

Chevron - CO

Sample Delivery Group: L1852765
Samples Received: 04/29/2025
Project Number: 38104
Description: Blehm 26-8 FL

Report To: CDH Team
2115 117th Avenue
Greeley, CO 80631

Entire Report Reviewed By:



Chris Ward
Project Manager

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Pace Analytical National

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¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

SAMPLE SUMMARY

FL01-07 @ 3' L1852765-01

Collected by: Jack Willey
 Collected date/time: 04/28/25 13:45
 Received date/time: 04/29/25 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504999	1	05/04/25 15:21	05/04/25 15:21	MAP	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2504790	1	05/02/25 08:40	05/05/25 02:06	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2507389	1	05/05/25 17:20	05/06/25 15:20	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2507381	1	05/05/25 17:15	05/06/25 18:30	BRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505048	1	05/03/25 16:26	05/04/25 11:08	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2509893	5	05/08/25 19:12	05/09/25 16:48	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2504959	1	05/01/25 13:13	05/02/25 00:26	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2505460	1	05/01/25 13:13	05/02/25 15:01	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2505563	1	05/03/25 06:36	05/03/25 15:25	SGB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2504879	1	05/02/25 10:16	05/02/25 21:15	TKW	Mt. Juliet, TN



FL01-R-W @ 3' L1852765-02

Collected by: Jack Willey
 Collected date/time: 04/28/25 13:55
 Received date/time: 04/29/25 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504999	1	05/04/25 15:23	05/04/25 15:23	MAP	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2504790	1	05/02/25 08:40	05/05/25 02:15	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2507389	1	05/05/25 17:20	05/06/25 15:20	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2507381	1	05/05/25 17:15	05/06/25 18:30	BRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505048	1	05/03/25 16:26	05/04/25 11:10	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2509893	5	05/08/25 19:12	05/09/25 16:51	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2504959	1	05/01/25 13:13	05/02/25 00:49	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2505460	1	05/01/25 13:13	05/02/25 15:20	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2505563	1	05/03/25 06:36	05/03/25 15:39	SGB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2504879	1	05/02/25 10:16	05/02/25 21:32	TKW	Mt. Juliet, TN

CASE NARRATIVE

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



Chris Ward
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

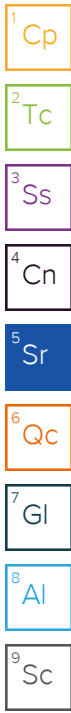
⁷ Gl

⁸ Al

⁹ Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.771		1	05/04/2025 15:21	WG2504999



Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.379	1.00	1	05/05/2025 02:06	WG2504790

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.90	<u>T8</u>	1	05/06/2025 15:20	WG2507389

Sample Narrative:

L1852765-01 WG2507389: 0

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	529	umhos/cm		10.0	1	05/06/2025 18:30	WG2507381

Sample Narrative:

L1852765-01 WG2507381: at 25C

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.220		0.0167	0.200	1	05/04/2025 11:08	WG2505048

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.29		0.100	1.00	5	05/09/2025 16:48	WG2509893
Barium	196		0.152	2.50	5	05/09/2025 16:48	WG2509893
Cadmium	0.307	<u>J</u>	0.0855	1.00	5	05/09/2025 16:48	WG2509893
Copper	13.4		0.132	5.00	5	05/09/2025 16:48	WG2509893
Lead	10.6		0.0990	2.00	5	05/09/2025 16:48	WG2509893
Nickel	17.4		0.197	2.50	5	05/09/2025 16:48	WG2509893
Selenium	0.554	<u>J</u>	0.180	2.50	5	05/09/2025 16:48	WG2509893
Silver	U		0.0865	0.500	5	05/09/2025 16:48	WG2509893
Zinc	54.6		0.740	25.0	5	05/09/2025 16:48	WG2509893

