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ANALYTICAL REPORT

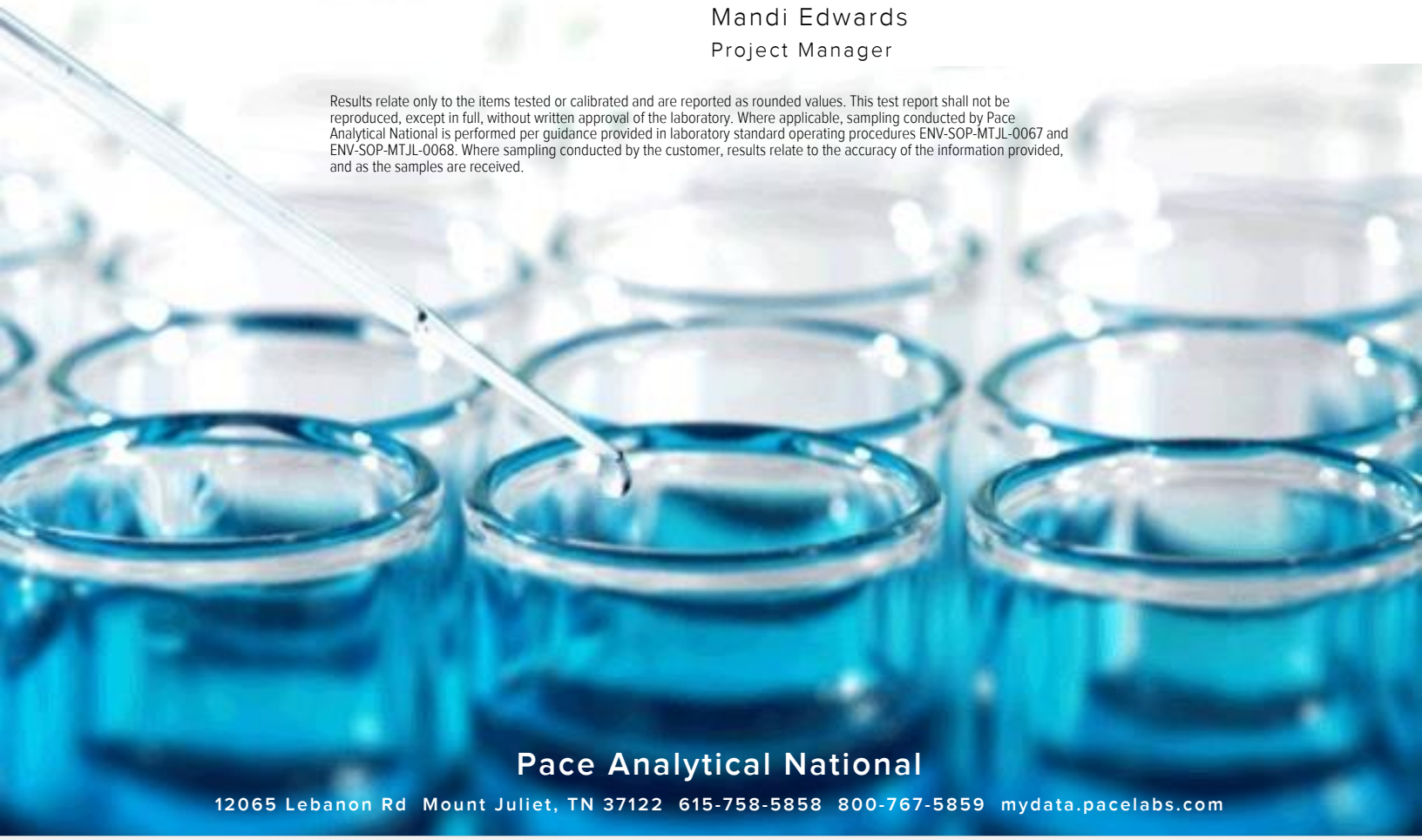
May 07, 2025

Civitas - CO

Sample Delivery Group:	L1851400
Samples Received:	04/24/2025
Project Number:	203724474 (100.008)
Description:	Rinn Valley East 17N-20-01C Backgrounds
Site:	REM 36236
Report To:	Civitas 6855 W. 118th Ave Broomfield, CO 80020

Entire Report Reviewed By:

Mandi Edwards
Project Manager



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BG01@3' L1851400-01 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 14:15 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504915	1	05/03/25 00:06	05/03/25 00:06	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501326	1	04/30/25 15:38	05/01/25 17:19	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505761	1	05/02/25 22:30	05/02/25 23:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505762	1	05/02/25 22:33	05/03/25 13:46	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505022	1	05/02/25 09:07	05/02/25 15:19	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501082	5	04/29/25 11:55	05/01/25 13:27	SJM	Mt. Juliet, TN

BG01@5' L1851400-02 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 14:10 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504915	1	05/03/25 00:08	05/03/25 00:08	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501326	1	04/30/25 15:38	05/01/25 17:28	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505761	1	05/02/25 22:30	05/02/25 23:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505762	1	05/02/25 22:33	05/03/25 13:46	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505022	1	05/02/25 09:07	05/02/25 15:21	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501082	5	04/29/25 11:55	05/01/25 13:30	SJM	Mt. Juliet, TN

BG02@3' L1851400-03 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 14:20 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504915	1	05/03/25 00:10	05/03/25 00:10	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501326	1	04/30/25 15:38	05/01/25 17:38	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505761	1	05/02/25 22:30	05/02/25 23:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505762	1	05/02/25 22:33	05/03/25 13:46	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505022	1	05/02/25 09:07	05/02/25 15:24	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501082	5	04/29/25 11:55	05/01/25 13:34	SJM	Mt. Juliet, TN

BG02@5' L1851400-04 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 14:25 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504915	1	05/03/25 00:11	05/03/25 00:11	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2504528	1	05/01/25 13:56	05/02/25 00:01	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505761	1	05/02/25 22:30	05/02/25 23:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505762	1	05/02/25 22:33	05/03/25 13:46	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505022	1	05/02/25 09:07	05/02/25 15:27	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501082	5	04/29/25 11:55	05/01/25 13:37	SJM	Mt. Juliet, TN

BG03@3' L1851400-05 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 14:35 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504915	1	05/03/25 00:13	05/03/25 00:13	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2504528	1	05/01/25 13:56	05/02/25 00:12	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505761	1	05/02/25 22:30	05/02/25 23:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505762	1	05/02/25 22:33	05/03/25 13:46	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505022	1	05/02/25 09:07	05/02/25 15:30	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501082	5	04/29/25 11:55	05/01/25 13:40	SJM	Mt. Juliet, TN

BG03@5' L1851400-06 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 14:40 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504915	1	05/03/25 00:15	05/03/25 00:15	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501334	1	04/28/25 21:48	04/30/25 18:03	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505761	1	05/02/25 22:30	05/02/25 23:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505762	1	05/02/25 22:33	05/03/25 13:46	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505022	1	05/02/25 09:07	05/02/25 15:33	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501082	5	04/29/25 11:55	05/01/25 13:44	SJM	Mt. Juliet, TN

BG04@3' L1851400-07 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 14:50 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504915	1	05/03/25 00:17	05/03/25 00:17	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501334	1	04/28/25 21:48	04/30/25 18:13	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505761	1	05/02/25 22:30	05/02/25 23:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505762	1	05/02/25 22:33	05/03/25 13:46	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505022	1	05/02/25 09:07	05/02/25 15:35	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501080	5	04/28/25 09:25	04/29/25 00:35	LD	Mt. Juliet, TN

BG04@5' L1851400-08 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 14:55 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504915	1	05/03/25 00:19	05/03/25 00:19	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501334	1	04/28/25 21:48	04/30/25 18:24	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505761	1	05/02/25 22:30	05/02/25 23:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505762	1	05/02/25 22:33	05/03/25 13:46	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505022	1	05/02/25 09:07	05/02/25 15:44	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501080	5	04/28/25 09:25	04/29/25 00:38	LD	Mt. Juliet, TN

