

CTEH - ER

Sample Delivery Group: L1848948
Samples Received: 04/17/2025
Project Number: PROJ-054017
Description: Bishop Loss of Containment Incident
Site: CHEVRON, GAELTON, CO
Report To: CTEH
5120 North Shore Drive
North Little Rock, AR 72118

Entire Report Reviewed By:



Jared Starkey
Project Manager

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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	6
Sr: Sample Results	8
GACO0416W001 L1848948-01	8
GACO0416W002 L1848948-02	10
GACO0416W003 L1848948-03	12
GACO0416W004 L1848948-04	14
GACO0416W005 L1848948-05	16
GACO0416W006 L1848948-06	18
GACO0416F001 L1848948-07	20
GACO0416V001 L1848948-08	22
Qc: Quality Control Summary	24
Gravimetric Analysis by Method 2540 C-2011	24
Gravimetric Analysis by Method 2540 D-2020	25
Wet Chemistry by Method 130.1	26
Wet Chemistry by Method 2320 B-2011	28
Wet Chemistry by Method 300.0	29
Wet Chemistry by Method 351.2	32
Wet Chemistry by Method 365.4	35
Wet Chemistry by Method 5540 C-2011	37
Wet Chemistry by Method 7199	38
Wet Chemistry by Method 9060A	40
Metals (ICPMS) by Method 6020B	41
Gl: Glossary of Terms	43
Al: Accreditations & Locations	44
Sc: Sample Chain of Custody	45



SAMPLE SUMMARY

GACO0416W001 L1848948-01 GW

Collected by: Spencer B
 Collected date/time: 04/16/25 10:09
 Received date/time: 04/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2495576	1	04/20/25 21:58	04/20/25 21:58	AEC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2493420	1	04/19/25 07:19	04/19/25 07:34	AMG	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2020	WG2493260	1	04/17/25 15:05	04/17/25 18:00	AMG	Mt. Juliet, TN
Wet Chemistry by Method 130.1	WG2494125	5	04/20/25 13:51	04/21/25 14:30	BMD	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2493758	1	04/18/25 00:05	04/18/25 00:05	BRT	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	5	04/18/25 00:19	04/18/25 00:19	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	50	04/21/25 21:45	04/21/25 21:45	DLH	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG2495576	1	04/20/25 18:30	04/20/25 21:58	AEC	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2495767	1	04/20/25 18:30	04/20/25 22:12	AEC	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG2492992	1	04/17/25 16:16	04/17/25 18:32	JEG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2490940	1	04/22/25 00:45	04/22/25 00:45	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2493859	1	04/18/25 16:37	04/18/25 16:37	KAM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/24/25 22:38	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	1	04/24/25 07:45	04/24/25 21:33	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	5	04/24/25 07:45	04/24/25 22:50	LD	Mt. Juliet, TN

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

GACO0416W002 L1848948-02 GW

Collected by: Spencer B
 Collected date/time: 04/16/25 11:26
 Received date/time: 04/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2495576	1	04/20/25 21:59	04/20/25 21:59	AEC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2493420	1	04/19/25 07:19	04/19/25 07:34	AMG	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2020	WG2493260	1	04/17/25 15:05	04/17/25 18:00	AMG	Mt. Juliet, TN
Wet Chemistry by Method 130.1	WG2494125	5	04/20/25 13:51	04/21/25 14:31	BMD	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2493758	1	04/18/25 00:12	04/18/25 00:12	BRT	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	5	04/18/25 00:46	04/18/25 00:46	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	50	04/21/25 21:57	04/21/25 21:57	DLH	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG2495576	1	04/20/25 18:30	04/20/25 21:59	AEC	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2500673	1	04/25/25 09:46	04/26/25 15:05	AEC	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG2492992	1	04/17/25 16:16	04/17/25 18:33	JEG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2493530	1	04/23/25 10:16	04/23/25 10:16	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2493859	1	04/18/25 17:04	04/18/25 17:04	KAM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/24/25 22:41	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/25/25 00:17	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	1	04/24/25 07:45	04/24/25 21:36	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	5	04/24/25 07:45	04/24/25 22:53	LD	Mt. Juliet, TN

GACO0416W003 L1848948-03 GW

Collected by: Spencer B
 Collected date/time: 04/16/25 12:08
 Received date/time: 04/17/25 09:00

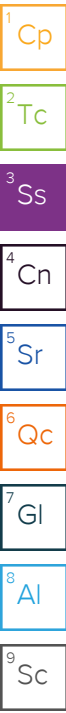
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2502242	1	04/29/25 21:45	04/29/25 21:45	JDW	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2493420	1	04/19/25 07:19	04/19/25 07:34	AMG	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2020	WG2493260	1	04/17/25 15:05	04/17/25 18:00	AMG	Mt. Juliet, TN
Wet Chemistry by Method 130.1	WG2494163	5	04/18/25 12:28	04/18/25 18:21	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2493758	1	04/18/25 00:16	04/18/25 00:16	BRT	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	5	04/18/25 01:39	04/18/25 01:39	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	50	04/21/25 22:10	04/21/25 22:10	DLH	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG2502242	4	04/29/25 07:38	04/29/25 21:45	JDW	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2500673	1	04/25/25 09:46	04/26/25 15:06	AEC	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG2492992	1	04/17/25 16:16	04/17/25 18:34	JEG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2493530	1	04/23/25 10:26	04/23/25 10:26	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2493859	1	04/18/25 17:27	04/18/25 17:27	KAM	Mt. Juliet, TN

SAMPLE SUMMARY

GACO0416W003 L1848948-03 GW

Collected by: Spencer B
 Collected date/time: 04/16/25 12:08
 Received date/time: 04/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/24/25 20:03	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	1	04/24/25 07:45	04/24/25 20:38	LD	Mt. Juliet, TN



