	WG2096505

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	07/21/2023 14:10	WG2098203
C28-C36 Motor Oil Range	1.10	J	0.274	4.00	1	07/21/2023 14:10	WG2098203
(S) o-Terphenyl	61.3			18.0-148		07/21/2023 14:10	WG2098203

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	3.53		1	07/23/2023 16:38	WG2095328

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.80	T8	1	07/17/2023 12:00	WG2096058

Sample Narrative:  
L1635599-13 WG2096058: 7.8 at 22.6C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	6.94		0.100	1.00	5	07/18/2023 20:17	WG2095886

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.05		0.0217	0.100	1	07/18/2023 06:23	WG2096505
(S) a,a,a-Trifluorotoluene(FID)	93.9			77.0-120		07/18/2023 06:23	WG2096505

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	84.3		1.61	4.00	1	07/21/2023 15:02	WG2098203
C28-C36 Motor Oil Range	42.8		0.274	4.00	1	07/21/2023 15:02	WG2098203
(S) o-Terphenyl	45.9			18.0-148		07/21/2023 15:02	WG2098203

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.09		1	07/23/2023 16:41	WG2095328

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.93	<u>T8</u>	1	07/17/2023 12:00	<a href="#">WG2096058</a>

## Sample Narrative:

L1635599-14 WG2096058: 7.93 at 22.8C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	5.55		0.100	1.00	5	07/18/2023 20:20	<a href="#">WG2095886</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.102	<u>B</u>	0.0217	0.100	1	07/18/2023 06:46	<a href="#">WG2096505</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	95.5			77.0-120		07/18/2023 06:46	<a href="#">WG2096505</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	2.13	<u>J</u>	1.61	4.00	1	07/21/2023 14:10	<a href="#">WG2098203</a>
C28-C36 Motor Oil Range	3.03	<u>J</u>	0.274	4.00	1	07/21/2023 14:10	<a href="#">WG2098203</a>
(S) <i>o</i> -Terphenyl	47.4			18.0-148		07/21/2023 14:10	<a href="#">WG2098203</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.753		1	07/23/2023 16:49	WG2095328

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.91	<u>T8</u>	1	07/17/2023 12:00	<a href="#">WG2096058</a>

## Sample Narrative:

L1635599-15 WG2096058: 7.91 at 22.7C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	14.2		0.100	1.00	5	07/18/2023 18:48	<a href="#">WG2095886</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0898	<u>B J</u>	0.0217	0.100	1	07/18/2023 07:09	<a href="#">WG2096505</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	94.6			77.0-120		07/18/2023 07:09	<a href="#">WG2096505</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	3.20	<u>J</u>	1.61	4.00	1	07/21/2023 14:22	<a href="#">WG2098203</a>
C28-C36 Motor Oil Range	1.91	<u>J</u>	0.274	4.00	1	07/21/2023 14:22	<a href="#">WG2098203</a>
(S) <i>o</i> -Terphenyl	64.8			18.0-148		07/21/2023 14:22	<a href="#">WG2098203</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3949459-1 07/17/23 12:05

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

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1635109-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1635109-02 07/17/23 12:23 • (DUP) R3949459-3 07/17/23 12:28

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	0.331	0.298	1	10.7	⌵	20

L1635112-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1635112-08 07/17/23 13:46 • (DUP) R3949459-8 07/17/23 13:52

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	0.598	0.599	1	0.0720	⌵	20

Laboratory Control Sample (LCS)

(LCS) R3949459-2 07/17/23 12:13

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Hexavalent Chromium	10.0	11.9	119	80.0-120	

L1635112-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1635112-06 07/17/23 13:15 • (MS) R3949459-4 07/17/23 13:20 • (MSD) R3949459-5 07/17/23 13:25

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Hexavalent Chromium	20.0	0.385	20.6	21.7	101	106	1	75.0-125			4.97	20

L1635112-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1635112-06 07/17/23 13:15 • (MS) R3949459-6 07/17/23 13:30

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Hexavalent Chromium	643	0.385	866	135	50	75.0-125	⌵

L1635593-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1635593-01 07/17/23 10:00 • (DUP) R3949261-2 07/17/23 10:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.64	8.63	1	0.116		1

Sample Narrative:

OS: 8.64 at 22.2C

DUP: 8.63 at 22.2C



L1635599-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1635599-07 07/17/23 10:00 • (DUP) R3949261-3 07/17/23 10:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	9.00	9.04	1	0.443		1

Sample Narrative:

OS: 9 at 21.5C

DUP: 9.04 at 21.5C

Laboratory Control Sample (LCS)

(LCS) R3949261-1 07/17/23 10:00

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

Sample Narrative:

LCS: 10 at 21.6C

L1635599-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1635599-14 07/17/23 12:00 • (DUP) R3949332-2 07/17/23 12:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.93	7.92	1	0.126		1

Sample Narrative:  
OS: 7.93 at 22.8C  
DUP: 7.92 at 22.6C



L1635621-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1635621-01 07/17/23 12:00 • (DUP) R3949332-3 07/17/23 12:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.86	7.89	1	0.381		1

Sample Narrative:  
OS: 7.86 at 22.9C  
DUP: 7.89 at 22.8C

Laboratory Control Sample (LCS)

(LCS) R3949332-1 07/17/23 12:00

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

Sample Narrative:  
LCS: 9.99 at 22.9C

Method Blank (MB)

(MB) R3949387-1 07/17/23 14:32

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

L1635618-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1635618-01 07/17/23 14:32 • (DUP) R3949387-3 07/17/23 14:32

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	443	444	1	0.225		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1635618-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1635618-02 07/17/23 14:32 • (DUP) R3949387-4 07/17/23 14:32

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	214	213	1	0.328		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3949387-2 07/17/23 14:32

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	732	743	102	85.0-115	

Sample Narrative:

LCS: at 25C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3956276-1 08/02/23 22:22

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) R3956276-2 08/02/23 22:24 • (LCSD) R3956276-3 08/02/23 22:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.08	1.18	108	118	80.0-120			8.66	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) R3949529-1 07/17/23 11:58

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) R3949529-2 07/17/23 12:01

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

L1635796-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1635796-02 07/17/23 12:04 • (MS) R3949529-5 07/17/23 12:14 • (MSD) R3949529-6 07/17/23 12:17

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	3.71	94.0	94.2	90.3	90.5	5	75.0-125			0.209	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3950058-1 07/18/23 18:42

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

Laboratory Control Sample (LCS)

(LCS) R3950058-2 07/18/23 18:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	98.5	98.5	80.0-120	
Barium	100	94.6	94.6	80.0-120	
Cadmium	100	102	102	80.0-120	
Copper	100	91.1	91.1	80.0-120	
Lead	100	90.5	90.5	80.0-120	
Nickel	100	98.8	98.8	80.0-120	
Selenium	100	103	103	80.0-120	
Silver	20.0	19.3	96.3	80.0-120	
Zinc	100	94.6	94.6	80.0-120	

L1635599-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1635599-15 07/18/23 18:48 • (MS) R3950058-5 07/18/23 18:58 • (MSD) R3950058-6 07/18/23 19:01

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	14.2	97.2	109	83.0	94.9	5	75.0-125			11.6	20
Barium	100	73.9	182	226	108	152	5	75.0-125		J3 J5	21.9	20
Cadmium	100	0.619	95.9	102	95.2	101	5	75.0-125			6.31	20
Copper	100	34.4	115	123	80.9	88.6	5	75.0-125			6.48	20
Lead	100	17.3	104	110	86.4	93.1	5	75.0-125			6.22	20
Nickel	100	24.6	111	121	86.7	96.5	5	75.0-125			8.43	20
Selenium	100	1.12	95.0	102	93.9	101	5	75.0-125			7.36	20
Silver	20.0	0.109	17.7	18.9	88.1	93.9	5	75.0-125			6.28	20
Zinc	100	90.9	167	178	76.5	86.7	5	75.0-125			5.93	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3949862-2 07/17/23 23:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0245	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	98.6			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3949862-1 07/17/23 22:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.12	74.9	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			96.6	77.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3950734-3 07/19/23 00:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	1.36	⬇	0.543	2.50
(S) a,a,a-Trifluorotoluene(FID)	91.0			77.0-120

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

(LCS) R3950734-1 07/18/23 22:53 • (LCSD) R3950734-2 07/18/23 23:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.92	6.18	108	112	72.0-127			4.30	20
(S) a,a,a-Trifluorotoluene(FID)				96.4	96.9	77.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3951150-2 07/19/23 10:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0261	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.4			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3951150-1 07/19/23 10:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.35	79.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			103	77.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3950845-1 07/20/23 09:22

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	1.01	J	0.274	4.00
(S) o-Terphenyl	93.8			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3950845-2 07/20/23 09:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	43.5	87.0	50.0-150	
(S) o-Terphenyl			75.1	18.0-148	

L1635514-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1635514-01 07/20/23 13:20 • (MS) R3950845-3 07/20/23 13:33 • (MSD) R3950845-4 07/20/23 13:47

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 %
C10-C28 Diesel Range	49.7	14000	13600	11700	0.000	0.000	100	50.0-150	V	V	15.0	20
(S) o-Terphenyl					0.000	0.000		18.0-148	J7	J7		

Sample Narrative:

- OS: Dilution and surrogate failure due to matrix interference.
- MS: Dilution and surrogate failure due to matrix interference.
- MSD: Dilution and surrogate failure due to matrix interference.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3951457-1 07/21/23 13:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	79.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3951457-2 07/21/23 13:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	39.3	78.6	50.0-150	
(S) o-Terphenyl			71.6	18.0-148	

L1635599-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1635599-15 07/21/23 14:22 • (MS) R3951457-3 07/21/23 14:35 • (MSD) R3951457-4 07/21/23 14:49

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	48.6	3.20	36.3	37.1	68.1	70.3	1	50.0-150			2.18	20
(S) o-Terphenyl					52.2	55.0		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

## Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

# ACCREDITATIONS & LOCATIONS

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

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

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

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

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







## CHAIN-OF-CUSTODY Analytical Request Document




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

Company: <b>Confluence Compliance Companies</b>		Billing Information: <b>ON FILE</b>	
Address: <b>ON FILE</b>			
Report To: <b>Chris McKisson</b>		Email To: <b>ON FILE</b>	
Copy To: <b>remediation@confluence-cc.com</b>		Site Collection Info/Address: <b>See pg. 1</b>	
Customer Project Name/Number: <b>AEC0005-Pinyon Ridge Fed C-1W(315977)</b>		State: _____ County/City: _____ Time Zone Collected: <b>[ ] PT <input checked="" type="checkbox"/> MT [ ] CT [ ] ET</b>	
Phone: _____	Site/Facility ID #: _____	Compliance Monitoring?	
Email: <b>ON FILE</b>	<b>same as above</b>	<b>[ ] Yes [ ] No</b>	
Collected By (print): <b>Alex Sborby</b>	Purchase Order #: _____ Quote #: _____	DW PWS ID #: _____ DW Location Code: _____	
Collected By (signature): <b>AS</b>	Turnaround Date Required: _____	Immediately Packed on Ice: <b><input checked="" type="checkbox"/> Yes [ ] No</b>	
Sample Disposal: <input checked="" type="checkbox"/> Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day <b><input checked="" type="checkbox"/> 5 Day</b> (Expedite Charges Apply)	Field Filtered (if applicable): [ ] Yes <b><input checked="" type="checkbox"/> No</b>	
		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)

[illegible]

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	N	N

Relinquished by/Company: (Signature) 	Date/Time: 7/13/23-13:00	Received by/Company: (Signature) 
Relinquished by/Company: (Signature) 	Date/Time: 7/13/23/600	Received by/Company: (Signature)
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature) Caleb Tapp

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

ALL SHADED AREAS are for LAB USE ONLY

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

## Analyses

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:

# / Comment: L1635599

1	1
1	2
1	3
1	4
1	5

SHORT HOLDS PRESENT (&lt;72 hours): Y N N/A

Lab Tracking #:

6426 8306 6694

Samples received via:

FEDEX	UPS	Client	Courier	Pace Courier
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MTJL LAB USE ONLY

Table #:

Accounting

Template:

[Template](#)  
[Backlinks](#)

PM.

PM:

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#:

Cooler 1 Temp Upon Receipt: \_\_\_\_\_ °C

Cooler 1 Therm Corr. Factor: \_\_\_\_\_ °C

Cooler 1 Corrected Temp: \_\_\_\_\_ °C

Comments:

Comments:  $GBA6$   
 $0.7 + 0 = 0.7$

Trip Blank Received: Y N NA

HCL	MeOH	TSP	Other
-----	------	-----	-------

Non Conformance(s):

YES / NO

Page: 22

of: 

## CHAIN-OF-CUSTODY Analytical Request Document

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 SHADED AREAS are for LAB USE ONLY**

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 \_\_\_\_\_

## Analyses

Lab Profile/Line:
-------------------

Lab Sample Receipt Checklist:

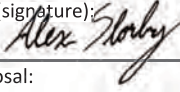
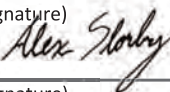
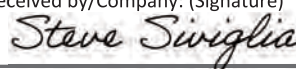
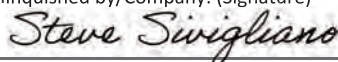
Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual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

COGCC TABLE 915-1 METALS

SAR, pH, EC, Boron (hot water sol.)