BG05@3' L1851400-09 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 15:05 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504915	1	05/03/25 00:20	05/03/25 00:20	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501334	1	04/28/25 21:48	04/30/25 18:34	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505761	1	05/02/25 22:30	05/02/25 23:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505762	1	05/02/25 22:33	05/03/25 13:46	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505022	1	05/02/25 09:07	05/02/25 15:46	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501080	5	04/28/25 09:25	04/29/25 00:41	LD	Mt. Juliet, TN

BG05@5' L1851400-10 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 15:10 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504915	1	05/03/25 00:30	05/03/25 00:30	RLS	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501334	1	04/28/25 21:48	04/30/25 19:06	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505761	1	05/02/25 22:30	05/02/25 23:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505762	1	05/02/25 22:33	05/03/25 13:46	RJP	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505022	1	05/02/25 09:07	05/02/25 15:49	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501080	5	04/28/25 09:25	04/29/25 00:44	LD	Mt. Juliet, TN

FL01@5' L1851400-11 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 10:00 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504919	1	05/02/25 10:48	05/02/25 10:48	BAG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501334	1	04/28/25 21:48	04/30/25 19:16	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505157	1	05/02/25 07:49	05/02/25 08:40	RJP	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505166	1	05/02/25 07:50	05/02/25 10:18	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505018	1	05/02/25 00:39	05/02/25 11:49	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501080	5	04/28/25 09:25	04/29/25 00:47	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2501955	1	04/27/25 12:00	04/28/25 18:59	AEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2502848	1	04/27/25 12:00	04/29/25 19:57	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2502566	1	04/30/25 07:04	04/30/25 17:14	KDB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2502656	1	04/29/25 13:50	04/30/25 16:42	KB	Mt. Juliet, TN

FL02@5' L1851400-12 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 13:55 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504919	1	05/02/25 10:50	05/02/25 10:50	BAG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501334	1	04/28/25 21:48	04/30/25 19:27	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505157	1	05/02/25 07:49	05/02/25 08:40	RJP	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505166	1	05/02/25 07:50	05/02/25 10:18	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505018	1	05/02/25 00:39	05/02/25 11:52	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501082	5	04/29/25 11:55	05/01/25 13:47	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2501955	1	04/27/25 12:00	04/28/25 19:23	AEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2502848	1	04/27/25 12:00	04/29/25 20:17	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2502566	1	04/30/25 07:04	04/30/25 17:00	KDB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2502656	1	04/29/25 13:50	04/30/25 17:00	KB	Mt. Juliet, TN

WH-B@5' L1851400-13 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 13:30 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504919	1	05/02/25 10:51	05/02/25 10:51	BAG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501334	1	04/28/25 21:48	04/30/25 19:48	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505157	1	05/02/25 07:49	05/02/25 08:40	RJP	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505166	1	05/02/25 07:50	05/02/25 10:18	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505018	1	05/02/25 00:39	05/02/25 11:54	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501082	5	04/29/25 11:55	05/01/25 13:50	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2502105	25	04/27/25 12:00	04/29/25 04:33	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2503476	2	04/27/25 12:00	04/30/25 23:42	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2502566	5	04/30/25 07:04	04/30/25 15:32	KDB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2502656	1	04/29/25 13:50	04/30/25 17:17	MBE	Mt. Juliet, TN

WH-E@3' L1851400-14 Solid

Collected by: B. Collins | Collected date/time: 04/22/25 13:40 | Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2504919	1	05/02/25 10:53	05/02/25 10:53	BAG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2501334	1	04/28/25 21:48	04/30/25 19:58	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2505157	1	05/02/25 07:49	05/02/25 08:40	RJP	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2505166	1	05/02/25 07:50	05/02/25 10:18	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2505018	1	05/02/25 00:39	05/02/25 11:57	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2501082	5	04/29/25 11:55	05/01/25 13:54	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2501955	1	04/27/25 12:00	04/28/25 19:46	AEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2502848	1	04/27/25 12:00	04/29/25 20:38	JHH	Mt. Juliet, TN

WH-E@3' L1851400-14 Solid

Collected by: B. Collins
Collected date/time: 04/22/25 13:40
Received date/time: 04/24/25 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2502566	1	04/30/25 07:04	04/30/25 17:29	KDB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2502656	1	04/29/25 13:50	04/30/25 17:34	MBE	Mt. Juliet, TN

CASE NARRATIVE

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

Mandi Edwards
Project Manager

Project Narrative

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

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.643		1	05/03/2025 00:06	WG2504915

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	05/01/2025 17:19	WG2501326

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.19	T8	1	05/02/2025 23:10	WG2505761

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	283	umhos/cm		10.0	1	05/03/2025 13:46	WG2505762

Sample Narrative:

L1851400-01 WG2505762: 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	0.143	J	0.0167	0.200	1	05/02/2025 15:19	WG2505022

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.27		0.100	1.00	5	05/01/2025 13:27	WG2501082
Barium	82.3		0.152	2.50	5	05/01/2025 13:27	WG2501082
Cadmium	0.109	J	0.0855	1.00	5	05/01/2025 13:27	WG2501082
Copper	9.27		0.132	5.00	5	05/01/2025 13:27	WG2501082
Lead	8.26		0.0990	2.00	5	05/01/2025 13:27	WG2501082
Nickel	10.3		0.197	2.50	5	05/01/2025 13:27	WG2501082
Selenium	1.05	J	0.180	2.50	5	05/01/2025 13:27	WG2501082
Silver	ND		0.0865	0.500	5	05/01/2025 13:27	WG2501082
Zinc	36.1		0.740	25.0	5	05/01/2025 13:27	WG2501082

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.480		1	05/03/2025 00:08	WG2504915

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	05/01/2025 17:28	WG2501326

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.43	T8	1	05/02/2025 23:10	WG2505761

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	243	umhos/cm		10.0	1	05/03/2025 13:46	WG2505762

Sample Narrative:

L1851400-02 WG2505762: 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	0.154	J	0.0167	0.200	1	05/02/2025 15:21	WG2505022

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.76		0.100	1.00	5	05/01/2025 13:30	WG2501082
Barium	67.1		0.152	2.50	5	05/01/2025 13:30	WG2501082
Cadmium	0.116	J	0.0855	1.00	5	05/01/2025 13:30	WG2501082
Copper	8.13		0.132	5.00	5	05/01/2025 13:30	WG2501082
Lead	6.39		0.0990	2.00	5	05/01/2025 13:30	WG2501082
Nickel	8.13		0.197	2.50	5	05/01/2025 13:30	WG2501082
Selenium	0.736	J	0.180	2.50	5	05/01/2025 13:30	WG2501082
Silver	ND		0.0865	0.500	5	05/01/2025 13:30	WG2501082
Zinc	28.6		0.740	25.0	5	05/01/2025 13:30	WG2501082

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.625		1	05/03/2025 00:10	WG2504915

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	05/01/2025 17:38	WG2501326

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.28	T8	1	05/02/2025 23:10	WG2505761

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	273	umhos/cm		10.0	1	05/03/2025 13:46	WG2505762

Sample Narrative:

L1851400-03 WG2505762: 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	0.173	J	0.0167	0.200	1	05/02/2025 15:24	WG2505022

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.00		0.100	1.00	5	05/01/2025 13:34	WG2501082
Barium	70.8		0.152	2.50	5	05/01/2025 13:34	WG2501082
Cadmium	0.110	J	0.0855	1.00	5	05/01/2025 13:34	WG2501082
Copper	8.19		0.132	5.00	5	05/01/2025 13:34	WG2501082
Lead	7.45		0.0990	2.00	5	05/01/2025 13:34	WG2501082
Nickel	9.44		0.197	2.50	5	05/01/2025 13:34	WG2501082
Selenium	0.821	J	0.180	2.50	5	05/01/2025 13:34	WG2501082
Silver	ND		0.0865	0.500	5	05/01/2025 13:34	WG2501082
Zinc	33.5		0.740	25.0	5	05/01/2025 13:34	WG2501082

