


Chevron - CO

Sample Delivery Group: L1851267
Samples Received: 04/24/2025
Project Number: C024-022
Description: Grigsby Separator Release
Site: GRIGSBY (NOBLE)
Report To: Paul H.
2115 117th Avenue
Greeley, CO 80631

Entire Report Reviewed By:



Chris Ward
Project Manager

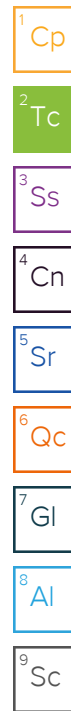
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory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

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	5
Sr: Sample Results	6
BKG18-6.0 L1851267-01	6
BKG19-6.0 L1851267-02	7
BKG20-6.0 L1851267-03	8
BKG21-6.0 L1851267-04	9
BKG13-6.0 L1851267-05	10
SS23-6.0(2) L1851267-06	11
SS24-6.0(2) L1851267-07	13
Qc: Quality Control Summary	15
Wet Chemistry by Method 7199	15
Wet Chemistry by Method 9045D	16
Wet Chemistry by Method 9050AMod	18
Metals (ICP) by Method 6010B-NE493 Ch 2	20
Metals (ICPMS) by Method 6020	22
Volatile Organic Compounds (GC) by Method 8015D/GRO	23
Volatile Organic Compounds (GC/MS) by Method 8260B	24
Semi-Volatile Organic Compounds (GC) by Method 8015M	25
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	26
Gl: Glossary of Terms	28
Al: Accreditations & Locations	29
Sc: Sample Chain of Custody	30



SAMPLE SUMMARY

BKG18-6.0 L1851267-01 Solid

Collected by Joshua Belanger Collected date/time 04/23/25 08:00 Received date/time 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504801	1	05/02/25 10:29	05/02/25 10:29	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2502235	1	04/29/25 06:36	04/30/25 02:11	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505119	1	05/02/25 06:42	05/02/25 08:14	RJP	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505122	1	05/02/25 06:45	05/02/25 12:00	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505017	1	05/02/25 01:36	05/02/25 12:01	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2500758	5	04/27/25 23:10	04/28/25 20:23	LD	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

BKG19-6.0 L1851267-02 Solid

Collected by Joshua Belanger Collected date/time 04/23/25 08:15 Received date/time 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2505067	1	05/03/25 00:28	05/03/25 00:28	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2502235	1	04/29/25 06:36	04/30/25 02:22	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2506289	1	05/03/25 23:18	05/04/25 13:20	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2506149	1	05/03/25 16:30	05/04/25 14:10	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505017	1	05/02/25 01:36	05/02/25 12:03	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2500758	5	04/27/25 23:10	04/28/25 20:26	LD	Mt. Juliet, TN

BKG20-6.0 L1851267-03 Solid

Collected by Joshua Belanger Collected date/time 04/23/25 08:30 Received date/time 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504801	1	05/02/25 10:31	05/02/25 10:31	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2502235	1	04/29/25 06:36	04/30/25 03:04	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505119	1	05/02/25 06:42	05/02/25 08:14	RJP	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505122	1	05/02/25 06:45	05/02/25 12:00	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505017	1	05/02/25 01:36	05/02/25 12:05	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2500758	5	04/27/25 23:10	04/28/25 20:30	LD	Mt. Juliet, TN

BKG21-6.0 L1851267-04 Solid

Collected by Joshua Belanger Collected date/time 04/23/25 08:45 Received date/time 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504801	1	05/02/25 10:32	05/02/25 10:32	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2502235	1	04/29/25 06:36	04/30/25 03:15	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505119	1	05/02/25 06:42	05/02/25 08:14	RJP	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505122	1	05/02/25 06:45	05/02/25 12:00	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505017	1	05/02/25 01:36	05/02/25 12:06	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2500758	5	04/27/25 23:10	04/28/25 20:33	LD	Mt. Juliet, TN

BKG13-6.0 L1851267-05 Solid

Collected by Joshua Belanger Collected date/time 04/23/25 09:00 Received date/time 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504801	1	05/02/25 10:34	05/02/25 10:34	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2502235	1	04/29/25 06:36	04/30/25 03:25	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505119	1	05/02/25 06:42	05/02/25 08:14	RJP	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505122	1	05/02/25 06:45	05/02/25 12:00	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505090	1	05/03/25 00:01	05/03/25 10:59	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2500758	5	04/27/25 23:10	04/28/25 20:36	LD	Mt. Juliet, TN