GACO0416W004 L1848948-04 GW

Collected by: Spencer B
 Collected date/time: 04/16/25 11:50
 Received date/time: 04/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2495576	1	04/20/25 22:02	04/20/25 22:02	AEC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2493420	1	04/19/25 07:19	04/19/25 07:34	AMG	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2020	WG2493260	1	04/17/25 15:05	04/17/25 18:00	AMG	Mt. Juliet, TN
Wet Chemistry by Method 130.1	WG2494163	5	04/18/25 12:28	04/18/25 19:13	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2493758	1	04/18/25 00:20	04/18/25 00:20	BRT	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	5	04/18/25 03:00	04/18/25 03:00	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	50	04/21/25 22:36	04/21/25 22:36	DLH	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG2495576	1	04/20/25 18:30	04/20/25 22:02	AEC	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2495767	1	04/20/25 18:30	04/20/25 22:16	AEC	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG2492992	1	04/17/25 16:16	04/17/25 18:35	JEG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2490940	1	04/22/25 00:55	04/22/25 00:55	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2493859	1	04/18/25 18:48	04/18/25 18:48	KAM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/24/25 22:45	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/25/25 00:20	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	1	04/24/25 07:45	04/24/25 21:39	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	5	04/24/25 07:45	04/24/25 22:56	LD	Mt. Juliet, TN

GACO0416W005 L1848948-05 GW

Collected by: Spencer B
 Collected date/time: 04/16/25 10:18
 Received date/time: 04/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2495576	1	04/20/25 22:03	04/20/25 22:03	AEC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2493420	1	04/19/25 07:19	04/19/25 07:34	AMG	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2020	WG2493260	1	04/17/25 15:05	04/17/25 18:00	AMG	Mt. Juliet, TN
Wet Chemistry by Method 130.1	WG2494163	5	04/18/25 12:28	04/18/25 18:26	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2493758	1	04/18/25 00:24	04/18/25 00:24	BRT	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	5	04/18/25 03:27	04/18/25 03:27	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	50	04/21/25 22:49	04/21/25 22:49	DLH	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG2495576	4	04/20/25 18:30	04/20/25 22:03	AEC	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2495767	1	04/20/25 18:30	04/20/25 22:17	AEC	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG2492992	1	04/17/25 16:16	04/17/25 18:35	JEG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2493530	1	04/23/25 10:55	04/23/25 10:55	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2493859	1	04/18/25 19:16	04/18/25 19:16	KAM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/24/25 22:48	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/25/25 00:23	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	1	04/24/25 07:45	04/24/25 21:42	LD	Mt. Juliet, TN

GACO0416W006 L1848948-06 GW

Collected by: Spencer B
 Collected date/time: 04/16/25 13:25
 Received date/time: 04/17/25 09:00

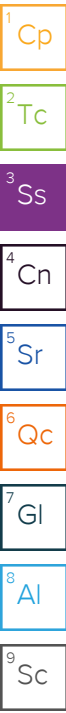
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2499515	1	04/26/25 14:23	04/26/25 14:23	AEC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2493420	1	04/19/25 07:19	04/19/25 07:34	AMG	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2020	WG2493260	1	04/17/25 15:05	04/17/25 18:00	AMG	Mt. Juliet, TN
Wet Chemistry by Method 130.1	WG2494163	5	04/18/25 12:28	04/18/25 18:27	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2493758	1	04/18/25 00:28	04/18/25 00:28	BRT	Mt. Juliet, TN

SAMPLE SUMMARY

GACO0416W006 L1848948-06 GW

Collected by: Spencer B
 Collected date/time: 04/16/25 13:25
 Received date/time: 04/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2493349	5	04/18/25 04:20	04/18/25 04:20	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	50	04/18/25 04:34	04/18/25 04:34	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG2499515	1	04/25/25 09:46	04/26/25 14:23	AEC	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2500673	1	04/25/25 09:46	04/26/25 15:10	AEC	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG2492992	1	04/17/25 16:16	04/17/25 18:35	JEG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2490940	1	04/22/25 01:04	04/22/25 01:04	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2493859	1	04/18/25 19:42	04/18/25 19:42	KAM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/24/25 21:47	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	1	04/24/25 07:45	04/24/25 21:55	LD	Mt. Juliet, TN



GACO0416F001 L1848948-07 GW

Collected by: Spencer B
 Collected date/time: 04/16/25 13:29
 Received date/time: 04/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2499515	1	04/26/25 14:24	04/26/25 14:24	AEC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2493420	1	04/19/25 07:19	04/19/25 07:34	AMG	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2020	WG2493260	1	04/17/25 15:05	04/17/25 18:00	AMG	Mt. Juliet, TN
Wet Chemistry by Method 130.1	WG2494163	1	04/18/25 12:28	04/18/25 18:28	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2493758	1	04/18/25 00:40	04/18/25 00:40	BRT	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	1	04/18/25 04:47	04/18/25 04:47	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG2499515	2	04/25/25 09:46	04/26/25 14:24	AEC	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2500673	1	04/25/25 09:46	04/26/25 15:12	AEC	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG2492992	1	04/17/25 16:16	04/17/25 18:36	JEG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2490940	1	04/22/25 01:24	04/22/25 01:24	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2493859	1	04/18/25 20:00	04/18/25 20:00	KAM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/24/25 21:51	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	1	04/24/25 07:45	04/24/25 21:58	LD	Mt. Juliet, TN

GACO0416V001 L1848948-08 GW

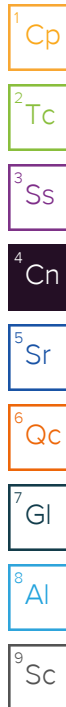
Collected by: Spencer B
 Collected date/time: 04/16/25 10:18
 Received date/time: 04/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2499515	1	04/26/25 14:26	04/26/25 14:26	AEC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2493420	1	04/19/25 07:19	04/19/25 07:34	AMG	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2020	WG2493260	1	04/17/25 15:05	04/17/25 18:00	AMG	Mt. Juliet, TN
Wet Chemistry by Method 130.1	WG2494163	5	04/18/25 12:28	04/18/25 18:30	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2493758	1	04/18/25 00:44	04/18/25 00:44	BRT	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	5	04/18/25 05:01	04/18/25 05:01	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2493349	50	04/18/25 05:14	04/18/25 05:14	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG2499515	2	04/25/25 09:46	04/26/25 14:26	AEC	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2500673	1	04/25/25 09:46	04/26/25 15:13	AEC	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG2492992	1	04/17/25 16:16	04/17/25 18:36	JEG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2493530	1	04/23/25 11:05	04/23/25 11:05	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2493859	1	04/18/25 20:30	04/18/25 20:30	KAM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2496289	1	04/24/25 13:37	04/24/25 21:54	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2497606	1	04/24/25 07:45	04/24/25 22:01	LD	Mt. Juliet, TN

CASE NARRATIVE

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Jared Starkey
Project Manager



Sample Delivery Group (SDG) Narrative

The laboratory analysis was performed from an unpreserved, insufficiently or inadequately preserved sample.