Company: <b>Confluence</b>		Billing Information:						
Address: <b>ON FILE</b>		<b>Confluence Compliance Companies</b>						
Report To: <b>CHRIS MCKISSON</b>		Email To: <b>CHRIS.MCKISSON@CONFLUENCE-CC.COM</b>						
Copy To: <b>REMEDIATION@CONFLUENCE-CC.COM</b>		Site Collection Info/Address: <b>NESE Sec. 21 3N97W 40.212620/-108.276390</b>						
Customer Project Name/Number: <b>AEC005-PINYON RIDGE FED C-1W (315979)</b>		State:      County/City:      Time Zone Collected: /      [ ] PT <input checked="" type="checkbox"/> MT [ ] CT [ ] ET						
Phone: <b>ON FILE</b> Email: <b>ON FILE</b>	Site/Facility ID #: <b>AEC005-PINYON RIDGE FED C-1W (315979)</b>		Compliance Monitoring? [ ] Yes      [ ] No					
Collected By (print): <b>Alex Slorby</b>	Purchase Order #: Quote #:		DW PWS ID #: DW Location Code:					
Collected By (signature): 	Turnaround Date Required:		Immediately Packed on Ice: <input checked="" type="checkbox"/> Yes      [ ] No					
Sample Disposal: <input checked="" type="checkbox"/> Dispose as appropriate    [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day    [ ] Next Day [ ] 2 Day    [ ] 3 Day    [ ] 4 Day <input checked="" type="checkbox"/> 5 Day (Expedite Charges Apply)		Field Filtered (if applicable): [ ] Yes <input checked="" type="checkbox"/> 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)								
Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
230712-PR_C-1W_SB14@5-8	SL		7/12/23	13:20				2
230712-PR_C-1W_SB14@8-12	SL		7/12/23	13:30				2
230712-PR_C-1W_SB14@12-14	SL		7/12/23	13:45				2
230712-PR_C-1W_SB14@14-18	SL		7/12/23	15:00				2
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					
Relinquished by/Company: (Signature) 			Date/Time: 7/12/2023    1945		Received by/Company: (Signature) 			
Relinquished by/Company: (Signature) 			Date/Time: 7/13/23    1300		Received by/Company: (Signature)			
Relinquished by/Company: (Signature)			Date/Time:		Received by/Company: (Signature)			

[illegible]







**Confluence Compliance Companies - CO**

Sample Delivery Group: L1519613  
Samples Received: 07/28/2022  
Project Number:  
Description: Pinyon Ridge C1W  
Site: PINYON RIDGE  
Report To: Chris McKisson  
403 ½ Rockwood Lane  
Grand Junction, CO 81507

Entire Report Reviewed By:



Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

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



# SAMPLE SUMMARY

## 220725-C1W-SB01@17.5'-20' L1519613-01 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 09:10

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:12	08/10/22 19:12	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903736	1	08/01/22 11:00	08/01/22 13:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1904634	5	08/03/22 09:00	08/04/22 14:50	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 10:43	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 19:52	JAS	Mt. Juliet, TN

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

## 220725-C1W-SB01@20'-22.5' L1519613-02 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 09:15

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:15	08/10/22 19:15	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903946	1	08/01/22 14:00	08/01/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1904634	10	08/03/22 09:00	08/04/22 15:03	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 11:04	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 17:27	JAS	Mt. Juliet, TN

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

## 220725-C1W-SB02@10'-15' L1519613-03 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 09:45

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:18	08/10/22 19:18	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903736	1	08/01/22 11:00	08/01/22 13:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1904634	5	08/03/22 09:00	08/04/22 15:06	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1904264	25	07/28/22 19:17	08/02/22 22:57	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 17:40	JAS	Mt. Juliet, TN

<sup>9</sup> Sc

## 220725-C1W-SB02@15'-17.5' L1519613-04 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 09:50

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:21	08/10/22 19:21	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903736	1	08/01/22 11:00	08/01/22 13:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1904634	5	08/03/22 09:00	08/04/22 15:09	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1904270	1	07/28/22 19:17	08/03/22 09:13	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 19:13	JAS	Mt. Juliet, TN

## 220725-C1W-SB03@16'-19' L1519613-05 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 10:20

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:23	08/10/22 19:23	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903736	1	08/01/22 11:00	08/01/22 13:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1904634	5	08/03/22 09:00	08/04/22 15:12	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902696	100	07/28/22 19:17	07/29/22 10:54	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 18:59	JAS	Mt. Juliet, TN

# SAMPLE SUMMARY

## 220725-C1W-SB03@20'-22.5' L1519613-06 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 10:25

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:26	08/10/22 19:26	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903946	1	08/01/22 14:00	08/01/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:24	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902696	200	07/28/22 19:17	07/29/22 11:17	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 20:05	JAS	Mt. Juliet, TN

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

## 220725-C1W-SB05@17.5'-20' L1519613-07 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 11:20

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 18:18	08/10/22 18:18	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903946	1	08/01/22 14:00	08/01/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:27	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1904270	1	07/28/22 19:17	08/03/22 09:33	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 17:53	JAS	Mt. Juliet, TN

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

## 220725-C1W-SB05@22'-25' L1519613-08 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 11:35

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 15:03	08/10/22 15:03	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903946	1	08/01/22 14:00	08/01/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:30	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1904270	1	07/28/22 19:17	08/03/22 09:54	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 18:07	JAS	Mt. Juliet, TN

<sup>9</sup> Sc

## 220725-C1W-SB06@12.5'-15' L1519613-09 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 12:20

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 16:58	08/10/22 16:58	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904469	1	08/02/22 14:00	08/02/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:34	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 12:52	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 20:19	JAS	Mt. Juliet, TN

## 220725-C1W-SB06@17.5'-20' L1519613-10 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 12:25

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:01	08/10/22 17:01	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904588	1	08/02/22 16:34	08/03/22 13:00	SDE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:37	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 13:14	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 18:20	JAS	Mt. Juliet, TN

# SAMPLE SUMMARY

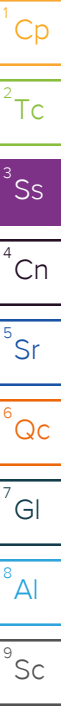
## 220725-C1W-SB07@12.5'-15' L1519613-11 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 12:55

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:04	08/10/22 17:04	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904878	1	08/03/22 09:56	08/03/22 12:00	SDE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 10:42	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 13:35	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 19:26	JAS	Mt. Juliet, TN



## 220725-C1W-SB07@15'-17.5' L1519613-12 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 13:00

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:07	08/10/22 17:07	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904878	1	08/03/22 09:56	08/03/22 12:00	SDE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:40	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 13:57	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 18:46	JAS	Mt. Juliet, TN

## 220725-C1W-SB08@8'-10' L1519613-13 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 13:15

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:09	08/10/22 17:09	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904218	1	08/02/22 09:00	08/02/22 11:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1903349	5	08/01/22 09:00	08/02/22 11:27	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 14:18	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 19:39	JAS	Mt. Juliet, TN

## 220725-C1W-SB08@12'-14.5' L1519613-14 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 13:20

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:12	08/10/22 17:12	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904469	1	08/02/22 14:00	08/02/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1903349	5	08/01/22 09:00	08/02/22 11:30	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 14:40	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 18:33	JAS	Mt. Juliet, TN

## 220725-C1W-SB09@12.5'-15' L1519613-15 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 13:45

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:15	08/10/22 17:15	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903946	1	08/01/22 14:00	08/01/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1903349	5	08/01/22 09:00	08/02/22 11:34	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1903614	1	07/28/22 19:17	08/01/22 13:21	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903903	1	08/02/22 09:14	08/02/22 16:57	JAS	Mt. Juliet, TN

# SAMPLE SUMMARY

220725-C1W-SB09@17'-19.5' L1519613-16 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 13:50

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:18	08/10/22 17:18	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904218	1	08/02/22 09:00	08/02/22 11:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1903349	5	08/01/22 09:00	08/02/22 11:37	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1903614	1	07/28/22 19:17	08/01/22 13:44	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903903	1	08/02/22 09:14	08/02/22 17:09	JAS	Mt. Juliet, TN

220725-C1W-SB10@12.5'-15' L1519613-17 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 14:10

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:26	08/10/22 17:26	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904469	1	08/02/22 14:00	08/02/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:44	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902696	100	07/28/22 19:17	07/29/22 11:39	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903903	1	08/02/22 09:14	08/02/22 17:09	JAS	Mt. Juliet, TN

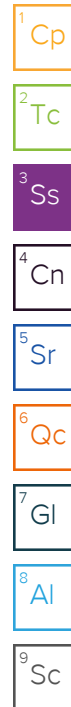
220725-C1W-SB10@17.5'-19.5' L1519613-18 Solid

Collected by  
Andrew Smith

Collected date/time  
07/25/22 14:15

Received date/time  
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:29	08/10/22 17:29	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904469	1	08/02/22 14:00	08/02/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:53	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1903614	1	07/28/22 19:17	08/01/22 14:07	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903903	1	08/02/22 09:14	08/02/22 17:22	JAS	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	17.5		1	08/10/2022 19:12	WG1904084

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	5.45	<u>T8</u>	1	08/01/2022 13:00	<a href="#">WG1903736</a>

## Sample Narrative:

L1519613-01 WG1903736: 5.45 at 23.2C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	30.9		0.100	1.00	5	08/04/2022 14:50	<a href="#">WG1904634</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 10:43	<a href="#">WG1902694</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	114			77.0-120		07/29/2022 10:43	<a href="#">WG1902694</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 19:52	<a href="#">WG1903900</a>
C28-C36 Motor Oil Range	2.03	<u>J</u>	0.274	4.00	1	08/02/2022 19:52	<a href="#">WG1903900</a>
(S) <i>o</i> -Terphenyl	55.2			18.0-148		08/02/2022 19:52	<a href="#">WG1903900</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	14.2		1	08/10/2022 19:15	WG1904084

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.54	T8	1	08/01/2022 16:00	WG1903946

## Sample Narrative:

L1519613-02 WG1903946: 6.54 at 24.1C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.14		0.200	2.00	10	08/04/2022 15:03	WG1904634

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 11:04	WG1902694
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120		07/29/2022 11:04	WG1902694

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 17:27	WG1903900
C28-C36 Motor Oil Range	0.481	J	0.274	4.00	1	08/02/2022 17:27	WG1903900
(S) o-Terphenyl	62.8			18.0-148		08/02/2022 17:27	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	8.11		1	08/10/2022 19:18	WG1904084

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.12	T8	1	08/01/2022 13:00	WG1903736

## Sample Narrative:

L1519613-03 WG1903736: 8.12 at 23.4C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.43		0.100	1.00	5	08/04/2022 15:06	WG1904634

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	49.2		0.543	2.50	25	08/02/2022 22:57	WG1904264
(S) a,a,a-Trifluorotoluene(FID)	93.3			77.0-120		08/02/2022 22:57	WG1904264

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 17:40	WG1903900
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/02/2022 17:40	WG1903900
(S) o-Terphenyl	39.3			18.0-148		08/02/2022 17:40	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	5.90		1	08/10/2022 19:21	WG1904084

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.52	<u>T8</u>	1	08/01/2022 13:00	<a href="#">WG1903736</a>

## Sample Narrative:

L1519613-04 WG1903736: 7.52 at 23.1C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	26.0		0.100	1.00	5	08/04/2022 15:09	<a href="#">WG1904634</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0277	<u>J</u>	0.0217	0.100	1	08/03/2022 09:13	<a href="#">WG1904270</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	94.5			77.0-120		08/03/2022 09:13	<a href="#">WG1904270</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 19:13	<a href="#">WG1903900</a>
C28-C36 Motor Oil Range	2.10	<u>J</u>	0.274	4.00	1	08/02/2022 19:13	<a href="#">WG1903900</a>
(S) <i>o</i> -Terphenyl	50.5			18.0-148		08/02/2022 19:13	<a href="#">WG1903900</a>

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

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	8.23		1	08/10/2022 19:23	WG1904084

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.08	T8	1	08/01/2022 13:00	WG1903736

## Sample Narrative:

L1519613-05 WG1903736: 8.08 at 23.3C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	19.1		0.100	1.00	5	08/04/2022 15:12	WG1904634

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	142		2.17	10.0	100	07/29/2022 10:54	WG1902696
(S)							
a,a,a-Trifluorotoluene(FID)	92.5			77.0-120		07/29/2022 10:54	WG1902696

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	6.44		1.61	4.00	1	08/02/2022 18:59	WG1903900
C28-C36 Motor Oil Range	6.42		0.274	4.00	1	08/02/2022 18:59	WG1903900
(S) o-Terphenyl	43.1			18.0-148		08/02/2022 18:59	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	7.02		1	08/10/2022 19:26	WG1904084