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.442		1	05/03/2025 00:11	WG2504915

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	05/02/2025 00:01	WG2504528

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.48	T8	1	05/02/2025 23:10	WG2505761

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	221	umhos/cm		10.0	1	05/03/2025 13:46	WG2505762

Sample Narrative:

L1851400-04 WG2505762: 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	0.150	J	0.0167	0.200	1	05/02/2025 15:27	WG2505022

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.17		0.100	1.00	5	05/01/2025 13:37	WG2501082
Barium	76.7		0.152	2.50	5	05/01/2025 13:37	WG2501082
Cadmium	0.128	J	0.0855	1.00	5	05/01/2025 13:37	WG2501082
Copper	9.61		0.132	5.00	5	05/01/2025 13:37	WG2501082
Lead	7.41		0.0990	2.00	5	05/01/2025 13:37	WG2501082
Nickel	9.77		0.197	2.50	5	05/01/2025 13:37	WG2501082
Selenium	0.671	J	0.180	2.50	5	05/01/2025 13:37	WG2501082
Silver	ND		0.0865	0.500	5	05/01/2025 13:37	WG2501082
Zinc	32.5		0.740	25.0	5	05/01/2025 13:37	WG2501082

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.671		1	05/03/2025 00:13	WG2504915

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	05/02/2025 00:12	WG2504528

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.43	T8	1	05/02/2025 23:10	WG2505761

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	257	umhos/cm		10.0	1	05/03/2025 13:46	WG2505762

Sample Narrative:

L1851400-05 WG2505762: 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	0.155	J	0.0167	0.200	1	05/02/2025 15:30	WG2505022

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.82		0.100	1.00	5	05/01/2025 13:40	WG2501082
Barium	61.6		0.152	2.50	5	05/01/2025 13:40	WG2501082
Cadmium	0.0951	J	0.0855	1.00	5	05/01/2025 13:40	WG2501082
Copper	7.88		0.132	5.00	5	05/01/2025 13:40	WG2501082
Lead	6.81		0.0990	2.00	5	05/01/2025 13:40	WG2501082
Nickel	8.77		0.197	2.50	5	05/01/2025 13:40	WG2501082
Selenium	0.819	J	0.180	2.50	5	05/01/2025 13:40	WG2501082
Silver	ND		0.0865	0.500	5	05/01/2025 13:40	WG2501082
Zinc	30.4		0.740	25.0	5	05/01/2025 13:40	WG2501082

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.513		1	05/03/2025 00:15	WG2504915

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	04/30/2025 18:03	WG2501334

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.32	T8	1	05/02/2025 23:10	WG2505761

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	251	umhos/cm		10.0	1	05/03/2025 13:46	WG2505762

Sample Narrative:

L1851400-06 WG2505762: 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	0.146	J	0.0167	0.200	1	05/02/2025 15:33	WG2505022

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	05/01/2025 13:44	WG2501082
Barium	69.5		0.152	2.50	5	05/01/2025 13:44	WG2501082
Cadmium	0.148	J	0.0855	1.00	5	05/01/2025 13:44	WG2501082
Copper	8.21		0.132	5.00	5	05/01/2025 13:44	WG2501082
Lead	7.46		0.0990	2.00	5	05/01/2025 13:44	WG2501082
Nickel	8.46		0.197	2.50	5	05/01/2025 13:44	WG2501082
Selenium	0.634	J	0.180	2.50	5	05/01/2025 13:44	WG2501082
Silver	ND		0.0865	0.500	5	05/01/2025 13:44	WG2501082
Zinc	31.4		0.740	25.0	5	05/01/2025 13:44	WG2501082

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.63		1	05/03/2025 00:17	WG2504915

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	04/30/2025 18:13	WG2501334

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.50	T8	1	05/02/2025 23:10	WG2505761

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	286	umhos/cm		10.0	1	05/03/2025 13:46	WG2505762

Sample Narrative:

L1851400-07 WG2505762: 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	0.132	J	0.0167	0.200	1	05/02/2025 15:35	WG2505022

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.67		0.100	1.00	5	04/29/2025 00:35	WG2501080
Barium	73.5		0.152	2.50	5	04/29/2025 00:35	WG2501080
Cadmium	0.106	J	0.0855	1.00	5	04/29/2025 00:35	WG2501080
Copper	8.74		0.132	5.00	5	04/29/2025 00:35	WG2501080
Lead	7.12		0.0990	2.00	5	04/29/2025 00:35	WG2501080
Nickel	9.36		0.197	2.50	5	04/29/2025 00:35	WG2501080
Selenium	0.341	J	0.180	2.50	5	04/29/2025 00:35	WG2501080
Silver	ND		0.0865	0.500	5	04/29/2025 00:35	WG2501080
Zinc	30.8		0.740	25.0	5	04/29/2025 00:35	WG2501080

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.06		1	05/03/2025 00:19	WG2504915

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	04/30/2025 18:24	WG2501334

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.51	T8	1	05/02/2025 23:10	WG2505761

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	249	umhos/cm		10.0	1	05/03/2025 13:46	WG2505762

Sample Narrative:

L1851400-08 WG2505762: 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	0.154	J	0.0167	0.200	1	05/02/2025 15:44	WG2505022

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.54		0.100	1.00	5	04/29/2025 00:38	WG2501080
Barium	64.7		0.152	2.50	5	04/29/2025 00:38	WG2501080
Cadmium	ND		0.0855	1.00	5	04/29/2025 00:38	WG2501080
Copper	8.13		0.132	5.00	5	04/29/2025 00:38	WG2501080
Lead	5.68		0.0990	2.00	5	04/29/2025 00:38	WG2501080
Nickel	8.24		0.197	2.50	5	04/29/2025 00:38	WG2501080
Selenium	0.291	J	0.180	2.50	5	04/29/2025 00:38	WG2501080
Silver	ND		0.0865	0.500	5	04/29/2025 00:38	WG2501080
Zinc	28.1		0.740	25.0	5	04/29/2025 00:38	WG2501080

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.60		1	05/03/2025 00:20	WG2504915

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	04/30/2025 18:34	WG2501334

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.35	T8	1	05/02/2025 23:10	WG2505761

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	370	umhos/cm		10.0	1	05/03/2025 13:46	WG2505762

Sample Narrative:

L1851400-09 WG2505762: 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	0.143	J	0.0167	0.200	1	05/02/2025 15:46	WG2505022

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.00		0.100	1.00	5	04/29/2025 00:41	WG2501080
Barium	67.2		0.152	2.50	5	04/29/2025 00:41	WG2501080
Cadmium	0.102	J	0.0855	1.00	5	04/29/2025 00:41	WG2501080
Copper	9.17		0.132	5.00	5	04/29/2025 00:41	WG2501080
Lead	7.47		0.0990	2.00	5	04/29/2025 00:41	WG2501080
Nickel	9.79		0.197	2.50	5	04/29/2025 00:41	WG2501080
Selenium	0.501	J	0.180	2.50	5	04/29/2025 00:41	WG2501080
Silver	ND		0.0865	0.500	5	04/29/2025 00:41	WG2501080
Zinc	31.9		0.740	25.0	5	04/29/2025 00:41	WG2501080

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.10		1	05/03/2025 00:30	WG2504915

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.383	J	0.379	1.00	1	04/30/2025 19:06	WG2501334

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.55	T8	1	05/02/2025 23:10	WG2505761

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	296	umhos/cm		10.0	1	05/03/2025 13:46	WG2505762

Sample Narrative:

L1851400-10 WG2505762: 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	0.148	J	0.0167	0.200	1	05/02/2025 15:49	WG2505022

