

Civitas - CO

Sample Delivery Group: L1855463
Samples Received: 05/06/2025
Project Number: 250075
Description: Miller 12-27

Report To: Civitas-Tasman
4725 Independence
Suite 100
Wheat Ridge, CO 80033

Entire Report Reviewed By:



Mandi Edwards
Project Manager

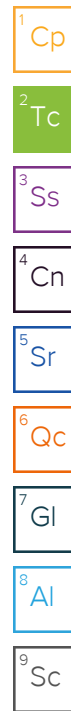
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Pace Analytical National

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SAMPLE SUMMARY

WH-B01@7' L1855463-01

Collected by: Dan Tyson
 Collected date/time: 05/05/25 09:30
 Received date/time: 05/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2510742	1	05/10/25 10:44	05/10/25 10:44	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2510713	1	05/09/25 03:00	05/09/25 16:47	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2511904	1	05/10/25 09:37	05/10/25 11:49	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2511908	1	05/10/25 09:44	05/10/25 23:45	BRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2510775	1	05/08/25 23:22	05/09/25 16:30	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2511164	5	05/09/25 11:21	05/09/25 22:23	UNP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2510422	1	05/06/25 22:27	05/08/25 16:57	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2510671	1	05/06/25 22:27	05/09/25 05:57	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2509190	1	05/08/25 07:25	05/08/25 22:22	SGB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2509196	1	05/07/25 13:54	05/08/25 02:00	CMF	Mt. Juliet, TN



FL-B01@4' L1855463-02

Collected by: Dan Tyson
 Collected date/time: 05/05/25 09:55
 Received date/time: 05/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2510742	1	05/10/25 10:47	05/10/25 10:47	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2510713	1	05/09/25 03:00	05/09/25 16:56	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2511904	1	05/10/25 09:37	05/10/25 11:49	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2511908	1	05/10/25 09:44	05/10/25 23:45	BRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2510775	1	05/08/25 23:22	05/09/25 16:33	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2511164	5	05/09/25 11:21	05/09/25 22:26	UNP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2510422	1	05/06/25 22:27	05/08/25 17:17	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2510671	1	05/06/25 22:27	05/09/25 06:16	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2509190	1	05/08/25 07:25	05/08/25 20:10	SGB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2509196	1	05/07/25 13:54	05/08/25 02:17	CMF	Mt. Juliet, TN

SP-CS01 L1855463-03

Collected by: Dan Tyson
 Collected date/time: 05/05/25 10:00
 Received date/time: 05/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2510742	1	05/10/25 10:50	05/10/25 10:50	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2510713	1	05/09/25 03:00	05/09/25 17:45	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2511904	1	05/10/25 09:37	05/10/25 11:49	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2511908	1	05/10/25 09:44	05/10/25 23:45	BRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2510775	1	05/08/25 23:22	05/09/25 16:42	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2511164	25	05/09/25 11:21	05/09/25 23:43	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2511164	5	05/09/25 11:21	05/09/25 22:29	UNP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2510811	25	05/06/25 22:27	05/09/25 01:12	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2510671	1	05/06/25 22:27	05/09/25 06:36	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2509190	1	05/08/25 07:25	05/08/25 23:01	SGB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2509190	5	05/08/25 07:25	05/09/25 11:18	SGB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2509196	1	05/07/25 13:54	05/08/25 02:35	CMF	Mt. Juliet, TN

GW01 L1855463-04

Collected by: Dan Tyson
 Collected date/time: 05/05/25 10:05
 Received date/time: 05/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2508241	1	05/06/25 17:20	05/06/25 21:01	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2508380	1	05/08/25 03:46	05/08/25 03:46	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2508380	5	05/08/25 12:17	05/08/25 12:17	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2509058	1	05/07/25 16:34	05/07/25 16:34	DWR	Mt. Juliet, TN

CASE NARRATIVE

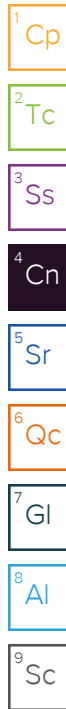
All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples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



Mandi Edwards
Project Manager

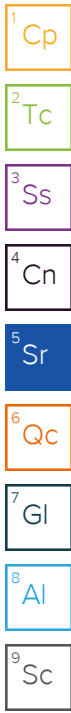
Project Narrative

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.