SAMPLE SUMMARY

SS23-6.0(2) L1851267-06 Solid

Collected by Joshua Belanger Collected date/time 04/23/25 09:15 Received date/time 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504801	1	05/02/25 10:36	05/02/25 10:36	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2502235	1	04/29/25 06:36	04/30/25 03:35	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505119	1	05/02/25 06:42	05/02/25 08:14	RJP	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505122	1	05/02/25 06:45	05/02/25 12:00	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505017	1	05/02/25 01:36	05/02/25 12:08	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2500758	5	04/27/25 23:10	04/28/25 21:08	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2500897	1	04/24/25 21:28	04/27/25 10:23	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2500383	1	04/24/25 21:28	04/26/25 07:13	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2500966	1	04/28/25 08:56	04/29/25 06:20	SGB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2500974	1	04/27/25 14:27	04/28/25 18:13	NJK	Mt. Juliet, TN

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

SS24-6.0(2) L1851267-07 Solid

Collected by Joshua Belanger Collected date/time 04/23/25 09:30 Received date/time 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504801	1	05/02/25 10:37	05/02/25 10:37	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2502235	1	04/29/25 06:36	04/30/25 03:46	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505119	1	05/02/25 06:42	05/02/25 08:14	RJP	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505122	1	05/02/25 06:45	05/02/25 12:00	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505017	1	05/02/25 01:36	05/02/25 12:18	RLS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2500758	5	04/27/25 23:10	04/28/25 21:11	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2500897	1	04/24/25 21:28	04/27/25 10:45	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2500383	1	04/24/25 21:28	04/26/25 07:32	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2500966	1	04/28/25 08:56	04/29/25 06:34	SGB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2500974	1	04/27/25 14:27	04/28/25 18:31	NJK	Mt. Juliet, TN

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

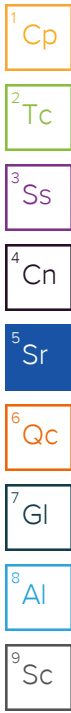
⁷ Gl

⁸ Al

⁹ Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	15.3		1	05/02/2025 10:29	WG2504801



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	04/30/2025 02:11	WG2502235

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.40	<u>T8</u>	1	05/02/2025 08:14	WG2505119

Sample Narrative:

L1851267-01 WG2505119: 0

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	7660	umhos/cm		10.0	1	05/02/2025 12:00	WG2505122

Sample Narrative:

L1851267-01 WG2505122: 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	0.797		0.0167	0.200	1	05/02/2025 12:01	WG2505017

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.47		0.100	1.00	5	04/28/2025 20:23	WG2500758
Barium	180		0.152	2.50	5	04/28/2025 20:23	WG2500758
Cadmium	0.112	<u>J</u>	0.0855	1.00	5	04/28/2025 20:23	WG2500758
Copper	8.62		0.132	5.00	5	04/28/2025 20:23	WG2500758
Lead	10.2		0.0990	2.00	5	04/28/2025 20:23	WG2500758
Nickel	12.9		0.197	2.50	5	04/28/2025 20:23	WG2500758
Selenium	0.346	<u>J</u>	0.180	2.50	5	04/28/2025 20:23	WG2500758
Silver	U		0.0865	0.500	5	04/28/2025 20:23	WG2500758
Zinc	46.3		0.740	25.0	5	04/28/2025 20:23	WG2500758

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	18.0		1	05/03/2025 00:28	WG2505067

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	04/30/2025 02:22	WG2502235

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.31	<u>T8</u>	1	05/04/2025 13:20	WG2506289

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	8370	umhos/cm		10.0	1	05/04/2025 14:10	WG2506149

Sample Narrative:

L1851267-02 WG2506149: 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	1.07		0.0167	0.200	1	05/02/2025 12:03	WG2505017

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.42		0.100	1.00	5	04/28/2025 20:26	WG2500758
Barium	32.0		0.152	2.50	5	04/28/2025 20:26	WG2500758
Cadmium	0.125	<u>J</u>	0.0855	1.00	5	04/28/2025 20:26	WG2500758
Copper	15.9		0.132	5.00	5	04/28/2025 20:26	WG2500758
Lead	13.4		0.0990	2.00	5	04/28/2025 20:26	WG2500758
Nickel	11.2		0.197	2.50	5	04/28/2025 20:26	WG2500758
Selenium	0.366	<u>J</u>	0.180	2.50	5	04/28/2025 20:26	WG2500758
Silver	U		0.0865	0.500	5	04/28/2025 20:26	WG2500758
Zinc	55.3		0.740	25.0	5	04/28/2025 20:26	WG2500758

