

Chevron - CO

Sample Delivery Group: L1873857
Samples Received: 06/27/2025
Project Number: 37583
Description: Lundvall J 18-12D 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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SAMPLE SUMMARY

FL01-W-R@4' L1873857-01

Collected by: Simon Hertzler Gascho
 Collected date/time: 06/26/25 09:39
 Received date/time: 06/27/25 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2552868	1	07/05/25 23:22	07/05/25 23:22	JTM	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2564298	1	07/23/25 14:57	07/24/25 04:21	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D (S-1.10)	WG2554098	1	07/06/25 14:44	07/08/25 07:37	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod (S-1.20)	WG2554103	1	07/06/25 14:59	07/08/25 15:05	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010D (S-7.10)	WG2552933	1	07/04/25 06:34	07/11/25 22:30	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2551751	5	07/04/25 15:41	07/24/25 13:47	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D	WG2549722	1	06/29/25 13:03	06/30/25 20:49	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2549364	1	06/29/25 13:03	06/29/25 22:47	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2552421	1	07/04/25 23:12	07/05/25 14:35	KDB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2552055	1	07/03/25 06:48	07/04/25 15:57	CMF	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

CASE NARRATIVE

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



Chris Ward
Project Manager

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	0.534		1	07/05/2025 23:22	WG2552868

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.200	1	07/24/2025 04:21	WG2564298

Wet Chemistry by Method 9045D (S-1.10)

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.00		1	07/08/2025 07:37	WG2554098

Sample Narrative:

L1873857-01 WG2554098: 8 at 23C

Wet Chemistry by Method 9050AMod (S-1.20)

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	0.558	mmhos/cm		0.0100	1	07/08/2025 15:05	WG2554103

Sample Narrative:

L1873857-01 WG2554103: at 25C

Metals (ICP) by Method 6010D (S-7.10)

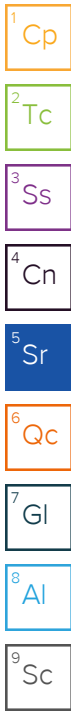
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	ND		0.100	1	07/11/2025 22:30	WG2552933

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.92		0.100	5	07/24/2025 13:47	WG2551751
Barium	112		10.0	5	07/24/2025 13:47	WG2551751
Cadmium	0.229		0.100	5	07/24/2025 13:47	WG2551751
Copper	ND		10.0	5	07/24/2025 13:47	WG2551751
Lead	ND		10.0	5	07/24/2025 13:47	WG2551751
Nickel	ND		10.0	5	07/24/2025 13:47	WG2551751
Selenium	0.225		0.100	5	07/24/2025 13:47	WG2551751
Silver	ND		0.500	5	07/24/2025 13:47	WG2551751
Zinc	ND		50.0	5	07/24/2025 13:47	WG2551751

Volatile Organic Compounds (GC) by Method 8015D

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	06/30/2025 20:49	WG2549722
(S) a, a, a-Trifluorotoluene(FID)	100		77.0-120		06/30/2025 20:49	WG2549722



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/29/2025 22:47	WG2549364
Ethylbenzene	ND		0.0100	1	06/29/2025 22:47	WG2549364
Toluene	ND		0.0100	1	06/29/2025 22:47	WG2549364
1,2,4-Trimethylbenzene	ND		0.00500	1	06/29/2025 22:47	WG2549364
1,3,5-Trimethylbenzene	ND		0.00500	1	06/29/2025 22:47	WG2549364
Xylenes, Total	ND		0.100	1	06/29/2025 22:47	WG2549364
(S) Toluene-d8	109		75.0-131		06/29/2025 22:47	WG2549364
(S) 4-Bromofluorobenzene	87.8		67.0-138		06/29/2025 22:47	WG2549364
(S) 1,2-Dichloroethane-d4	102		70.0-130		06/29/2025 22:47	WG2549364

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	11.5		4.00	1	07/05/2025 14:35	WG2552421
C28-C36 Motor Oil Range	23.0		4.00	1	07/05/2025 14:35	WG2552421
(S) o-Terphenyl	61.4		18.0-148		07/05/2025 14:35	WG2552421