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.78		1	05/10/2025 10:44	WG2510742



Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	0.300	1	05/09/2025 16:47	WG2510713

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.81	T8	1	05/10/2025 11:49	WG2511904

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	1870	umhos/cm		10.0	1	05/10/2025 23:45	WG2511908

Sample Narrative:

L1855463-01 WG2511908: at 25C

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	1.49		0.0167	0.200	1	05/09/2025 16:30	WG2510775

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	3.15		0.200	0.200	5	05/09/2025 22:23	WG2511164
Barium	96.8		10.0	10.0	5	05/09/2025 22:23	WG2511164
Cadmium	ND		0.200	0.200	5	05/09/2025 22:23	WG2511164
Copper	10.8		10.0	10.0	5	05/09/2025 22:23	WG2511164
Lead	10.7		10.0	10.0	5	05/09/2025 22:23	WG2511164
Nickel	ND		10.0	10.0	5	05/09/2025 22:23	WG2511164
Selenium	0.429		0.200	0.200	5	05/09/2025 22:23	WG2511164
Silver	ND		0.500	0.500	5	05/09/2025 22:23	WG2511164
Zinc	ND		50.0	50.0	5	05/09/2025 22:23	WG2511164

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.0217	0.100	1	05/08/2025 16:57	WG2510422
(S) a,a,a-Trifluorotoluene(FID)	88.4			77.0-120		05/08/2025 16:57	WG2510422

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Benzene	ND		0.00200	0.00200	1	05/09/2025 05:57	WG2510671
Ethylbenzene	ND		0.0100	0.0100	1	05/09/2025 05:57	WG2510671
Toluene	ND		0.0100	0.0100	1	05/09/2025 05:57	WG2510671
1,2,4-Trimethylbenzene	ND		0.00500	0.00500	1	05/09/2025 05:57	WG2510671
1,3,5-Trimethylbenzene	ND		0.00500	0.00500	1	05/09/2025 05:57	WG2510671

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

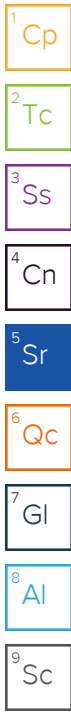
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Xylenes, Total	ND		0.100	0.100	1	05/09/2025 05:57	WG2510671
(S) Toluene-d8	120			75.0-131		05/09/2025 05:57	WG2510671
(S) 4-Bromofluorobenzene	90.1			67.0-138		05/09/2025 05:57	WG2510671
(S) 1,2-Dichloroethane-d4	88.3			70.0-130		05/09/2025 05:57	WG2510671

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.09	J	1.61	4.00	1	05/08/2025 22:22	WG2509190
C28-C36 Motor Oil Range	4.05		0.274	4.00	1	05/08/2025 22:22	WG2509190
(S) o-Terphenyl	54.4			18.0-148		05/08/2025 22:22	WG2509190

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Acenaphthene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Acenaphthylene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Benzo(a)anthracene	ND		0.00600	0.00600	1	05/08/2025 02:00	WG2509196
Benzo(a)pyrene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Benzo(b)fluoranthene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Benzo(g,h,i)perylene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Benzo(k)fluoranthene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Chrysene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Dibenz(a,h)anthracene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Fluoranthene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Fluorene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Indeno(1,2,3-cd)pyrene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Naphthalene	ND		0.00300	0.00300	1	05/08/2025 02:00	WG2509196
Phenanthrene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
Pyrene	ND		0.0330	0.0330	1	05/08/2025 02:00	WG2509196
1-Methylnaphthalene	ND		0.00300	0.00300	1	05/08/2025 02:00	WG2509196
2-Methylnaphthalene	ND		0.0120	0.0120	1	05/08/2025 02:00	WG2509196
(S) p-Terphenyl-d14	93.3			23.0-120		05/08/2025 02:00	WG2509196
(S) Nitrobenzene-d5	79.1			14.0-149		05/08/2025 02:00	WG2509196
(S) 2-Fluorobiphenyl	76.9			34.0-125		05/08/2025 02:00	WG2509196



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.736		1	05/10/2025 10:47	WG2510742

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.300	0.300	1	05/09/2025 16:56	WG2510713

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.78	T8	1	05/10/2025 11:49	WG2511904

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	2930	umhos/cm		10.0	1	05/10/2025 23:45	WG2511908

Sample Narrative:

L1855463-02 WG2511908: 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	1.01		0.0167	0.200	1	05/09/2025 16:33	WG2510775