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	20.4		1	05/02/2025 10:31	WG2504801

1 Cp

2 Tc

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	04/30/2025 03:04	WG2502235

3 Ss

4 Cn

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.63	<u>T8</u>	1	05/02/2025 08:14	WG2505119

5 Sr

6 Qc

Sample Narrative:

L1851267-03 WG2505119: 0

7 Gl

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	10800	umhos/cm		10.0	1	05/02/2025 12:00	WG2505122

8 Al

9 Sc

Sample Narrative:

L1851267-03 WG2505122: at 25C

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

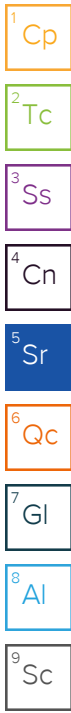
Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.681		0.0167	0.200	1	05/02/2025 12:05	WG2505017

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.60		0.100	1.00	5	04/28/2025 20:30	WG2500758
Barium	24.0		0.152	2.50	5	04/28/2025 20:30	WG2500758
Cadmium	0.0961	<u>J</u>	0.0855	1.00	5	04/28/2025 20:30	WG2500758
Copper	8.25		0.132	5.00	5	04/28/2025 20:30	WG2500758
Lead	6.93		0.0990	2.00	5	04/28/2025 20:30	WG2500758
Nickel	8.47		0.197	2.50	5	04/28/2025 20:30	WG2500758
Selenium	0.345	<u>J</u>	0.180	2.50	5	04/28/2025 20:30	WG2500758
Silver	U		0.0865	0.500	5	04/28/2025 20:30	WG2500758
Zinc	53.1		0.740	25.0	5	04/28/2025 20:30	WG2500758

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	17.3		1	05/02/2025 10:32	WG2504801



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	04/30/2025 03:15	WG2502235

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.47	<u>T8</u>	1	05/02/2025 08:14	WG2505119

Sample Narrative:

L1851267-04 WG2505119: 0

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	2680	umhos/cm		10.0	1	05/02/2025 12:00	WG2505122

Sample Narrative:

L1851267-04 WG2505122: 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	0.495		0.0167	0.200	1	05/02/2025 12:06	WG2505017

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.97		0.100	1.00	5	04/28/2025 20:33	WG2500758
Barium	18.8		0.152	2.50	5	04/28/2025 20:33	WG2500758
Cadmium	U		0.0855	1.00	5	04/28/2025 20:33	WG2500758
Copper	10.7		0.132	5.00	5	04/28/2025 20:33	WG2500758
Lead	7.87		0.0990	2.00	5	04/28/2025 20:33	WG2500758
Nickel	10.6		0.197	2.50	5	04/28/2025 20:33	WG2500758
Selenium	0.391	<u>J</u>	0.180	2.50	5	04/28/2025 20:33	WG2500758
Silver	U		0.0865	0.500	5	04/28/2025 20:33	WG2500758
Zinc	53.4		0.740	25.0	5	04/28/2025 20:33	WG2500758

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	19.6		1	05/02/2025 10:34	WG2504801

- 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	U		0.379	1.00	1	04/30/2025 03:25	WG2502235

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.52	<u>T8</u>	1	05/02/2025 08:14	WG2505119

Sample Narrative:

L1851267-05 WG2505119: 0

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	9870	umhos/cm		10.0	1	05/02/2025 12:00	WG2505122

Sample Narrative:

L1851267-05 WG2505122: 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	0.822		0.0167	0.200	1	05/03/2025 10:59	WG2505090

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.85		0.100	1.00	5	04/28/2025 20:36	WG2500758
Barium	53.0		0.152	2.50	5	04/28/2025 20:36	WG2500758
Cadmium	U		0.0855	1.00	5	04/28/2025 20:36	WG2500758
Copper	11.9		0.132	5.00	5	04/28/2025 20:36	WG2500758
Lead	8.67		0.0990	2.00	5	04/28/2025 20:36	WG2500758
Nickel	10.3		0.197	2.50	5	04/28/2025 20:36	WG2500758
Selenium	0.483	<u>J</u>	0.180	2.50	5	04/28/2025 20:36	WG2500758
Silver	U		0.0865	0.500	5	04/28/2025 20:36	WG2500758
Zinc	50.8		0.740	25.0	5	04/28/2025 20:36	WG2500758

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	3.07		1	05/02/2025 10:36	WG2504801

