

September 11, 2024

Revised Report

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Civitas - CO

Sample Delivery Group: L1767187
Samples Received: 08/14/2024
Project Number:
Description: North Platte K-0-13 HNC

Report To: Jacob Evans
6855 W. 118th Ave
Broomfield, CO 80020

Entire Report Reviewed By:



Chris Ward
Project Manager

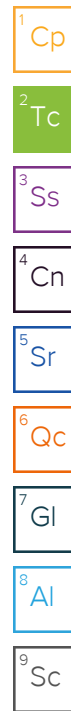
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory 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

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SAMPLE SUMMARY

B01@7' L1767187-01 Solid

Collected by
Max Buffy

Collected date/time
08/13/24 09:05

Received date/time
08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346281	1	08/21/24 01:33	08/21/24 01:33	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344720	1	08/20/24 18:42	08/21/24 17:10	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347254	1	08/21/24 09:24	08/21/24 10:22	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347263	1	08/21/24 09:25	08/21/24 11:26	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2344342	1	08/17/24 07:47	08/17/24 21:09	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2346285	5	08/20/24 11:58	08/20/24 20:05	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353834	5	08/31/24 01:08	09/02/24 16:55	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2345339	1	08/15/24 16:24	08/18/24 07:03	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2344797	1	08/15/24 16:24	08/16/24 21:12	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2347646	1	08/21/24 14:38	08/22/24 05:15	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2347201	1	08/21/24 11:29	08/21/24 19:20	JCH	Mt. Juliet, TN

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

SEP01 INLET@7' L1767187-02 Solid

Collected by
Max Buffy

Collected date/time
08/13/24 09:13

Received date/time
08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346281	1	08/21/24 01:35	08/21/24 01:35	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344720	1	08/20/24 18:42	08/21/24 17:16	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347254	1	08/21/24 09:24	08/21/24 10:22	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347263	1	08/21/24 09:25	08/21/24 11:26	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2344342	1	08/17/24 07:47	08/17/24 21:11	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2346285	1	08/20/24 11:58	08/20/24 20:06	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353834	5	08/31/24 01:08	09/02/24 16:58	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2345339	1	08/15/24 16:24	08/18/24 07:27	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2344797	1	08/15/24 16:24	08/16/24 21:31	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2347646	1	08/21/24 14:38	08/22/24 05:28	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2347201	1	08/21/24 11:29	08/21/24 19:38	JCH	Mt. Juliet, TN

FL01@7' L1767187-03 Solid

Collected by
Max Buffy

Collected date/time
08/13/24 10:20

Received date/time
08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346281	1	08/21/24 01:37	08/21/24 01:37	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344720	1	08/20/24 18:42	08/21/24 17:22	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347254	1	08/21/24 09:24	08/21/24 10:22	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347263	1	08/21/24 09:25	08/21/24 11:26	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2344342	1	08/17/24 07:47	08/17/24 21:13	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2346285	5	08/20/24 11:58	08/20/24 20:08	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353834	5	08/31/24 01:08	09/02/24 17:01	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2345339	1	08/15/24 16:24	08/18/24 07:51	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2344797	1	08/15/24 16:24	08/16/24 21:50	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2347646	1	08/21/24 14:38	08/22/24 05:42	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2347201	1	08/21/24 11:29	08/21/24 19:56	JCH	Mt. Juliet, TN

FL02@7' L1767187-04 Solid

Collected by
Max Buffy

Collected date/time
08/13/24 09:56

Received date/time
08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2346281	1	08/21/24 01:39	08/21/24 01:39	DJS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2344720	1	08/20/24 18:42	08/21/24 17:28	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2347254	1	08/21/24 09:24	08/21/24 10:22	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2347263	1	08/21/24 09:25	08/21/24 11:26	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2344344	1	08/20/24 09:42	08/20/24 22:25	MAP	Mt. Juliet, TN

SAMPLE SUMMARY

FL02@7' L1767187-04 Solid

Collected by: Max Buffy
 Collected date/time: 08/13/24 09:56
 Received date/time: 08/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2346285	1	08/20/24 11:58	08/20/24 20:10	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353834	5	08/31/24 01:08	09/02/24 17:04	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2345339	1	08/15/24 16:24	08/18/24 08:15	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2344797	1	08/15/24 16:24	08/16/24 22:09	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2347646	1	08/21/24 14:38	08/22/24 05:55	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2347201	1	08/21/24 11:29	08/21/24 20:13	JCH	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

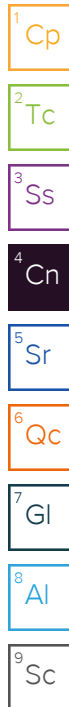
⁹Sc

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: 08/26/24 10:21

Level II Report - Version 2: 09/06/24 13:57

Project Narrative

The requested project specific reporting limits may be less than laboratory standard quantitation limits (PQL) but will be greater than or equal to the laboratory method detection limits (MDL). It is noted that results reported below lab standard quantitation limits (PQLs) may result in false positive/false negative values that may require additional laboratory quality assurance review, if requested. Routine laboratory procedures do not initiate a data review process for detections below the laboratory's PQL unless requested by the client.