Metals (ICPMS) by Method 6020

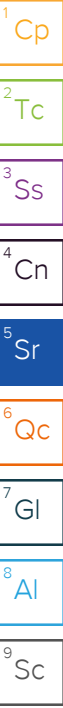
Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.52		0.200	0.200	5	05/09/2025 22:26	WG2511164
Barium	128		10.0	10.0	5	05/09/2025 22:26	WG2511164
Cadmium	ND		0.200	0.200	5	05/09/2025 22:26	WG2511164
Copper	13.3		10.0	10.0	5	05/09/2025 22:26	WG2511164
Lead	16.9		10.0	10.0	5	05/09/2025 22:26	WG2511164
Nickel	11.5		10.0	10.0	5	05/09/2025 22:26	WG2511164
Selenium	0.387		0.200	0.200	5	05/09/2025 22:26	WG2511164
Silver	ND		0.500	0.500	5	05/09/2025 22:26	WG2511164
Zinc	ND		50.0	50.0	5	05/09/2025 22:26	WG2511164

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	ND		0.0217	0.100	1	05/08/2025 17:17	WG2510422
(S) a,a,a-Trifluorotoluene(FID)	86.9			77.0-120		05/08/2025 17:17	WG2510422

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00200	0.00200	1	05/09/2025 06:16	WG2510671
Ethylbenzene	ND		0.0100	0.0100	1	05/09/2025 06:16	WG2510671
Toluene	ND		0.0100	0.0100	1	05/09/2025 06:16	WG2510671
1,2,4-Trimethylbenzene	ND		0.00500	0.00500	1	05/09/2025 06:16	WG2510671
1,3,5-Trimethylbenzene	ND		0.00500	0.00500	1	05/09/2025 06:16	WG2510671



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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Xylenes, Total	ND		0.100	0.100	1	05/09/2025 06:16	WG2510671
(S) Toluene-d8	120			75.0-131		05/09/2025 06:16	WG2510671
(S) 4-Bromofluorobenzene	89.7			67.0-138		05/09/2025 06:16	WG2510671
(S) 1,2-Dichloroethane-d4	86.9			70.0-130		05/09/2025 06:16	WG2510671

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	6.19		1.61	4.00	1	05/08/2025 20:10	WG2509190
C28-C36 Motor Oil Range	12.1		0.274	4.00	1	05/08/2025 20:10	WG2509190
(S) o-Terphenyl	43.4			18.0-148		05/08/2025 20:10	WG2509190

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Acenaphthene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Acenaphthylene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Benzo(a)anthracene	ND		0.00600	0.00600	1	05/08/2025 02:17	WG2509196
Benzo(a)pyrene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Benzo(b)fluoranthene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Benzo(g,h,i)perylene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Benzo(k)fluoranthene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Chrysene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Dibenz(a,h)anthracene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Fluoranthene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Fluorene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Indeno(1,2,3-cd)pyrene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Naphthalene	ND		0.00300	0.00300	1	05/08/2025 02:17	WG2509196
Phenanthrene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
Pyrene	ND		0.0330	0.0330	1	05/08/2025 02:17	WG2509196
1-Methylnaphthalene	ND		0.00300	0.00300	1	05/08/2025 02:17	WG2509196
2-Methylnaphthalene	ND		0.0120	0.0120	1	05/08/2025 02:17	WG2509196
(S) p-Terphenyl-d14	84.3			23.0-120		05/08/2025 02:17	WG2509196
(S) Nitrobenzene-d5	78.8			14.0-149		05/08/2025 02:17	WG2509196
(S) 2-Fluorobiphenyl	79.6			34.0-125		05/08/2025 02:17	WG2509196

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	1.71		1	05/10/2025 10:50	WG2510742

- 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	ND		0.300	0.300	1	05/09/2025 17:45	WG2510713

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.99	T8	1	05/10/2025 11:49	WG2511904

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	2480	umhos/cm		10.0	1	05/10/2025 23:45	WG2511908

Sample Narrative:

L1855463-03 WG2511908: 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	1.01		0.0167	0.200	1	05/09/2025 16:42	WG2510775