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	04/30/2025 03:35	WG2502235

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.16	<u>T8</u>	1	05/02/2025 08:14	WG2505119

Sample Narrative:

L1851267-06 WG2505119: 0

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	1500	umhos/cm		10.0	1	05/02/2025 12:00	WG2505122

Sample Narrative:

L1851267-06 WG2505122: at 25C

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

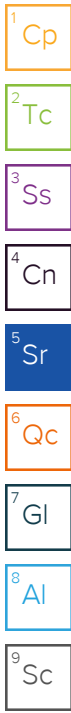
Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.523		0.0167	0.200	1	05/02/2025 12:08	WG2505017

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.23		0.100	1.00	5	04/28/2025 21:08	WG2500758
Barium	131		0.152	2.50	5	04/28/2025 21:08	WG2500758
Cadmium	0.164	<u>J</u>	0.0855	1.00	5	04/28/2025 21:08	WG2500758
Copper	8.72		0.132	5.00	5	04/28/2025 21:08	WG2500758
Lead	8.04		0.0990	2.00	5	04/28/2025 21:08	WG2500758
Nickel	8.42		0.197	2.50	5	04/28/2025 21:08	WG2500758
Selenium	0.426	<u>J</u>	0.180	2.50	5	04/28/2025 21:08	WG2500758
Silver	U		0.0865	0.500	5	04/28/2025 21:08	WG2500758
Zinc	44.7		0.740	25.0	5	04/28/2025 21:08	WG2500758

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	0.0377	<u>B J</u>	0.0217	0.100	1	04/27/2025 10:23	WG2500897
(S) a,a,a-Trifluorotoluene(FID)	97.8			77.0-120		04/27/2025 10:23	WG2500897



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	04/26/2025 07:13	WG2500383
Toluene	U		0.00130	0.00500	1	04/26/2025 07:13	WG2500383
Ethylbenzene	U		0.000737	0.00250	1	04/26/2025 07:13	WG2500383
Xylenes, Total	U		0.000880	0.00650	1	04/26/2025 07:13	WG2500383
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	04/26/2025 07:13	WG2500383
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	04/26/2025 07:13	WG2500383
(S) Toluene-d8	108			75.0-131		04/26/2025 07:13	WG2500383
(S) 4-Bromofluorobenzene	88.6			67.0-138		04/26/2025 07:13	WG2500383
(S) 1,2-Dichloroethane-d4	95.6			70.0-130		04/26/2025 07:13	WG2500383

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	1.91	U	1.61	4.00	1	04/29/2025 06:20	WG2500966
C28-C36 Motor Oil Range	2.70	U	0.274	4.00	1	04/29/2025 06:20	WG2500966
(S) o-Terphenyl	39.8			18.0-148		04/29/2025 06:20	WG2500966

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	04/28/2025 18:13	WG2500974
Anthracene	0.00179	U	0.00163	0.00600	1	04/28/2025 18:13	WG2500974
Benzo(a)anthracene	0.00958		0.00200	0.00600	1	04/28/2025 18:13	WG2500974
Benzo(b)fluoranthene	0.0107		0.00275	0.00600	1	04/28/2025 18:13	WG2500974
Benzo(k)fluoranthene	0.00351	U	0.00213	0.00600	1	04/28/2025 18:13	WG2500974
Benzo(a)pyrene	0.00650		0.00163	0.00600	1	04/28/2025 18:13	WG2500974
Chrysene	0.0100		0.00206	0.00600	1	04/28/2025 18:13	WG2500974
Dibenz(a,h)anthracene	U		0.00201	0.00600	1	04/28/2025 18:13	WG2500974
Fluoranthene	0.0194		0.00239	0.00600	1	04/28/2025 18:13	WG2500974
Fluorene	U		0.00180	0.00600	1	04/28/2025 18:13	WG2500974
Indeno(1,2,3-cd)pyrene	0.00387	U	0.00234	0.00600	1	04/28/2025 18:13	WG2500974
1-Methylnaphthalene	U		0.00219	0.0200	1	04/28/2025 18:13	WG2500974
2-Methylnaphthalene	U		0.00571	0.0200	1	04/28/2025 18:13	WG2500974
Naphthalene	U		0.00579	0.0200	1	04/28/2025 18:13	WG2500974
Pyrene	0.0175		0.00205	0.00600	1	04/28/2025 18:13	WG2500974
(S) p-Terphenyl-d14	86.2			23.0-120		04/28/2025 18:13	WG2500974
(S) Nitrobenzene-d5	76.6			14.0-149		04/28/2025 18:13	WG2500974
(S) 2-Fluorobiphenyl	84.0			34.0-125		04/28/2025 18:13	WG2500974