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.75		0.100	1.00	5	04/29/2025 00:44	WG2501080
Barium	100		0.152	2.50	5	04/29/2025 00:44	WG2501080
Cadmium	0.111	J	0.0855	1.00	5	04/29/2025 00:44	WG2501080
Copper	10.7		0.132	5.00	5	04/29/2025 00:44	WG2501080
Lead	7.78		0.0990	2.00	5	04/29/2025 00:44	WG2501080
Nickel	10.9		0.197	2.50	5	04/29/2025 00:44	WG2501080
Selenium	0.387	J	0.180	2.50	5	04/29/2025 00:44	WG2501080
Silver	ND		0.0865	0.500	5	04/29/2025 00:44	WG2501080
Zinc	40.5		0.740	25.0	5	04/29/2025 00:44	WG2501080

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.628		1	05/02/2025 10:48	WG2504919

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	04/30/2025 19:16	WG2501334

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.59	T8	1	05/02/2025 08:40	WG2505157

Sample Narrative:
L1851400-11 WG2505157: 0

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	185	umhos/cm		10.0	1	05/02/2025 10:18	WG2505166

Sample Narrative:
L1851400-11 WG2505166: 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	0.111	J	0.0167	0.200	1	05/02/2025 11:49	WG2505018

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.76		0.100	1.00	5	04/29/2025 00:47	WG2501080
Barium	56.3		0.152	2.50	5	04/29/2025 00:47	WG2501080
Cadmium	ND		0.0855	1.00	5	04/29/2025 00:47	WG2501080
Copper	7.52		0.132	5.00	5	04/29/2025 00:47	WG2501080
Lead	6.11		0.0990	2.00	5	04/29/2025 00:47	WG2501080
Nickel	8.08		0.197	2.50	5	04/29/2025 00:47	WG2501080
Selenium	0.381	J	0.180	2.50	5	04/29/2025 00:47	WG2501080
Silver	ND		0.0865	0.500	5	04/29/2025 00:47	WG2501080
Zinc	29.9		0.740	25.0	5	04/29/2025 00:47	WG2501080

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	0.0392	B J	0.0217	0.100	1	04/28/2025 18:59	WG2501955
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*77.0-120*		*04/28/2025 18:59*	WG2501955

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	ND		0.000467	0.00100	1	04/29/2025 19:57	WG2502848
Toluene	ND		0.00130	0.00500	1	04/29/2025 19:57	WG2502848
Ethylbenzene	ND		0.000737	0.00250	1	04/29/2025 19:57	WG2502848
Xylenes, Total	ND		0.000880	0.00650	1	04/29/2025 19:57	WG2502848
1,2,4-Trimethylbenzene	ND		0.00158	0.00500	1	04/29/2025 19:57	WG2502848
1,3,5-Trimethylbenzene	ND		0.00200	0.00500	1	04/29/2025 19:57	WG2502848
(S) Toluene-d8	*96.4*			*75.0-131*		*04/29/2025 19:57*	WG2502848
(S) 4-Bromofluorobenzene	*96.0*			*67.0-138*		*04/29/2025 19:57*	WG2502848
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*04/29/2025 19:57*	WG2502848

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	ND		1.61	4.00	1	04/30/2025 17:14	WG2502566
C28-C36 Motor Oil Range	2.66	B J	0.274	4.00	1	04/30/2025 17:14	WG2502566
(S) o-Terphenyl	*74.8*			*18.0-148*		*04/30/2025 17:14*	WG2502566

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	ND		0.00162	0.00600	1	04/30/2025 16:42	WG2502656
Anthracene	ND		0.00163	0.00600	1	04/30/2025 16:42	WG2502656
Benzo(a)anthracene	ND		0.00200	0.00600	1	04/30/2025 16:42	WG2502656
Benzo(b)fluoranthene	ND		0.00275	0.00600	1	04/30/2025 16:42	WG2502656
Benzo(k)fluoranthene	ND		0.00213	0.00600	1	04/30/2025 16:42	WG2502656
Benzo(a)pyrene	ND		0.00163	0.00600	1	04/30/2025 16:42	WG2502656
Chrysene	ND		0.00206	0.00600	1	04/30/2025 16:42	WG2502656
Dibenz(a,h)anthracene	ND		0.00201	0.00600	1	04/30/2025 16:42	WG2502656
Fluoranthene	ND		0.00239	0.00600	1	04/30/2025 16:42	WG2502656
Fluorene	ND		0.00180	0.00600	1	04/30/2025 16:42	WG2502656
Indeno(1,2,3-cd)pyrene	ND		0.00234	0.00600	1	04/30/2025 16:42	WG2502656
1-Methylnaphthalene	ND		0.00219	0.0200	1	04/30/2025 16:42	WG2502656
2-Methylnaphthalene	ND		0.00571	0.0200	1	04/30/2025 16:42	WG2502656
Naphthalene	ND		0.00579	0.0200	1	04/30/2025 16:42	WG2502656
Pyrene	ND		0.00205	0.00600	1	04/30/2025 16:42	WG2502656
(S) p-Terphenyl-d14	*78.0*			*23.0-120*		*04/30/2025 16:42*	WG2502656
(S) Nitrobenzene-d5	*72.8*			*14.0-149*		*04/30/2025 16:42*	WG2502656
(S) 2-Fluorobiphenyl	*81.1*			*34.0-125*		*04/30/2025 16:42*	WG2502656

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	2.48		1	05/02/2025 10:50	WG2504919

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.506	J P1	0.379	1.00	1	04/30/2025 19:27	WG2501334

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.11	T8	1	05/02/2025 08:40	WG2505157

Sample Narrative:
L1851400-12 WG2505157: 0

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	649	umhos/cm		10.0	1	05/02/2025 10:18	WG2505166

Sample Narrative:
L1851400-12 WG2505166: 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	0.570		0.0167	0.200	1	05/02/2025 11:52	WG2505018

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.11		0.100	1.00	5	05/01/2025 13:47	WG2501082
Barium	80.3		0.152	2.50	5	05/01/2025 13:47	WG2501082
Cadmium	0.146	J	0.0855	1.00	5	05/01/2025 13:47	WG2501082
Copper	9.13		0.132	5.00	5	05/01/2025 13:47	WG2501082
Lead	7.66		0.0990	2.00	5	05/01/2025 13:47	WG2501082
Nickel	9.74		0.197	2.50	5	05/01/2025 13:47	WG2501082
Selenium	0.586	J	0.180	2.50	5	05/01/2025 13:47	WG2501082
Silver	ND		0.0865	0.500	5	05/01/2025 13:47	WG2501082
Zinc	37.3		0.740	25.0	5	05/01/2025 13:47	WG2501082

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	0.0424	B J	0.0217	0.100	1	04/28/2025 19:23	WG2501955
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*77.0-120*		*04/28/2025 19:23*	WG2501955

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	ND		0.000467	0.00100	1	04/29/2025 20:17	WG2502848
Toluene	ND		0.00130	0.00500	1	04/29/2025 20:17	WG2502848
Ethylbenzene	ND		0.000737	0.00250	1	04/29/2025 20:17	WG2502848
Xylenes, Total	ND		0.000880	0.00650	1	04/29/2025 20:17	WG2502848
1,2,4-Trimethylbenzene	ND		0.00158	0.00500	1	04/29/2025 20:17	WG2502848
1,3,5-Trimethylbenzene	ND		0.00200	0.00500	1	04/29/2025 20:17	WG2502848
(S) Toluene-d8	*97.2*			*75.0-131*		*04/29/2025 20:17*	WG2502848
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*04/29/2025 20:17*	WG2502848
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*04/29/2025 20:17*	WG2502848

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	2.03	J	1.61	4.00	1	04/30/2025 17:00	WG2502566
C28-C36 Motor Oil Range	2.61	B J	0.274	4.00	1	04/30/2025 17:00	WG2502566
(S) o-Terphenyl	*45.6*			*18.0-148*		*04/30/2025 17:00*	WG2502566