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.56		0.200	0.200	5	05/09/2025 22:29	WG2511164
Barium	115		10.0	10.0	5	05/09/2025 22:29	WG2511164
Cadmium	0.886		0.200	0.200	5	05/09/2025 22:29	WG2511164
Copper	12.8		10.0	10.0	5	05/09/2025 22:29	WG2511164
Lead	103		10.0	10.0	5	05/09/2025 22:29	WG2511164
Nickel	14.7		10.0	10.0	5	05/09/2025 22:29	WG2511164
Selenium	1.13		0.200	0.200	5	05/09/2025 22:29	WG2511164
Silver	ND		0.500	0.500	5	05/09/2025 22:29	WG2511164
Zinc	1880		250	250	25	05/09/2025 23:43	WG2511164

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	8.84		0.543	2.50	25	05/09/2025 01:12	WG2510811
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		05/09/2025 01:12	WG2510811

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00200	0.00200	1	05/09/2025 06:36	WG2510671
Ethylbenzene	ND		0.0100	0.0100	1	05/09/2025 06:36	WG2510671
Toluene	ND		0.0100	0.0100	1	05/09/2025 06:36	WG2510671
1,2,4-Trimethylbenzene	0.00797		0.00500	0.00500	1	05/09/2025 06:36	WG2510671
1,3,5-Trimethylbenzene	ND		0.00500	0.00500	1	05/09/2025 06:36	WG2510671

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Xylenes, Total	ND		0.100	0.100	1	05/09/2025 06:36	WG2510671
(S) Toluene-d8	118			75.0-131		05/09/2025 06:36	WG2510671
(S) 4-Bromofluorobenzene	95.1			67.0-138		05/09/2025 06:36	WG2510671
(S) 1,2-Dichloroethane-d4	86.8			70.0-130		05/09/2025 06:36	WG2510671

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	149		1.61	4.00	1	05/08/2025 23:01	WG2509190
C28-C36 Motor Oil Range	281		1.37	20.0	5	05/09/2025 11:18	WG2509190
(S) o-Terphenyl	51.1			18.0-148		05/08/2025 23:01	WG2509190
(S) o-Terphenyl	50.6			18.0-148		05/09/2025 11:18	WG2509190

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Acenaphthene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Acenaphthylene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Benzo(a)anthracene	ND		0.00600	0.00600	1	05/08/2025 02:35	WG2509196
Benzo(a)pyrene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Benzo(b)fluoranthene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Benzo(g,h,i)perylene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Benzo(k)fluoranthene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Chrysene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Dibenz(a,h)anthracene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Fluoranthene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Fluorene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Indeno(1,2,3-cd)pyrene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Naphthalene	0.00434		0.00300	0.00300	1	05/08/2025 02:35	WG2509196
Phenanthrene	0.0758		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
Pyrene	ND		0.0330	0.0330	1	05/08/2025 02:35	WG2509196
1-Methylnaphthalene	0.0148		0.00300	0.00300	1	05/08/2025 02:35	WG2509196
2-Methylnaphthalene	0.0139		0.0120	0.0120	1	05/08/2025 02:35	WG2509196
(S) p-Terphenyl-d14	100			23.0-120		05/08/2025 02:35	WG2509196
(S) Nitrobenzene-d5	105			14.0-149		05/08/2025 02:35	WG2509196
(S) 2-Fluorobiphenyl	91.3			34.0-125		05/08/2025 02:35	WG2509196

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	827		13.3	1	05/06/2025 21:01	WG2508241

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	58.0	J6	0.547	1.00	1	05/08/2025 03:46	WG2508380
Sulfate	196		3.18	25.0	5	05/08/2025 12:17	WG2508380

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Benzene	ND		0.0941	1.00	1	05/07/2025 16:34	WG2509058
Toluene	ND		0.278	1.00	1	05/07/2025 16:34	WG2509058
Ethylbenzene	ND		0.137	1.00	1	05/07/2025 16:34	WG2509058
Xylenes, Total	ND		0.174	3.00	1	05/07/2025 16:34	WG2509058
Naphthalene	ND	C3	1.00	5.00	1	05/07/2025 16:34	WG2509058
1,2,4-Trimethylbenzene	ND		0.322	1.00	1	05/07/2025 16:34	WG2509058
1,3,5-Trimethylbenzene	ND		0.104	1.00	1	05/07/2025 16:34	WG2509058
(S) Toluene-d8	103			80.0-120		05/07/2025 16:34	WG2509058
(S) 4-Bromofluorobenzene	92.0			77.0-126		05/07/2025 16:34	WG2509058
(S) 1,2-Dichloroethane-d4	104			70.0-130		05/07/2025 16:34	WG2509058

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4211273-1 05/06/25 21:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	ND		5.20	10.0