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0400	<u>B J</u>	0.0217	0.100	1	05/02/2025 00:26	WG2504959
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		05/02/2025 00:26	WG2504959

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	05/02/2025 15:01	WG2505460
Toluene	U		0.00130	0.00500	1	05/02/2025 15:01	WG2505460
Ethylbenzene	U		0.000737	0.00250	1	05/02/2025 15:01	WG2505460
Xylenes, Total	U		0.000880	0.00650	1	05/02/2025 15:01	WG2505460
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	05/02/2025 15:01	WG2505460
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	05/02/2025 15:01	WG2505460
(S) Toluene-d8	104			75.0-131		05/02/2025 15:01	WG2505460
(S) 4-Bromofluorobenzene	98.6			67.0-138		05/02/2025 15:01	WG2505460
(S) 1,2-Dichloroethane-d4	89.7			70.0-130		05/02/2025 15:01	WG2505460

- 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	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	05/03/2025 15:25	WG2505563
C28-C36 Motor Oil Range	3.44	<u>B</u> <u>J</u>	0.274	4.00	1	05/03/2025 15:25	WG2505563
(S) o-Terphenyl	60.8			18.0-148		05/03/2025 15:25	WG2505563

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00162	0.00600	1	05/02/2025 21:15	WG2504879
Anthracene	U		0.00163	0.00600	1	05/02/2025 21:15	WG2504879
Benzo(a)anthracene	U		0.00200	0.00600	1	05/02/2025 21:15	WG2504879
Benzo(b)fluoranthene	U		0.00275	0.00600	1	05/02/2025 21:15	WG2504879
Benzo(k)fluoranthene	U		0.00213	0.00600	1	05/02/2025 21:15	WG2504879
Benzo(a)pyrene	U		0.00163	0.00600	1	05/02/2025 21:15	WG2504879
Chrysene	U		0.00206	0.00600	1	05/02/2025 21:15	WG2504879
Dibenz(a,h)anthracene	U		0.00201	0.00600	1	05/02/2025 21:15	WG2504879
Fluoranthene	U		0.00239	0.00600	1	05/02/2025 21:15	WG2504879
Fluorene	U		0.00180	0.00600	1	05/02/2025 21:15	WG2504879
Indeno(1,2,3-cd)pyrene	U		0.00234	0.00600	1	05/02/2025 21:15	WG2504879
1-Methylnaphthalene	U		0.00219	0.0200	1	05/02/2025 21:15	WG2504879
2-Methylnaphthalene	U		0.00571	0.0200	1	05/02/2025 21:15	WG2504879
Naphthalene	U		0.00579	0.0200	1	05/02/2025 21:15	WG2504879
Pyrene	U		0.00205	0.00600	1	05/02/2025 21:15	WG2504879
(S) p-Terphenyl-d14	80.8			23.0-120		05/02/2025 21:15	WG2504879
(S) Nitrobenzene-d5	82.1			14.0-149		05/02/2025 21:15	WG2504879
(S) 2-Fluorobiphenyl	83.3			34.0-125		05/02/2025 21:15	WG2504879

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.293		1	05/04/2025 15:23	WG2504999

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.379	1.00	1	05/05/2025 02:15	WG2504790

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.63	<u>T8</u>	1	05/06/2025 15:20	WG2507389

Sample Narrative:

L1852765-02 WG2507389: 0

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	1980	umhos/cm		10.0	1	05/06/2025 18:30	WG2507381

Sample Narrative:

L1852765-02 WG2507381: at 25C

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

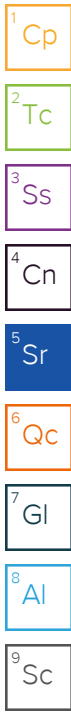
Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.342		0.0167	0.200	1	05/04/2025 11:10	WG2505048