The requested project specific reporting limits may be less than laboratory standard quantitation limits (PQL) but will be greater than or equal to the laboratory method detection limits (MDL). It is noted that results reported below lab standard quantitation limits (PQLs) may result in false positive/false negative values that may require additional laboratory quality assurance review, if requested. Routine laboratory procedures do not initiate a data review process for detections below the laboratory's PQL unless requested by the client.

Report reissued for corrected sample ID

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.40		1	08/21/2024 01:33	WG2346281

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 17:10	WG2344720

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.15	<u>T8</u>	1	08/21/2024 10:22	WG2347254

Sample Narrative:

L1767187-01 WG2347254: 8.15 at 20.5C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	236		10.0	1	08/21/2024 11:26	WG2347263

Sample Narrative:

L1767187-01 WG2347263: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.23	<u>J</u>	0.518	1	08/17/2024 21:09	WG2344342
Barium	34.0		0.400	1	08/17/2024 21:09	WG2344342
Cadmium	ND		0.200	1	08/17/2024 21:09	WG2344342
Copper	1.12	<u>J</u>	0.400	1	08/17/2024 21:09	WG2344342
Lead	3.17		0.208	1	08/17/2024 21:09	WG2344342
Nickel	2.09		0.400	1	08/17/2024 21:09	WG2344342
Selenium	ND		0.764	1	08/17/2024 21:09	WG2344342
Silver	ND		0.127	1	08/17/2024 21:09	WG2344342
Zinc	10.1		0.832	1	08/17/2024 21:09	WG2344342

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

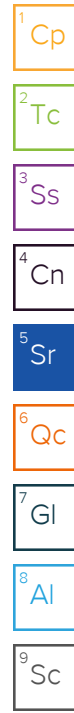
Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	5	08/20/2024 20:05	WG2346285

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.317	<u>J</u>	0.180	5	09/02/2024 16:55	WG2353834

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.500	1	08/18/2024 07:03	WG2345339
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120	08/18/2024 07:03	WG2345339



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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00200	1	08/16/2024 21:12	WG2344797
Toluene	ND		0.00500	1	08/16/2024 21:12	WG2344797
Ethylbenzene	ND		0.00500	1	08/16/2024 21:12	WG2344797
Xylenes, Total	ND		0.0100	1	08/16/2024 21:12	WG2344797
1,2,4-Trimethylbenzene	ND		0.00500	1	08/16/2024 21:12	WG2344797
1,3,5-Trimethylbenzene	ND		0.00500	1	08/16/2024 21:12	WG2344797
(S) Toluene-d8	99.4			75.0-131	08/16/2024 21:12	WG2344797
(S) 4-Bromofluorobenzene	99.8			67.0-138	08/16/2024 21:12	WG2344797
(S) 1,2-Dichloroethane-d4	98.1			70.0-130	08/16/2024 21:12	WG2344797

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		50.0	1	08/22/2024 05:15	WG2347646
C28-C36 Motor Oil Range	ND		50.0	1	08/22/2024 05:15	WG2347646
(S) o-Terphenyl	37.4			18.0-148	08/22/2024 05:15	WG2347646

6 Qc

7 Gl

8 Al

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Anthracene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Benzo(a)anthracene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Benzo(b)fluoranthene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Benzo(k)fluoranthene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Benzo(a)pyrene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Chrysene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Dibenz(a,h)anthracene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Fluoranthene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Fluorene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Indeno(1,2,3-cd)pyrene	ND		0.00500	1	08/21/2024 19:20	WG2347201
1-Methylnaphthalene	ND		0.00500	1	08/21/2024 19:20	WG2347201
2-Methylnaphthalene	ND		0.00500	1	08/21/2024 19:20	WG2347201
Naphthalene	ND		0.00408	1	08/21/2024 19:20	WG2347201
Pyrene	ND		0.00500	1	08/21/2024 19:20	WG2347201
(S) p-Terphenyl-d14	74.7			23.0-120	08/21/2024 19:20	WG2347201
(S) Nitrobenzene-d5	77.9			14.0-149	08/21/2024 19:20	WG2347201
(S) 2-Fluorobiphenyl	70.8			34.0-125	08/21/2024 19:20	WG2347201

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.606		1	08/21/2024 01:35	WG2346281

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 17:16	WG2344720

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.95	<u>T8</u>	1	08/21/2024 10:22	WG2347254