Batch	Method	Lab Sample ID
WG2502242	351.2	L1848948-03

Wet Chemistry by Method 130.1

The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).

Batch	Lab Sample ID	Analytes
WG2494125	(MS) R4202732-5	Hardness (colorimetric) as CaCO ₃
WG2494125	(MSD) R4202732-6	Hardness (colorimetric) as CaCO ₃
WG2494163	(MS) R4201854-3	Hardness (colorimetric) as CaCO ₃
WG2494163	(MSD) R4201854-4	Hardness (colorimetric) as CaCO ₃

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2494125	(MS) R4202732-5, (MSD) R4202732-6	Hardness (colorimetric) as CaCO ₃

Wet Chemistry by Method 300.0

The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).

Batch	Lab Sample ID	Analytes
WG2493349	(MS) R4201972-4	Sulfate
WG2493349	(MSD) R4201972-5	Sulfate

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2493349	(MS) R4201972-4, (MSD) R4201972-5, L1848948-03	Chloride and Nitrate as (N)

The sample concentration is too high to evaluate accurate spike recoveries.

Batch	Lab Sample ID	Analytes
WG2493349	(MS) R4201972-4, (MSD) R4201972-5	Sulfate

CASE NARRATIVE

Wet Chemistry by Method 351.2

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG2502242	Kjeldahl Nitrogen, TKN	L1848948-03

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2499515	(DUP) R4205592-3	Kjeldahl Nitrogen, TKN

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG2495576	(MS) R4202412-6, (MSD) R4202412-7	Kjeldahl Nitrogen, TKN
WG2499515	(MS) R4205592-7, (MS) R4205592-5, (MSD) R4205592-6	Kjeldahl Nitrogen, TKN

Wet Chemistry by Method 365.4

RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Batch	Lab Sample ID	Analytes
WG2495767	(DUP) R4202414-4	Phosphorus, Total

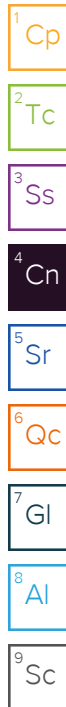
Metals (ICPMS) by Method 6020B

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG2496289	Nickel, Dissolved	L1848948-01, 02, 03, 04, 05, 06, 08
WG2496289	Zinc, Dissolved	L1848948-01, 04, 05, 06, 07, 08

The sample concentration is too high to evaluate accurate spike recoveries.

Batch	Lab Sample ID	Analytes
WG2497606	(MS) R4204770-9, (MSD) R4204770-10, L1848948-03	Calcium, Magnesium and Sodium



Calculated Results

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Total Nitrogen	7730		131	250	1	04/20/2025 21:58	WG2495576

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	3010000		50000	50000	1	04/19/2025 07:34	WG2493420

Gravimetric Analysis by Method 2540 D-2020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Suspended Solids	20800		566	5000	1	04/17/2025 18:00	WG2493260

Wet Chemistry by Method 130.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hardness (colorimetric) as CaCO3	1500000		53000	150000	5	04/21/2025 14:30	WG2494125

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	401000		4750	20000	1	04/18/2025 00:05	WG2493758

Sample Narrative:

L1848948-01 WG2493758: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Bromide	U		3400	5000	5	04/18/2025 00:19	WG2493349
Chloride	116000		2740	5000	5	04/18/2025 00:19	WG2493349
Fluoride	1240		380	750	5	04/18/2025 00:19	WG2493349
Nitrate as (N)	5190		442	500	5	04/18/2025 00:19	WG2493349
Nitrite as (N)	U		397	500	5	04/18/2025 00:19	WG2493349
Sulfate	1560000		31800	250000	50	04/21/2025 21:45	WG2493349

Sample Narrative:

L1848948-01 WG2493349: Dilution due to matrix impact on instrumentation at lower dilution

Wet Chemistry by Method 351.2

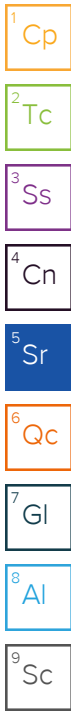
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	2540		131	250	1	04/20/2025 21:58	WG2495576

Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Phosphorus, Total	221		64.2	100	1	04/20/2025 22:12	WG2495767

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch



Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
MBAS	U		19.0	100	1	04/17/2025 18:32	WG2492992

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Hexavalent Chromium	U		0.100	5.00	1	04/22/2025 00:45	WG2490940

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	11900		495	1000	1	04/18/2025 16:37	WG2493859

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cadmium,Dissolved	U		0.120	1.00	1	04/24/2025 22:38	WG2496289
Calcium	279000		92.5	1000	1	04/24/2025 21:33	WG2497606
Copper,Dissolved	6.04		0.700	5.00	1	04/24/2025 22:38	WG2496289
Iron	277		22.6	100	1	04/24/2025 21:33	WG2497606
Lead,Dissolved	U		0.500	2.00	1	04/24/2025 22:38	WG2496289
Magnesium	183000		82.7	1000	1	04/24/2025 21:33	WG2497606
Manganese	777		3.50	25.0	5	04/24/2025 22:50	WG2497606
Manganese,Dissolved	737		0.700	5.00	1	04/24/2025 22:38	WG2496289
Nickel,Dissolved	3.67	<u>B</u>	0.500	2.00	1	04/24/2025 22:38	WG2496289
Potassium	10600		96.5	2000	1	04/24/2025 21:33	WG2497606
Sodium	328000		142	2000	1	04/24/2025 21:33	WG2497606
Zinc,Dissolved	10.3	<u>B J</u>	4.00	25.0	1	04/24/2025 22:38	WG2496289

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Total Nitrogen	7240		131	250	1	04/20/2025 21:59	WG2495576

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	2810000		50000	50000	1	04/19/2025 07:34	WG2493420

Gravimetric Analysis by Method 2540 D-2020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Suspended Solids	9330		376	3330	1	04/17/2025 18:00	WG2493260