¹Cp

²Tc

³Ss

L1855274-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1855274-02 05/06/25 21:01 • (DUP) R4211273-3 05/06/25 21:01

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	2520	2490	1	1.20		10

⁴Cn

⁵Sr

L1855274-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1855274-04 05/06/25 21:01 • (DUP) R4211273-4 05/06/25 21:01

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	2240	2240	1	0.000		10

⁶Qc

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R4211273-2 05/06/25 21:01

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800	8730	99.2	90.0-110	

⁹Sc

Method Blank (MB)

(MB) R4212542-1 05/09/25 11:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	ND		0.300	0.300

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1855208-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1855208-01 05/09/25 11:28 • (DUP) R4212542-3 05/09/25 11:38

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Hexavalent Chromium	0.314	0.319	1	1.35		20

L1855208-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1855208-03 05/09/25 11:57 • (DUP) R4212542-4 05/09/25 12:07

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) R4212542-2 05/09/25 11:19

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

L1855208-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1855208-08 05/09/25 13:15 • (MS) R4212542-5 05/09/25 13:24 • (MSD) R4212542-6 05/09/25 13:34

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	4.15	1.40	20.8	7.02	1	75.0-125	<u>J6</u>	<u>J3 J6</u>	99.0	20

L1855208-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1855208-08 05/09/25 13:15 • (MS) R4212542-7 05/09/25 13:43

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	646	ND	430	66.5	50	75.0-125	<u>J6</u>

L1855455-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1855455-09 05/10/25 11:49 • (DUP) R4212761-2 05/10/25 11:49

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.98	7.98	1	0.000		1

Laboratory Control Sample (LCS)

(LCS) R4212761-1 05/10/25 11:49

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4212886-1 05/10/25 23:45

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

L1855455-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1855455-12 05/10/25 23:45 • (DUP) R4212886-3 05/10/25 23:45

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	umhos/cm	umhos/cm		%		%
	619	614	1	0.811		20

Sample Narrative:

OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4212886-2 05/10/25 23:45

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Specific Conductance	umhos/cm	umhos/cm	%	%	
	1130	1090	96.7	90.0-110	

Sample Narrative:

LCS: at 25C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4211543-1 05/07/25 21:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	mg/l		mg/l	mg/l
Chloride	ND		0.547	1.00
Sulfate	ND		0.637	5.00

L1855463-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1855463-04 05/08/25 03:46 • (DUP) R4211543-3 05/08/25 03:59

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	mg/l	mg/l	%			%
Chloride	58.0	57.9	1	0.0554		15

L1855580-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1855580-01 05/08/25 05:01 • (DUP) R4211543-6 05/08/25 05:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Sulfate	mg/l	mg/l	%			%
Sulfate	70.1	68.7	1	2.01		15

L1855580-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1855580-01 05/08/25 05:39 • (DUP) R4211543-8 05/08/25 05:52

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	mg/l	mg/l	%			%
Chloride	326	328	5	0.657		15

L1855463-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1855463-04 05/08/25 12:17 • (DUP) R4211747-1 05/08/25 12:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Sulfate	mg/l	mg/l	%			%
Sulfate	196	196	5	0.148		15

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4211543-2 05/07/25 21:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Chloride	40.0	38.8	97.0	80.0-120	
Sulfate	40.0	39.5	98.8	80.0-120	

L1855463-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1855463-04 05/08/25 03:46 • (MS) R4211543-4 05/08/25 04:11 • (MSD) R4211543-5 05/08/25 04:24

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 %
Chloride	40.0	58.0	83.8	83.4	64.7	63.5	1	80.0-120	<u>J6</u>	<u>J6</u>	0.567	15
Sulfate	40.0	194	189	187	0.000	0.000	1	80.0-120	<u>E V</u>	<u>E V</u>	0.757	15

L1855580-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1855580-01 05/08/25 05:01 • (MS) R4211543-7 05/08/25 05:27

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Chloride	40.0	323	288	0.000	1	80.0-120	<u>E V</u>
Sulfate	40.0	70.1	91.7	54.0	1	80.0-120	<u>J6</u>

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4212820-1 05/09/25 16:09

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) R4212820-2 05/09/25 16:11 • (LCSD) R4212820-3 05/09/25 16:14

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	1.02	1.03	102	103	80.0-120			1.58	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4212598-1 05/09/25 20:41