Sample Narrative:

L1767187-02 WG2347254: 7.95 at 21C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	311		10.0	1	08/21/2024 11:26	WG2347263

Sample Narrative:

L1767187-02 WG2347263: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.24	<u>J</u>	0.518	1	08/17/2024 21:11	WG2344342
Barium	26.9		0.400	1	08/17/2024 21:11	WG2344342
Cadmium	ND		0.200	1	08/17/2024 21:11	WG2344342
Copper	0.947	<u>J</u>	0.400	1	08/17/2024 21:11	WG2344342
Lead	3.20		0.208	1	08/17/2024 21:11	WG2344342
Nickel	2.19		0.400	1	08/17/2024 21:11	WG2344342
Selenium	ND		0.764	1	08/17/2024 21:11	WG2344342
Silver	ND		0.127	1	08/17/2024 21:11	WG2344342
Zinc	9.44		0.832	1	08/17/2024 21:11	WG2344342

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

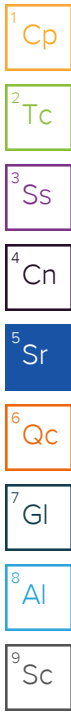
Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/20/2024 20:06	WG2346285

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.293	<u>J</u>	0.180	5	09/02/2024 16:58	WG2353834

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.500	1	08/18/2024 07:27	WG2345339
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120	08/18/2024 07:27	WG2345339



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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00200	1	08/16/2024 21:31	WG2344797
Toluene	ND		0.00500	1	08/16/2024 21:31	WG2344797
Ethylbenzene	ND		0.00500	1	08/16/2024 21:31	WG2344797
Xylenes, Total	ND		0.0100	1	08/16/2024 21:31	WG2344797
1,2,4-Trimethylbenzene	ND		0.00500	1	08/16/2024 21:31	WG2344797
1,3,5-Trimethylbenzene	ND		0.00500	1	08/16/2024 21:31	WG2344797
(S) Toluene-d8	99.4			75.0-131	08/16/2024 21:31	WG2344797
(S) 4-Bromofluorobenzene	104			67.0-138	08/16/2024 21:31	WG2344797
(S) 1,2-Dichloroethane-d4	101			70.0-130	08/16/2024 21:31	WG2344797

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		50.0	1	08/22/2024 05:28	WG2347646
C28-C36 Motor Oil Range	ND		50.0	1	08/22/2024 05:28	WG2347646
(S) o-Terphenyl	93.1			18.0-148	08/22/2024 05:28	WG2347646

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Anthracene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Benzo(a)anthracene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Benzo(b)fluoranthene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Benzo(k)fluoranthene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Benzo(a)pyrene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Chrysene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Dibenz(a,h)anthracene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Fluoranthene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Fluorene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Indeno(1,2,3-cd)pyrene	ND		0.00500	1	08/21/2024 19:38	WG2347201
1-Methylnaphthalene	ND		0.00500	1	08/21/2024 19:38	WG2347201
2-Methylnaphthalene	ND		0.00500	1	08/21/2024 19:38	WG2347201
Naphthalene	ND		0.00408	1	08/21/2024 19:38	WG2347201
Pyrene	ND		0.00500	1	08/21/2024 19:38	WG2347201
(S) p-Terphenyl-d14	81.6			23.0-120	08/21/2024 19:38	WG2347201
(S) Nitrobenzene-d5	78.0			14.0-149	08/21/2024 19:38	WG2347201
(S) 2-Fluorobiphenyl	73.7			34.0-125	08/21/2024 19:38	WG2347201

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.230		1	08/21/2024 01:37	WG2346281

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 17:22	WG2344720

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.75	<u>T8</u>	1	08/21/2024 10:22	WG2347254

Sample Narrative:

L1767187-03 WG2347254: 7.75 at 20.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	128		10.0	1	08/21/2024 11:26	WG2347263

Sample Narrative:

L1767187-03 WG2347263: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.61	<u>J</u>	0.518	1	08/17/2024 21:13	WG2344342
Barium	42.4		0.400	1	08/17/2024 21:13	WG2344342
Cadmium	ND		0.200	1	08/17/2024 21:13	WG2344342
Copper	0.991	<u>J</u>	0.400	1	08/17/2024 21:13	WG2344342
Lead	3.06		0.208	1	08/17/2024 21:13	WG2344342
Nickel	2.12		0.400	1	08/17/2024 21:13	WG2344342
Selenium	ND		0.764	1	08/17/2024 21:13	WG2344342
Silver	ND		0.127	1	08/17/2024 21:13	WG2344342
Zinc	9.51		0.832	1	08/17/2024 21:13	WG2344342