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0330	1	07/04/2025 15:57	WG2552055
Acenaphthene	ND		0.0330	1	07/04/2025 15:57	WG2552055
Acenaphthylene	ND		0.0330	1	07/04/2025 15:57	WG2552055
Benzo(a)anthracene	0.0663		0.00600	1	07/04/2025 15:57	WG2552055
Benzo(a)pyrene	0.0489		0.0330	1	07/04/2025 15:57	WG2552055
Benzo(b)fluoranthene	0.0663		0.0330	1	07/04/2025 15:57	WG2552055
Benzo(g,h,i)perylene	ND		0.0330	1	07/04/2025 15:57	WG2552055
Benzo(k)fluoranthene	ND		0.0330	1	07/04/2025 15:57	WG2552055
Chrysene	0.0531		0.0330	1	07/04/2025 15:57	WG2552055
Dibenz(a,h)anthracene	ND		0.0330	1	07/04/2025 15:57	WG2552055
Fluoranthene	0.155		0.0330	1	07/04/2025 15:57	WG2552055
Fluorene	ND		0.0330	1	07/04/2025 15:57	WG2552055
Indeno(1,2,3-cd)pyrene	ND		0.0330	1	07/04/2025 15:57	WG2552055
Naphthalene	ND		0.00300	1	07/04/2025 15:57	WG2552055
Phenanthrene	0.0725		0.0330	1	07/04/2025 15:57	WG2552055
Pyrene	0.109		0.0330	1	07/04/2025 15:57	WG2552055
1-Methylnaphthalene	ND		0.00300	1	07/04/2025 15:57	WG2552055
2-Methylnaphthalene	ND		0.0120	1	07/04/2025 15:57	WG2552055
(S) p-Terphenyl-d14	117		23.0-120		07/04/2025 15:57	WG2552055
(S) Nitrobenzene-d5	81.1		14.0-149		07/04/2025 15:57	WG2552055
(S) 2-Fluorobiphenyl	101		34.0-125		07/04/2025 15:57	WG2552055

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4249117-1 07/24/25 03:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	U		0.200	0.200

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1874128-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1874128-10 07/24/25 05:42 • (DUP) R4249117-3 07/24/25 05:51

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

L1874128-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1874128-23 07/24/25 08:15 • (DUP) R4249117-8 07/24/25 08:24

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) R4249117-2 07/24/25 04:03

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	10.0	9.67	96.7	80.0-120	

L1874128-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1874128-20 07/24/25 07:21 • (MS) R4249117-5 07/24/25 07:39 • (MSD) R4249117-6 07/24/25 07:48

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	19.6	19.6	97.9	97.8	1	75.0-125			0.0898	20

L1874128-20 Original Sample (OS) • Matrix Spike (MS)

(OS) L1874128-20 07/24/25 07:21 • (MS) R4249117-7 07/24/25 07:57

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	643	ND	482	75.0	50	75.0-125	

Method Blank (MB)

(MB) R4244008-1 07/11/25 15:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0199	0.100

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

(LCS) R4244008-2 07/11/25 15:24 • (LCSD) R4244008-3 07/11/25 15:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	0.881	0.824	88.1	82.4	80.0-120			6.66	20

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

Method Blank (MB)

(MB) R4249041-1 07/24/25 13:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	0.100
Barium	U		10.0	10.0
Cadmium	U		0.100	0.100
Copper	U		10.0	10.0
Lead	U		10.0	10.0
Nickel	U		10.0	10.0
Selenium	U		0.100	0.100
Silver	U		0.500	0.500
Zinc	U		50.0	50.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS)

(LCS) R4249041-2 07/24/25 13:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	89.3	89.3	80.0-120	
Barium	100	88.5	88.5	80.0-120	
Cadmium	100	92.2	92.2	80.0-120	
Copper	100	88.8	88.8	80.0-120	
Lead	100	86.0	86.0	80.0-120	
Nickel	100	92.7	92.7	80.0-120	
Selenium	100	88.3	88.3	80.0-120	
Silver	20.0	18.6	93.0	80.0-120	
Zinc	100	88.6	88.6	80.0-120	