Wet Chemistry by Method 130.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hardness (colorimetric) as CaCO3	1460000		53000	150000	5	04/21/2025 14:31	WG2494125

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	398000		4750	20000	1	04/18/2025 00:12	WG2493758

Sample Narrative:

L1848948-02 WG2493758: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Bromide	U		3400	5000	5	04/18/2025 00:46	WG2493349
Chloride	109000		2740	5000	5	04/18/2025 00:46	WG2493349
Fluoride	1210		380	750	5	04/18/2025 00:46	WG2493349
Nitrate as (N)	4530		442	500	5	04/18/2025 00:46	WG2493349
Nitrite as (N)	U		397	500	5	04/18/2025 00:46	WG2493349
Sulfate	1360000		31800	250000	50	04/21/2025 21:57	WG2493349

Sample Narrative:

L1848948-02 WG2493349: Dilution due to matrix impact on instrumentation at lower dilution

Wet Chemistry by Method 351.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	2710		131	250	1	04/20/2025 21:59	WG2495576

Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Phosphorus, Total	111		64.2	100	1	04/26/2025 15:05	WG2500673

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
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1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
MBAS	229		19.0	100	1	04/17/2025 18:33	WG2492992

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Hexavalent Chromium	U		0.100	5.00	1	04/23/2025 10:16	WG2493530

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	13800		495	1000	1	04/18/2025 17:04	WG2493859

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cadmium,Dissolved	U		0.120	1.00	1	04/24/2025 22:41	WG2496289
Calcium	276000		92.5	1000	1	04/24/2025 21:36	WG2497606
Copper,Dissolved	1.29	<u>J</u>	0.700	5.00	1	04/25/2025 00:17	WG2496289
Iron	204		22.6	100	1	04/24/2025 21:36	WG2497606
Lead,Dissolved	U		0.500	2.00	1	04/24/2025 22:41	WG2496289
Magnesium	175000		82.7	1000	1	04/24/2025 21:36	WG2497606
Manganese	674		3.50	25.0	5	04/24/2025 22:53	WG2497606
Manganese,Dissolved	400		0.700	5.00	1	04/24/2025 22:41	WG2496289
Nickel,Dissolved	3.28	<u>B</u>	0.500	2.00	1	04/24/2025 22:41	WG2496289
Potassium	11500		96.5	2000	1	04/24/2025 21:36	WG2497606
Sodium	293000		142	2000	1	04/24/2025 21:36	WG2497606
Zinc,Dissolved	U		4.00	25.0	1	04/24/2025 22:41	WG2496289

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Total Nitrogen	12500		397	500	1	04/29/2025 21:45	WG2502242

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	2890000		50000	50000	1	04/19/2025 07:34	WG2493420

Gravimetric Analysis by Method 2540 D-2020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Suspended Solids	3600		283	2500	1	04/17/2025 18:00	WG2493260

Wet Chemistry by Method 130.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hardness (colorimetric) as CaCO3	1370000		53000	150000	5	04/18/2025 18:21	WG2494163

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	375000		4750	20000	1	04/18/2025 00:16	WG2493758

Sample Narrative:

L1848948-03 WG2493758: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Bromide	U		3400	5000	5	04/18/2025 01:39	WG2493349
Chloride	125000	J6	2740	5000	5	04/18/2025 01:39	WG2493349
Fluoride	1510		380	750	5	04/18/2025 01:39	WG2493349
Nitrate as (N)	10400	J6	442	500	5	04/18/2025 01:39	WG2493349
Nitrite as (N)	U		397	500	5	04/18/2025 01:39	WG2493349
Sulfate	1560000		31800	250000	50	04/21/2025 22:10	WG2493349

Sample Narrative:

L1848948-03 WG2493349: Dilution due to matrix impact on instrumentation at lower dilution

Wet Chemistry by Method 351.2

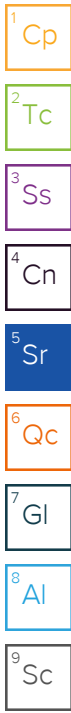
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	2030	B	524	1000	4	04/29/2025 21:45	WG2502242

Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Phosphorus, Total	85.0	J	64.2	100	1	04/26/2025 15:06	WG2500673

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch



Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
MBAS	255		19.0	100	1	04/17/2025 18:34	WG2492992

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Hexavalent Chromium	U		0.100	5.00	1	04/23/2025 10:26	WG2493530

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6830		495	1000	1	04/18/2025 17:27	WG2493859

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cadmium,Dissolved	U		0.120	1.00	1	04/24/2025 20:03	WG2496289
Calcium	250000	V	92.5	1000	1	04/24/2025 20:38	WG2497606
Copper,Dissolved	8.06		0.700	5.00	1	04/24/2025 20:03	WG2496289
Iron	95.6	J	22.6	100	1	04/24/2025 20:38	WG2497606
Lead,Dissolved	U		0.500	2.00	1	04/24/2025 20:03	WG2496289
Magnesium	183000	V	82.7	1000	1	04/24/2025 20:38	WG2497606
Manganese	149		0.700	5.00	1	04/24/2025 20:38	WG2497606
Manganese,Dissolved	135		0.700	5.00	1	04/24/2025 20:03	WG2496289
Nickel,Dissolved	2.10	B	0.500	2.00	1	04/24/2025 20:03	WG2496289
Potassium	9950		96.5	2000	1	04/24/2025 20:38	WG2497606
Sodium	436000	V	142	2000	1	04/24/2025 20:38	WG2497606
Zinc,Dissolved	U		4.00	25.0	1	04/24/2025 20:03	WG2496289

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

Calculated Results

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Total Nitrogen	6530		131	250	1	04/20/2025 22:02	WG2495576

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	3000000		50000	50000	1	04/19/2025 07:34	WG2493420

Gravimetric Analysis by Method 2540 D-2020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Suspended Solids	17000		566	5000	1	04/17/2025 18:00	WG2493260

Wet Chemistry by Method 130.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hardness (colorimetric) as CaCO3	1490000		53000	150000	5	04/18/2025 19:13	WG2494163

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	435000		4750	20000	1	04/18/2025 00:20	WG2493758

Sample Narrative:

L1848948-04 WG2493758: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Bromide	U		3400	5000	5	04/18/2025 03:00	WG2493349
Chloride	107000		2740	5000	5	04/18/2025 03:00	WG2493349
Fluoride	1050		380	750	5	04/18/2025 03:00	WG2493349
Nitrate as (N)	4440		442	500	5	04/18/2025 03:00	WG2493349
Nitrite as (N)	U		397	500	5	04/18/2025 03:00	WG2493349
Sulfate	1460000		31800	250000	50	04/21/2025 22:36	WG2493349

Sample Narrative:

L1848948-04 WG2493349: Dilution due to matrix impact on instrumentation at lower dilution

Wet Chemistry by Method 351.2

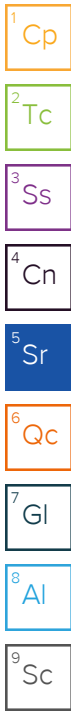
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	2090		131	250	1	04/20/2025 22:02	WG2495576

Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Phosphorus, Total	248		64.2	100	1	04/20/2025 22:16	WG2495767

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch



Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
MBAS	107		19.0	100	1	04/17/2025 18:35	WG2492992

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Hexavalent Chromium	U		0.100	5.00	1	04/22/2025 00:55	WG2490940

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	14000		495	1000	1	04/18/2025 18:48	WG2493859

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cadmium,Dissolved	0.484	<u>J</u>	0.120	1.00	1	04/24/2025 22:45	WG2496289
Calcium	308000		92.5	1000	1	04/24/2025 21:39	WG2497606
Copper,Dissolved	2.19	<u>J</u>	0.700	5.00	1	04/25/2025 00:20	WG2496289
Iron	465		22.6	100	1	04/24/2025 21:39	WG2497606
Lead,Dissolved	0.638	<u>J</u>	0.500	2.00	1	04/24/2025 22:45	WG2496289
Magnesium	174000		82.7	1000	1	04/24/2025 21:39	WG2497606
Manganese	2100		3.50	25.0	5	04/24/2025 22:56	WG2497606
Manganese,Dissolved	2020		0.700	5.00	1	04/24/2025 22:45	WG2496289
Nickel,Dissolved	5.64	<u>B</u>	0.500	2.00	1	04/24/2025 22:45	WG2496289
Potassium	11400		96.5	2000	1	04/24/2025 21:39	WG2497606
Sodium	306000		142	2000	1	04/24/2025 21:39	WG2497606
Zinc,Dissolved	5.73	<u>B J</u>	4.00	25.0	1	04/24/2025 22:45	WG2496289

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Total Nitrogen	8050		397	500	1	04/20/2025 22:03	WG2495576

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	3370000		50000	1	04/19/2025 07:34		WG2493420

Gravimetric Analysis by Method 2540 D-2020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Suspended Solids	42600		809	7150	1	04/17/2025 18:00	WG2493260

Wet Chemistry by Method 130.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hardness (colorimetric) as CaCO3	1660000		53000	150000	5	04/18/2025 18:26	WG2494163

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	492000		4750	20000	1	04/18/2025 00:24	WG2493758

Sample Narrative:

L1848948-05 WG2493758: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Bromide	U		3400	5000	5	04/18/2025 03:27	WG2493349
Chloride	135000		2740	5000	5	04/18/2025 03:27	WG2493349
Fluoride	1160		380	750	5	04/18/2025 03:27	WG2493349
Nitrate as (N)	6770		442	500	5	04/18/2025 03:27	WG2493349
Nitrite as (N)	U		397	500	5	04/18/2025 03:27	WG2493349
Sulfate	1620000		31800	250000	50	04/21/2025 22:49	WG2493349

Sample Narrative:

L1848948-05 WG2493349: Dilution due to matrix impact on instrumentation at lower dilution

Wet Chemistry by Method 351.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	1280		524	1000	4	04/20/2025 22:03	WG2495576

Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Phosphorus, Total	167		64.2	100	1	04/20/2025 22:17	WG2495767

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
MBAS	102		19.0	100	1	04/17/2025 18:35	WG2492992

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Hexavalent Chromium	U		0.100	5.00	1	04/23/2025 10:55	WG2493530

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	19700		495	1000	1	04/18/2025 19:16	WG2493859

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cadmium,Dissolved	U		0.120	1.00	1	04/24/2025 22:48	WG2496289
Calcium	335000		92.5	1000	1	04/24/2025 21:42	WG2497606
Copper,Dissolved	2.69	<u>J</u>	0.700	5.00	1	04/25/2025 00:23	WG2496289
Iron	87.0	<u>J</u>	22.6	100	1	04/24/2025 21:42	WG2497606
Lead,Dissolved	U		0.500	2.00	1	04/24/2025 22:48	WG2496289
Magnesium	195000		82.7	1000	1	04/24/2025 21:42	WG2497606
Manganese	335		0.700	5.00	1	04/24/2025 21:42	WG2497606
Manganese,Dissolved	303		0.700	5.00	1	04/24/2025 22:48	WG2496289
Nickel,Dissolved	6.62	<u>B</u>	0.500	2.00	1	04/24/2025 22:48	WG2496289
Potassium	14300		96.5	2000	1	04/24/2025 21:42	WG2497606
Sodium	361000		142	2000	1	04/24/2025 21:42	WG2497606
Zinc,Dissolved	7.01	<u>B J</u>	4.00	25.0	1	04/24/2025 22:48	WG2496289

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Total Nitrogen	7010		131	250	1	04/26/2025 14:23	WG2499515

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	2480000		50000	50000	1	04/19/2025 07:34	WG2493420

Gravimetric Analysis by Method 2540 D-2020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Suspended Solids	16600		283	2500	1	04/17/2025 18:00	WG2493260

Wet Chemistry by Method 130.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hardness (colorimetric) as CaCO3	1250000		53000	150000	5	04/18/2025 18:27	WG2494163

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	343000		4750	20000	1	04/18/2025 00:28	WG2493758

Sample Narrative:

L1848948-06 WG2493758: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Bromide	U		3400	5000	5	04/18/2025 04:20	WG2493349
Chloride	105000		2740	5000	5	04/18/2025 04:20	WG2493349
Fluoride	2030		380	750	5	04/18/2025 04:20	WG2493349
Nitrate as (N)	5520		442	500	5	04/18/2025 04:20	WG2493349
Nitrite as (N)	588		397	500	5	04/18/2025 04:20	WG2493349
Sulfate	1490000		31800	250000	50	04/18/2025 04:34	WG2493349