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.36		0.100	1.00	5	05/09/2025 16:51	WG2509893
Barium	145		0.152	2.50	5	05/09/2025 16:51	WG2509893
Cadmium	0.296	<u>J</u>	0.0855	1.00	5	05/09/2025 16:51	WG2509893
Copper	12.0		0.132	5.00	5	05/09/2025 16:51	WG2509893
Lead	68.6		0.0990	2.00	5	05/09/2025 16:51	WG2509893
Nickel	14.0		0.197	2.50	5	05/09/2025 16:51	WG2509893
Selenium	0.459	<u>J</u>	0.180	2.50	5	05/09/2025 16:51	WG2509893
Silver	U		0.0865	0.500	5	05/09/2025 16:51	WG2509893
Zinc	46.9		0.740	25.0	5	05/09/2025 16:51	WG2509893

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0329	<u>B J</u>	0.0217	0.100	1	05/02/2025 00:49	WG2504959
(S) a,a,a-Trifluorotoluene(FID)	99.3			77.0-120		05/02/2025 00:49	WG2504959



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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	05/02/2025 15:20	WG2505460
Toluene	U		0.00130	0.00500	1	05/02/2025 15:20	WG2505460
Ethylbenzene	U		0.000737	0.00250	1	05/02/2025 15:20	WG2505460
Xylenes, Total	U		0.000880	0.00650	1	05/02/2025 15:20	WG2505460
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	05/02/2025 15:20	WG2505460
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	05/02/2025 15:20	WG2505460
(S) Toluene-d8	106			75.0-131		05/02/2025 15:20	WG2505460
(S) 4-Bromofluorobenzene	99.6			67.0-138		05/02/2025 15:20	WG2505460
(S) 1,2-Dichloroethane-d4	88.5			70.0-130		05/02/2025 15:20	WG2505460

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	36.6		1.61	4.00	1	05/03/2025 15:39	WG2505563
C28-C36 Motor Oil Range	42.5		0.274	4.00	1	05/03/2025 15:39	WG2505563
(S) o-Terphenyl	58.6			18.0-148		05/03/2025 15:39	WG2505563

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00162	0.00600	1	05/02/2025 21:32	WG2504879
Anthracene	U		0.00163	0.00600	1	05/02/2025 21:32	WG2504879
Benzo(a)anthracene	U		0.00200	0.00600	1	05/02/2025 21:32	WG2504879
Benzo(b)fluoranthene	U		0.00275	0.00600	1	05/02/2025 21:32	WG2504879
Benzo(k)fluoranthene	U		0.00213	0.00600	1	05/02/2025 21:32	WG2504879
Benzo(a)pyrene	U		0.00163	0.00600	1	05/02/2025 21:32	WG2504879
Chrysene	U		0.00206	0.00600	1	05/02/2025 21:32	WG2504879
Dibenz(a,h)anthracene	U		0.00201	0.00600	1	05/02/2025 21:32	WG2504879
Fluoranthene	U		0.00239	0.00600	1	05/02/2025 21:32	WG2504879
Fluorene	U		0.00180	0.00600	1	05/02/2025 21:32	WG2504879
Indeno(1,2,3-cd)pyrene	U		0.00234	0.00600	1	05/02/2025 21:32	WG2504879
1-Methylnaphthalene	U		0.00219	0.0200	1	05/02/2025 21:32	WG2504879
2-Methylnaphthalene	U		0.00571	0.0200	1	05/02/2025 21:32	WG2504879
Naphthalene	U		0.00579	0.0200	1	05/02/2025 21:32	WG2504879
Pyrene	U		0.00205	0.00600	1	05/02/2025 21:32	WG2504879
(S) p-Terphenyl-d14	84.5			23.0-120		05/02/2025 21:32	WG2504879
(S) Nitrobenzene-d5	83.0			14.0-149		05/02/2025 21:32	WG2504879
(S) 2-Fluorobiphenyl	88.3			34.0-125		05/02/2025 21:32	WG2504879

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

Method Blank (MB)