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	2.89		1	05/02/2025 10:37	WG2504801

1 Cp

2 Tc

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	04/30/2025 03:46	WG2502235

3 Ss

4 Cn

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.10	<u>T8</u>	1	05/02/2025 08:14	WG2505119

5 Sr

6 Qc

Sample Narrative:

L1851267-07 WG2505119: 0

7 Gl

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	1510	umhos/cm		10.0	1	05/02/2025 12:00	WG2505122

8 Al

9 Sc

Sample Narrative:

L1851267-07 WG2505122: 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	0.441		0.0167	0.200	1	05/02/2025 12:18	WG2505017

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.70		0.100	1.00	5	04/28/2025 21:11	WG2500758
Barium	91.2		0.152	2.50	5	04/28/2025 21:11	WG2500758
Cadmium	0.139	<u>J</u>	0.0855	1.00	5	04/28/2025 21:11	WG2500758
Copper	7.72		0.132	5.00	5	04/28/2025 21:11	WG2500758
Lead	7.24		0.0990	2.00	5	04/28/2025 21:11	WG2500758
Nickel	6.54		0.197	2.50	5	04/28/2025 21:11	WG2500758
Selenium	0.293	<u>J</u>	0.180	2.50	5	04/28/2025 21:11	WG2500758
Silver	U		0.0865	0.500	5	04/28/2025 21:11	WG2500758
Zinc	31.6		0.740	25.0	5	04/28/2025 21:11	WG2500758

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	0.0472	<u>B J</u>	0.0217	0.100	1	04/27/2025 10:45	WG2500897
(S) a,a,a-Trifluorotoluene(FID)	96.8			77.0-120		04/27/2025 10:45	WG2500897

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	04/26/2025 07:32	WG2500383
Toluene	U		0.00130	0.00500	1	04/26/2025 07:32	WG2500383
Ethylbenzene	U		0.000737	0.00250	1	04/26/2025 07:32	WG2500383
Xylenes, Total	U		0.000880	0.00650	1	04/26/2025 07:32	WG2500383
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	04/26/2025 07:32	WG2500383
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	04/26/2025 07:32	WG2500383
(S) Toluene-d8	111			75.0-131		04/26/2025 07:32	WG2500383
(S) 4-Bromofluorobenzene	94.1			67.0-138		04/26/2025 07:32	WG2500383
(S) 1,2-Dichloroethane-d4	96.1			70.0-130		04/26/2025 07:32	WG2500383

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.02	U	1.61	4.00	1	04/29/2025 06:34	WG2500966
C28-C36 Motor Oil Range	4.73		0.274	4.00	1	04/29/2025 06:34	WG2500966
(S) o-Terphenyl	40.4			18.0-148		04/29/2025 06:34	WG2500966

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	0.00726		0.00162	0.00600	1	04/28/2025 18:31	WG2500974
Anthracene	0.0270		0.00163	0.00600	1	04/28/2025 18:31	WG2500974
Benzo(a)anthracene	0.0750		0.00200	0.00600	1	04/28/2025 18:31	WG2500974
Benzo(b)fluoranthene	0.0729		0.00275	0.00600	1	04/28/2025 18:31	WG2500974
Benzo(k)fluoranthene	0.0241		0.00213	0.00600	1	04/28/2025 18:31	WG2500974
Benzo(a)pyrene	0.0418		0.00163	0.00600	1	04/28/2025 18:31	WG2500974
Chrysene	0.0468		0.00206	0.00600	1	04/28/2025 18:31	WG2500974
Dibenz(a,h)anthracene	0.00532	U	0.00201	0.00600	1	04/28/2025 18:31	WG2500974
Fluoranthene	0.234		0.00239	0.00600	1	04/28/2025 18:31	WG2500974
Fluorene	0.00875		0.00180	0.00600	1	04/28/2025 18:31	WG2500974
Indeno(1,2,3-cd)pyrene	0.0223		0.00234	0.00600	1	04/28/2025 18:31	WG2500974
1-Methylnaphthalene	U		0.00219	0.0200	1	04/28/2025 18:31	WG2500974
2-Methylnaphthalene	U		0.00571	0.0200	1	04/28/2025 18:31	WG2500974
Naphthalene	U		0.00579	0.0200	1	04/28/2025 18:31	WG2500974
Pyrene	0.196		0.00205	0.00600	1	04/28/2025 18:31	WG2500974
(S) p-Terphenyl-d14	87.6			23.0-120		04/28/2025 18:31	WG2500974
(S) Nitrobenzene-d5	83.3			14.0-149		04/28/2025 18:31	WG2500974
(S) 2-Fluorobiphenyl	83.3			34.0-125		04/28/2025 18:31	WG2500974