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.66	<u>T8</u>	1	08/01/2022 16:00	<a href="#">WG1903946</a>

## Sample Narrative:

L1519613-06 WG1903946: 6.66 at 23.2C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	38.2		0.100	1.00	5	08/10/2022 11:24	<a href="#">WG1902672</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	44.2	<u>B</u>	4.34	20.0	200	07/29/2022 11:17	<a href="#">WG1902696</a>
(S)							
<i>a,a,a</i> -Trifluorotoluene(FID)	95.9			77.0-120		07/29/2022 11:17	<a href="#">WG1902696</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	34.8		1.61	4.00	1	08/02/2022 20:05	<a href="#">WG1903900</a>
C28-C36 Motor Oil Range	4.58		0.274	4.00	1	08/02/2022 20:05	<a href="#">WG1903900</a>
(S) <i>o</i> -Terphenyl	51.9			18.0-148		08/02/2022 20:05	<a href="#">WG1903900</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	4.60		1	08/10/2022 18:18	WG1904084

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.82	<u>T8</u>	1	08/01/2022 16:00	<a href="#">WG1903946</a>

## Sample Narrative:

L1519613-07 WG1903946: 7.82 at 23.7C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.30		0.100	1.00	5	08/10/2022 11:27	<a href="#">WG1902672</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0374	<u>J</u>	0.0217	0.100	1	08/03/2022 09:33	<a href="#">WG1904270</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	93.3			77.0-120		08/03/2022 09:33	<a href="#">WG1904270</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 17:53	<a href="#">WG1903900</a>
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/02/2022 17:53	<a href="#">WG1903900</a>
(S) <i>o</i> -Terphenyl	58.0			18.0-148		08/02/2022 17:53	<a href="#">WG1903900</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	10.6		1	08/10/2022 15:03	WG1904085

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.94	T8	1	08/01/2022 16:00	WG1903946

## Sample Narrative:

L1519613-08 WG1903946: 7.94 at 23.2C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	8.70		0.100	1.00	5	08/10/2022 11:30	WG1902672

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0411	J	0.0217	0.100	1	08/03/2022 09:54	WG1904270
(S)							
a,a,a-Trifluorotoluene(FID)	93.4			77.0-120		08/03/2022 09:54	WG1904270

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 18:07	WG1903900
C28-C36 Motor Oil Range	2.50	J	0.274	4.00	1	08/02/2022 18:07	WG1903900
(S) o-Terphenyl	55.3			18.0-148		08/02/2022 18:07	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	14.3		1	08/10/2022 16:58	WG1904085

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	4.81	<u>T8</u>	1	08/02/2022 16:00	<a href="#">WG1904469</a>

## Sample Narrative:

L1519613-09 WG1904469: 4.81 at 23.8C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	49.7		0.100	1.00	5	08/10/2022 11:34	<a href="#">WG1902672</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 12:52	<a href="#">WG1902694</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	113			77.0-120		07/29/2022 12:52	<a href="#">WG1902694</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	2.39	<u>J</u>	1.61	4.00	1	08/02/2022 20:19	<a href="#">WG1903900</a>
C28-C36 Motor Oil Range	24.1		0.274	4.00	1	08/02/2022 20:19	<a href="#">WG1903900</a>
(S) <i>o</i> -Terphenyl	50.9			18.0-148		08/02/2022 20:19	<a href="#">WG1903900</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	23.5		1	08/10/2022 17:01	WG1904085

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.19	T8	1	08/03/2022 13:00	WG1904588

## Sample Narrative:

L1519613-10 WG1904588: 7.19 at 24.2C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.59		0.100	1.00	5	08/10/2022 11:37	WG1902672

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 13:14	WG1902694
(S) a,a,a-Trifluorotoluene(FID)	113			77.0-120		07/29/2022 13:14	WG1902694

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 18:20	WG1903900
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/02/2022 18:20	WG1903900
(S) o-Terphenyl	56.0			18.0-148		08/02/2022 18:20	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	26.8		1	08/10/2022 17:04	WG1904085

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	5.03	<u>T8</u>	1	08/03/2022 12:00	<a href="#">WG1904878</a>

## Sample Narrative:

L1519613-11 WG1904878: 5.03 at 24.3C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	12.0		0.100	1.00	5	08/10/2022 10:42	<a href="#">WG1902672</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 13:35	<a href="#">WG1902694</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	114			77.0-120		07/29/2022 13:35	<a href="#">WG1902694</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 19:26	<a href="#">WG1903900</a>
C28-C36 Motor Oil Range	2.93	<u>J</u>	0.274	4.00	1	08/02/2022 19:26	<a href="#">WG1903900</a>
(S) <i>o</i> -Terphenyl	55.3			18.0-148		08/02/2022 19:26	<a href="#">WG1903900</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	34.7		1	08/10/2022 17:07	WG1904085

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	5.55	T8	1	08/03/2022 12:00	WG1904878

## Sample Narrative:

L1519613-12 WG1904878: 5.55 at 24.2C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	4.65		0.100	1.00	5	08/10/2022 11:40	WG1902672

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 13:57	WG1902694
(S) a,a,a-Trifluorotoluene(FID)	113			77.0-120		07/29/2022 13:57	WG1902694

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 18:46	WG1903900
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/02/2022 18:46	WG1903900
(S) o-Terphenyl	50.5			18.0-148		08/02/2022 18:46	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	15.3		1	08/10/2022 17:09	WG1904085

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.14	<u>T8</u>	1	08/02/2022 11:00	<a href="#">WG1904218</a>

## Sample Narrative:

L1519613-13 WG1904218: 7.14 at 23.3C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	21.3		0.100	1.00	5	08/02/2022 11:27	<a href="#">WG1903349</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 14:18	<a href="#">WG1902694</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	111			77.0-120		07/29/2022 14:18	<a href="#">WG1902694</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 19:39	<a href="#">WG1903900</a>
C28-C36 Motor Oil Range	3.51	<u>J</u>	0.274	4.00	1	08/02/2022 19:39	<a href="#">WG1903900</a>
(S) <i>o</i> -Terphenyl	55.3			18.0-148		08/02/2022 19:39	<a href="#">WG1903900</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	19.6		1	08/10/2022 17:12	WG1904085

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.73	T8	1	08/02/2022 16:00	WG1904469

## Sample Narrative:

L1519613-14 WG1904469: 6.73 at 23.9C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	11.1		0.100	1.00	5	08/02/2022 11:30	WG1903349

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 14:40	WG1902694
(S) a,a,a-Trifluorotoluene(FID)	113			77.0-120		07/29/2022 14:40	WG1902694

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 18:33	WG1903900
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/02/2022 18:33	WG1903900
(S) o-Terphenyl	56.4			18.0-148		08/02/2022 18:33	WG1903900



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	9.55		1	08/10/2022 17:15	WG1904085

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.05	<u>T8</u>	1	08/01/2022 16:00	<a href="#">WG1903946</a>

## Sample Narrative:

L1519613-15 WG1903946: 8.05 at 23.1C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.50		0.100	1.00	5	08/02/2022 11:34	<a href="#">WG1903349</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0765	<u>J</u>	0.0217	0.100	1	08/01/2022 13:21	<a href="#">WG1903614</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	99.8			77.0-120		08/01/2022 13:21	<a href="#">WG1903614</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 16:57	<a href="#">WG1903903</a>
C28-C36 Motor Oil Range	1.07	<u>J</u>	0.274	4.00	1	08/02/2022 16:57	<a href="#">WG1903903</a>
(S) <i>o</i> -Terphenyl	52.8			18.0-148		08/02/2022 16:57	<a href="#">WG1903903</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	6.44		1	08/10/2022 17:18	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.98	T8	1	08/02/2022 11:00	WG1904218

Sample Narrative:

L1519613-16 WG1904218: 7.98 at 22.7C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	7.09		0.100	1.00	5	08/02/2022 11:37	WG1903349

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0938	J	0.0217	0.100	1	08/01/2022 13:44	WG1903614
(S) a,a,a-Trifluorotoluene(FID)	99.3			77.0-120		08/01/2022 13:44	WG1903614

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 17:09	WG1903903
C28-C36 Motor Oil Range	0.350	J	0.274	4.00	1	08/02/2022 17:09	WG1903903
(S) o-Terphenyl	49.8			18.0-148		08/02/2022 17:09	WG1903903

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	21.2		1	08/10/2022 17:26	WG1904085

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.94	<u>T8</u>	1	08/02/2022 16:00	<a href="#">WG1904469</a>

## Sample Narrative:

L1519613-17 WG1904469: 7.94 at 24.2C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	8.86		0.100	1.00	5	08/10/2022 11:44	<a href="#">WG1902672</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	332		2.17	10.0	100	07/29/2022 11:39	<a href="#">WG1902696</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	93.9			77.0-120		07/29/2022 11:39	<a href="#">WG1902696</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	2.17	<u>J</u>	1.61	4.00	1	08/02/2022 17:09	<a href="#">WG1903903</a>
C28-C36 Motor Oil Range	1.81	<u>J</u>	0.274	4.00	1	08/02/2022 17:09	<a href="#">WG1903903</a>
(S) <i>o</i> -Terphenyl	37.8			18.0-148		08/02/2022 17:09	<a href="#">WG1903903</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	5.78		1	08/10/2022 17:29	WG1904085

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.51	<u>T8</u>	1	08/02/2022 16:00	<a href="#">WG1904469</a>

## Sample Narrative:

L1519613-18 WG1904469: 7.51 at 23.9C

## Metals (ICPMS) by Method 6020

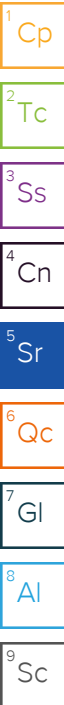
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	5.25		0.100	1.00	5	08/10/2022 11:53	<a href="#">WG1902672</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0384	<u>J</u>	0.0217	0.100	1	08/01/2022 14:07	<a href="#">WG1903614</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	101			77.0-120		08/01/2022 14:07	<a href="#">WG1903614</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 17:22	<a href="#">WG1903903</a>
C28-C36 Motor Oil Range	0.798	<u>J</u>	0.274	4.00	1	08/02/2022 17:22	<a href="#">WG1903903</a>
(S) <i>o</i> -Terphenyl	36.9			18.0-148		08/02/2022 17:22	<a href="#">WG1903903</a>



L1519613-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1519613-05 08/01/22 13:00 • (DUP) R3821296-2 08/01/22 13:00

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

Sample Narrative:

OS: 8.08 at 23.3C

DUP: 8.04 at 23.4C



L1519700-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1519700-01 08/01/22 13:00 • (DUP) R3821296-3 08/01/22 13:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.61	7.62	1	0.131		1

Sample Narrative:

OS: 7.61 at 23.4C

DUP: 7.62 at 23.5C

Laboratory Control Sample (LCS)

(LCS) R3821296-1 08/01/22 13:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.91	99.1	99.0-101	

Sample Narrative:

LCS: 9.91 at 23.9C



L1519603-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1519603-03 08/01/22 16:00 • (DUP) R3821459-2 08/01/22 16:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	pH	su		%		%
pH	8.18	8.19	1	0.122		1

Sample Narrative:  
OS: 8.18 at 23.5C  
DUP: 8.19 at 23.6C

L1519861-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1519861-03 08/01/22 16:00 • (DUP) R3821459-3 08/01/22 16:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.95	7.96	1	0.126		1

Sample Narrative:  
OS: 7.95 at 23.1C  
DUP: 7.96 at 23.1C

Laboratory Control Sample (LCS)

(LCS) R3821459-1 08/01/22 16:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.90	99.0	99.0-101	

Sample Narrative:  
LCS: 9.9 at 24.9C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1519856-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1519856-02 08/02/22 11:00 • (DUP) R3821644-2 08/02/22 11:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.28	7.29	1	0.137		1

Sample Narrative:

OS: 7.28 at 22.6C

DUP: 7.29 at 22.7C

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1520009-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1520009-01 08/02/22 11:00 • (DUP) R3821644-3 08/02/22 11:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.74	7.76	1	0.258		1

Sample Narrative:

OS: 7.74 at 22.9C

DUP: 7.76 at 23.2C

Laboratory Control Sample (LCS)

(LCS) R3821644-1 08/02/22 11:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	9.90	99.0	99.0-101	

Sample Narrative:

LCS: 9.9 at 22C

L1519987-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1519987-03 08/02/22 16:00 • (DUP) R3821843-2 08/02/22 16:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.64	7.65	1	0.131		1

Sample Narrative:

OS: 7.64 at 23.6C

DUP: 7.65 at 23.6C

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1520018-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1520018-02 08/02/22 16:00 • (DUP) R3821843-3 08/02/22 16:00

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

Sample Narrative:

OS: 8.04 at 23.2C

DUP: 8.08 at 23C

Laboratory Control Sample (LCS)

(LCS) R3821843-1 08/02/22 16:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.90	99.0	99.0-101	

Sample Narrative:

LCS: 9.9 at 23.9C

L1519613-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1519613-10 08/03/22 13:00 • (DUP) R3822121-2 08/03/22 13:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.19	7.17	1	0.279		1