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	ND		0.200	0.200
Barium	ND		10.0	10.0
Cadmium	ND		0.200	0.200
Copper	ND		10.0	10.0
Lead	ND		10.0	10.0
Nickel	ND		10.0	10.0
Selenium	ND		0.200	0.200
Silver	ND		0.500	0.500
Zinc	ND		50.0	50.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS)

(LCS) R4212598-2 05/09/25 20:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	86.5	86.5	80.0-120	
Barium	100	85.5	85.5	80.0-120	
Cadmium	100	92.9	92.9	80.0-120	
Copper	100	86.7	86.7	80.0-120	
Lead	100	85.7	85.7	80.0-120	
Nickel	100	91.4	91.4	80.0-120	
Selenium	100	87.4	87.4	80.0-120	
Silver	20.0	18.8	94.2	80.0-120	
Zinc	100	87.4	87.4	80.0-120	

⁷Gl

⁸Al

⁹Sc

L1855208-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1855208-01 05/09/25 20:47 • (MS) R4212598-5 05/09/25 20:56 • (MSD) R4212598-6 05/09/25 20:59

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	81.8	94.6	77.9	90.7	5	75.0-125			14.5	20
Barium	100	142	227	237	85.0	95.8	5	75.0-125			4.64	20
Cadmium	100	ND	83.0	93.4	83.0	93.4	5	75.0-125			11.8	20
Copper	100	15.1	94.6	106	79.5	90.7	5	75.0-125			11.2	20
Lead	100	27.7	88.7	97.7	61.0	70.0	5	75.0-125	J6	J6	9.62	20
Nickel	100	18.9	101	113	82.5	94.5	5	75.0-125			11.2	20
Selenium	100	0.545	80.5	89.6	80.0	89.1	5	75.0-125			10.7	20
Silver	20.0	ND	16.9	19.0	84.7	94.9	5	75.0-125			11.3	20
Zinc	100	61.4	141	149	79.4	88.1	5	75.0-125			6.01	20

Method Blank (MB)

(MB) R4212052-3 05/08/25 14:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	ND		0.0217	0.100
^(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120

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

(LCS) R4212052-1 05/08/25 13:02 • (LCSD) R4212052-2 05/08/25 13:21

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	4.79	5.17	95.8	103	72.0-127			7.63	20
^(S) a,a,a-Trifluorotoluene(FID)				98.3	99.3	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) R4212162-2 05/09/25 00:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	ND		0.543	2.50
^(S) a,a,a-Trifluorotoluene(FID)	97.5			77.0-120

Laboratory Control Sample (LCS)

(LCS) R4212162-1 05/08/25 23:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.00	5.19	104	72.0-127	
^(S) a,a,a-Trifluorotoluene(FID)			107	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) R4211104-3 05/07/25 05:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	ND		0.0941	1.00
Toluene	ND		0.278	1.00
Ethylbenzene	ND		0.137	1.00
Xylenes, Total	ND		0.174	3.00
Naphthalene	ND		1.00	5.00
1,2,4-Trimethylbenzene	ND		0.322	1.00
1,3,5-Trimethylbenzene	ND		0.104	1.00
(S) Toluene-d8	103			80.0-120
(S) 4-Bromofluorobenzene	91.4			77.0-126
(S) 1,2-Dichloroethane-d4	101			70.0-130

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

(LCS) R4211104-1 05/07/25 04:37 • (LCSD) R4211104-2 05/07/25 04:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	4.70	4.63	94.0	92.6	70.0-123			1.50	20
Toluene	5.00	4.63	4.54	92.6	90.8	79.0-120			1.96	20
Ethylbenzene	5.00	4.62	4.48	92.4	89.6	79.0-123			3.08	20
Xylenes, Total	15.0	14.0	13.9	93.3	92.7	79.0-123			0.717	20
Naphthalene	5.00	3.90	4.11	78.0	82.2	54.0-135	↓	↓	5.24	20
1,2,4-Trimethylbenzene	5.00	4.64	4.79	92.8	95.8	76.0-121			3.18	20
1,3,5-Trimethylbenzene	5.00	4.84	4.90	96.8	98.0	76.0-122			1.23	20
(S) Toluene-d8				102	102	80.0-120				
(S) 4-Bromofluorobenzene				93.3	93.3	77.0-126				
(S) 1,2-Dichloroethane-d4				103	100	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) R4212202-3 05/09/25 04:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	ND		0.00200	0.00200
Ethylbenzene	ND		0.0100	0.0100
Toluene	ND	u	0.0100	0.0100
1,2,4-Trimethylbenzene	ND		0.00500	0.00500
1,3,5-Trimethylbenzene	ND		0.00500	0.00500
Xylenes, Total	ND		0.100	0.100
(S) Toluene-d8	119			75.0-131
(S) 4-Bromofluorobenzene	88.0			67.0-138
(S) 1,2-Dichloroethane-d4	86.4			70.0-130