⁷Gl

⁸Al

⁹Sc

L1874175-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1874175-02 07/24/25 13:06 • (MS) R4249041-5 07/24/25 13:16 • (MSD) R4249041-6 07/24/25 13:19

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	99.7	5.42	103	102	97.6	96.1	5	75.0-125			1.42	20
Barium	99.7	57.3	171	153	114	95.5	5	75.0-125			11.5	20
Cadmium	99.7	0.130	101	101	101	101	5	75.0-125			0.387	20
Copper	99.7	62.0	151	149	88.8	87.4	5	75.0-125			0.938	20
Lead	99.7	ND	98.6	96.1	96.2	93.6	5	75.0-125			2.58	20
Nickel	99.7	19.3	118	116	98.3	96.2	5	75.0-125			1.81	20
Selenium	99.7	0.438	101	98.0	100	97.6	5	75.0-125			2.67	20
Silver	20.0	ND	20.4	20.4	101	101	5	75.0-125			0.316	20
Zinc	99.7	94.5	186	182	91.8	87.6	5	75.0-125			2.24	20

Method Blank (MB)

(MB) R4238767-2 06/30/25 10:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0800	0.100
^(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120

Laboratory Control Sample (LCS)

(LCS) R4238767-1 06/30/25 09:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.00	4.80	96.0	72.0-127	
^(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Method Blank (MB)

(MB) R4239284-2 06/29/25 16:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.00100	0.00100
Ethylbenzene	U		0.0100	0.0100
Toluene	U		0.0100	0.0100
1,2,4-Trimethylbenzene	U		0.00500	0.00500
1,3,5-Trimethylbenzene	U		0.00500	0.00500
Xylenes, Total	U		0.100	0.100
(S) Toluene-d8	108			75.0-131
(S) 4-Bromofluorobenzene	82.9			67.0-138
(S) 1,2-Dichloroethane-d4	101			70.0-130

Laboratory Control Sample (LCS)

(LCS) R4239284-1 06/29/25 15:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.110	88.0	70.0-123	
Ethylbenzene	0.125	0.115	92.0	74.0-126	
Toluene	0.125	0.118	94.4	75.0-121	
1,2,4-Trimethylbenzene	0.125	0.126	101	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.130	104	73.0-127	
Xylenes, Total	0.375	0.322	85.9	72.0-127	
(S) Toluene-d8			104	75.0-131	
(S) 4-Bromofluorobenzene			90.3	67.0-138	
(S) 1,2-Dichloroethane-d4			111	70.0-130	

L1873855-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1873855-02 06/29/25 22:09 • (MS) R4239284-3 06/29/25 23:25 • (MSD) R4239284-4 06/29/25 23:44

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	ND	0.0880	0.0831	70.4	66.5	1	10.0-149			5.73	37
Ethylbenzene	0.125	ND	0.0919	0.0924	73.5	73.9	1	10.0-160			0.543	38
Toluene	0.125	ND	0.102	0.0976	81.6	78.1	1	10.0-156			4.41	38
1,2,4-Trimethylbenzene	0.125	ND	0.101	0.103	80.8	82.4	1	10.0-160			1.96	36
1,3,5-Trimethylbenzene	0.125	ND	0.112	0.106	89.6	84.8	1	10.0-160			5.50	38
Xylenes, Total	0.375	ND	0.267	0.253	71.2	67.5	1	10.0-160			5.38	38
(S) Toluene-d8					107	107		75.0-131				
(S) 4-Bromofluorobenzene					85.5	87.1		67.0-138				
(S) 1,2-Dichloroethane-d4					101	104		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) R4241109-1 07/05/25 11:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
<i>(S) o-Terphenyl</i>	66.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R4241109-2 07/05/25 12:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	38.2	76.4	50.0-150	
<i>(S) o-Terphenyl</i>			81.2	18.0-148	