Sample Narrative:

OS: 7.19 at 24.2C

DUP: 7.17 at 24.3C

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1519620-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1519620-05 08/03/22 13:00 • (DUP) R3822121-3 08/03/22 13:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	pH	su		%		%
pH	9.24	9.24	1	0.000		1

Sample Narrative:

OS: 9.24 at 24C

DUP: 9.24 at 24.1C

Laboratory Control Sample (LCS)

(LCS) R3822121-1 08/03/22 13:00

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

Sample Narrative:

LCS: 9.99 at 23.8C

L1520009-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1520009-05 08/03/22 12:00 • (DUP) R3822204-2 08/03/22 12:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.77	7.74	1	0.387		1

Sample Narrative:

OS: 7.77 at 23.9C

DUP: 7.74 at 24C

L1520326-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1520326-05 08/03/22 12:00 • (DUP) R3822204-3 08/03/22 12:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	pH	su		%		%
pH	7.44	7.41	1	0.404		1

Sample Narrative:

OS: 7.44 at 23.9C

DUP: 7.41 at 24C

Laboratory Control Sample (LCS)

(LCS) R3822204-1 08/03/22 12:00

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

Sample Narrative:

LCS: 9.99 at 23.5C

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3824592-1 08/10/22 10:36

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) R3824592-3 08/10/22 10:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	85.6	85.6	80.0-120	

L1519613-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519613-11 08/10/22 10:42 • (MS) R3824592-6 08/10/22 10:52 • (MSD) R3824592-7 08/10/22 10:55

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	12.0	90.3	104	78.3	92.0	5	75.0-125			14.1	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) R3821674-1 08/02/22 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) R3821674-2 08/02/22 10:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	95.0	95.0	80.0-120	

L1519025-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519025-12 08/02/22 10:08 • (MS) R3821674-5 08/02/22 10:18 • (MSD) R3821674-6 08/02/22 10:21

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	0.913	90.2	94.1	89.3	93.2	5	75.0-125			4.19	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3822796-1 08/04/22 13:45

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

Laboratory Control Sample (LCS)

(LCS) R3822796-2 08/04/22 13:48

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	99.4	99.4	80.0-120	

L1518594-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1518594-07 08/04/22 13:51 • (MS) R3822796-5 08/04/22 14:01 • (MSD) R3822796-6 08/04/22 14:04

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	6.40	103	108	96.5	101	5	75.0-125			4.53	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3821594-2 07/29/22 06:36

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)	113			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3821594-1 07/29/22 05:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.76	105	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			104	77.0-120	

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3820917-3 07/29/22 06:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.987	⬇	0.543	2.50
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120

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

(LCS) R3820917-1 07/29/22 05:14 • (LCSD) R3820917-2 07/29/22 05:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.17	4.87	94.0	88.5	72.0-127			5.98	20
(S) a,a,a-Trifluorotoluene(FID)				99.0	99.3	77.0-120				

L1518914-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1518914-01 07/29/22 07:29 • (MS) R3820917-4 07/29/22 15:08 • (MSD) R3820917-5 07/29/22 15:30

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	142	1.86	112	137	77.6	95.2	25.8	10.0-151			20.1	28
(S) a,a,a-Trifluorotoluene(FID)					99.7	101		77.0-120				

1  
Cp

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Tc

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Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Method Blank (MB)

(MB) R3822946-2 08/01/22 11:04

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)	100			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3822946-1 08/01/22 09:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.33	115	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			109	77.0-120	

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3823165-2 08/02/22 20:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.543	2.50
(S) a,a,a-Trifluorotoluene(FID)	99.3			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3823165-1 08/02/22 19:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.13	93.3	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			112	77.0-120	

1  
Cp

2  
Tc

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Ss

4  
Cn

5  
Sr

6  
Qc

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Gl

8  
Al

9  
Sc

Method Blank (MB)

(MB) R3822313-2 08/03/22 08:32

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)	96.3			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3822313-1 08/03/22 07:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.90	89.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			104	77.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3821899-1 08/02/22 17:01

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	66.8			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3821899-2 08/02/22 17:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	37.3	74.6	50.0-150	
(S) o-Terphenyl			97.7	18.0-148	

L1519607-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519607-01 08/02/22 21:51 • (MS) R3821899-3 08/02/22 22:04 • (MSD) R3821899-4 08/02/22 22:17

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.4	U	U	U	0.000	0.000	50	50.0-150	J6	J6	0.000	20
(S) o-Terphenyl					0.000	0.000		18.0-148	J7	J7		

Sample Narrative:

OS: Cannot run at lower dilution due to viscosity of extract

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3822003-1 08/02/22 16:44

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	73.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3822003-2 08/02/22 16:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	38.9	77.8	50.0-150	
(S) o-Terphenyl			82.6	18.0-148	

L1519744-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519744-03 08/02/22 18:12 • (MS) R3822003-3 08/02/22 18:24 • (MSD) R3822003-4 08/02/22 18:37

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	48.2	1440	1690	1280	519	0.000	25	50.0-150	V	J3 V	27.6	20
(S) o-Terphenyl					0.000	0.000		18.0-148	J7	J7		

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

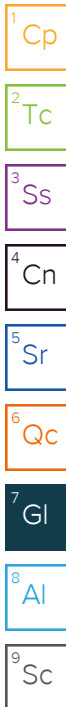
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

## Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.



# ACCREDITATIONS & LOCATIONS

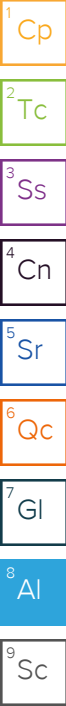
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

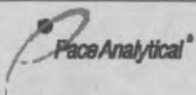
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Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North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

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

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

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





# CHAIN-OF-CUSTODY Analytical Request Document

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

Company: Confluence Compliance Companies, LLC.		Billing Information: Info on file	
Address: Info on file		Email To: info on file	
Report To: Chris McKisson		Site Collection Info/Address:	
Copy To: Chris McKisson, remediation@confluence-cc.com		State: County/City: Time Zone Collected: CO / Moffat [ ] PT [X] MT [ ] CT [ ] ET	
Customer Project Name/Number: Voloshin Morton 1-8 Backgrounds		Compliance Monitoring? [ ] Yes [X] No	
Phone:	Site/Facility ID #: Voloshin Morton 1-8	DW PWS ID #:	
Email:	Purchase Order #:	DW Location Code:	
Collected By (print): Andrew Smith	Quote #:	Immediately Packed on Ice:	
Collected By (signature): <i>A. Donita</i>	Turnaround Date Required: Standard Turnaround	[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)			

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)
			Date	Time	Date	Time			
220725-C1W-SB01@17.5'-20'	SL	G	7/25/2022	0910				2	G
220725-C1W-SB01@20'-22.5'	SL	G	7/25/2022	0915				2	G
220725-C1W-SB02@10'-15'	SL	G	7/25/2022	0945				2	G
220725-C1W-SB02@15'-17.5'	SL	G	7/25/2022	0950				2	G
220725-C1W-SB03@16'-19'	SL	G	7/25/2022	1020				2	G
220725-C1W-SB03@20'-22.5'	SL	G	7/25/2022	1025				2	G
220725-C1W-SB05@17.5'-20'	SL	G	7/25/2022	1120				2	G
220725-C1W-SB05@22'-25'	SL	G	7/25/2022	1135				2	G
220725-C1W-SB06@12.5'-15'	SL	G	7/25/2022	1220				2	G
220725-C1W-SB06@17.5'-20'	SL	G	7/25/2022	1225				2	G

Customer Remarks / Special Conditions / Possible Hazards:	Type of Ice Used: Wet Blue Dry None	SHORT HOLDS PRESENT (<72 hours): Y N N/A
	Packing Material Used:	Lab Tracking #:
	Radchem sample(s) screened (<500 cpm): Y N NA	Samples received via: FEDEX UPS Client Courier Pace Courier

Relinquished by/Company: (Signature) <i>A. Donita</i>	Date/Time: 7/27/22 1330	Received by/Company: (Signature) <i>[Signature]</i>	Date/Time:
Relinquished by/Company: (Signature) <i>[Signature]</i>	Date/Time: 7/27/22 1500	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 7/28/22 900

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

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 _____																			
Analyses										Lab Profile/Line:									
<div>Table 915-1 VOCs</div> <div>TPH (ORO, GRO, DRO)</div> <div>Table 915-1 Metal's</div> <div>Table 915-1 PAHs</div> <div>pH, EC, SAR</div> <div>Boron (Hot Water Soluble Soil)</div>										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: <b>U1515613</b>																			
LAB Sample Temperature Info: Temp Blank Received: Y N NA Therm ID#: Cooler 1 Temp Upon Receipt: °C Cooler 1 Therm Corr. Factor: °C Cooler 1 Corrected Temp: °C Comments:																			
F105										Trip Blank Received: Y N NA HCL MeOH TSP Other									
PM: PB:										Non Conformance(s): Page: 1 YES / NO of: 2									

YES / NO OF. 21



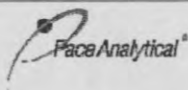
21519613

<u>Tracking Numbers</u>		<u>Temperature</u>
575580849576		DeA7 0.3 to 0.3
9587		DeA7 0.3 to 0.3









# CHAIN-OF-CUSTODY Analytical Request Document

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

Company: Confluence Compliance Companies, LLC.		Billing Information:	
Address: Info on file		Info on file	
Report To: Chris McKisson		Email To: info on file	
Copy To: Chris McKisson, remediation@confluence-cc.com		Site Collection Info/Address:	
Customer Project Name/Number: Pinyon Ridge C-1W		State: County/City: Time Zone Collected:	
		CO / Rio Blanco [ ] PT [X] MT [ ] CT [ ] ET	
Phone:	Site/Facility ID #: C-1W	Compliance Monitoring?	
Email:		[ ] Yes [X] No	
Collected By (print): Andrew Smith	Purchase Order #:	DW PWS ID #:	
	Quote #:	DW Location Code:	
Collected By (signature): <i>A. Smith</i>	Turnaround Date Required: Standard	Immediately Packed on Ice:	
	Turnaround	[X] Yes [ ] No	
Sample Disposal:	Rush: (Expedite Charges Apply)	Field Filtered (if applicable):	
[ ] Dispose as appropriate	[ ] Same Day [ ] Next Day	[ ] Yes [ ] No	
[ ] Return	[ ] 2 Day [ ] 3 Day		
[ ] Archive: _____	[ ] 4 Day [ ] 5 Day	Analysis: _____	
[ ] Hold: _____			

\* 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)		Composite End		Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)
			Date	Time	Date	Time			
220725-C1W-SB01@17.5'-20'	SL	G	7/25/2022	0910				2	G
220725-C1W-SB01@20'-22.5'	SL	G	7/25/2022	0915				2	G
220725-C1W-SB02@10'-15'	SL	G	7/25/2022	0945				2	G
220725-C1W-SB02@15'-17.5'	SL	G	7/25/2022	0950				2	G
220725-C1W-SB03@16'-19'	SL	G	7/25/2022	1020				2	G
220725-C1W-SB03@20'-22.5'	SL	G	7/25/2022	1025				2	G
220725-C1W-SB05@17.5'-20'	SL	G	7/25/2022	1120				2	G
220725-C1W-SB05@22'-25'	SL	G	7/25/2022	1135				2	G
220725-C1W-SB06@12.5'-15'	SL	G	7/25/2022	1220				2	G
220725-C1W-SB06@17.5'-20'	SL	G	7/25/2022	1225				2	G

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

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

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 _____																																							
Analyses										Lab Profile/Line:																													
<table><tr><td>Table 915-1 VOCs</td><td>TPH (ORO, GRO, DRO)</td><td>Table 915-1 Metal's</td><td>Table 915-1 PAHs</td><td>pH, SAR, Arsenic</td><td>Boron (Hot Water Soluble Soil)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										Table 915-1 VOCs	TPH (ORO, GRO, DRO)	Table 915-1 Metal's	Table 915-1 PAHs	pH, SAR, Arsenic	Boron (Hot Water Soluble Soil)															Lab Sample Receipt Checklist:									
										Table 915-1 VOCs	TPH (ORO, GRO, DRO)	Table 915-1 Metal's	Table 915-1 PAHs	pH, SAR, Arsenic	Boron (Hot Water Soluble Soil)																								
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:																																							
L1519613																																							
Customer Remarks / Special Conditions / Possible Hazards:										LAB Sample Temperature Info:																													
Type of Ice Used: Wet Blue Dry None										Temp Blank Received: Y N NA																													
Packing Material Used:										Therm ID#:																													
Radchem sample(s) screened (<500 cpm): Y N NA										Cooler 1 Temp Upon Receipt: ____oC																													
										Cooler 1 Therm Corr. Factor: ____oC																													
										Cooler 1 Corrected Temp: ____oC																													
										Comments:																													
Relinquished by/Company: (Signature) <i>A. Smith</i>										Date/Time:																													
Received by/Company: (Signature)										Date/Time:																													
Relinquished by/Company: (Signature)										Date/Time:																													
Received by/Company: (Signature)										Date/Time:																													
Relinquished by/Company: (Signature)										Date/Time:																													
Received by/Company: (Signature)										Date/Time:																													
										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: _____																													