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

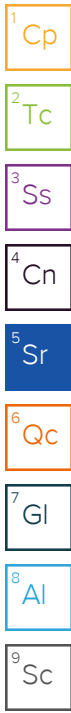
Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	5	08/20/2024 20:08	WG2346285

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.312	<u>J</u>	0.180	5	09/02/2024 17:01	WG2353834

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.500	1	08/18/2024 07:51	WG2345339
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	101			77.0-120	08/18/2024 07:51	WG2345339



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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00200	1	08/16/2024 21:50	WG2344797
Toluene	ND		0.00500	1	08/16/2024 21:50	WG2344797
Ethylbenzene	ND		0.00500	1	08/16/2024 21:50	WG2344797
Xylenes, Total	ND		0.0100	1	08/16/2024 21:50	WG2344797
1,2,4-Trimethylbenzene	ND		0.00500	1	08/16/2024 21:50	WG2344797
1,3,5-Trimethylbenzene	ND		0.00500	1	08/16/2024 21:50	WG2344797
(S) Toluene-d8	102			75.0-131	08/16/2024 21:50	WG2344797
(S) 4-Bromofluorobenzene	98.1			67.0-138	08/16/2024 21:50	WG2344797
(S) 1,2-Dichloroethane-d4	100			70.0-130	08/16/2024 21:50	WG2344797

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

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		50.0	1	08/22/2024 05:42	WG2347646
C28-C36 Motor Oil Range	ND		50.0	1	08/22/2024 05:42	WG2347646
(S) o-Terphenyl	61.1			18.0-148	08/22/2024 05:42	WG2347646

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Anthracene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Benzo(a)anthracene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Benzo(b)fluoranthene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Benzo(k)fluoranthene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Benzo(a)pyrene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Chrysene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Dibenz(a,h)anthracene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Fluoranthene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Fluorene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Indeno(1,2,3-cd)pyrene	ND		0.00500	1	08/21/2024 19:56	WG2347201
1-Methylnaphthalene	ND		0.00500	1	08/21/2024 19:56	WG2347201
2-Methylnaphthalene	ND		0.00500	1	08/21/2024 19:56	WG2347201
Naphthalene	ND		0.00408	1	08/21/2024 19:56	WG2347201
Pyrene	ND		0.00500	1	08/21/2024 19:56	WG2347201
(S) p-Terphenyl-d14	76.4			23.0-120	08/21/2024 19:56	WG2347201
(S) Nitrobenzene-d5	82.9			14.0-149	08/21/2024 19:56	WG2347201
(S) 2-Fluorobiphenyl	74.0			34.0-125	08/21/2024 19:56	WG2347201

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.595		1	08/21/2024 01:39	WG2346281

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	1	08/21/2024 17:28	WG2344720

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.08	<u>T8</u>	1	08/21/2024 10:22	WG2347254

Sample Narrative:

L1767187-04 WG2347254: 8.08 at 20.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	315		10.0	1	08/21/2024 11:26	WG2347263

Sample Narrative:

L1767187-04 WG2347263: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.65	<u>J</u>	0.518	1	08/20/2024 22:25	WG2344344
Barium	28.5		0.400	1	08/20/2024 22:25	WG2344344
Cadmium	ND		0.200	1	08/20/2024 22:25	WG2344344
Copper	1.53	<u>J</u>	0.400	1	08/20/2024 22:25	WG2344344
Lead	4.19		0.208	1	08/20/2024 22:25	WG2344344
Nickel	2.37		0.400	1	08/20/2024 22:25	WG2344344
Selenium	ND		0.764	1	08/20/2024 22:25	WG2344344
Silver	ND		0.127	1	08/20/2024 22:25	WG2344344
Zinc	10.5		0.832	1	08/20/2024 22:25	WG2344344

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

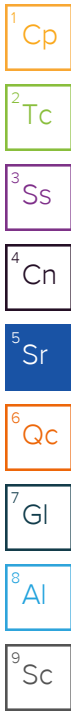
Analyte	Result mg/l	Qualifier	RL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		2.00	1	08/20/2024 20:10	WG2346285

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.360	<u>J</u>	0.180	5	09/02/2024 17:04	WG2353834

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.500	1	08/18/2024 08:15	WG2345339
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120	08/18/2024 08:15	WG2345339



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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00200	1	08/16/2024 22:09	WG2344797
Toluene	ND		0.00500	1	08/16/2024 22:09	WG2344797
Ethylbenzene	ND		0.00500	1	08/16/2024 22:09	WG2344797
Xylenes, Total	ND		0.0100	1	08/16/2024 22:09	WG2344797
1,2,4-Trimethylbenzene	ND		0.00500	1	08/16/2024 22:09	WG2344797
1,3,5-Trimethylbenzene	ND		0.00500	1	08/16/2024 22:09	WG2344797
(S) Toluene-d8	101			75.0-131	08/16/2024 22:09	WG2344797
(S) 4-Bromofluorobenzene	97.6			67.0-138	08/16/2024 22:09	WG2344797
(S) 1,2-Dichloroethane-d4	103			70.0-130	08/16/2024 22:09	WG2344797