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4207316-1 04/29/25 21:05

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

L1850556-28 Original Sample (OS) • Duplicate (DUP)

(OS) L1850556-28 04/29/25 21:47 • (DUP) R4207316-3 04/29/25 21:57

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

L1850556-68 Original Sample (OS) • Duplicate (DUP)

(OS) L1850556-68 04/29/25 23:41 • (DUP) R4207316-4 04/29/25 23:52

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) R4207316-2 04/29/25 21:15

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	10.0	9.76	97.6	80.0-120	

L1850556-73 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1850556-73 04/30/25 00:44 • (MS) R4207316-5 04/30/25 01:06 • (MSD) R4207316-6 04/30/25 01:19

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	17.2	17.2	86.2	86.2	1	75.0-125			0.00795	20

L1850556-73 Original Sample (OS) • Matrix Spike (MS)

(OS) L1850556-73 04/30/25 00:44 • (MS) R4207316-7 04/30/25 01:29

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	648	U	588	90.7	50	75.0-125	

L1851125-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1851125-01 05/02/25 08:14 • (DUP) R4208674-2 05/02/25 08:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	8.57	8.58	1	0.117		1

Sample Narrative:

OS: 0
DUP: 0

Laboratory Control Sample (LCS)

(LCS) R4208674-1 05/02/25 08:14

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

Sample Narrative:

LCS: 0

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

L1851267-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1851267-02 05/04/25 13:20 • (DUP) R4209496-2 05/04/25 13:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.31	8.27	1	0.483		1

Laboratory Control Sample (LCS)

(LCS) R4209496-1 05/04/25 13:20

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	9.98	99.8	99.0-101	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4208811-1 05/02/25 12:00

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

Sample Narrative:

BLANK: at 25C

L1851267-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1851267-07 05/02/25 12:00 • (DUP) R4208811-3 05/02/25 12:00

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Specific Conductance	1510	1510	1	0.265		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4208811-2 05/02/25 12:00

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	1130	1130	99.8	85.0-115	

Sample Narrative:

LCS: at 25C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4209503-1 05/04/25 14:10

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

Sample Narrative:

BLANK: at 25C

L1851267-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1851267-02 05/04/25 14:10 • (DUP) R4209503-3 05/04/25 14:10

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Specific Conductance	8370	8280	1	1.08		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4209503-2 05/04/25 14:10

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	1130	1170	103	85.0-115	

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R4209058-1 05/02/25 11:32

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) R4209058-2 05/02/25 11:34 • (LCSD) R4209058-3 05/02/25 11:35

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	1.09	1.11	109	111	80.0-120			1.72	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4209333-1 05/03/25 10:54

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) R4209333-2 05/03/25 10:55 • (LCSD) R4209333-3 05/03/25 10:57

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	1.07	104	107	80.0-120			2.56	20

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

Method Blank (MB)

(MB) R4206562-1 04/28/25 19:29

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) R4206562-2 04/28/25 19:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	107	107	80.0-120	
Barium	100	105	105	80.0-120	
Cadmium	100	114	114	80.0-120	
Copper	100	110	110	80.0-120	
Lead	100	106	106	80.0-120	
Nickel	100	114	114	80.0-120	
Selenium	100	105	105	80.0-120	
Silver	20.0	22.6	113	80.0-120	
Zinc	100	106	106	80.0-120	

⁷Gl

⁸Al

⁹Sc

L1850527-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1850527-13 04/28/25 19:36 • (MS) R4206562-5 04/28/25 19:45 • (MSD) R4206562-6 04/28/25 19:48

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	1.72	117	102	115	100	5	75.0-125			13.7	20
Barium	100	39.4	156	137	116	97.9	5	75.0-125			12.5	20
Cadmium	100	U	116	107	116	107	5	75.0-125			8.06	20
Copper	100	3.52	118	107	114	104	5	75.0-125			9.67	20
Lead	100	3.84	115	105	111	101	5	75.0-125			9.28	20
Nickel	100	3.96	121	110	117	106	5	75.0-125			10.0	20
Selenium	100	0.234	112	102	111	101	5	75.0-125			9.47	20
Silver	20.0	U	23.7	21.2	119	106	5	75.0-125			11.3	20
Zinc	100	16.4	130	116	113	99.6	5	75.0-125			11.0	20