<b>CHAIN-OF-CUSTODY Analytical Request Document</b> <small>Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <a href="https://info.pacelabs.com/hubs/pas-standard-terms.pdf">https://info.pacelabs.com/hubs/pas-standard-terms.pdf</a>  Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields</small>										<b>LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here</b>														
Company: Confluence Compliance Companies, LLC.					Billing Information: Info on file					<b>ALL BOLD OUTLINED AREAS are for LAB USE ONLY</b>  <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Container Preservative Type **      Lab Project Manager: </div> <div style="font-size: 0.8em;"> ** 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 _____ </div>														
Address: Info on file					Report To: Chris McKisson																			
Copy To: Chris McKisson, remediation@confluence-cc.com					Email To: info on file																			
Customer Project Name/Number: Pinyon Ridge C-1W					State:    County/City:    Time Zone Collected:																			
Phone:		Site/Facility ID #: Pinyon Ridge C-1W			Compliance Monitoring?			Container Type: Plastic (P) or Glass (G)			<b>Analyses</b> <div style="display: flex; justify-content: space-between; font-size: 0.8em;"> <div>Table 915-1 VOCs</div> <div>TPH (ORO, GRO, DRO)</div> <div>Table 915-1 Metals</div> <div>Table 915-1 PAHs</div> <div>pH, SAR, Arsenic</div> <div>Boron (Hot Water Soluble Soil)</div> </div>													
Email:		Purchase Order #:			[ ] Yes    [X] No																			
Collected By (print): Andrew Smith		Quote #:			DW PWS ID #:																			
Collected By (signature): <i>A. Smith</i>		Turnaround Date Required: Standard Turnaround			DW Location Code:																			
Sample Disposal:		Rush: (Expedite Charges Apply)			Immediately Packed on Ice:																			
[ ] Dispose as appropriate		[ ] Same Day    [ ] Next Day			[X] Yes    [ ] No			<b>Lab Profile/Line:</b> 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:  <div style="font-size: 1.5em; margin-top: 10px;">C1519613</div>																
[ ] Return		[ ] 2 Day    [ ] 3 Day			Field Filtered (if applicable):																			
[ ] Archive: _____		[ ] 4 Day    [ ] 5 Day			[ ] Yes    [ ] No																			
[ ] Hold: _____					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)																								
Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns																
			Date	Time	Date	Time																		
220725-C1W-SB07@12.5'-15'	SL	G	7/25/2022	1255				2	G	X				X										
220725-C1W-SB07@15'-17.5'	SL	G	7/25/2022	1300				2	G	X				X										
220725-C1W-SB08@8'-10'	SL	G	7/25/2022	1315				2	G	X				X										
220725-C1W-SB08@12'-14.5'	SL	G	7/25/2022	1320				2	G	X				X										
220725-C1W-SB09@12.5'-15'	SL	G	7/25/2022	1345				2	G	X				X										
220725-C1W-SB09@17'-19.5'	SL	G	7/25/2022	1350				2	G	X				X										
220725-C1W-SB10@12.5'-15'	SL	G	7/25/2022	1410				2	G	X				X										
220725-C1W-SB10@17.5'-19.5'	SL	G	7/25/2022	1415				2	G	X				X										
Customer Remarks / Special Conditions / Possible Hazards:										Type of Ice Used:    Wet    Blue    Dry    None					SHORT HOLDS PRESENT (<72 hours) :    Y    N    N/A					<b>LAB Sample Temperature Info:</b> Temp Blank Received:    Y    N    NA Therm ID#: _____ Cooler 1 Temp Upon Receipt: _____ °C Cooler 1 Therm Corr. Factor: _____ °C Cooler 1 Corrected Temp: _____ °C Comments: _____				
										Packing Material Used:					Lab Tracking #:									
										Radchem sample(s) screened (<500 cpm):    Y    N    NA					Samples received via: FEDEX    UPS    Client    Courier    Pace Courier									
Relinquished by/Company: (Signature) <i>A. Smith</i>			Date/Time:		Received by/Company: (Signature)			Date/Time:		<b>MTJL LAB USE ONLY</b> Table #:  Acctnum: Template: Prelogin:  PM: PB:					Trip Blank Received: Y N NA HCL    MeOH    TSP    Other									
Relinquished by/Company: (Signature)			Date/Time:		Received by/Company: (Signature)			Date/Time:																
Relinquished by/Company: (Signature)			Date/Time:		Received by/Company: (Signature)			Date/Time:																
										Non Conformance(s):					Page: _____ of: _____									

CONCOMGJCO L1519613 edits

R3/R4/RX/EX

L1519613-01 through -18: Please delete all analyses **except** GRO, DRONM, PH, SAR, ASG.

Time estimate: oh

Time spent: oh

Members



Chris Ward



Kelly Mercer

**Confluence Compliance Companies - CO**

Sample Delivery Group: L1541684  
Samples Received: 09/30/2022  
Project Number: 315979  
Description: AEC005-Pinyon Ridge Fed C-1W (315979)  
Site: PIYON RIDGE FED C-1W/315979  
Report To: Chris McKisson  
403 ½ Rockwood Lane  
Grand Junction, CO 81507

Entire Report Reviewed By:



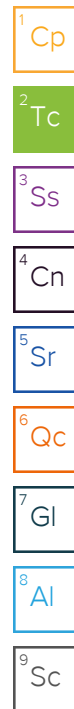
Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

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# SAMPLE SUMMARY

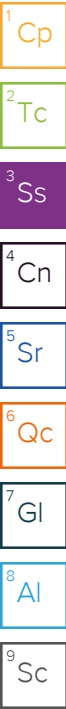
## 20220928-PR\_FED\_C-1W-PHNE@4' L1541684-01 Solid

Collected by  
Alex Slorby

Collected date/time  
09/28/22 11:30

Received date/time  
09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1942702	1	10/17/22 07:39	10/17/22 07:39	CCE	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1935993	1	10/03/22 09:00	10/03/22 11:00	SGB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1937115	5	10/04/22 17:46	10/06/22 14:41	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1939111	500	10/04/22 17:17	10/07/22 23:52	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1938522	1	10/06/22 16:32	10/07/22 10:15	JAS	Mt. Juliet, TN



## 20220928-PR\_FED\_C-1W-PHNE@12' L1541684-02 Solid

Collected by  
Alex Slorby

Collected date/time  
09/28/22 13:00

Received date/time  
09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1942702	1	10/17/22 07:42	10/17/22 07:42	CCE	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1935993	1	10/03/22 09:00	10/03/22 11:00	SGB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1937119	5	10/12/22 18:20	10/14/22 10:25	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1939111	500	10/04/22 17:17	10/08/22 00:13	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1938522	1	10/06/22 16:32	10/07/22 10:28	JAS	Mt. Juliet, TN

## 20220928-PR\_FED\_C-1W-PHNW@4' L1541684-03 Solid

Collected by  
Alex Slorby

Collected date/time  
09/28/22 13:35

Received date/time  
09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1942702	1	10/17/22 07:45	10/17/22 07:45	CCE	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1935993	1	10/03/22 09:00	10/03/22 11:00	SGB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1937119	5	10/12/22 18:20	10/14/22 10:28	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1938210	1	10/04/22 17:17	10/07/22 18:31	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1938522	1	10/06/22 16:32	10/07/22 10:41	JAS	Mt. Juliet, TN

## 20220928-PR\_FED\_C-1W-PHS@1.5' L1541684-04 Solid

Collected by  
Alex Slorby

Collected date/time  
09/28/22 13:50

Received date/time  
09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1942702	1	10/17/22 07:53	10/17/22 07:53	CCE	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1935993	1	10/03/22 09:00	10/03/22 11:00	SGB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1937119	5	10/12/22 18:20	10/14/22 10:09	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1937292	1	10/04/22 17:17	10/05/22 15:26	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1938522	1	10/06/22 16:32	10/07/22 11:08	JAS	Mt. Juliet, TN

## 20220928-PR\_FED\_C-1W-PHS@4' L1541684-05 Solid

Collected by  
Alex Slorby

Collected date/time  
09/28/22 14:10

Received date/time  
09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1942702	1	10/17/22 07:56	10/17/22 07:56	CCE	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1935993	1	10/03/22 09:00	10/03/22 11:00	SGB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1937119	5	10/12/22 18:20	10/14/22 10:32	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1938210	1	10/04/22 17:17	10/07/22 18:54	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1938522	1	10/06/22 16:32	10/07/22 10:54	JAS	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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	20.6		1	10/17/2022 07:39	WG1942702

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.27	T8	1	10/03/2022 11:00	WG1935993

## Sample Narrative:

L1541684-01 WG1935993: 8.27 at 20.2C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.26		0.100	1.00	5	10/06/2022 14:41	WG1937115

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	1420		10.9	50.0	500	10/07/2022 23:52	WG1939111
(S)	84.9			77.0-120		10/07/2022 23:52	WG1939111
a,a,a-Trifluorotoluene(FID)							

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	88.3		1.61	4.00	1	10/07/2022 10:15	WG1938522
C28-C36 Motor Oil Range	26.6		0.274	4.00	1	10/07/2022 10:15	WG1938522
(S) o-Terphenyl	61.6			18.0-148		10/07/2022 10:15	WG1938522

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	25.7		1	10/17/2022 07:42	WG1942702

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.69	T8	1	10/03/2022 11:00	WG1935993

## Sample Narrative:

L1541684-02 WG1935993: 8.69 at 20.3C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	5.67		0.100	1.00	5	10/14/2022 10:25	WG1937119

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	1050		10.9	50.0	500	10/08/2022 00:13	WG1939111
(S) a,a,a-Trifluorotoluene(FID)	89.1			77.0-120		10/08/2022 00:13	WG1939111

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	36.7		1.61	4.00	1	10/07/2022 10:28	WG1938522
C28-C36 Motor Oil Range	13.9		0.274	4.00	1	10/07/2022 10:28	WG1938522
(S) o-Terphenyl	61.5			18.0-148		10/07/2022 10:28	WG1938522

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	3.74		1	10/17/2022 07:45	WG1942702

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.24	<u>T8</u>	1	10/03/2022 11:00	<a href="#">WG1935993</a>

## Sample Narrative:

L1541684-03 WG1935993: 8.24 at 20.3C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.07		0.100	1.00	5	10/14/2022 10:28	<a href="#">WG1937119</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0559	<u>B J</u>	0.0217	0.100	1	10/07/2022 18:31	<a href="#">WG1938210</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	98.3			77.0-120		10/07/2022 18:31	<a href="#">WG1938210</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	10/07/2022 10:41	<a href="#">WG1938522</a>
C28-C36 Motor Oil Range	1.71	<u>J</u>	0.274	4.00	1	10/07/2022 10:41	<a href="#">WG1938522</a>
(S) <i>o</i> -Terphenyl	62.9			18.0-148		10/07/2022 10:41	<a href="#">WG1938522</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	70.2		1	10/17/2022 07:53	WG1942702

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.35	<u>T8</u>	1	10/03/2022 11:00	<a href="#">WG1935993</a>

## Sample Narrative:

L1541684-04 WG1935993: 8.35 at 20.3C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.88	<u>J6</u>	0.100	1.00	5	10/14/2022 10:09	<a href="#">WG1937119</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	6.59		0.0217	0.100	1	10/05/2022 15:26	<a href="#">WG1937292</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	96.4			62.0-128		10/05/2022 15:26	<a href="#">WG1937292</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	11.7		1.61	4.00	1	10/07/2022 11:08	<a href="#">WG1938522</a>
C28-C36 Motor Oil Range	14.1		0.274	4.00	1	10/07/2022 11:08	<a href="#">WG1938522</a>
(S) <i>o</i> -Terphenyl	82.9			18.0-148		10/07/2022 11:08	<a href="#">WG1938522</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	18.4		1	10/17/2022 07:56	WG1942702

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.61	<u>T8</u>	1	10/03/2022 11:00	<a href="#">WG1935993</a>

## Sample Narrative:

L1541684-05 WG1935993: 8.61 at 20.4C

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.21		0.100	1.00	5	10/14/2022 10:32	<a href="#">WG1937119</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0828	<u>B J</u>	0.0217	0.100	1	10/07/2022 18:54	<a href="#">WG1938210</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	99.1			77.0-120		10/07/2022 18:54	<a href="#">WG1938210</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	10/07/2022 10:54	<a href="#">WG1938522</a>
C28-C36 Motor Oil Range	0.310	<u>J</u>	0.274	4.00	1	10/07/2022 10:54	<a href="#">WG1938522</a>
(S) <i>o</i> -Terphenyl	68.8			18.0-148		10/07/2022 10:54	<a href="#">WG1938522</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L1541669-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1541669-02 10/03/22 11:00 • (DUP) R3843981-2 10/03/22 11:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	6.84	6.88	1	0.583		1