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	ND		0.00162	0.00600	1	04/30/2025 17:00	WG2502656
Anthracene	ND		0.00163	0.00600	1	04/30/2025 17:00	WG2502656
Benzo(a)anthracene	ND		0.00200	0.00600	1	04/30/2025 17:00	WG2502656
Benzo(b)fluoranthene	ND		0.00275	0.00600	1	04/30/2025 17:00	WG2502656
Benzo(k)fluoranthene	ND		0.00213	0.00600	1	04/30/2025 17:00	WG2502656
Benzo(a)pyrene	ND		0.00163	0.00600	1	04/30/2025 17:00	WG2502656
Chrysene	ND		0.00206	0.00600	1	04/30/2025 17:00	WG2502656
Dibenz(a,h)anthracene	ND		0.00201	0.00600	1	04/30/2025 17:00	WG2502656
Fluoranthene	ND		0.00239	0.00600	1	04/30/2025 17:00	WG2502656
Fluorene	ND		0.00180	0.00600	1	04/30/2025 17:00	WG2502656
Indeno(1,2,3-cd)pyrene	ND		0.00234	0.00600	1	04/30/2025 17:00	WG2502656
1-Methylnaphthalene	ND		0.00219	0.0200	1	04/30/2025 17:00	WG2502656
2-Methylnaphthalene	ND		0.00571	0.0200	1	04/30/2025 17:00	WG2502656
Naphthalene	ND		0.00579	0.0200	1	04/30/2025 17:00	WG2502656
Pyrene	ND		0.00205	0.00600	1	04/30/2025 17:00	WG2502656
(S) p-Terphenyl-d14	*70.1*			*23.0-120*		*04/30/2025 17:00*	WG2502656
(S) Nitrobenzene-d5	*71.7*			*14.0-149*		*04/30/2025 17:00*	WG2502656
(S) 2-Fluorobiphenyl	*76.6*			*34.0-125*		*04/30/2025 17:00*	WG2502656

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	7.27		1	05/02/2025 10:51	WG2504919

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	04/30/2025 19:48	WG2501334

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.65	T8	1	05/02/2025 08:40	WG2505157

Sample Narrative:
L1851400-13 WG2505157: 0

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	1110	umhos/cm		10.0	1	05/02/2025 10:18	WG2505166

Sample Narrative:
L1851400-13 WG2505166: 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	0.0942	J	0.0167	0.200	1	05/02/2025 11:54	WG2505018

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.02		0.100	1.00	5	05/01/2025 13:50	WG2501082
Barium	158		0.152	2.50	5	05/01/2025 13:50	WG2501082
Cadmium	0.0997	J	0.0855	1.00	5	05/01/2025 13:50	WG2501082
Copper	8.93		0.132	5.00	5	05/01/2025 13:50	WG2501082
Lead	6.61		0.0990	2.00	5	05/01/2025 13:50	WG2501082
Nickel	9.01		0.197	2.50	5	05/01/2025 13:50	WG2501082
Selenium	0.857	J	0.180	2.50	5	05/01/2025 13:50	WG2501082
Silver	ND		0.0865	0.500	5	05/01/2025 13:50	WG2501082
Zinc	30.6		0.740	25.0	5	05/01/2025 13:50	WG2501082

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	25.4		0.543	2.50	25	04/29/2025 04:33	WG2502105
(S) a,a,a-Trifluorotoluene(FID)	*93.4*			*77.0-120*		*04/29/2025 04:33*	WG2502105

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	0.00145	J	0.000934	0.00200	2	04/30/2025 23:42	WG2503476
Toluene	0.00875	J	0.00260	0.0100	2	04/30/2025 23:42	WG2503476
Ethylbenzene	0.0374		0.00147	0.00500	2	04/30/2025 23:42	WG2503476
Xylenes, Total	0.245		0.00176	0.0130	2	04/30/2025 23:42	WG2503476
1,2,4-Trimethylbenzene	0.791		0.00316	0.0100	2	04/30/2025 23:42	WG2503476
1,3,5-Trimethylbenzene	0.291		0.00400	0.0100	2	04/30/2025 23:42	WG2503476
(S) Toluene-d8	*96.8*			*75.0-131*		*04/30/2025 23:42*	WG2503476
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*04/30/2025 23:42*	WG2503476
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/30/2025 23:42*	WG2503476

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	1360		8.05	20.0	5	04/30/2025 15:32	WG2502566
C28-C36 Motor Oil Range	622		1.37	20.0	5	04/30/2025 15:32	WG2502566
(S) o-Terphenyl	*92.6*			*18.0-148*		*04/30/2025 15:32*	WG2502566

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	0.102		0.00162	0.00600	1	04/30/2025 17:17	WG2502656
Anthracene	ND		0.00163	0.00600	1	04/30/2025 17:17	WG2502656
Benzo(a)anthracene	0.00858		0.00200	0.00600	1	04/30/2025 17:17	WG2502656
Benzo(b)fluoranthene	0.00702		0.00275	0.00600	1	04/30/2025 17:17	WG2502656
Benzo(k)fluoranthene	ND		0.00213	0.00600	1	04/30/2025 17:17	WG2502656
Benzo(a)pyrene	0.00650		0.00163	0.00600	1	04/30/2025 17:17	WG2502656
Chrysene	0.0163		0.00206	0.00600	1	04/30/2025 17:17	WG2502656
Dibenz(a,h)anthracene	ND		0.00201	0.00600	1	04/30/2025 17:17	WG2502656
Fluoranthene	0.0281		0.00239	0.00600	1	04/30/2025 17:17	WG2502656
Fluorene	0.177		0.00180	0.00600	1	04/30/2025 17:17	WG2502656
Indeno(1,2,3-cd)pyrene	ND		0.00234	0.00600	1	04/30/2025 17:17	WG2502656
1-Methylnaphthalene	1.57		0.00219	0.0200	1	04/30/2025 17:17	WG2502656
2-Methylnaphthalene	1.54		0.00571	0.0200	1	04/30/2025 17:17	WG2502656
Naphthalene	0.358		0.00579	0.0200	1	04/30/2025 17:17	WG2502656
Pyrene	0.222		0.00205	0.00600	1	04/30/2025 17:17	WG2502656
(S) p-Terphenyl-d14	*76.3*			*23.0-120*		*04/30/2025 17:17*	WG2502656
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*04/30/2025 17:17*	WG2502656
(S) 2-Fluorobiphenyl	*56.8*			*34.0-125*		*04/30/2025 17:17*	WG2502656

Sample Narrative:

L1851400-13 WG2502656: Surrogate failure due to matrix interference.

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.30		1	05/02/2025 10:53	WG2504919

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.379	1.00	1	04/30/2025 19:58	WG2501334

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	9.12	T8	1	05/02/2025 08:40	WG2505157

Sample Narrative:
L1851400-14 WG2505157: 0

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	568	umhos/cm		10.0	1	05/02/2025 10:18	WG2505166

Sample Narrative:
L1851400-14 WG2505166: 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	0.260		0.0167	0.200	1	05/02/2025 11:57	WG2505018

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.04		0.100	1.00	5	05/01/2025 13:54	WG2501082
Barium	82.6		0.152	2.50	5	05/01/2025 13:54	WG2501082
Cadmium	0.149	J	0.0855	1.00	5	05/01/2025 13:54	WG2501082
Copper	8.85		0.132	5.00	5	05/01/2025 13:54	WG2501082
Lead	7.79		0.0990	2.00	5	05/01/2025 13:54	WG2501082
Nickel	9.52		0.197	2.50	5	05/01/2025 13:54	WG2501082
Selenium	0.820	J	0.180	2.50	5	05/01/2025 13:54	WG2501082
Silver	ND		0.0865	0.500	5	05/01/2025 13:54	WG2501082
Zinc	36.2		0.740	25.0	5	05/01/2025 13:54	WG2501082

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	0.185	B	0.0217	0.100	1	04/28/2025 19:46	WG2501955
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*77.0-120*		*04/28/2025 19:46*	WG2501955