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

(LCS) R4212202-1 05/09/25 03:20 • (LCSD) R4212202-2 05/09/25 03:40

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.128	0.126	102	101	70.0-123			1.57	20
Ethylbenzene	0.125	0.121	0.117	96.8	93.6	74.0-126			3.36	20
Toluene	0.125	0.139	0.148	111	118	75.0-121			6.27	20
1,2,4-Trimethylbenzene	0.125	0.125	0.115	100	92.0	70.0-126			8.33	20
1,3,5-Trimethylbenzene	0.125	0.125	0.127	100	102	73.0-127			1.59	20
Xylenes, Total	0.375	0.378	0.375	101	100	72.0-127			0.797	20
(S) Toluene-d8				116	123	75.0-131				
(S) 4-Bromofluorobenzene				85.1	86.1	67.0-138				
(S) 1,2-Dichloroethane-d4				93.0	92.1	70.0-130				

L1855237-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1855237-03 05/09/25 11:31 • (MS) R4212202-4 05/09/25 11:51 • (MSD) R4212202-5 05/09/25 12:11

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	10.0	ND	11.8	11.6	118	116	80	10.0-149			1.71	37
Ethylbenzene	10.0	2.03	13.6	13.5	116	115	80	10.0-160			0.738	38
Toluene	10.0	ND	13.2	13.6	132	136	80	10.0-156			2.99	38
1,2,4-Trimethylbenzene	10.0	9.49	22.2	23.1	127	136	80	10.0-160			3.97	36
1,3,5-Trimethylbenzene	10.0	2.78	14.1	14.4	113	116	80	10.0-160			2.11	38
Xylenes, Total	30.0	17.2	53.8	54.9	122	126	80	10.0-160			2.02	38
(S) Toluene-d8					113	120		75.0-131				
(S) 4-Bromofluorobenzene					86.0	86.1		67.0-138				
(S) 1,2-Dichloroethane-d4					94.8	93.6		70.0-130				



L1855237-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1855237-03 05/09/25 11:31 • (MS) R4212202-4 05/09/25 11:51 • (MSD) R4212202-5 05/09/25 12:11

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
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Sample Narrative:

OS: Non-target compounds too high to run at a lower dilution.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Method Blank (MB)

(MB) R4212104-1 05/08/25 18:38

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	65.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R4212104-2 05/08/25 18:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	34.5	69.0	50.0-150	
(S) o-Terphenyl			83.5	18.0-148	

L1854258-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1854258-05 05/08/25 20:23 • (MS) R4212104-3 05/08/25 20:37 • (MSD) R4212104-4 05/08/25 20:50

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	29.1	28.9	60.0	59.2	1	50.0-150			0.690	20
(S) o-Terphenyl					67.0	67.4		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) R4211665-2 05/07/25 21:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	ND		0.0330	0.0330
Acenaphthene	ND		0.0330	0.0330
Acenaphthylene	ND		0.0330	0.0330
Benzo(a)anthracene	ND		0.00600	0.00600
Benzo(a)pyrene	ND		0.0330	0.0330
Benzo(b)fluoranthene	ND		0.0330	0.0330
Benzo(g,h,i)perylene	ND		0.0330	0.0330
Benzo(k)fluoranthene	ND		0.0330	0.0330
Chrysene	ND		0.0330	0.0330
Dibenz(a,h)anthracene	ND		0.0330	0.0330
Fluoranthene	ND		0.0330	0.0330
Fluorene	ND		0.0330	0.0330
Indeno(1,2,3-cd)pyrene	ND		0.0330	0.0330
Naphthalene	ND		0.00300	0.00300
Phenanthrene	ND		0.0330	0.0330
Pyrene	ND		0.0330	0.0330
1-Methylnaphthalene	ND		0.00300	0.00300
2-Methylnaphthalene	ND		0.0120	0.0120
<i>(S) p-Terphenyl-d14</i>	97.0			23.0-120
<i>(S) Nitrobenzene-d5</i>	93.2			14.0-149
<i>(S) 2-Fluorobiphenyl</i>	87.8			34.0-125