Sample Narrative:

OS: 6.84 at 21.3C

DUP: 6.88 at 21.3C

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1541684-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1541684-02 10/03/22 11:00 • (DUP) R3843981-3 10/03/22 11:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.69	8.68	1	0.115		1

Sample Narrative:

OS: 8.69 at 20.3C

DUP: 8.68 at 20.4C

Laboratory Control Sample (LCS)

(LCS) R3843981-1 10/03/22 11:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.91	99.1	99.0-101	

Sample Narrative:

LCS: 9.91 at 20.7C

Method Blank (MB)

(MB) R3845451-1 10/06/22 13:23

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) R3845451-2 10/06/22 13:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	96.4	96.4	80.0-120	

L1541384-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541384-01 10/06/22 13:29 • (MS) R3845451-5 10/06/22 13:39 • (MSD) R3845451-6 10/06/22 13:42

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	3.91	112	108	108	104	5	75.0-125			3.26	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3848462-1 10/14/22 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) R3848462-2 10/14/22 10:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	86.9	86.9	80.0-120	

L1541684-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541684-04 10/14/22 10:09 • (MS) R3848462-5 10/14/22 10:18 • (MSD) R3848462-6 10/14/22 10:22

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	6.88	83.4	79.1	76.6	72.2	5	75.0-125		J6	5.34	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3845249-3 10/05/22 11:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0219	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3845249-2 10/05/22 09:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.67	103	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			110	77.0-120	

L1541563-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541563-07 10/05/22 12:03 • (MS) R3845249-6 10/05/22 16:57 • (MSD) R3845249-7 10/05/22 17:19

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.13	6.69	6.81	10.2	12.4	1	10.0-151			1.78	28
(S) a,a,a-Trifluorotoluene(FID)					75.9	67.6		77.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3846280-2 10/07/22 17:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0305	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3846280-1 10/07/22 16:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.90	89.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Method Blank (MB)

(MB) R3847042-2 10/07/22 17:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.543	2.50
(S) a,a,a-Trifluorotoluene(FID)	94.2			77.0-120

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

(LCS) R3847042-1 10/07/22 16:24 • (LCSD) R3847042-3 10/07/22 18:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.14	5.76	93.5	105	72.0-127			11.4	20
(S) a,a,a-Trifluorotoluene(FID)				107	110	77.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3845657-1 10/07/22 02:01

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	81.7			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3845657-2 10/07/22 02:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	26.9	53.8	50.0-150	
(S) o-Terphenyl			67.1	18.0-148	

L1541687-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541687-01 10/07/22 11:33 • (MS) R3845657-3 10/07/22 11:46 • (MSD) R3845657-4 10/07/22 12:00

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	50.0	U	37.7	35.1	75.4	70.2	1	50.0-150			7.14	20
(S) o-Terphenyl					95.0	90.5		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

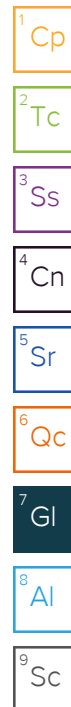
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

### Abbreviations and Definitions

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

### Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.



# ACCREDITATIONS & LOCATIONS

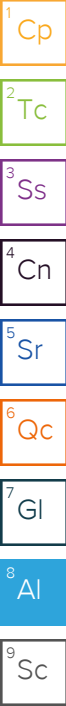
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



Non Conformance(s): YES / NO	Page: _____ of: _____
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**Confluence Compliance Companies - CO**

Sample Delivery Group: L1541680  
Samples Received: 09/30/2022  
Project Number: 315979  
Description: AEC005-Pinyon Ridge Fed C-1W (315979)  
Site: PINYON RIDGE FED C-1W/315979  
Report To: Chris McKisson  
403 ½ Rockwood Lane  
Grand Junction, CO 81507

Entire Report Reviewed By:



Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

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

# SAMPLE SUMMARY

20220928-PR\_FED\_C-1W-BG (1455) @ 1' L1541680-01 Solid

Collected by  
Alex Slorby

Collected date/time  
09/28/22 14:55

Received date/time  
09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1940413	1	10/12/22 16:13	10/12/22 16:13	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1938132	1	10/06/22 16:00	10/06/22 18:00	SGB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1937115	5	10/04/22 17:46	10/06/22 14:24	JPD	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

ACCOUNT:

Confluence Compliance Companies - CO

PROJECT:

315979

SDG:

L1541680

DATE/TIME:

10/13/22 12:44

PAGE:

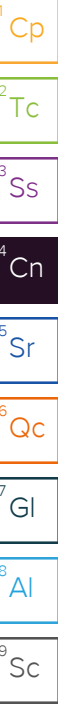
3 of 10

# 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	4.26		1	10/12/2022 16:13	WG1940413

<sup>1</sup>Cp

<sup>2</sup>Tc

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.75	T8	1	10/06/2022 18:00	<a href="#">WG1938132</a>

<sup>3</sup>Ss

<sup>4</sup>Cn

Sample Narrative:

L1541680-01 WG1938132: 8.75 at 18.3C

<sup>5</sup>Sr

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	8.05		0.100	1.00	5	10/06/2022 14:24	<a href="#">WG1937115</a>

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1538852-41 Original Sample (OS) • Duplicate (DUP)

(OS) L1538852-41 10/06/22 18:00 • (DUP) R3845601-2 10/06/22 18:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	8.04	8.04	1	0.000		1

Sample Narrative:

OS: 8.04 at 18.7C

DUP: 8.04 at 18.7C

L1541678-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1541678-01 10/06/22 18:00 • (DUP) R3845601-3 10/06/22 18:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	8.37	8.36	1	0.120		1

Sample Narrative:

OS: 8.37 at 18.4C

DUP: 8.36 at 18.5C

Laboratory Control Sample (LCS)

(LCS) R3845601-1 10/06/22 18:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	9.91	99.1	99.0-101	

Sample Narrative:

LCS: 9.91 at 18.7C



Method Blank (MB)

(MB) R3845451-1 10/06/22 13:23

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) R3845451-2 10/06/22 13:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	96.4	96.4	80.0-120	

L1541384-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541384-01 10/06/22 13:29 • (MS) R3845451-5 10/06/22 13:39 • (MSD) R3845451-6 10/06/22 13:42

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	3.91	112	108	108	104	5	75.0-125			3.26	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

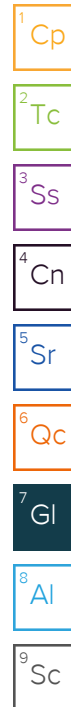
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

### Abbreviations and Definitions

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

### Qualifier Description

T8	Sample(s) received past/too close to holding time expiration.
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# ACCREDITATIONS & LOCATIONS

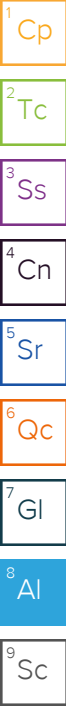
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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





**Confluence Compliance Companies - CO**

Sample Delivery Group: L1541681  
Samples Received: 09/30/2022  
Project Number: 315979  
Description: AEC005-Pinyon Ridge Fed C-1W (315979)  
Site: PINYON RIDGE FED C-1W/315979  
Report To: Chris McKisson  
403 ½ Rockwood Lane  
Grand Junction, CO 81507

Entire Report Reviewed By:



Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)



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

# SAMPLE SUMMARY

20220928-PR\_FED\_C-1W-BG (1450) @ 1' L1541681-01 Solid

Collected by  
Alex Slorby

Collected date/time  
09/28/22 14:50

Received date/time  
09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1940413	1	10/12/22 16:16	10/12/22 16:16	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1938132	1	10/06/22 16:00	10/06/22 18:00	SGB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1937115	5	10/04/22 17:46	10/06/22 14:28	JPD	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

ACCOUNT:

Confluence Compliance Companies - CO

PROJECT:

315979

SDG:

L1541681

DATE/TIME:

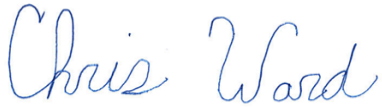
10/13/22 12:45

PAGE:

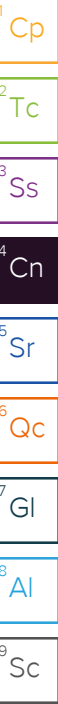
3 of 10

# 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

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte					
Sodium Adsorption Ratio	0.108		1	10/12/2022 16:16	WG1940413

<sup>1</sup> Cp

<sup>2</sup> Tc

Wet Chemistry by Method 9045D

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte	su				
pH	8.33	T8	1	10/06/2022 18:00	<a href="#">WG1938132</a>

<sup>3</sup> Ss

<sup>4</sup> Cn

Sample Narrative:

L1541681-01 WG1938132: 8.33 at 18.2C

<sup>5</sup> Sr

Metals (ICPMS) by Method 6020

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
Arsenic	3.10		0.100	1.00	5	10/06/2022 14:28	<a href="#">WG1937115</a>

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

L1538852-41 Original Sample (OS) • Duplicate (DUP)

(OS) L1538852-41 10/06/22 18:00 • (DUP) R3845601-2 10/06/22 18:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.04	8.04	1	0.000		1

Sample Narrative:

OS: 8.04 at 18.7C

DUP: 8.04 at 18.7C

L1541678-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1541678-01 10/06/22 18:00 • (DUP) R3845601-3 10/06/22 18:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.37	8.36	1	0.120		1

Sample Narrative:

OS: 8.37 at 18.4C

DUP: 8.36 at 18.5C

Laboratory Control Sample (LCS)

(LCS) R3845601-1 10/06/22 18:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.91	99.1	99.0-101	

Sample Narrative:

LCS: 9.91 at 18.7C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3845451-1 10/06/22 13:23

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

Laboratory Control Sample (LCS)

(LCS) R3845451-2 10/06/22 13:26

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	96.4	96.4	80.0-120	

L1541384-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541384-01 10/06/22 13:29 • (MS) R3845451-5 10/06/22 13:39 • (MSD) R3845451-6 10/06/22 13:42

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	3.91	112	108	108	104	5	75.0-125			3.26	20

1Cp

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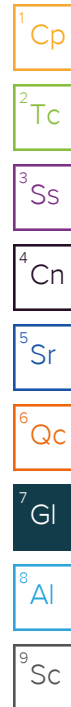
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## Qualifier Description

T8	Sample(s) received past/too close to holding time expiration.
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# ACCREDITATIONS & LOCATIONS

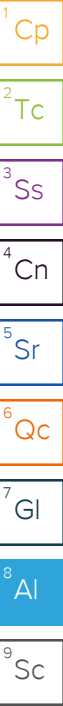
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



nd

**Confluence Compliance Companies - CO**

Sample Delivery Group: L1541678  
Samples Received: 09/30/2022  
Project Number: 315979  
Description: AEC005-Pinyon Ridge Fed C-1W (315979)  
Site: PINYON RIDGE FED C-1W/315979  
Report To: Chris McKisson  
403 ½ Rockwood Lane  
Grand Junction, CO 81507

Entire Report Reviewed By:



Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

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Ss: Sample Summary	3	<sup>2</sup> Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	<sup>3</sup> Ss
20220928-PR_FED_C-1W-BG (1520) @ 1' L1541678-01	5	
Qc: Quality Control Summary	6	<sup>4</sup> Cn
Wet Chemistry by Method 9045D	6	<sup>5</sup> Sr
Metals (ICPMS) by Method 6020	7	
Gl: Glossary of Terms	8	<sup>6</sup> Qc
Al: Accreditations & Locations	9	<sup>7</sup> Gl
Sc: Sample Chain of Custody	10	<sup>8</sup> Al
		<sup>9</sup> Sc

# SAMPLE SUMMARY

20220928-PR\_FED\_C-1W-BG (1520) @ 1' L1541678-01 Solid

Collected by  
Alex Slorby

Collected date/time  
09/28/22 15:20

Received date/time  
09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1940413	1	10/12/22 16:02	10/12/22 16:02	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1938132	1	10/06/22 16:00	10/06/22 18:00	SGB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1937115	5	10/04/22 17:46	10/06/22 14:18	JPD	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

ACCOUNT:

Confluence Compliance Companies - CO

PROJECT:

315979

SDG:

L1541678

DATE/TIME:

10/13/22 12:46

PAGE:

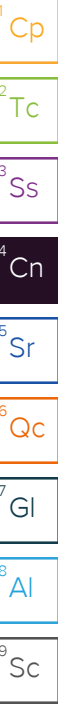
3 of 10

# CASE NARRATIVE

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



Chris Ward  
Project Manager



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.0772		1	10/12/2022 16:02	WG1940413

<sup>1</sup> Cp

<sup>2</sup> Tc

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.37	T8	1	10/06/2022 18:00	<a href="#">WG1938132</a>

<sup>3</sup> Ss

<sup>4</sup> Cn

Sample Narrative:

L1541678-01 WG1938132: 8.37 at 18.4C

<sup>5</sup> Sr

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	5.32		0.100	1.00	5	10/06/2022 14:18	<a href="#">WG1937115</a>

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



L1538852-41 Original Sample (OS) • Duplicate (DUP)