Method Blank (MB)

(MB) R4206656-2 04/27/25 10:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0257	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	98.6			77.0-120

Laboratory Control Sample (LCS)

(LCS) R4206656-1 04/27/25 08:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.00	5.45	109	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) R4206171-2 04/26/25 00:20

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	119			75.0-131
(S) 4-Bromofluorobenzene	86.9			67.0-138
(S) 1,2-Dichloroethane-d4	98.2			70.0-130

Laboratory Control Sample (LCS)

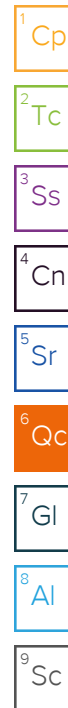
(LCS) R4206171-1 04/25/25 22:38

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.103	82.4	70.0-123	
Toluene	0.125	0.130	104	75.0-121	
Ethylbenzene	0.125	0.130	104	74.0-126	
Xylenes, Total	0.375	0.391	104	72.0-127	
1,2,4-Trimethylbenzene	0.125	0.129	103	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.123	98.4	73.0-127	
(S) Toluene-d8			111	75.0-131	
(S) 4-Bromofluorobenzene			93.2	67.0-138	
(S) 1,2-Dichloroethane-d4			97.9	70.0-130	

L1850885-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1850885-01 04/26/25 05:16 • (MS) R4206171-3 04/26/25 08:11 • (MSD) R4206171-4 04/26/25 08:31

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	0.133	U	0.110	0.104	88.0	83.2	1	10.0-149			5.61	37
Toluene	0.133	U	0.142	0.134	114	107	1	10.0-156			5.80	38
Ethylbenzene	0.133	U	0.142	0.132	114	106	1	10.0-160			7.30	38
Xylenes, Total	0.399	U	0.437	0.406	117	108	1	10.0-160			7.35	38
1,2,4-Trimethylbenzene	0.133	U	0.171	0.146	137	117	1	10.0-160			15.8	36
1,3,5-Trimethylbenzene	0.133	U	0.163	0.137	130	110	1	10.0-160			17.3	38
(S) Toluene-d8					112	113		75.0-131				
(S) 4-Bromofluorobenzene					88.8	88.8		67.0-138				
(S) 1,2-Dichloroethane-d4					98.5	100		70.0-130				



Method Blank (MB)

(MB) R4206725-1 04/29/25 01:23

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	U		0.274	4.00
(S) o-Terphenyl	41.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R4206725-2 04/29/25 01:38

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	27.0	54.0	50.0-150	
(S) o-Terphenyl			43.7	18.0-148	

L1850527-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1850527-03 04/29/25 04:27 • (MS) R4206725-3 04/29/25 04:41 • (MSD) R4206725-4 04/29/25 04:55

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	48.2	U	21.6	19.8	44.8	41.3	1	50.0-150	J6	J6	8.70	20
(S) o-Terphenyl					38.9	37.3		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) R4206507-2 04/28/25 11:41

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	92.1			23.0-120
(S) Nitrobenzene-d5	90.5			14.0-149
(S) 2-Fluorobiphenyl	93.6			34.0-125

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4206507-1 04/28/25 11:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0746	93.3	50.0-120	
Anthracene	0.0800	0.0788	98.5	50.0-126	
Benzo(a)anthracene	0.0800	0.0809	101	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0824	103	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0812	102	49.0-125	
Benzo(a)pyrene	0.0800	0.0685	85.6	42.0-120	
Chrysene	0.0800	0.0878	110	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0756	94.5	47.0-125	
Fluoranthene	0.0800	0.0856	107	49.0-129	
Fluorene	0.0800	0.0807	101	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0719	89.9	46.0-125	
1-Methylnaphthalene	0.0800	0.0804	101	51.0-121	
2-Methylnaphthalene	0.0800	0.0772	96.5	50.0-120	
Naphthalene	0.0800	0.0765	95.6	50.0-120	
Pyrene	0.0800	0.0835	104	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R4206507-1 04/28/25 11:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			90.2	23.0-120	
(S) Nitrobenzene-d5			92.2	14.0-149	
(S) 2-Fluorobiphenyl			95.2	34.0-125	

L1851679-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1851679-01 04/28/25 19:07 • (MS) R4206507-3 04/28/25 19:25 • (MSD) R4206507-4 04/28/25 19:43