Sample Narrative:

L1848948-06 WG2493349: Dilution due to matrix impact on instrumentation at lower dilution

Wet Chemistry by Method 351.2

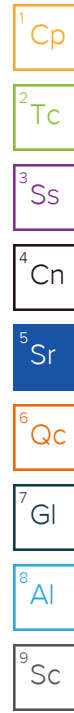
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	903		131	250	1	04/26/2025 14:23	WG2499515

Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Phosphorus, Total	180		64.2	100	1	04/26/2025 15:10	WG2500673

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
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Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
MBAS	74.0	J	19.0	100	1	04/17/2025 18:35	WG2492992

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Hexavalent Chromium	U		0.100	5.00	1	04/22/2025 01:04	WG2490940

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	11000		495	1000	1	04/18/2025 19:42	WG2493859

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cadmium,Dissolved	U		0.120	1.00	1	04/24/2025 21:47	WG2496289
Calcium	246000		92.5	1000	1	04/24/2025 21:55	WG2497606
Copper,Dissolved	6.83		0.700	5.00	1	04/24/2025 21:47	WG2496289
Iron	190		22.6	100	1	04/24/2025 21:55	WG2497606
Lead,Dissolved	U		0.500	2.00	1	04/24/2025 21:47	WG2496289
Magnesium	152000		82.7	1000	1	04/24/2025 21:55	WG2497606
Manganese	372		0.700	5.00	1	04/24/2025 21:55	WG2497606
Manganese,Dissolved	444		0.700	5.00	1	04/24/2025 21:47	WG2496289
Nickel,Dissolved	3.11	B	0.500	2.00	1	04/24/2025 21:47	WG2496289
Potassium	11100		96.5	2000	1	04/24/2025 21:55	WG2497606
Sodium	307000		142	2000	1	04/24/2025 21:55	WG2497606
Zinc,Dissolved	9.89	B J	4.00	25.0	1	04/24/2025 21:47	WG2496289

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

Calculated Results

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Total Nitrogen	U		79.4	100	1	04/26/2025 14:24	WG2499515



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	ND		10000		1	04/19/2025 07:34	WG2493420

Gravimetric Analysis by Method 2540 D-2020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Suspended Solids	U		566	5000	1	04/17/2025 18:00	WG2493260

Sample Narrative:

L1848948-07 WG2493260: Reduced amount used due to matrix.

Wet Chemistry by Method 130.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hardness (colorimetric) as CaCO3	U		10600	30000	1	04/18/2025 18:28	WG2494163

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	U		4750	20000	1	04/18/2025 00:40	WG2493758

Sample Narrative:

L1848948-07 WG2493758: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Bromide	U		680	1000	1	04/18/2025 04:47	WG2493349
Chloride	U		547	1000	1	04/18/2025 04:47	WG2493349
Fluoride	U		76.1	150	1	04/18/2025 04:47	WG2493349
Nitrate as (N)	U		88.4	100	1	04/18/2025 04:47	WG2493349
Nitrite as (N)	U		79.4	100	1	04/18/2025 04:47	WG2493349
Sulfate	U		637	5000	1	04/18/2025 04:47	WG2493349

Wet Chemistry by Method 351.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	U		262	500	2	04/26/2025 14:24	WG2499515

Sample Narrative:

L1848948-07 WG2499515: Dilution due to matrix.

Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Phosphorus, Total	U		64.2	100	1	04/26/2025 15:12	WG2500673

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
MBAS	U		19.0	100	1	04/17/2025 18:36	WG2492992

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Hexavalent Chromium	U		0.100	5.00	1	04/22/2025 01:24	WG2490940

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	U		495	1000	1	04/18/2025 20:00	WG2493859

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cadmium,Dissolved	0.127	<u>J</u>	0.120	1.00	1	04/24/2025 21:51	WG2496289
Calcium	U		92.5	1000	1	04/24/2025 21:58	WG2497606
Copper,Dissolved	0.821	<u>J</u>	0.700	5.00	1	04/24/2025 21:51	WG2496289
Iron	U		22.6	100	1	04/24/2025 21:58	WG2497606
Lead,Dissolved	U		0.500	2.00	1	04/24/2025 21:51	WG2496289
Magnesium	U		82.7	1000	1	04/24/2025 21:58	WG2497606
Manganese	U		0.700	5.00	1	04/24/2025 21:58	WG2497606
Manganese,Dissolved	U		0.700	5.00	1	04/24/2025 21:51	WG2496289
Nickel,Dissolved	U		0.500	2.00	1	04/24/2025 21:51	WG2496289
Potassium	U		96.5	2000	1	04/24/2025 21:58	WG2497606
Sodium	230	<u>J</u>	142	2000	1	04/24/2025 21:58	WG2497606
Zinc,Dissolved	5.21	<u>B J</u>	4.00	25.0	1	04/24/2025 21:51	WG2496289

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Total Nitrogen	8730		262	500	1	04/26/2025 14:26	WG2499515

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	3350000		50000	1	04/19/2025 07:34	WG2493420

Gravimetric Analysis by Method 2540 D-2020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Suspended Solids	12200		473	4180	1	04/17/2025 18:00	WG2493260

Wet Chemistry by Method 130.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hardness (colorimetric) as CaCO3	1590000		53000	150000	5	04/18/2025 18:30	WG2494163

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	491000		4750	20000	1	04/18/2025 00:44	WG2493758

Sample Narrative:

L1848948-08 WG2493758: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Bromide	U		3400	5000	5	04/18/2025 05:01	WG2493349
Chloride	137000		2740	5000	5	04/18/2025 05:01	WG2493349
Fluoride	1180		380	750	5	04/18/2025 05:01	WG2493349
Nitrate as (N)	6780		442	500	5	04/18/2025 05:01	WG2493349
Nitrite as (N)	U		397	500	5	04/18/2025 05:01	WG2493349
Sulfate	1440000		31800	250000	50	04/18/2025 05:14	WG2493349

Sample Narrative:

L1848948-08 WG2493349: Dilution due to matrix impact on instrumentation at lower dilution

Wet Chemistry by Method 351.2

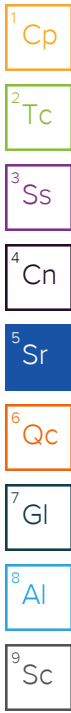
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	1950		262	500	2	04/26/2025 14:26	WG2499515

Sample Narrative:

L1848948-08 WG2499515: Dilution due to matrix.

Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Phosphorus, Total	64.3	J	64.2	100	1	04/26/2025 15:13	WG2500673



Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
MBAS	85.0	J	19.0	100	1	04/17/2025 18:36	WG2492992

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.100	5.00	1	04/23/2025 11:05	WG2493530

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	20800		495	1000	1	04/18/2025 20:30	WG2493859

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cadmium,Dissolved	U		0.120	1.00	1	04/24/2025 21:54	WG2496289
Calcium	334000		92.5	1000	1	04/24/2025 22:01	WG2497606
Copper,Dissolved	7.89		0.700	5.00	1	04/24/2025 21:54	WG2496289
Iron	23.8	J	22.6	100	1	04/24/2025 22:01	WG2497606
Lead,Dissolved	U		0.500	2.00	1	04/24/2025 21:54	WG2496289
Magnesium	197000		82.7	1000	1	04/24/2025 22:01	WG2497606
Manganese	313		0.700	5.00	1	04/24/2025 22:01	WG2497606
Manganese,Dissolved	307		0.700	5.00	1	04/24/2025 21:54	WG2496289
Nickel,Dissolved	6.58	B	0.500	2.00	1	04/24/2025 21:54	WG2496289
Potassium	14300		96.5	2000	1	04/24/2025 22:01	WG2497606
Sodium	357000		142	2000	1	04/24/2025 22:01	WG2497606
Zinc,Dissolved	7.30	B J	4.00	25.0	1	04/24/2025 21:54	WG2496289

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4202651-1 04/19/25 07:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U	↓	10000	10000

1 Cp

2 Tc

3 Ss

L1839516-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1839516-11 04/19/25 07:34 • (DUP) R4202651-3 04/19/25 07:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	127000	131000	1	3.10		10

4 Cn

5 Sr

L1839516-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1839516-18 04/19/25 07:34 • (DUP) R4202651-4 04/19/25 07:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	113000	111000	1	1.79		10

6 Qc

7 Gl

8 Al

Laboratory Control Sample (LCS)

(LCS) R4202651-2 04/19/25 07:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	8430000	95.8	90.0-110	

9 Sc

Method Blank (MB)

(MB) R4202682-1 04/17/25 18:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Suspended Solids	U		283	2500

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1848813-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1848813-01 04/17/25 18:00 • (DUP) R4202682-3 04/17/25 18:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Suspended Solids	12400	12800	1	3.17		10

L1848914-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1848914-01 04/17/25 18:00 • (DUP) R4202682-4 04/17/25 18:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Suspended Solids	17000	17000	1	0.000	↓	10

Sample Narrative:

OS: Reduced amount used due to matrix.

Laboratory Control Sample (LCS)

(LCS) R4202682-2 04/17/25 18:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Suspended Solids	773000	830000	107	85.0-115	

Method Blank (MB)

(MB) R4202732-1 04/21/25 13:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hardness (colorimetric) as CaCO3	U		10600	30000

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R4202732-2 04/21/25 13:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hardness (colorimetric) as CaCO3	200000	201000	101	85.0-115	

L1847563-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1847563-07 04/21/25 14:04 • (MS) R4202732-3 04/21/25 14:08 • (MSD) R4202732-4 04/21/25 14:09

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hardness (colorimetric) as CaCO3	200000	U	199000	198000	99.5	99.0	1	80.0-120			0.504	20

L1848773-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848773-02 04/21/25 14:19 • (MS) R4202732-5 04/21/25 14:23 • (MSD) R4202732-6 04/21/25 14:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hardness (colorimetric) as CaCO3	200000	339000	459000	460000	60.0	60.5	1	80.0-120	<u>E J6</u>	<u>E J6</u>	0.218	20

Method Blank (MB)

(MB) R4201854-1 04/18/25 18:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hardness (colorimetric) as CaCO3	U		10600	30000

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R4201854-2 04/18/25 18:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hardness (colorimetric) as CaCO3	200000	199000	99.5	85.0-115	

4 Cn

5 Sr

6 Qc

L1848948-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848948-03 04/18/25 18:21 • (MS) R4201854-3 04/18/25 18:22 • (MSD) R4201854-4 04/18/25 18:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hardness (colorimetric) as CaCO3	1000000	1370000	2390000	2360000	102	98.5	5	80.0-120	E	E	1.27	20

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4201387-2 04/17/25 23:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	U		4750	20000

Sample Narrative:

BLANK: Endpoint pH 4.5 Headspace

L1848948-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1848948-01 04/18/25 00:05 • (DUP) R4201387-3 04/18/25 00:09

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	401000	396000	1	1.34		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5 Headspace

Laboratory Control Sample (LCS)

(LCS) R4201387-1 04/17/25 23:48

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	101000	101	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5 Headspace

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4201972-1 04/17/25 23:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Bromide	U		680	1000
Chloride	U		547	1000
Fluoride	U		76.1	150
Nitrate as (N)	U		88.4	100
Nitrite as (N)	U		79.4	100
Sulfate	1240	J	637	5000

Method Blank (MB)

(MB) R4203045-1 04/21/25 20:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Bromide	U		680	1000
Chloride	U		547	1000
Fluoride	U		76.1	150
Nitrate as (N)	U		88.4	100
Nitrite as (N)	U		79.4	100
Sulfate	U		637	5000

L1848948-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1848948-03 04/18/25 01:39 • (DUP) R4201972-3 04/18/25 01:53

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Bromide	U	U	5	0.000		15
Chloride	125000	123000	5	1.63		15
Fluoride	1510	1400	5	7.25		15
Nitrate as (N)	10400	10100	5	3.76		15
Nitrite as (N)	U	U	5	0.000		15

Sample Narrative:

OS: Dilution due to matrix impact on instrumentation at lower dilution

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1848968-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1848968-11 04/18/25 07:14 • (DUP) R4201972-7 04/18/25 07:28

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Bromide	U	U	1	0.000		15
Nitrate as (N)	188	180	1	4.36		15
Nitrite as (N)	U	U	1	0.000		15
Sulfate	12900	12600	1	2.43		15