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	ND		0.000467	0.00100	1	04/29/2025 20:38	WG2502848
Toluene	ND		0.00130	0.00500	1	04/29/2025 20:38	WG2502848
Ethylbenzene	ND		0.000737	0.00250	1	04/29/2025 20:38	WG2502848
Xylenes, Total	ND		0.000880	0.00650	1	04/29/2025 20:38	WG2502848
1,2,4-Trimethylbenzene	0.00205	J	0.00158	0.00500	1	04/29/2025 20:38	WG2502848
1,3,5-Trimethylbenzene	0.00403	J	0.00200	0.00500	1	04/29/2025 20:38	WG2502848
(S) Toluene-d8	*98.4*			*75.0-131*		*04/29/2025 20:38*	WG2502848
(S) 4-Bromofluorobenzene	*97.9*			*67.0-138*		*04/29/2025 20:38*	WG2502848
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*04/29/2025 20:38*	WG2502848

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	13.5		1.61	4.00	1	04/30/2025 17:29	WG2502566
C28-C36 Motor Oil Range	15.8		0.274	4.00	1	04/30/2025 17:29	WG2502566
(S) o-Terphenyl	*63.2*			*18.0-148*		*04/30/2025 17:29*	WG2502566

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	ND		0.00162	0.00600	1	04/30/2025 17:34	WG2502656
Anthracene	ND		0.00163	0.00600	1	04/30/2025 17:34	WG2502656
Benzo(a)anthracene	ND		0.00200	0.00600	1	04/30/2025 17:34	WG2502656
Benzo(b)fluoranthene	ND		0.00275	0.00600	1	04/30/2025 17:34	WG2502656
Benzo(k)fluoranthene	ND		0.00213	0.00600	1	04/30/2025 17:34	WG2502656
Benzo(a)pyrene	ND		0.00163	0.00600	1	04/30/2025 17:34	WG2502656
Chrysene	ND		0.00206	0.00600	1	04/30/2025 17:34	WG2502656
Dibenz(a,h)anthracene	ND		0.00201	0.00600	1	04/30/2025 17:34	WG2502656
Fluoranthene	ND		0.00239	0.00600	1	04/30/2025 17:34	WG2502656
Fluorene	ND		0.00180	0.00600	1	04/30/2025 17:34	WG2502656
Indeno(1,2,3-cd)pyrene	ND		0.00234	0.00600	1	04/30/2025 17:34	WG2502656
1-Methylnaphthalene	ND		0.00219	0.0200	1	04/30/2025 17:34	WG2502656
2-Methylnaphthalene	ND		0.00571	0.0200	1	04/30/2025 17:34	WG2502656
Naphthalene	ND		0.00579	0.0200	1	04/30/2025 17:34	WG2502656
Pyrene	0.00213	J	0.00205	0.00600	1	04/30/2025 17:34	WG2502656
(S) p-Terphenyl-d14	*66.6*			*23.0-120*		*04/30/2025 17:34*	WG2502656
(S) Nitrobenzene-d5	*64.7*			*14.0-149*		*04/30/2025 17:34*	WG2502656
(S) 2-Fluorobiphenyl	*68.8*			*34.0-125*		*04/30/2025 17:34*	WG2502656

Method Blank (MB)

(MB) R4208759-1 05/01/25 15:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	ND		0.379	1.00

L1851354-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1851354-02 05/01/25 15:52 • (DUP) R4208759-3 05/01/25 16:01

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	0.000		20

L1851359-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1851359-02 05/01/25 16:21 • (DUP) R4208759-4 05/01/25 16:30

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4208759-2 05/01/25 15:23

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

L1851645-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1851645-04 05/01/25 19:14 • (MS) R4208759-5 05/01/25 19:24 • (MSD) R4208759-6 05/01/25 19:34

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 %
Hexavalent Chromium	20.0	ND	14.1	18.2	70.3	91.0	1	75.0-125	J6	J3	25.7	20

L1851645-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1851645-04 05/01/25 19:14 • (MS) R4208759-7 05/01/25 19:43

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	654	ND	682	104	50	75.0-125	

QUALITY CONTROL SUMMARY

L1851400-06,07,08,09,10,11,12,13,14

Method Blank (MB)

(MB) R4207935-1 04/30/25 17:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	ND		0.379	1.00

L1851133-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1851133-04 04/30/25 17:31 • (DUP) R4207935-3 04/30/25 17:42

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	0.000		20

L1851400-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1851400-12 04/30/25 19:27 • (DUP) R4207935-4 04/30/25 19:37

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.506	0.409	1	21.2	J P1	20

Laboratory Control Sample (LCS)

(LCS) R4207935-2 04/30/25 17:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	8.87	88.7	80.0-120	

L1851417-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1851417-05 04/30/25 21:11 • (MS) R4207935-5 04/30/25 21:22 • (MSD) R4207935-6 04/30/25 21:32

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 %
Hexavalent Chromium	20.0	ND	19.1	16.6	95.3	83.1	1	75.0-125			13.7	20

L1851417-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1851417-05 04/30/25 21:11 • (MS) R4207935-7 04/30/25 21:43

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	643	ND	568	88.3	50	75.0-125	

Method Blank (MB)

(MB) R4208757-1 05/01/25 19:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	ND		0.379	1.00

L1850886-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1850886-06 05/01/25 20:32 • (DUP) R4208757-3 05/01/25 20:42

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	0.000		20

L1851351-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1851351-01 05/01/25 22:37 • (DUP) R4208757-8 05/01/25 22:48

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4208757-2 05/01/25 19:39

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

L1851268-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1851268-01 05/01/25 21:03 • (MS) R4208757-9 05/01/25 21:55

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	651	ND	467	71.8	50	75.0-125	J6

L1851400-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1851400-11 05/02/25 08:40 • (DUP) R4208691-2 05/02/25 08:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.59	8.57	1	0.233		1

Sample Narrative:

OS: 0

DUP: 0

L1851449-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1851449-04 05/02/25 08:40 • (DUP) R4208691-3 05/02/25 08:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	pH	su		%		%
pH	8.38	8.42	1	0.476		1

Sample Narrative:

OS: 0

DUP: 0

Laboratory Control Sample (LCS)

(LCS) R4208691-1 05/02/25 08:40

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

L1851343-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1851343-01 05/02/25 23:10 • (DUP) R4209223-2 05/02/25 23:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	9.84	9.80	1	0.407		1

L1851400-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1851400-10 05/02/25 23:10 • (DUP) R4209223-3 05/02/25 23:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.55	8.52	1	0.351		1

Laboratory Control Sample (LCS)

(LCS) R4209223-1 05/02/25 23:10

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

Method Blank (MB)

(MB) R4208760-1 05/02/25 10:18

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

Sample Narrative:
BLANK: at 25C

L1851400-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1851400-12 05/02/25 10:18 • (DUP) R4208760-3 05/02/25 10:18

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	649	651	1	0.308		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1851449-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1851449-03 05/02/25 10:18 • (DUP) R4208760-4 05/02/25 10:18

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	216	216	1	0.0463		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4208760-2 05/02/25 10:18

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	1130	1170	104	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R4209348-1 05/03/25 13:46

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

Sample Narrative:
BLANK: at 25C

L1851343-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1851343-01 05/03/25 13:46 • (DUP) R4209348-3 05/03/25 13:46

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	333	333	1	0.000		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1851400-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1851400-10 05/03/25 13:46 • (DUP) R4209348-4 05/03/25 13:46

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	296	298	1	0.673		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4209348-2 05/03/25 13:46

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	1130	1100	97.1	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R4208911-4 05/02/25 11:41

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

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

(LCS) R4208911-5 05/02/25 11:44 • (LCSD) R4208911-6 05/02/25 11:46

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	1.05	104	105	80.0-120			0.925	20

Method Blank (MB)

(MB) R4209168-1 05/02/25 14:38

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

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

(LCS) R4209168-2 05/02/25 14:40 • (LCSD) R4209168-3 05/02/25 14:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.02	1.03	102	103	80.0-120			1.23	20

Method Blank (MB)

(MB) R4206628-1 04/28/25 23:14

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

Laboratory Control Sample (LCS)