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		50.0	1	08/22/2024 05:55	WG2347646
C28-C36 Motor Oil Range	ND		50.0	1	08/22/2024 05:55	WG2347646
(S) o-Terphenyl	68.7			18.0-148	08/22/2024 05:55	WG2347646

6 Qc

7 Gl

8 Al

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

Analyte	Result mg/kg	Qualifier	RL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Anthracene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Benzo(a)anthracene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Benzo(b)fluoranthene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Benzo(k)fluoranthene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Benzo(a)pyrene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Chrysene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Dibenz(a,h)anthracene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Fluoranthene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Fluorene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Indeno(1,2,3-cd)pyrene	ND		0.00500	1	08/21/2024 20:13	WG2347201
1-Methylnaphthalene	ND		0.00500	1	08/21/2024 20:13	WG2347201
2-Methylnaphthalene	ND		0.00500	1	08/21/2024 20:13	WG2347201
Naphthalene	ND		0.00408	1	08/21/2024 20:13	WG2347201
Pyrene	ND		0.00500	1	08/21/2024 20:13	WG2347201
(S) p-Terphenyl-d14	73.5			23.0-120	08/21/2024 20:13	WG2347201
(S) Nitrobenzene-d5	77.7			14.0-149	08/21/2024 20:13	WG2347201
(S) 2-Fluorobiphenyl	67.0			34.0-125	08/21/2024 20:13	WG2347201

9 Sc

Method Blank (MB)

(MB) R4109974-1 08/21/24 15:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	ND		0.255	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1766912-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1766912-03 08/21/24 16:08 • (DUP) R4109974-3 08/21/24 16:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Hexavalent Chromium	ND	ND	1	200	P1	20

L1767330-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1767330-05 08/21/24 18:36 • (DUP) R4109974-8 08/21/24 18:43

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Hexavalent Chromium	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4109974-2 08/21/24 15:49

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	10.0	9.63	96.3	80.0-120	

L1767330-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767330-02 08/21/24 17:41 • (MS) R4109974-4 08/21/24 17:47 • (MSD) R4109974-5 08/21/24 17:53

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Hexavalent Chromium	20.0	ND	16.4	17.7	82.0	88.6	1	75.0-125			7.80	20

L1767330-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1767330-02 08/21/24 17:41 • (MS) R4109974-6 08/21/24 18:12

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	633	ND	501	79.2	50	75.0-125	

L1765281-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1765281-05 08/21/24 10:22 • (DUP) R4109716-2 08/21/24 10:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.82	7.85	1	0.383		1

Sample Narrative:

OS: 7.82 at 21.3C
 DUP: 7.85 at 21.3C

L1767334-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1767334-02 08/21/24 10:22 • (DUP) R4109716-3 08/21/24 10:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.02	8.01	1	0.125		1

Sample Narrative:

OS: 8.02 at 20.4C
 DUP: 8.01 at 20.8C

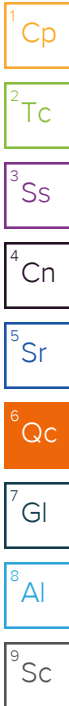
Laboratory Control Sample (LCS)

(LCS) R4109716-1 08/21/24 10:22

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

Sample Narrative:

LCS: 10.01 at 21.1C



Method Blank (MB)

(MB) R4109783-1 08/21/24 11:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Specific Conductance	umhos/cm		umhos/cm	umhos/cm
	ND		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1767169-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1767169-01 08/21/24 11:26 • (DUP) R4109783-3 08/21/24 11:26

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	umhos/cm	umhos/cm		%		%
	23900	23900	1	0.0419		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1767359-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1767359-01 08/21/24 11:26 • (DUP) R4109783-4 08/21/24 11:26

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	umhos/cm	umhos/cm		%		%
	842	843	1	0.119		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4109783-2 08/21/24 11:26

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Specific Conductance	umhos/cm	umhos/cm	%	%	
	733	758	103	85.0-115	

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R4108275-1 08/17/24 20:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	ND		0.518	2.00
Barium	ND		0.0852	0.500
Cadmium	0.0530	J	0.0471	0.500
Copper	ND		0.400	2.00
Lead	ND		0.208	0.500
Nickel	ND		0.132	2.00
Selenium	ND		0.764	2.00
Silver	ND		0.127	1.00
Zinc	ND		0.832	5.00

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS)