(MB) R4209640-1 05/04/25 22:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	U		0.379	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1852741-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1852741-02 05/04/25 22:54 • (DUP) R4209640-2 05/04/25 23:03

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

L1852788-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1852788-02 05/05/25 02:24 • (DUP) R4209640-8 05/05/25 04:20

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

Laboratory Control Sample (LCS)

(LCS) R4209640-7 05/05/25 04:11

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

L1852762-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1852762-06 05/05/25 01:21 • (MS) R4209640-3 05/05/25 01:30 • (MSD) R4209640-4 05/05/25 01:39

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	U	17.3	18.7	86.5	93.3	1	75.0-125			7.61	20

L1852762-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1852762-06 05/05/25 01:21 • (MS) R4209640-5 05/05/25 01:48

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	646	U	676	105	50	75.0-125	

L1852741-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1852741-02 05/06/25 15:20 • (DUP) R4210623-2 05/06/25 15:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.25	7.27	1	0.275		1

Sample Narrative:

OS: 0
DUP: 0

L1853074-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1853074-11 05/06/25 15:20 • (DUP) R4210623-3 05/06/25 15:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.84	7.86	1	0.255		1

Sample Narrative:

OS: 0
DUP: 0

Laboratory Control Sample (LCS)

(LCS) R4210623-1 05/06/25 15:20

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: 0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4210689-1 05/06/25 18:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1852741-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1852741-03 05/06/25 18:30 • (DUP) R4210689-3 05/06/25 18:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	57.0	56.6	1	0.704		20

Sample Narrative:

OS: at 25C
DUP: at 25C

L1853074-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1853074-12 05/06/25 18:30 • (DUP) R4210689-4 05/06/25 18:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	671	662	1	1.35		20

Sample Narrative:

OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4210689-2 05/06/25 18:30

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Specific Conductance	1130	1090	96.1	85.0-115	

Sample Narrative:

LCS: at 25C

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4209485-1 05/04/25 10:43

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

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

(LCS) R4209485-2 05/04/25 10:45 • (LCSD) R4209485-3 05/04/25 10:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.04	1.04	104	104	80.0-120			0.268	20

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

Method Blank (MB)

(MB) R4212327-1 05/09/25 13:04

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS)

(LCS) R4212327-2 05/09/25 13:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	104	104	80.0-120	
Barium	100	102	102	80.0-120	
Cadmium	100	112	112	80.0-120	
Copper	100	107	107	80.0-120	
Lead	100	106	106	80.0-120	
Nickel	100	113	113	80.0-120	
Selenium	100	101	101	80.0-120	
Silver	20.0	22.0	110	80.0-120	
Zinc	100	106	106	80.0-120	

⁷Gl

⁸Al

⁹Sc

L1852741-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1852741-01 05/09/25 13:10 • (MS) R4212327-5 05/09/25 13:19 • (MSD) R4212327-6 05/09/25 13:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	2.12	98.8	108	96.7	105	5	75.0-125			8.45	20
Barium	100	28.8	130	139	102	111	5	75.0-125			6.62	20
Cadmium	100	U	105	113	105	113	5	75.0-125			7.29	20
Copper	100	3.39	103	111	99.2	108	5	75.0-125			7.81	20
Lead	100	3.47	100	109	96.9	106	5	75.0-125			8.32	20
Nickel	100	2.75	108	116	105	113	5	75.0-125			7.47	20
Selenium	100	0.192	98.1	102	97.9	102	5	75.0-125			4.26	20
Silver	20.0	U	20.6	22.2	103	111	5	75.0-125			7.24	20
Zinc	100	24.5	134	137	109	113	5	75.0-125			2.36	20

Method Blank (MB)

(MB) R4210255-2 05/01/25 22:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0226	↓	0.0217	0.100
^(S) a,a,a-Trifluorotoluene(FID)	103			77.0-120

Laboratory Control Sample (LCS)