(LCS) R4206628-2 04/28/25 23:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	103	103	80.0-120	
Barium	100	101	101	80.0-120	
Cadmium	100	105	105	80.0-120	
Copper	100	102	102	80.0-120	
Lead	100	99.9	99.9	80.0-120	
Nickel	100	106	106	80.0-120	
Selenium	100	102	102	80.0-120	
Silver	20.0	21.5	107	80.0-120	
Zinc	100	101	101	80.0-120	

L1850056-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1850056-01 04/28/25 23:20 • (MS) R4206628-5 04/28/25 23:30 • (MSD) R4206628-6 04/28/25 23:33

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	99.9	3.41	93.8	97.3	90.4	93.9	5	75.0-125			3.66	20
Barium	99.9	163	274	368	112	205	5	75.0-125		J3 J5	29.1	20
Cadmium	99.9	0.166	92.4	96.1	92.2	96.0	5	75.0-125			3.98	20
Copper	99.9	13.2	105	111	92.3	98.3	5	75.0-125			5.54	20
Lead	99.9	8.17	94.7	100	86.6	92.0	5	75.0-125			5.62	20
Nickel	99.9	13.1	107	111	93.8	98.0	5	75.0-125			3.78	20
Selenium	99.9	0.297	90.2	92.2	89.9	91.9	5	75.0-125			2.18	20
Silver	20.0	ND	19.0	19.7	94.8	98.5	5	75.0-125			3.77	20
Zinc	99.9	65.4	153	170	87.5	105	5	75.0-125			10.7	20

Method Blank (MB)

(MB) R4208298-1 05/01/25 12:38

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

Laboratory Control Sample (LCS)

(LCS) R4208298-2 05/01/25 12:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	96.0	96.0	80.0-120	
Barium	100	94.4	94.4	80.0-120	
Cadmium	100	97.9	97.9	80.0-120	
Copper	100	95.9	95.9	80.0-120	
Lead	100	93.4	93.4	80.0-120	
Nickel	100	98.7	98.7	80.0-120	
Selenium	100	96.3	96.3	80.0-120	
Silver	20.0	19.6	97.9	80.0-120	
Zinc	100	93.4	93.4	80.0-120	

L1851417-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1851417-01 05/01/25 12:45 • (MS) R4208298-5 05/01/25 12:55 • (MSD) R4208298-6 05/01/25 12:58

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	2.54	96.1	96.1	93.6	93.6	5	75.0-125			0.00231	20
Barium	100	56.9	151	178	94.2	121	5	75.0-125			16.5	20
Cadmium	100	ND	95.0	94.3	95.0	94.3	5	75.0-125			0.639	20
Copper	100	6.58	99.1	99.1	92.6	92.5	5	75.0-125			0.0651	20
Lead	100	5.74	95.0	98.4	89.3	92.7	5	75.0-125			3.51	20
Nickel	100	7.66	102	103	94.0	95.0	5	75.0-125			0.974	20
Selenium	100	0.511	90.5	93.3	90.0	92.8	5	75.0-125			3.00	20
Silver	20.0	ND	18.5	18.7	92.4	93.4	5	75.0-125			0.978	20
Zinc	100	27.2	119	120	91.6	92.8	5	75.0-125			1.03	20

Method Blank (MB)

(MB) R4207283-2 04/28/25 15:52

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0266	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*97.9*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R4207283-1 04/28/25 15:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.00	4.64	92.8	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*101*	*77.0-120*	

Method Blank (MB)

(MB) R4207167-2 04/29/25 01:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.793	J	0.543	2.50
(S) a,a,a-Trifluorotoluene(FID)	*97.9*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R4207167-1 04/29/25 00:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.00	4.99	99.8	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*100*	*77.0-120*	

Method Blank (MB)

(MB) R4207518-3 04/29/25 11:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	ND		0.000467	0.00100
Toluene	ND		0.00130	0.00500
Ethylbenzene	ND		0.000737	0.00250
Xylenes, Total	ND		0.000880	0.00650
1,2,4-Trimethylbenzene	ND		0.00158	0.00500
1,3,5-Trimethylbenzene	ND		0.00200	0.00500
(S) Toluene-d8	*95.8*			*75.0-131*
(S) 4-Bromofluorobenzene	*95.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*

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

(LCS) R4207518-1 04/29/25 09:23 • (LCSD) R4207518-2 04/29/25 09:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.110	0.113	88.0	90.4	70.0-123			2.69	20
Toluene	0.125	0.109	0.109	87.2	87.2	75.0-121			0.000	20
Ethylbenzene	0.125	0.100	0.102	80.0	81.6	74.0-126			1.98	20
Xylenes, Total	0.375	0.309	0.308	82.4	82.1	72.0-127			0.324	20
1,2,4-Trimethylbenzene	0.125	0.124	0.119	99.2	95.2	70.0-126			4.12	20
1,3,5-Trimethylbenzene	0.125	0.124	0.123	99.2	98.4	73.0-127			0.810	20
(S) Toluene-d8				*94.3*	*94.8*	*75.0-131*				
(S) 4-Bromofluorobenzene				*95.6*	*95.8*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*120*	*120*	*70.0-130*				

Method Blank (MB)

(MB) R4208156-3 04/30/25 21:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	ND		0.000467	0.00100
Toluene	ND		0.00130	0.00500
Ethylbenzene	ND		0.000737	0.00250
Xylenes, Total	ND		0.000880	0.00650
1,2,4-Trimethylbenzene	ND		0.00158	0.00500
1,3,5-Trimethylbenzene	ND		0.00200	0.00500
(S) Toluene-d8	*99.2*			*75.0-131*
(S) 4-Bromofluorobenzene	*94.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

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

(LCS) R4208156-1 04/30/25 19:52 • (LCSD) R4208156-2 04/30/25 20:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.122	0.119	97.6	95.2	70.0-123			2.49	20
Toluene	0.125	0.122	0.117	97.6	93.6	75.0-121			4.18	20
Ethylbenzene	0.125	0.116	0.112	92.8	89.6	74.0-126			3.51	20
Xylenes, Total	0.375	0.350	0.335	93.3	89.3	72.0-127			4.38	20
1,2,4-Trimethylbenzene	0.125	0.127	0.125	102	100	70.0-126			1.59	20
1,3,5-Trimethylbenzene	0.125	0.129	0.131	103	105	73.0-127			1.54	20
(S) Toluene-d8				*97.2*	*96.0*	*75.0-131*				
(S) 4-Bromofluorobenzene				*96.9*	*96.0*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*111*	*110*	*70.0-130*				

Method Blank (MB)

(MB) R4207902-1 04/30/25 14:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	ND		1.61	4.00
C28-C36 Motor Oil Range	0.371	J	0.274	4.00
(S) o-Terphenyl	*81.1*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R4207902-2 04/30/25 15:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	43.4	86.8	50.0-150	
(S) o-Terphenyl			*84.2*	*18.0-148*	

L1851018-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1851018-01 04/30/25 15:47 • (MS) R4207902-3 04/30/25 16:01 • (MSD) R4207902-4 04/30/25 16:16

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.0	892	851	710	0.000	0.000	5	50.0-150	V	V	18.1	20
(S) o-Terphenyl					*100*	*76.8*		*18.0-148*				

Method Blank (MB)