L1873883-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1873883-08 07/05/25 13:19 • (MS) R4241109-3 07/05/25 13:44 • (MSD) R4241109-4 07/05/25 13:57

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	47.4	ND	37.0	38.0	78.1	79.7	1	50.0-150			2.67	20
<i>(S) o-Terphenyl</i>					67.6	58.5		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) R4241378-2 07/04/25 10:21

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.0330	0.0330
Acenaphthene	U		0.0330	0.0330
Acenaphthylene	U		0.0330	0.0330
Benzo(a)anthracene	U		0.00600	0.00600
Benzo(a)pyrene	U		0.0330	0.0330
Benzo(b)fluoranthene	U		0.0330	0.0330
Benzo(g,h,i)perylene	U		0.0330	0.0330
Benzo(k)fluoranthene	U		0.0330	0.0330
Chrysene	U		0.0330	0.0330
Dibenz(a,h)anthracene	U		0.0330	0.0330
Fluoranthene	U		0.0330	0.0330
Fluorene	U		0.0330	0.0330
Indeno(1,2,3-cd)pyrene	U		0.0330	0.0330
Naphthalene	U		0.00300	0.00300
Phenanthrene	U		0.0330	0.0330
Pyrene	U		0.0330	0.0330
1-Methylnaphthalene	U		0.00300	0.00300
2-Methylnaphthalene	U		0.0120	0.0120
<i>(S) p-Terphenyl-d14</i>	112			23.0-120
<i>(S) Nitrobenzene-d5</i>	95.6			14.0-149
<i>(S) 2-Fluorobiphenyl</i>	104			34.0-125

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R4241378-1 07/04/25 10:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0536	67.0	50.0-126	
Acenaphthene	0.0800	0.0511	63.9	50.0-120	
Acenaphthylene	0.0800	0.0530	66.3	50.0-120	
Benzo(a)anthracene	0.0800	0.0545	68.1	45.0-120	
Benzo(a)pyrene	0.0800	0.0507	63.4	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0494	61.8	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0532	66.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0483	60.4	49.0-125	
Chrysene	0.0800	0.0531	66.4	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0554	69.3	47.0-125	
Fluoranthene	0.0800	0.0542	67.8	49.0-129	
Fluorene	0.0800	0.0551	68.9	49.0-120	

Laboratory Control Sample (LCS)

(LCS) R4241378-1 07/04/25 10:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Indeno(1,2,3-cd)pyrene	0.0800	0.0548	68.5	46.0-125	
Naphthalene	0.0800	0.0526	65.8	50.0-120	
Phenanthrene	0.0800	0.0533	66.6	47.0-120	
Pyrene	0.0800	0.0517	64.6	43.0-123	
1-Methylnaphthalene	0.0800	0.0559	69.9	51.0-121	
2-Methylnaphthalene	0.0800	0.0535	66.9	50.0-120	
(S) p-Terphenyl-d14			108	23.0-120	
(S) Nitrobenzene-d5			94.8	14.0-149	
(S) 2-Fluorobiphenyl			99.8	34.0-125	

L1873827-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1873827-02 07/04/25 16:15 • (MS) R4241378-3 07/04/25 16:33 • (MSD) R4241378-4 07/04/25 16:50