(OS) L1538852-41 10/06/22 18:00 • (DUP) R3845601-2 10/06/22 18:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.04	8.04	1	0.000		1

Sample Narrative:

OS: 8.04 at 18.7C

DUP: 8.04 at 18.7C

L1541678-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1541678-01 10/06/22 18:00 • (DUP) R3845601-3 10/06/22 18:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.37	8.36	1	0.120		1

Sample Narrative:

OS: 8.37 at 18.4C

DUP: 8.36 at 18.5C

Laboratory Control Sample (LCS)

(LCS) R3845601-1 10/06/22 18:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.91	99.1	99.0-101	

Sample Narrative:

LCS: 9.91 at 18.7C



Method Blank (MB)

(MB) R3845451-1 10/06/22 13:23

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) R3845451-2 10/06/22 13:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	96.4	96.4	80.0-120	

L1541384-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541384-01 10/06/22 13:29 • (MS) R3845451-5 10/06/22 13:39 • (MSD) R3845451-6 10/06/22 13:42

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	3.91	112	108	108	104	5	75.0-125			3.26	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

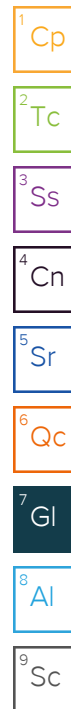
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

## Abbreviations and Definitions

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

## Qualifier Description

T8	Sample(s) received past/too close to holding time expiration.
----	---



# ACCREDITATIONS & LOCATIONS

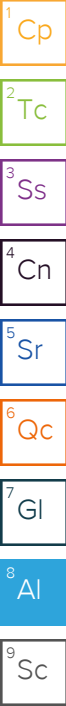
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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





# CHAIN-OF-CUSTODY Analytical Request Document

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

Company: Confluence Compliance Companies		Billing Information:				
Address: Info on file		Info on file				
Report To: Chris McKisson		Email To: Info on file				
Copy To: Chris McKisson, remediation@confluence-cc.com		Site Collection Info/Address: NESE 21 3N97W 40.212620/-108.276390				
Customer Project Name/Number: AEC005 - Pinyon Ridge Fed C-1W (315979)		State: County/City: Time Zone Collected: CO / Rio Blanco [ ] PT [X] MT [ ] CT [ ] ET				
Phone:	Site/Facility ID #:	Compliance Monitoring?				
Email:	Pinyon Ridge Fed C-1W / 315979	[ ] Yes [X] No				
Collected By (print): Alex Sloby	Purchase Order #:	DW PWS ID #:				
	Quote #:	DW Location Code:				
Collected By (signature): Alex Sloby	Turnaround Date Required: Standard	Immediately Packed on Ice:				
		[X] Yes [ ] No				
Sample Disposal:	Rush: (Expedite Charges Apply)	Field Filtered (if applicable):				
[X] Dispose as appropriate	[ ] Same Day [ ] Next Day	[ ] Yes [ ] No				
[ ] Return	[ ] 2 Day [ ] 3 Day	Analysis:				
[ ] Archive:	[ ] 4 Day [ ] 5 Day					
[ ] Hold:						
* 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)	Composite End	Res Cl	# of Ctns
Sample Prefix: 20220928-PR_FED_C-1W-			Date Time	Date Time		
BG(1520)@1'	SL	G	9/28/2022 1520			1

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

D082

## ALL BOLD OUTLINED AREAS are for LAB USE ONLY

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

Analyses

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:

115411678  
-01

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

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

Packing Material Used:

Lab Tracking #:

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

Samples received via:

FEDEX UPS Client Courier Pace Courier

Relinquished by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

MTJL LAB USE ONLY

Relinquished by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

Table #:

Acctnum:

Template:

Prelogin:

PM:

PB:

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Relinquished by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

Non Conformance(s):

YES / NO

Page:

of:

**Confluence Compliance Companies - CO**

Sample Delivery Group: L1541679  
Samples Received: 09/30/2022  
Project Number: 315979  
Description: AEC005-Pinyon Ridge Fed C-1W (315979)  
Site: PINYON RIDGE FED C-1W/315979  
Report To: Chris McKisson  
403 ½ Rockwood Lane  
Grand Junction, CO 81507

Entire Report Reviewed By:



Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

# TABLE OF CONTENTS

Cp: Cover Page	1	<sup>1</sup> Cp
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Ss: Sample Summary	3	<sup>2</sup> Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	<sup>3</sup> Ss
20220928-PR_FED_C-1W-BG (1515) @ 1' L1541679-01	5	<sup>4</sup> Cn
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Wet Chemistry by Method 9045D	6	<sup>5</sup> Sr
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Gl: Glossary of Terms	8	<sup>6</sup> Qc
Al: Accreditations & Locations	9	<sup>7</sup> Gl
Sc: Sample Chain of Custody	10	<sup>8</sup> Al
		<sup>9</sup> Sc



# SAMPLE SUMMARY

20220928-PR\_FED\_C-1W-BG (1515) @ 1' L1541679-01 Solid

Collected by  
Alex Slorby

Collected date/time  
09/28/22 15:15

Received date/time  
09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1940413	1	10/12/22 16:10	10/12/22 16:10	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1938132	1	10/06/22 16:00	10/06/22 18:00	SGB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1937115	5	10/04/22 17:46	10/06/22 14:21	JPD	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

ACCOUNT:

Confluence Compliance Companies - CO

PROJECT:

315979

SDG:

L1541679

DATE/TIME:

10/13/22 12:45

PAGE:

3 of 10

# CASE NARRATIVE

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



Chris Ward  
Project Manager



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.0659		1	10/12/2022 16:10	WG1940413

1  
Cp

2  
Tc

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.29	T8	1	10/06/2022 18:00	WG1938132

3  
Ss

4  
Cn

Sample Narrative:

L1541679-01 WG1938132: 8.29 at 18.4C

5  
Sr

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	4.01		0.100	1.00	5	10/06/2022 14:21	WG1937115

6  
Qc

7  
Gl

8  
Al

9  
Sc

L1538852-41 Original Sample (OS) • Duplicate (DUP)

(OS) L1538852-41 10/06/22 18:00 • (DUP) R3845601-2 10/06/22 18:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	8.04	8.04	1	0.000		1

Sample Narrative:

OS: 8.04 at 18.7C

DUP: 8.04 at 18.7C

L1541678-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1541678-01 10/06/22 18:00 • (DUP) R3845601-3 10/06/22 18:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	8.37	8.36	1	0.120		1

Sample Narrative:

OS: 8.37 at 18.4C

DUP: 8.36 at 18.5C

Laboratory Control Sample (LCS)

(LCS) R3845601-1 10/06/22 18:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	9.91	99.1	99.0-101	

Sample Narrative:

LCS: 9.91 at 18.7C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3845451-1 10/06/22 13:23

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

Laboratory Control Sample (LCS)

(LCS) R3845451-2 10/06/22 13:26

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	96.4	96.4	80.0-120	

L1541384-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541384-01 10/06/22 13:29 • (MS) R3845451-5 10/06/22 13:39 • (MSD) R3845451-6 10/06/22 13:42

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	3.91	112	108	108	104	5	75.0-125			3.26	20

1

Cp

2

Tc

3

Ss

4

Cn

5

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Qc

7

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8

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# GLOSSARY OF TERMS

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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.
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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.
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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

T8	Sample(s) received past/too close to holding time expiration.
----	---

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

# ACCREDITATIONS & LOCATIONS

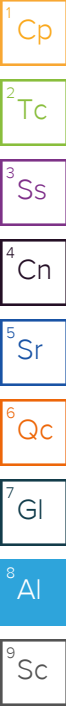
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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







**Confluence Compliance Companies - CO**

Sample Delivery Group: L1541682  
Samples Received: 09/30/2022  
Project Number: 315979  
Description: AEC005-Pinyon Ridge Fed C-1W (315979)  
Site: PINYON RIDGE FED C-1W/315979  
Report To: Chris McKisson  
403 ½ Rockwood Lane  
Grand Junction, CO 81507

Entire Report Reviewed By:



Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

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Sr: Sample Results	5	<sup>3</sup> Ss
20220928-PR_FED_C-1W-BG (1440) @ 1' L1541682-01	5	<sup>4</sup> Cn
Qc: Quality Control Summary	6	
Wet Chemistry by Method 9045D	6	<sup>5</sup> Sr
Metals (ICPMS) by Method 6020	7	<sup>6</sup> Qc
Gl: Glossary of Terms	8	<sup>7</sup> Gl
Al: Accreditations & Locations	9	<sup>8</sup> Al
Sc: Sample Chain of Custody	10	<sup>9</sup> Sc

# SAMPLE SUMMARY

20220928-PR\_FED\_C-1W-BG (1440) @ 1' L1541682-01 Solid

Collected by  
Alex Slorby

Collected date/time  
09/28/22 14:40

Received date/time  
09/30/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1940413	1	10/12/22 16:19	10/12/22 16:19	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1939090	1	10/07/22 14:00	10/07/22 16:00	SGB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1937115	5	10/04/22 17:46	10/06/22 14:31	JPD	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

ACCOUNT:

Confluence Compliance Companies - CO

PROJECT:

315979

SDG:

L1541682

DATE/TIME:

10/13/22 12:46

PAGE:

3 of 10

# CASE NARRATIVE

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



Chris Ward  
Project Manager



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.0894		1	10/12/2022 16:19	WG1940413

1  
Cp

2  
Tc

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.19	T8	1	10/07/2022 16:00	WG1939090

3  
Ss

4  
Cn

Sample Narrative:

L1541682-01 WG1939090: 8.19 at 21.1C

5  
Sr

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	8.16		0.100	1.00	5	10/06/2022 14:31	WG1937115

6  
Qc

7  
Gl

8  
Al

9  
Sc

L1540921-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1540921-04 10/07/22 16:00 • (DUP) R3845985-2 10/07/22 16:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	11.2	11.2	1	0.0896		1

Sample Narrative:

OS: 11.15 at 22.5C

DUP: 11.16 at 22.4C



L1541823-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1541823-01 10/07/22 16:00 • (DUP) R3845985-3 10/07/22 16:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.92	7.96	1	0.504		1

Sample Narrative:

OS: 7.92 at 20.9C

DUP: 7.96 at 21.1C

Laboratory Control Sample (LCS)

(LCS) R3845985-1 10/07/22 16:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	9.90	99.0	99.0-101	

Sample Narrative:

LCS: 9.9 at 20C



Method Blank (MB)

(MB) R3845451-1 10/06/22 13:23

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

Laboratory Control Sample (LCS)

(LCS) R3845451-2 10/06/22 13:26

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	96.4	96.4	80.0-120	

L1541384-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1541384-01 10/06/22 13:29 • (MS) R3845451-5 10/06/22 13:39 • (MSD) R3845451-6 10/06/22 13:42

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	3.91	112	108	108	104	5	75.0-125			3.26	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

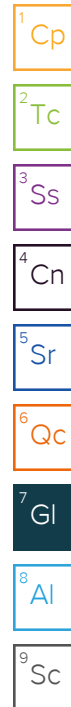
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

### Abbreviations and Definitions

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

### Qualifier Description

T8	Sample(s) received past/too close to holding time expiration.
----	---



# ACCREDITATIONS & LOCATIONS

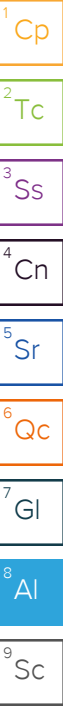
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Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
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Florida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

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

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

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



Non Conformance(s):	Page: _____
YES / NO	of: _____

October 16, 2023

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## Anschutz Exploration Corporation

Sample Delivery Group: L1662745  
Samples Received: 10/04/2023  
Project Number:  
Description: Pinyon Ridge  
Site: PINYON RIDGE  
Report To: Schuyler Hamilton  
555 17th Street Suite 2400  
Denver, CO 80202

Entire Report Reviewed By:



T. Alan Harvill  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

ACCOUNT:

Anschutz Exploration Corporation

PROJECT:

SDG:

L1662745

DATE/TIME:

10/16/23 11:40

PAGE:

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Sr: Sample Results	5	<sup>3</sup> Ss
231003_PINYONRIDGE_PW L1662745-01	5	<sup>4</sup> Cn
Qc: Quality Control Summary	6	
Wet Chemistry by Method 3500Cr C-2011	6	<sup>5</sup> Sr
Wet Chemistry by Method 4500H+ B-2011	7	
Metals (ICP) by Method 200.7	8	<sup>6</sup> Qc
Metals (ICPMS) by Method 200.8	9	
Gl: Glossary of Terms	11	<sup>7</sup> Gl
Al: Accreditations & Locations	12	<sup>8</sup> Al
Sc: Sample Chain of Custody	13	<sup>9</sup> Sc

# SAMPLE SUMMARY

231003\_PINYONRIDGE\_PW L1662745-01 WW

Collected by  
Ahmed Shah

Collected date/time  
10/03/23 12:30

Received date/time  
10/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 3500Cr C-2011	WG2148999	1	10/12/23 13:36	10/12/23 13:36	SET	Mt. Juliet, TN
Wet Chemistry by Method 4500H+ B-2011	WG2146374	1	10/08/23 13:00	10/08/23 13:00	BJM	Mt. Juliet, TN
Metals (ICP) by Method 200.7	WG2147294	5	10/08/23 08:23	10/10/23 12:56	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG2145211	5	10/09/23 16:52	10/15/23 16:48	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG2145211	500	10/09/23 16:52	10/16/23 09:58	SJM	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

ACCOUNT:

Anschutz Exploration Corporation

PROJECT:

SDG:

L1662745

DATE/TIME:

10/16/23 11:40

PAGE:

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# 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.