(MB) R4207845-2 04/30/25 12:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	ND		0.00162	0.00600
Anthracene	ND		0.00163	0.00600
Benzo(a)anthracene	ND		0.00200	0.00600
Benzo(b)fluoranthene	ND		0.00275	0.00600
Benzo(k)fluoranthene	ND		0.00213	0.00600
Benzo(a)pyrene	ND		0.00163	0.00600
Chrysene	ND		0.00206	0.00600
Dibenz(a,h)anthracene	ND		0.00201	0.00600
Fluoranthene	ND		0.00239	0.00600
Fluorene	ND		0.00180	0.00600
Indeno(1,2,3-cd)pyrene	ND		0.00234	0.00600
1-Methylnaphthalene	ND		0.00219	0.0200
2-Methylnaphthalene	ND		0.00571	0.0200
Naphthalene	ND		0.00579	0.0200
Pyrene	ND		0.00205	0.00600
(S) p-Terphenyl-d14	*122*	J1		*23.0-120*
(S) Nitrobenzene-d5	*131*			*14.0-149*
(S) 2-Fluorobiphenyl	*133*	J1		*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R4207845-1 04/30/25 11:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0617	77.1	50.0-120	
Anthracene	0.0800	0.0642	80.3	50.0-126	
Benzo(a)anthracene	0.0800	0.0580	72.5	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0548	68.5	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0582	72.8	49.0-125	
Benzo(a)pyrene	0.0800	0.0570	71.3	42.0-120	
Chrysene	0.0800	0.0627	78.4	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0611	76.4	47.0-125	
Fluoranthene	0.0800	0.0696	87.0	49.0-129	
Fluorene	0.0800	0.0666	83.3	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0558	69.8	46.0-125	
1-Methylnaphthalene	0.0800	0.0676	84.5	51.0-121	
2-Methylnaphthalene	0.0800	0.0641	80.1	50.0-120	
Naphthalene	0.0800	0.0599	74.9	50.0-120	
Pyrene	0.0800	0.0567	70.9	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R4207845-1 04/30/25 11:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			*84.1*	*23.0-120*	
(S) Nitrobenzene-d5			*92.2*	*14.0-149*	
(S) 2-Fluorobiphenyl			*93.5*	*34.0-125*	

L1851400-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1851400-14 04/30/25 17:34 • (MS) R4207845-3 04/30/25 17:52 • (MSD) R4207845-4 04/30/25 18:09

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	0.0796	ND	0.0435	0.0462	54.6	58.0	1	14.0-127			6.02	27
Anthracene	0.0796	ND	0.0480	0.0490	60.3	61.6	1	10.0-145			2.06	30
Benzo(a)anthracene	0.0796	ND	0.0492	0.0498	61.8	62.6	1	10.0-139			1.21	30
Benzo(b)fluoranthene	0.0796	ND	0.0416	0.0421	52.3	52.9	1	10.0-140			1.19	36
Benzo(k)fluoranthene	0.0796	ND	0.0470	0.0484	59.0	60.8	1	10.0-137			2.94	31
Benzo(a)pyrene	0.0796	ND	0.0485	0.0492	60.9	61.8	1	10.0-141			1.43	31
Chrysene	0.0796	ND	0.0548	0.0574	68.8	72.1	1	10.0-145			4.63	30
Dibenz(a,h)anthracene	0.0796	ND	0.0508	0.0542	63.8	68.1	1	10.0-132			6.48	31
Fluoranthene	0.0796	ND	0.0493	0.0503	61.9	63.2	1	10.0-153			2.01	33
Fluorene	0.0796	ND	0.0523	0.0542	65.7	68.1	1	11.0-130			3.57	29
Indeno(1,2,3-cd)pyrene	0.0796	ND	0.0435	0.0435	54.6	54.6	1	10.0-137			0.000	32
1-Methylnaphthalene	0.0796	ND	0.0495	0.0535	62.2	67.2	1	10.0-142			7.77	28
2-Methylnaphthalene	0.0796	ND	0.0469	0.0505	58.9	63.4	1	10.0-137			7.39	28
Naphthalene	0.0796	ND	0.0450	0.0497	56.5	62.4	1	10.0-135			9.93	27
Pyrene	0.0796	0.00213	0.0444	0.0463	53.1	55.5	1	10.0-148			4.19	35
(S) p-Terphenyl-d14					*76.6*	*78.7*		*23.0-120*				
(S) Nitrobenzene-d5					*81.6*	*84.5*		*14.0-149*				
(S) 2-Fluorobiphenyl					*85.4*	*86.5*		*34.0-125*				

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:	Billing Information:	Pres Chk
Civitas - CO 6855 W. 118th Ave Broomfield, CO 80020	Accounts Payable 650 Southgate Dr. Windsor, CO 80550	
Report to: Civitas 610-405-9078	Email To:chris.roy@stantec.com;marc.hes@stante	

Chain of Custody Page 1 of 2

Pace PEOPLE ADVANCING SCIENCE

MT JULIET, TN

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/hubfs/pas-standard-terms.pdf

SDG # L1851100
D013

Acctnum: **CIVTASBCO**
Template: **T269922**
Prelogin: **P1137690**
PM: **824 - Chris Ward**
PB:
Shipped Via: **FedEX Ground**

Project Description:	City/State Collected:	Please Circle:
Rinn Valley East 17N-20-01C Backgrounds	Weld County, CO	PT (MT) CT ET

Regulatory Program(DOD,RCRA,DW,etc):	Client Project #	Lab Project #
ECMC	203724474 (100.008)	CIVTASBCO-STANTEC

Collected by (print):	Site/Facility ID #	P.O. #
B. Collins	Rem 36236	Cost Center: COX2770

Collected by (signature): [signature]

Immediately Packed on Ice N___ Y X

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

Quote # AFE: 24469

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BG Table 915-1 8ozClr-NoPres (pH, EC, SAR, boron, 915-1 metals)	Full Table 915-1 8ozClr-NoPres	Remarks	Sample # (lab only)
BG01@3'	G	SS	3	4/22/25	1415	2	X			-01
BG01@5'	↓	SS	5	↓	1410	↓	X			-02
BG02@3'	↓	↓	3	↓	1420	↓	↓			-03
BG02@5'	↓	↓	5	↓	1425	↓	↓			-04
BG03@3'	↓	↓	3	↓	1435	↓	↓			-05
BG03@5'	↓	↓	5	↓	1440	↓	↓			-06
BG04@3'	↓	↓	3	↓	1450	↓	↓			-07
BG04@5'	↓	↓	5	↓	1455	↓	↓			-08
BG05@3'	↓	↓	3	↓	1505	↓	↓			-09
BG05@5'	↓	↓	5	↓	1510	↓	↓			-10

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

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y Y __N
COC Signed/Accurate: Y 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: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
[signature]	4/23/25	1026	[signature]	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 32
[signature]	4/23/25	1600	SWA	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4/24/25 Time: 12:30
			Steward Francey	Hold: Condition: NCF / OK

Company Name/Address:
Civitas - CO

6855 W. 118th Ave
Broomfield, CO 80020

Billing Information:
Accounts Payable
650 Southgate Dr.
Windsor, CO 80550

Pres Chk

Report to:
Civitas 610-405-9078

Email To:chris.roy@stantec.com;marc.hes@stante

Project Description:
Rinn Valley East 17N-20-01C

City/State Collected: Weld County, CO

Please Circle: PT MT CT ET

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

Client Project #
203724474 (100.008)

Lab Project #
CIVTASBCO-STANTEC

Collected by (print):
B. Collins

Site/Facility ID #
Rem 36236

P.O. # Cost Center: COX2770

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote # AFE: 24469

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BG Table 915-1 8ozClr-NoPres	Full Table 915-1 8ozClr-NoPres	Remarks	Sample # (lab only)
FL01@5'	G	SS	5'	4/22/25	1000	3		X		
FL02@5'		SS	5'		1355			X		
WH-B@5'			5'		1330					
WH-E@3'			3'		1340					

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
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/hubfs/pas-standard-terms.pdf

SDG # L851400

Table #

Acctnum: **CIVTASBCO**
Template:**T269922**
Prelogin: **P1137690**
PM: **824 - Chris Ward**
PB:

Shipped Via: **FedEX Ground**

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X 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: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	4/23/25	1626	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	4/23/25	1800	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received: 32

If preservation required by Login: Date/Time

Date: 4/24/25 Time: 12:30

Hold:

Condition: NCF / OK

Multiple Parcel Form L# L1491480

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
	TLA9	4.3 +	0.4 =	4.7	(Yes) / No / Not Present
	TLA9	0.4 +	0.4 =	0.8	(Yes) / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

[signature] 4/24/25 12:30

Name Date