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0764	U	0.0684	0.0666	89.5	87.6	1	14.0-127			2.67	27
Anthracene	0.0764	U	0.0714	0.0694	93.5	91.3	1	10.0-145			2.84	30
Benzo(a)anthracene	0.0764	U	0.0730	0.0697	95.5	91.7	1	10.0-139			4.63	30
Benzo(b)fluoranthene	0.0764	U	0.0781	0.0750	102	98.7	1	10.0-140			4.05	36
Benzo(k)fluoranthene	0.0764	U	0.0742	0.0708	97.1	93.2	1	10.0-137			4.69	31
Benzo(a)pyrene	0.0764	U	0.0712	0.0688	93.2	90.5	1	10.0-141			3.43	31
Chrysene	0.0764	U	0.0814	0.0787	107	104	1	10.0-145			3.37	30
Dibenz(a,h)anthracene	0.0764	U	0.0666	0.0639	87.2	84.1	1	10.0-132			4.14	31
Fluoranthene	0.0764	U	0.0761	0.0739	99.6	97.2	1	10.0-153			2.93	33
Fluorene	0.0764	U	0.0719	0.0697	94.1	91.7	1	11.0-130			3.11	29
Indeno(1,2,3-cd)pyrene	0.0764	U	0.0655	0.0626	85.7	82.4	1	10.0-137			4.53	32
1-Methylnaphthalene	0.0764	U	0.0739	0.0714	96.7	93.9	1	10.0-142			3.44	28
2-Methylnaphthalene	0.0764	U	0.0698	0.0678	91.4	89.2	1	10.0-137			2.91	28
Naphthalene	0.0764	U	0.0717	0.0697	93.8	91.7	1	10.0-135			2.83	27
Pyrene	0.0764	U	0.0797	0.0759	104	99.9	1	10.0-148			4.88	35
(S) p-Terphenyl-d14					87.6	85.4		23.0-120				
(S) Nitrobenzene-d5					92.7	89.6		14.0-149				
(S) 2-Fluorobiphenyl					89.6	86.4		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.

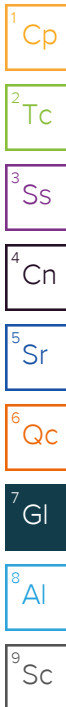
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. 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.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico 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 Avenue
Greeley, CO 80631

Billing Information:

Dan Peterson
2115 117th Avenue
Greeley, CO 80631

Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___



mtenv.com, aaron@fremontenv.com;
12065 Lebanon Rd Mount Juliet, TN 37122

Submitting a sample via this chain of custody
constitutes acknowledgment and acceptance of the
Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

SDG #

C076

Acctnum: **CHEGCO**

Template: **T268712**

Prelogin: **P1140480**

PM: **824 - Chris Ward**

PB:

Shipped Via: **FedEX Ground**

Remarks

Sample # (lab only)

Report to:

Paul H. 970-304-5000

Email To: danpeterson@chevron.com;paulh@fremontenv.com;ason.davidson@chevron.com;chrisl@fremontenv.com

Project Description:

Grigsby separator release

City/State
Collected:

Please Circle:
PT MT CT ET

Regulatory Program (DOD, RCRA, DW, etc):

ECMC

Client Project #

C024-022

Lab Project #

CHEGCO-FREMONT

Collected by (print):

Joshua Belanger

Site/Facility ID #

Grigsby (NOBLE)

P.O. #

Collected by (signature):

Joshua Belanger

Rush? (Lab MUST Be Notified)

Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day STD TAT

Quote #

Date Results Needed

No.
of
Cnts

Immediately
Packed on Ice N Y

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

BKG18-6.0

GRAB

SS

6.0

4/23

0800

2

BKG19-6.0

SS

0815

2

BKG20-6.0

0830

2

BKG21-6.0

0845

2

BKG13-6.0

0900

2

SS23-6.0 (2)

0915

3

SS24-6.0 (2)

0930

3

* Matrix:

SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Waste Water
DW - Drinking Water
OT - Other

Remarks:

Samples returned via:

UPS FedEx Courier

Tracking #

Relinquished by: (Signature)

Date:

4/23/25

Time:

1230

Received by: (Signature)

Trip Blank Received: Yes (No)

HCL / MeOH
TBR

Relinquished by: (Signature)

Date:

4-23-25

Time:

18:00

Received by: (Signature)

Temp: °C Bottles Received:

TLA91.70.4E2-1 16

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: Time:

04/24/2025 1230

If preservation required by Login: Date/Time

Hold:

Condition:
NCF / OK

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