(LCS) R4210255-1 05/01/25 21:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.00	5.47	109	72.0-127	
^(S) a,a,a-Trifluorotoluene(FID)			114	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) R4209615-2 05/02/25 13:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Xylenes, Total	U		0.000880	0.00650
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
(S) Toluene-d8	106			75.0-131
(S) 4-Bromofluorobenzene	99.1			67.0-138
(S) 1,2-Dichloroethane-d4	90.6			70.0-130

Laboratory Control Sample (LCS)

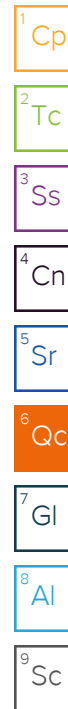
(LCS) R4209615-1 05/02/25 11:35

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.126	101	70.0-123	
Toluene	0.125	0.130	104	75.0-121	
Ethylbenzene	0.125	0.148	118	74.0-126	
Xylenes, Total	0.375	0.448	119	72.0-127	
1,2,4-Trimethylbenzene	0.125	0.147	118	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.141	113	73.0-127	
(S) Toluene-d8			102	75.0-131	
(S) 4-Bromofluorobenzene			101	67.0-138	
(S) 1,2-Dichloroethane-d4			92.8	70.0-130	

L1853891-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853891-15 05/02/25 18:31 • (MS) R4209615-3 05/02/25 20:45 • (MSD) R4209615-4 05/02/25 21:04

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	0.124	U	0.0646	0.115	52.1	92.7	1	10.0-149		J3	56.1	37
Toluene	0.124	U	0.0720	0.127	58.1	102	1	10.0-156		J3	55.3	38
Ethylbenzene	0.124	U	0.0765	0.134	61.7	108	1	10.0-160		J3	54.6	38
Xylenes, Total	0.372	U	0.231	0.406	62.1	109	1	10.0-160		J3	54.9	38
1,2,4-Trimethylbenzene	0.124	U	0.0756	0.132	61.0	106	1	10.0-160		J3	54.3	36
1,3,5-Trimethylbenzene	0.124	U	0.0723	0.133	58.3	107	1	10.0-160		J3	59.1	38
(S) Toluene-d8					103	104		75.0-131				
(S) 4-Bromofluorobenzene					100	99.4		67.0-138				
(S) 1,2-Dichloroethane-d4					88.6	90.4		70.0-130				



Method Blank (MB)

(MB) R4209913-1 05/03/25 14:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	0.894	J	0.274	4.00
(S) o-Terphenyl	56.9			18.0-148

Laboratory Control Sample (LCS)

(LCS) R4209913-2 05/03/25 14:29

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	37.7	75.4	50.0-150	
(S) o-Terphenyl			57.8	18.0-148	

L1854095-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1854095-05 05/03/25 14:29 • (MS) R4209913-3 05/03/25 14:43 • (MSD) R4209913-4 05/03/25 14:57

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	%	%		%			%	%
C10-C28 Diesel Range	48.6	U	40.4	40.8	83.1	82.4	1	50.0-150			0.985	20
(S) o-Terphenyl					61.7	62.6		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) R4209243-2 05/02/25 19:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00162	0.00600
Anthracene	U		0.00163	0.00600
Benzo(a)anthracene	U		0.00200	0.00600
Benzo(b)fluoranthene	U		0.00275	0.00600
Benzo(k)fluoranthene	U		0.00213	0.00600
Benzo(a)pyrene	U		0.00163	0.00600
Chrysene	U		0.00206	0.00600
Dibenz(a,h)anthracene	U		0.00201	0.00600
Fluoranthene	U		0.00239	0.00600
Fluorene	U		0.00180	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00234	0.00600
1-Methylnaphthalene	U		0.00219	0.0200
2-Methylnaphthalene	U		0.00571	0.0200
Naphthalene	U		0.00579	0.0200
Pyrene	U		0.00205	0.00600
(S) p-Terphenyl-d14	93.9			23.0-120
(S) Nitrobenzene-d5	95.7			14.0-149
(S) 2-Fluorobiphenyl	96.5			34.0-125