T. Alan Harvill  
Project Manager



## Wet Chemistry by Method 3500Cr C-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.000150	0.000500	1	10/12/2023 13:36	<a href="#">WG2148999</a>

## Wet Chemistry by Method 4500H+ B-2011

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	6.46	<a href="#">T8</a>	1	10/08/2023 13:00	<a href="#">WG2146374</a>

## Sample Narrative:

L1662745-01 WG2146374: 6.46 at 20.1C

## Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Boron	26.5		0.198	1.00	5	10/10/2023 12:56	<a href="#">WG2147294</a>

## Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic	U		0.000975	0.00500	5	10/15/2023 16:48	<a href="#">WG2145211</a>
Barium	72.9		0.238	2.50	500	10/16/2023 09:58	<a href="#">WG2145211</a>
Cadmium	U		0.000800	0.00500	5	10/15/2023 16:48	<a href="#">WG2145211</a>
Copper	0.0621		0.00335	0.00500	5	10/15/2023 16:48	<a href="#">WG2145211</a>
Lead	0.00440	<a href="#">J</a>	0.00256	0.0100	5	10/15/2023 16:48	<a href="#">WG2145211</a>
Nickel	U		0.00257	0.0100	5	10/15/2023 16:48	<a href="#">WG2145211</a>
Selenium	U		0.00218	0.0100	5	10/15/2023 16:48	<a href="#">WG2145211</a>
Silver	U		0.000720	0.00500	5	10/15/2023 16:48	<a href="#">WG2145211</a>
Zinc	U		0.0398	0.100	5	10/15/2023 16:48	<a href="#">WG2145211</a>

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

Method Blank (MB)

(MB) R3985466-1 10/12/23 08:05

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Hexavalent Chromium	U		0.000150	0.000500

L1664748-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1664748-03 10/12/23 09:33 • (DUP) R3985466-5 10/12/23 09:44

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

L1665018-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1665018-01 10/12/23 12:28 • (DUP) R3985466-6 10/12/23 12:39

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Hexavalent Chromium	0.00154	0.00154	1	0.266		20

Laboratory Control Sample (LCS)

(LCS) R3985466-2 10/12/23 08:16

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Hexavalent Chromium	0.00200	0.00213	107	90.0-110	

L1664748-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1664748-01 10/12/23 09:00 • (MS) R3985466-3 10/12/23 09:11 • (MSD) R3985466-4 10/12/23 09:22

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Hexavalent Chromium	0.0500	0.00182	0.0530	0.0532	102	103	1	90.0-110			0.394	20

L1665047-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1665047-01 10/12/23 13:01 • (MS) R3985466-7 10/12/23 13:12

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Hexavalent Chromium	0.0500	0.000351	0.0518	103	1	90.0-110	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1662010-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1662010-02 10/08/23 13:00 • (DUP) R3983454-2 10/08/23 13:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.02	8.00	1	0.250		1

Sample Narrative:  
OS: 8.02 at 20.8C  
DUP: 8 at 20.5C

L1663044-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1663044-01 10/08/23 13:00 • (DUP) R3983454-3 10/08/23 13:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	6.97	6.97	1	0.000		1

Sample Narrative:  
OS: 6.97 at 20.5C  
DUP: 6.97 at 20.2C

Laboratory Control Sample (LCS)

(LCS) R3983454-1 10/08/23 13:00

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

Sample Narrative:  
LCS: 10 at 20.7C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3983802-8 10/09/23 12:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron	U		0.0396	0.200

Laboratory Control Sample (LCS)

(LCS) R3983802-9 10/09/23 12:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1.00	0.985	98.5	85.0-115	

L1661900-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1661900-02 10/09/23 12:30 • (MS) R3983802-11 10/09/23 12:36 • (MSD) R3983802-12 10/09/23 12:38

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 %
Boron	1.00	0.216	1.13	1.23	91.0	102	1	70.0-130			9.04	20

L1661948-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1661948-02 10/09/23 12:41 • (MS) R3983802-13 10/09/23 12:43 • (MSD) R3983802-14 10/09/23 12:46

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 %
Boron	1.00	0.117	1.10	1.09	98.1	97.6	1	70.0-130			0.388	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3986510-1 10/15/23 15:03

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.000195	0.00100
Barium	U		0.000476	0.00500
Cadmium	U		0.000160	0.00100
Copper	U		0.000670	0.00100
Lead	U		0.000513	0.00200
Nickel	U		0.000514	0.00200
Selenium	U		0.000437	0.00200
Silver	U		0.000144	0.00100
Zinc	U		0.00796	0.0200

Laboratory Control Sample (LCS)

(LCS) R3986510-2 10/15/23 15:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	0.0500	0.0524	105	85.0-115	
Barium	0.0500	0.0490	98.1	85.0-115	
Cadmium	0.0500	0.0517	103	85.0-115	
Copper	0.0500	0.0470	94.0	85.0-115	
Lead	0.0500	0.0523	105	85.0-115	
Nickel	0.0500	0.0516	103	85.0-115	
Selenium	0.0500	0.0492	98.3	85.0-115	
Silver	0.0500	0.0500	99.9	85.0-115	
Zinc	0.0500	0.0507	101	85.0-115	

L1661990-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1661990-02 10/15/23 15:10 • (MS) R3986510-4 10/15/23 15:16 • (MSD) R3986510-5 10/15/23 15:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.000704	0.0534	0.0520	105	103	1	70.0-130			2.60	20
Barium	0.0500	0.0143	0.0654	0.0644	102	100	1	70.0-130			1.49	20
Cadmium	0.0500	U	0.0517	0.0514	103	103	1	70.0-130			0.466	20
Copper	0.0500	0.00871	0.0565	0.0547	95.7	92.0	1	70.0-130			3.26	20
Lead	0.0500	U	0.0544	0.0545	109	109	1	70.0-130			0.177	20
Nickel	0.0500	0.00223	0.0540	0.0528	104	101	1	70.0-130			2.24	20
Selenium	0.0500	U	0.0503	0.0501	101	100	1	70.0-130			0.338	20
Silver	0.0500	U	0.0498	0.0496	99.6	99.1	1	70.0-130			0.528	20
Zinc	0.0500	0.0229	0.0728	0.0717	99.7	97.5	1	70.0-130			1.57	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1662293-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1662293-01 10/15/23 15:23 • (MS) R3986510-6 10/15/23 15:26 • (MSD) R3986510-7 10/15/23 15:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Arsenic	0.0500	0.00206	0.0524	0.0527	101	101	1	70.0-130			0.710	20
Barium	0.0500	0.0186	0.0686	0.0678	99.9	98.3	1	70.0-130			1.14	20
Cadmium	0.0500	U	0.0535	0.0529	107	106	1	70.0-130			1.17	20
Copper	0.0500	0.00868	0.0549	0.0542	92.4	91.1	1	70.0-130			1.18	20
Lead	0.0500	0.000522	0.0551	0.0533	109	106	1	70.0-130			3.43	20
Nickel	0.0500	0.0559	0.108	0.106	105	99.8	1	70.0-130			2.30	20
Selenium	0.0500	U	0.0505	0.0510	101	102	1	70.0-130			1.04	20
Silver	0.0500	0.000167	0.0504	0.0504	100	100	1	70.0-130			0.0142	20
Zinc	0.0500	0.0735	0.127	0.129	106	111	1	70.0-130			1.77	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

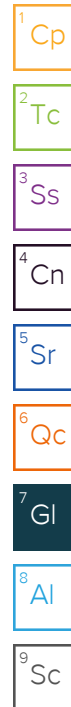
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

## Abbreviations and Definitions

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

## Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
T8	Sample(s) received past/too close to holding time expiration.



# ACCREDITATIONS & LOCATIONS

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


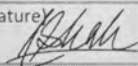
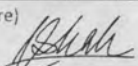
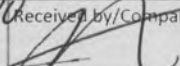
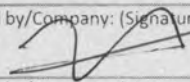
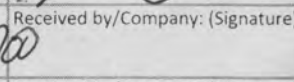
Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1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

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

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

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



<div><b>CHAIN-OF-CUSTODY Analytical Request Document</b></div> <div>Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields</div>										LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here																			
Company: <b>Anschutz Exploration Corp</b>					Billing Information: <b>Info on file</b>					<b>ALL SHADED AREAS are for LAB USE ONLY</b>																			
Address: <b>Info on file</b>										Container Preservative Type **					Lab Project Manager:														
Report To: <b>schuyler.hamilton@aec-denver.com</b>					Email To: <b>Info on file</b>					** 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																			
Copy To: <b>sage.maher@confluence-cc.com; remediation@confluence-cc.com</b>					Site Collection Info/Address:					Analyses										Lab Profile/Line:									
Customer Project Name/Number: <b>Pinyon Ridge</b>					State: <b>CO</b> County/City: <b>Mesa</b> Time Zone Collected: <b>[ ] PT [x] MT [ ] CT [ ] ET</b>															Lab Sample Receipt Checklist:									
Phone: Info on file					Site/Facility ID #: <b>Pinyon Ridge</b>					Compliance Monitoring? <b>[ ] Yes [ ] No</b>															Custody Seals Present/Intact <b>Y N NA</b>				
Email: Info on file																									Custody Signatures Present <b>Y N NA</b>				
Collected By (print): <b>Ahmed Shah</b>					Purchase Order #: <b>Quote #:</b>					DW PWS ID #: <b>DW Location Code:</b>															Collector Signature Present <b>Y N NA</b>				
Collected By (signature): 					Turnaround Date Required: <b>Standard TAT</b>					Immediately Packed on Ice: <b>[x] Yes [ ] No</b>															Bottles Intact <b>Y N NA</b>				
Sample Disposal: <b>[x] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:</b>					Rush: <b>[ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)</b>					Field Filtered (if applicable): <b>[ ] Yes [x] No</b>															Correct Bottles <b>Y N NA</b>				
* 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)																									Sufficient Volume <b>Y N NA</b>				
Customer Sample ID					Matrix *		Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns	TABLE 915-1 VOCs	TPH-(GRO, DRO, ORO)	TABLE 915-1 METALS LIST	TABLE 915-1 PAHS	pH, EC, SAR	Boron (hot water soluble)	Cr6	pH	Samples Received on Ice <b>Y N NA</b>							
231003_PinyonRidge_PW					WW		GRAB	10/03/23 1230					2			X					X	VOA - Headspace Acceptable <b>Y N NA</b>							
																						USDA Regulated Soils <b>Y N NA</b>							
																						Samples in Holding Time <b>Y N NA</b>							
																						Residual Chlorine Present <b>Y N NA</b>							
																						Cl Strips: <b>Y N NA</b>							
																						Sample pH Acceptable <b>Y N NA</b>							
																						pH Strips: <b>Y N NA</b>							
																						Sulfide Present <b>Y N NA</b>							
																						Lead Acetate Strips: <b>Y N NA</b>							
																						LAB USE ONLY: Lab Sample # / Comments: <b>L1662745 -01</b>							
Customer Remarks / Special Conditions / Possible Hazards:					Type of Ice Used: <b>Wet Blue Dry None</b>					SHORT HOLDS PRESENT (<72 hours): <b>Y N N/A</b>					Lab Sample Temperature Info:														
					Packing Material Used:					Lab Tracking #: <b>6025 5572 2085</b>					Temp Blank Received: <b>Y N NA</b>														
					Radchem sample(s) screened (<500 cpm): <b>Y N NA</b>					Samples received via: <b>FEDEX UPS Client Courier Pace Courier</b>					Therm ID#: <b>4.9 oC</b>														
Relinquished by/Company: (Signature) 					Date/Time: <b>10/03/2023 1630</b>					Received by/Company: (Signature) 					Date/Time: <b>D248</b>					Cooler 1 Temp Upon Receipt: <b>4.9 oC</b>									
Relinquished by/Company: (Signature) 					Date/Time: <b>10/3/23 1700</b>					Received by/Company: (Signature) 					Date/Time: <b>10/4/23 0900</b>					Cooler 1 Therm Corr. Factor: <b>0 oC</b>									
Relinquished by/Company: (Signature)					Date/Time:					Received by/Company: (Signature)					Date/Time:					Cooler 1 Corrected Temp: <b>4.9 oC</b>									
																				Comments: <b>ok adj. 10/4/23 1837</b>									
																				Trip Blank Received: <b>Y N NA</b>									
																				HCL MeOH TSP Other									
																				Non Conformance(s): <b>YES / NO</b>									
																				Page: <b>of:</b>									