(LCS) R4108275-2 08/17/24 20:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	104	104	80.0-120	
Barium	100	107	107	80.0-120	
Cadmium	100	104	104	80.0-120	
Copper	100	103	103	80.0-120	
Lead	100	104	104	80.0-120	
Nickel	100	102	102	80.0-120	
Selenium	100	99.6	99.6	80.0-120	
Silver	20.0	22.0	110	80.0-120	
Zinc	100	104	104	80.0-120	

7 Gl

8 Al

9 Sc

L1767780-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767780-02 08/17/24 20:33 • (MS) R4108275-5 08/17/24 20:38 • (MSD) R4108275-6 08/17/24 20:40

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	2.94	71.6	71.6	68.6	68.7	1	75.0-125	J6	J6	0.0886	20
Barium	100	105	187	181	82.1	76.2	1	75.0-125			3.26	20
Cadmium	100	ND	70.7	72.4	70.5	72.2	1	75.0-125	J6	J6	2.38	20
Copper	100	5.56	76.7	75.8	71.2	70.2	1	75.0-125	J6	J6	1.26	20
Lead	100	6.57	77.0	78.1	70.4	71.5	1	75.0-125	J6	J6	1.42	20
Nickel	100	12.3	81.1	80.7	68.7	68.4	1	75.0-125	J6	J6	0.448	20
Selenium	100	ND	66.9	66.6	66.9	66.6	1	75.0-125	J6	J6	0.476	20
Silver	20.0	ND	15.3	15.4	76.5	76.9	1	75.0-125			0.568	20
Zinc	100	45.5	113	112	67.7	66.3	1	75.0-125	J6	J6	1.28	20

Method Blank (MB)

(MB) R4109468-1 08/20/24 22:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	ND		0.518	2.00
Barium	ND		0.0852	0.500
Cadmium	ND		0.0471	0.500
Copper	ND		0.400	2.00
Lead	ND		0.208	0.500
Nickel	ND		0.132	2.00
Selenium	ND		0.764	2.00
Silver	ND		0.127	1.00
Zinc	ND		0.832	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS)

(LCS) R4109468-2 08/20/24 22:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	87.1	87.1	80.0-120	
Barium	100	89.7	89.7	80.0-120	
Cadmium	100	88.4	88.4	80.0-120	
Copper	100	90.5	90.5	80.0-120	
Lead	100	87.8	87.8	80.0-120	
Nickel	100	86.2	86.2	80.0-120	
Selenium	100	91.0	91.0	80.0-120	
Silver	20.0	18.3	91.7	80.0-120	
Zinc	100	88.1	88.1	80.0-120	

⁷Gl

⁸Al

⁹Sc

L1767334-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767334-03 08/20/24 22:17 • (MS) R4109468-5 08/20/24 22:22 • (MSD) R4109468-6 08/20/24 22:24

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	3.00	81.4	88.0	78.4	85.0	1	75.0-125			7.73	20
Barium	100	146	189	879	43.3	733	1	75.0-125	J6	J3 J5	129	20
Cadmium	100	ND	77.0	83.4	76.8	83.2	1	75.0-125			7.98	20
Copper	100	8.67	88.5	96.2	79.8	87.5	1	75.0-125			8.35	20
Lead	100	16.5	97.5	110	81.0	93.4	1	75.0-125			12.0	20
Nickel	100	10.2	87.1	93.0	76.9	82.9	1	75.0-125			6.62	20
Selenium	100	1.64	82.6	89.5	81.0	87.9	1	75.0-125			8.00	20
Silver	20.0	ND	16.0	17.3	79.8	86.6	1	75.0-125			8.18	20
Zinc	100	70.0	123	134	52.8	64.2	1	75.0-125	J6	J6	8.94	20

Method Blank (MB)

(MB) R4109438-1 08/20/24 19:57

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	ND		0.0167	0.200

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

(LCS) R4109438-2 08/20/24 19:58 • (LCSD) R4109438-3 08/20/24 20:00

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	1.11	1.08	111	108	80.0-120			2.80	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4114661-1 09/02/24 15:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Selenium	ND		0.180	2.50

¹Cp

²Tc

³Ss

Laboratory Control Sample (LCS)

(LCS) R4114661-2 09/02/24 15:59

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Selenium	100	93.2	93.2	80.0-120	

⁴Cn

⁵Sr

L1766240-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1766240-07 09/02/24 16:02 • (MS) R4114661-5 09/02/24 16:12 • (MSD) R4114661-6 09/02/24 16:15

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Selenium	100	0.563	92.0	95.1	91.5	94.5	5	75.0-125			3.24	20

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4109309-3 08/18/24 04:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0282	↓	0.0217	0.100
^(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120