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4211665-1 05/07/25 21:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0640	80.0	50.0-126	
Acenaphthene	0.0800	0.0620	77.5	50.0-120	
Acenaphthylene	0.0800	0.0645	80.6	50.0-120	
Benzo(a)anthracene	0.0800	0.0679	84.9	45.0-120	
Benzo(a)pyrene	0.0800	0.0662	82.8	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0717	89.6	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0728	91.0	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0731	91.4	49.0-125	
Chrysene	0.0800	0.0720	90.0	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0715	89.4	47.0-125	
Fluoranthene	0.0800	0.0772	96.5	49.0-129	
Fluorene	0.0800	0.0692	86.5	49.0-120	

Laboratory Control Sample (LCS)

(LCS) R4211665-1 05/07/25 21:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Indeno(1,2,3-cd)pyrene	0.0800	0.0728	91.0	46.0-125	
Naphthalene	0.0800	0.0684	85.5	50.0-120	
Phenanthrene	0.0800	0.0680	85.0	47.0-120	
Pyrene	0.0800	0.0691	86.4	43.0-123	
1-Methylnaphthalene	0.0800	0.0726	90.8	51.0-121	
2-Methylnaphthalene	0.0800	0.0693	86.6	50.0-120	
(S) p-Terphenyl-d14			91.7	23.0-120	
(S) Nitrobenzene-d5			93.4	14.0-149	
(S) 2-Fluorobiphenyl			86.1	34.0-125	

L1855241-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1855241-01 05/08/25 01:07 • (MS) R4211665-3 05/08/25 01:25 • (MSD) R4211665-4 05/08/25 01:42

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 %
Anthracene	0.0768	ND	0.0495	0.0456	64.5	58.8	1	10.0-145			8.20	30
Acenaphthene	0.0768	ND	0.0494	0.0462	64.3	59.5	1	14.0-127			6.69	27
Acenaphthylene	0.0768	ND	0.0497	0.0488	64.7	62.9	1	21.0-124			1.83	25
Benzo(a)anthracene	0.0768	ND	0.0546	0.0507	71.1	65.3	1	10.0-139			7.41	30
Benzo(a)pyrene	0.0768	ND	0.0583	0.0555	75.9	71.5	1	10.0-141			4.92	31
Benzo(b)fluoranthene	0.0768	ND	0.0562	0.0516	73.2	66.5	1	10.0-140			8.53	36
Benzo(g,h,i)perylene	0.0768	ND	0.0588	0.0615	76.6	79.3	1	10.0-140			4.49	33
Benzo(k)fluoranthene	0.0768	ND	0.0580	0.0565	75.5	72.8	1	10.0-137			2.62	31
Chrysene	0.0768	ND	0.0590	0.0587	76.8	75.6	1	10.0-145			0.510	30
Dibenz(a,h)anthracene	0.0768	ND	0.0600	0.0602	78.1	77.6	1	10.0-132			0.333	31
Fluoranthene	0.0768	ND	0.0602	0.0543	78.4	70.0	1	10.0-153			10.3	33
Fluorene	0.0768	ND	0.0526	0.0501	68.5	64.6	1	11.0-130			4.87	29
Indeno(1,2,3-cd)pyrene	0.0768	ND	0.0595	0.0547	77.5	70.5	1	10.0-137			8.41	32
Naphthalene	0.0768	ND	0.0549	0.0566	71.5	72.9	1	10.0-135			3.05	27
Phenanthrene	0.0768	ND	0.0519	0.0483	67.6	62.2	1	10.0-144			7.19	31
Pyrene	0.0768	ND	0.0539	0.0496	70.2	63.9	1	10.0-148			8.31	35
1-Methylnaphthalene	0.0768	ND	0.0567	0.0539	73.8	69.5	1	10.0-142			5.06	28
2-Methylnaphthalene	0.0768	ND	0.0538	0.0509	70.1	65.6	1	10.0-137			5.54	28
(S) p-Terphenyl-d14					85.0	81.5		23.0-120				
(S) Nitrobenzene-d5					84.0	81.1		14.0-149				
(S) 2-Fluorobiphenyl					75.3	73.3		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

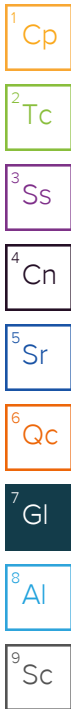
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
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.
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.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