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4209243-1 05/02/25 19:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0575	71.9	50.0-120	
Anthracene	0.0800	0.0567	70.9	50.0-126	
Benzo(a)anthracene	0.0800	0.0564	70.5	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0529	66.1	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0546	68.3	49.0-125	
Benzo(a)pyrene	0.0800	0.0498	62.3	42.0-120	
Chrysene	0.0800	0.0599	74.9	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0579	72.4	47.0-125	
Fluoranthene	0.0800	0.0648	81.0	49.0-129	
Fluorene	0.0800	0.0608	76.0	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0548	68.5	46.0-125	
1-Methylnaphthalene	0.0800	0.0656	82.0	51.0-121	
2-Methylnaphthalene	0.0800	0.0606	75.8	50.0-120	
Naphthalene	0.0800	0.0590	73.8	50.0-120	
Pyrene	0.0800	0.0553	69.1	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R4209243-1 05/02/25 19:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
(S) p-Terphenyl-d14			76.6	23.0-120	
(S) Nitrobenzene-d5			77.9	14.0-149	
(S) 2-Fluorobiphenyl			83.0	34.0-125	

L1852783-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1852783-03 05/02/25 22:41 • (MS) R4209243-3 05/02/25 22:58 • (MSD) R4209243-4 05/02/25 23:16

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 %
Acenaphthene	0.0768	U	0.0546	0.0544	71.1	70.8	1	14.0-127			0.367	27
Anthracene	0.0768	U	0.0542	0.0539	70.6	70.2	1	10.0-145			0.555	30
Benzo(a)anthracene	0.0768	U	0.0514	0.0514	66.9	66.9	1	10.0-139			0.000	30
Benzo(b)fluoranthene	0.0768	U	0.0458	0.0436	59.6	56.8	1	10.0-140			4.92	36
Benzo(k)fluoranthene	0.0768	U	0.0483	0.0470	62.9	61.2	1	10.0-137			2.73	31
Benzo(a)pyrene	0.0768	U	0.0497	0.0487	64.7	63.4	1	10.0-141			2.03	31
Chrysene	0.0768	U	0.0551	0.0539	71.7	70.2	1	10.0-145			2.20	30
Dibenz(a,h)anthracene	0.0768	U	0.0530	0.0508	69.0	66.1	1	10.0-132			4.24	31
Fluoranthene	0.0768	U	0.0600	0.0579	78.1	75.4	1	10.0-153			3.56	33
Fluorene	0.0768	U	0.0582	0.0578	75.8	75.3	1	11.0-130			0.690	29
Indeno(1,2,3-cd)pyrene	0.0768	U	0.0489	0.0467	63.7	60.8	1	10.0-137			4.60	32
1-Methylnaphthalene	0.0768	U	0.0627	0.0631	81.6	82.2	1	10.0-142			0.636	28
2-Methylnaphthalene	0.0768	U	0.0577	0.0579	75.1	75.4	1	10.0-137			0.346	28
Naphthalene	0.0768	U	0.0571	0.0578	74.3	75.3	1	10.0-135			1.22	27
Pyrene	0.0768	U	0.0507	0.0495	66.0	64.5	1	10.0-148			2.40	35
(S) p-Terphenyl-d14					78.3	80.5		23.0-120				
(S) Nitrobenzene-d5					84.1	87.1		14.0-149				
(S) 2-Fluorobiphenyl					84.5	86.3		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.

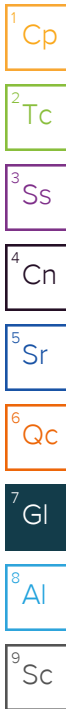
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

Abbreviations and Definitions

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

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
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.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