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

(LCS) R4109309-1 08/18/24 01:59 • (LCSD) R4109309-2 08/18/24 03:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.00	5.78	5.75	116	115	72.0-127			0.520	20
^(S) a,a,a-Trifluorotoluene(FID)				110	109	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) R4109006-2 08/16/24 17:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	ND		0.000467	0.00100
Toluene	ND		0.00130	0.00500
Ethylbenzene	ND		0.000737	0.00250
Xylenes, Total	ND		0.000880	0.00650
1,2,4-Trimethylbenzene	ND		0.00158	0.00500
1,3,5-Trimethylbenzene	ND		0.00200	0.00500
(S) Toluene-d8	99.4			75.0-131
(S) 4-Bromofluorobenzene	103			67.0-138
(S) 1,2-Dichloroethane-d4	98.9			70.0-130

Laboratory Control Sample (LCS)

(LCS) R4109006-1 08/16/24 16:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.131	105	70.0-123	
Toluene	0.125	0.128	102	75.0-121	
Ethylbenzene	0.125	0.126	101	74.0-126	
Xylenes, Total	0.375	0.385	103	72.0-127	
1,2,4-Trimethylbenzene	0.125	0.121	96.8	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.121	96.8	73.0-127	
(S) Toluene-d8			97.2	75.0-131	
(S) 4-Bromofluorobenzene			103	67.0-138	
(S) 1,2-Dichloroethane-d4			106	70.0-130	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4110253-1 08/22/24 04:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	ND		1.61	4.00
C28-C36 Motor Oil Range	ND		0.274	4.00
(S) o-Terphenyl	44.1			18.0-148

Laboratory Control Sample (LCS)

(LCS) R4110253-2 08/22/24 05:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	29.8	59.6	50.0-150	
(S) o-Terphenyl			52.6	18.0-148	

L1767353-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767353-02 08/22/24 05:02 • (MS) R4110253-3 08/22/24 05:15 • (MSD) R4110253-4 08/22/24 05:28

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	48.5	ND	ND	ND	38.5	53.0	1	50.0-150	J6	J3	25.4	20
(S) o-Terphenyl					45.7	52.9		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4110141-2 08/21/24 18:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	ND		0.00209	0.00600
Anthracene	ND		0.00230	0.00600
Benzo(a)anthracene	ND		0.00173	0.00600
Benzo(b)fluoranthene	ND		0.00153	0.00600
Benzo(k)fluoranthene	ND		0.00215	0.00600
Benzo(a)pyrene	ND		0.00179	0.00600
Chrysene	ND		0.00232	0.00600
Dibenz(a,h)anthracene	ND		0.00172	0.00600
Fluoranthene	ND		0.00227	0.00600
Fluorene	ND		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	ND		0.00181	0.00600
1-Methylnaphthalene	ND		0.00449	0.0200
2-Methylnaphthalene	ND		0.00427	0.0200
Naphthalene	ND		0.00408	0.0200
Pyrene	ND		0.00200	0.00600
(S) p-Terphenyl-d14	92.3			23.0-120
(S) Nitrobenzene-d5	97.6			14.0-149
(S) 2-Fluorobiphenyl	80.1			34.0-125

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4110141-1 08/21/24 18:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0691	86.4	50.0-120	
Anthracene	0.0800	0.0716	89.5	50.0-126	
Benzo(a)anthracene	0.0800	0.0659	82.4	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0699	87.4	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0633	79.1	49.0-125	
Benzo(a)pyrene	0.0800	0.0678	84.8	42.0-120	
Chrysene	0.0800	0.0720	90.0	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0689	86.1	47.0-125	
Fluoranthene	0.0800	0.0788	98.5	49.0-129	
Fluorene	0.0800	0.0718	89.8	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0660	82.5	46.0-125	
1-Methylnaphthalene	0.0800	0.0692	86.5	51.0-121	
2-Methylnaphthalene	0.0800	0.0656	82.0	50.0-120	
Naphthalene	0.0800	0.0694	86.8	50.0-120	
Pyrene	0.0800	0.0702	87.8	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R4110141-1 08/21/24 18:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			85.9	23.0-120	
(S) Nitrobenzene-d5			98.2	14.0-149	
(S) 2-Fluorobiphenyl			82.7	34.0-125	

L1767353-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767353-01 08/22/24 01:46 • (MS) R4110141-3 08/22/24 02:04 • (MSD) R4110141-4 08/22/24 02:22