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 %
Anthracene	0.0768	ND	0.0484	0.0525	63.0	68.4	1	10.0-145			8.13	30
Acenaphthene	0.0768	ND	0.0493	0.0535	64.2	69.7	1	14.0-127			8.17	27
Acenaphthylene	0.0768	ND	0.0498	0.0536	64.8	69.8	1	21.0-124			7.35	25
Benzo(a)anthracene	0.0768	ND	0.0493	0.0540	64.2	70.3	1	10.0-139			9.10	30
Benzo(a)pyrene	0.0768	ND	0.0481	0.0531	62.6	69.1	1	10.0-141			9.88	31
Benzo(b)fluoranthene	0.0768	ND	0.0490	0.0547	63.8	71.2	1	10.0-140			11.0	36
Benzo(g,h,i)perylene	0.0768	ND	0.0513	0.0562	66.8	73.2	1	10.0-140			9.12	33
Benzo(k)fluoranthene	0.0768	ND	0.0476	0.0512	62.0	66.7	1	10.0-137			7.29	31
Chrysene	0.0768	ND	0.0510	0.0561	66.4	73.0	1	10.0-145			9.52	30
Dibenz(a,h)anthracene	0.0768	ND	0.0507	0.0555	66.0	72.3	1	10.0-132			9.04	31
Fluoranthene	0.0768	ND	0.0505	0.0552	65.8	71.9	1	10.0-153			8.89	33
Fluorene	0.0768	ND	0.0518	0.0569	67.4	74.1	1	11.0-130			9.38	29
Indeno(1,2,3-cd)pyrene	0.0768	ND	0.0488	0.0547	63.5	71.2	1	10.0-137			11.4	32
Naphthalene	0.0768	ND	0.0512	0.0558	66.7	72.7	1	10.0-135			8.60	27
Phenanthrene	0.0768	ND	0.0517	0.0558	67.3	72.7	1	10.0-144			7.63	31
Pyrene	0.0768	ND	0.0508	0.0555	66.1	72.3	1	10.0-148			8.84	35
1-Methylnaphthalene	0.0768	ND	0.0536	0.0584	69.8	76.0	1	10.0-142			8.57	28
2-Methylnaphthalene	0.0768	ND	0.0521	0.0561	67.8	73.0	1	10.0-137			7.39	28
(S) p-Terphenyl-d14					112	122		23.0-120		J1		
(S) Nitrobenzene-d5					92.8	82.1		14.0-149				
(S) 2-Fluorobiphenyl					105	104		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.

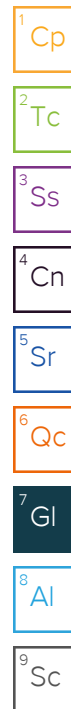
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. 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.
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.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.
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

J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
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ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico 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

Company Name/Address:
 Chevron - CO
 2115 117th ave
 Greeley, CO 80631

Billing Information:
 Karen Olson
 Karenolson@Chevron.com

Analysis / Container / Preservative										Chain of Custody Page ___ of ___	
										 PEOPLE ADVANCING SCIENCE 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/hubfs/pas-standard-terms.pdf SDG # LA673857 Table # K171 Acctnum: Template: Prelogin: PM: PB: Shipped Via: Remarks: Sample # (lab only) -01	

Report to:
 CDH Team 970-304-5000

Email To: Karen.olson@chevron.com
 CVX-PM@CDHconsult.com

Project Description:
 Lundvall J 18-12D FL

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

Phone:	Client Project # 37583	Lab Project #
Collected by (print): Simon Hertzler Gascho	Site/Facility ID #	P.O. #
Collected by (signature): <i>Simon Hertzler Gascho</i>	Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input checked="" type="checkbox"/> Three Day <input type="checkbox"/> STD TAT	Quote # Date Results Needed
Immediately Packaged on Ice: N ___ Y <input checked="" type="checkbox"/>		No. of Cntrs

Full Table 915

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs														
6/26/25 FL01-W-R04	Grab	SS	4'	6/26/25	0939	3	X													

- * 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 #

pH _____ Temp _____

Flow _____ Other _____

Sample Receipt Checklist

COC Seal Present/Intact: 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) <i>Simon Hertzler Gascho</i>	Date: 6/26/25	Time: 1605	Received by: (Signature) <i>[Signature]</i>	Trip Blank Received: Yes / No HCL / MeOH TBR
Relinquished by: (Signature) <i>[Signature]</i>	Date: 6-26-25	Time: 18:00	Received by: (Signature) SWA	Temp: °C Bottles Received: 1.40M = 1.87CA 3
Relinquished by: (Signature) <i>[Signature]</i>	Date:	Time:	Received for lab by: (Signature) Eaton Oqgm	Date: 6/27/25 Time: 0800
			Hold:	Condition: NCF / OK