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 %
Acenaphthene	0.0800	ND	0.0610	0.0601	76.3	75.1	1	14.0-127			1.49	27
Anthracene	0.0800	ND	0.0611	0.0619	76.4	77.4	1	10.0-145			1.30	30
Benzo(a)anthracene	0.0800	ND	0.0605	0.0590	75.6	73.8	1	10.0-139			2.51	30
Benzo(b)fluoranthene	0.0800	ND	0.0603	0.0592	75.4	74.0	1	10.0-140			1.84	36
Benzo(k)fluoranthene	0.0800	ND	0.0588	0.0571	73.5	71.4	1	10.0-137			2.93	31
Benzo(a)pyrene	0.0800	ND	0.0624	0.0616	78.0	77.0	1	10.0-141			1.29	31
Chrysene	0.0800	ND	0.0643	0.0631	80.4	78.9	1	10.0-145			1.88	30
Dibenz(a,h)anthracene	0.0800	ND	0.0613	0.0617	76.6	77.1	1	10.0-132			0.650	31
Fluoranthene	0.0800	ND	0.0708	0.0694	88.5	86.8	1	10.0-153			2.00	33
Fluorene	0.0800	ND	0.0626	0.0616	78.3	77.0	1	11.0-130			1.61	29
Indeno(1,2,3-cd)pyrene	0.0800	ND	0.0610	0.0586	76.3	73.3	1	10.0-137			4.01	32
1-Methylnaphthalene	0.0800	ND	0.0619	0.0647	77.4	80.9	1	10.0-142			4.42	28
2-Methylnaphthalene	0.0800	ND	0.0606	0.0610	75.8	76.3	1	10.0-137			0.658	28
Naphthalene	0.0800	ND	0.0618	0.0620	77.3	77.5	1	10.0-135			0.323	27
Pyrene	0.0800	ND	0.0586	0.0594	73.3	74.3	1	10.0-148			1.36	35
(S) p-Terphenyl-d14					75.3	77.0		23.0-120				
(S) Nitrobenzene-d5					85.7	91.2		14.0-149				
(S) 2-Fluorobiphenyl					73.6	72.9		34.0-125				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

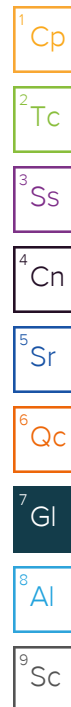
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
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.
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.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.



ACCREDITATIONS & LOCATIONS

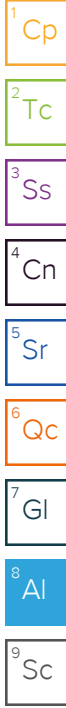
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



AFE: 24295

Company Name/Address:
 Civitas - CO
 6855 W 118th Ave
 Broomfield, CO 80020

Billing Information:
 Accounts Payable
 650 Southgate Dr.
 Windsor, CO 80550
 jevanso@civiresources.com

Analysis / Container / Preservative
 Pres Chk

Chain of Custody Page 1 of 1



12065 Lebanon Rd Mount Juliet, TN 37122
 Phone: 615-758-5858 Alt: 800-767-5859
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

Report to: ~~Costa McQueen~~ Jacob Evans
 Branden Ferguson

Email To: bferguson@civiresources.com
 tlyon@ensolum.com
 bsulzberger@ensolum.com

Project Description:
 North Platte K-0-13 HNC

City/State Collected: CO
 Please Circle: PT MT CT ET

Phone: 970-509-0947

Client Project #

Lab Project #

Collected by (print): Max Buffy

Site/Facility ID #

P.O. #

Collected by (signature): M. Buffy

Rush? (Lab MUST Be Notified)
 ___ Same Day ___ Five Day
 ___ Next Day ___ 5 Day (Rad Only)
 ___ Two Day ___ 10 Day (Rad Only)
 ___ Three Day

Quote #
 Date Results Needed

Immediately Packed on Ice N Y X

Standard TAT

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs
Bola@7'	G	SS	7	8/13/24	0905	4
Sepd Inlet@7'					0913	1
FL01@7'					1020	1
FL02@7'					0956	1

Full table 915

SDG # 6176196
E143

Acctnum:
 Template:
 Prelogin:
 PM:
 PB:

Shipped Via:

Remarks	Sample # (lab only)
	01
	02
	03
	04

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

Remarks:
 Samples returned via:
 ___ UPS ___ FedEx ___ Courier _____
 Tracking # 4047 5439 9098

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

Relinquished by: (Signature)
 M. Buffy

Date: 8/13/24
 Time: 1525

Received by: (Signature)
 Sale Contino

Trip Blank Received: Yes No
 HCL/MeOH TBR

Relinquished by: (Signature)
 Sale Contino

Date: 8/13/24
 Time: 1800

Received by: (Signature)
 FedEx

Temp: 8 °C
 Bottles Received: 16
1.2 + 0.3 = 1.5

Relinquished by: (Signature)

Date: 8-14-24
 Time: 0900

Received for lab by: (Signature)
 Ei R...

Date: 8-14-24
 Time: 0900

If preservation required by Login: Date/Time
 Hold:
 Condition: NCF / OK