1 Cp

2 Tc

3 Ss

4 Cn

L1848948-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1848948-03 04/21/25 22:10 • (DUP) R4203045-3 04/21/25 22:23

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Sulfate	1560000	1560000	50	0.0923		15

5 Sr

6 Qc

7 Gl

Laboratory Control Sample (LCS)

(LCS) R4201972-2 04/17/25 23:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Bromide	40000	40300	101	90.0-110	
Chloride	40000	38300	95.8	90.0-110	
Fluoride	8000	8210	103	90.0-110	
Nitrate as (N)	8000	8340	104	90.0-110	
Nitrite as (N)	8000	7950	99.4	90.0-110	
Sulfate	40000	41700	104	90.0-110	

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R4203045-2 04/21/25 21:06

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Bromide	40000	39000	97.5	90.0-110	
Chloride	40000	38400	95.9	90.0-110	
Fluoride	8000	7920	99.0	90.0-110	
Nitrate as (N)	8000	7840	98.0	90.0-110	
Nitrite as (N)	8000	8000	99.9	90.0-110	
Sulfate	40000	39000	97.6	90.0-110	

L1848948-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848948-03 04/18/25 01:39 • (MS) R4201972-4 04/18/25 02:06 • (MSD) R4201972-5 04/18/25 02:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromide	40000	U	37200	36200	93.0	90.5	5	90.0-110			2.70	15
Chloride	40000	125000	140000	137000	36.9	29.4	5	90.0-110	J6	J6	2.17	15
Fluoride	8000	1510	10100	9960	107	106	5	90.0-110			1.43	15
Nitrate as (N)	8000	10400	16400	16000	74.5	69.9	5	90.0-110	J6	J6	2.26	15
Nitrite as (N)	8000	U	8700	8550	109	107	5	90.0-110			1.74	15
Sulfate	40000	1840000	1420000	1440000	0.000	0.000	5	90.0-110	EV	EV	1.74	15

Sample Narrative:

OS: Dilution due to matrix impact on instrumentation at lower dilution

L1848968-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848968-11 04/18/25 07:14 • (MS) R4201972-8 04/18/25 07:41 • (MSD) R4201972-9 04/18/25 07:55

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromide	40000	U	40400	40700	101	102	1	90.0-110			0.817	15
Nitrate as (N)	8000	188	8670	8740	106	107	1	90.0-110			0.762	15
Nitrite as (N)	8000	U	8290	8350	104	104	1	90.0-110			0.729	15
Sulfate	40000	12900	53000	53100	100	100	1	90.0-110			0.259	15

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4202412-1 04/20/25 21:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Kjeldahl Nitrogen, TKN	U		131	250

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1848363-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1848363-01 04/20/25 21:44 • (DUP) R4202412-3 04/20/25 21:45

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Kjeldahl Nitrogen, TKN	2080	1920	1	8.00		20

L1848363-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1848363-07 04/20/25 21:53 • (DUP) R4202412-4 04/20/25 21:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Kjeldahl Nitrogen, TKN	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4202412-2 04/20/25 21:43

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Kjeldahl Nitrogen, TKN	6000	5860	97.7	90.0-110	

L1848948-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1848948-02 04/20/25 21:59 • (MS) R4202412-5 04/20/25 22:00

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Kjeldahl Nitrogen, TKN	5000	2710	7840	103	1	90.0-110	

L1850131-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1850131-05 04/20/25 22:12 • (MS) R4202412-6 04/20/25 22:13 • (MSD) R4202412-7 04/20/25 22:14

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Kjeldahl Nitrogen, TKN	5000	2170	8490	7950	126	116	1	90.0-110	<u>J5</u>	<u>J5</u>	6.57	20

Method Blank (MB)

(MB) R4205592-1 04/26/25 14:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Kjeldahl Nitrogen, TKN	U		131	250

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1849540-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1849540-04 04/26/25 14:31 • (DUP) R4205592-3 04/26/25 14:32

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Kjeldahl Nitrogen, TKN	1880	2510	1	28.7	<u>J3</u>	20

L1849540-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1849540-07 04/26/25 14:38 • (DUP) R4205592-4 04/26/25 14:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Kjeldahl Nitrogen, TKN	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4205592-2 04/26/25 14:22

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Kjeldahl Nitrogen, TKN	6000	6610	110	90.0-110	

L1850850-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1850850-01 04/26/25 14:41 • (MS) R4205592-5 04/26/25 14:42 • (MSD) R4205592-6 04/26/25 14:44

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Kjeldahl Nitrogen, TKN	5000	U	5920	5990	118	120	1	90.0-110	<u>J5</u>	<u>J5</u>	1.18	20

L1850880-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1850880-01 04/26/25 14:46 • (MS) R4205592-7 04/26/25 14:47

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Kjeldahl Nitrogen, TKN	5000	3480	9420	119	1	90.0-110	<u>J5</u>

Method Blank (MB)

(MB) R4207343-1 04/29/25 21:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Kjeldahl Nitrogen, TKN	197	↓	131	250

¹Cp

²Tc

³Ss

L1848771-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1848771-01 04/29/25 21:38 • (DUP) R4207343-3 04/29/25 21:39

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Kjeldahl Nitrogen, TKN	1160	1170	1	0.386		20

⁴Cn

⁵Sr

Laboratory Control Sample (LCS)

(LCS) R4207343-2 04/29/25 21:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Kjeldahl Nitrogen, TKN	6000	6510	109	90.0-110	

⁶Qc

⁷Gl

L1848948-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848948-03 04/29/25 21:45 • (MS) R4207343-4 04/29/25 21:46 • (MSD) R4207343-6 04/29/25 21:47

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Kjeldahl Nitrogen, TKN	20000	2030	22200	22800	101	104	4	90.0-110			2.54	20

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4202414-1 04/20/25 21:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Phosphorus,Total	U		64.2	100

L1848363-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1848363-01 04/20/25 21:58 • (DUP) R4202414-3 04/20/25 22:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Phosphorus,Total	142	164	1	14.4		20

L1848363-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1848363-07 04/20/25 22:07 • (DUP) R4202414-4 04/20/25 22:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Phosphorus,Total	U	85.4	1	200	J P1	20

Laboratory Control Sample (LCS)

(LCS) R4202414-2 04/20/25 21:57

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Phosphorus,Total	1690	1560	92.6	85.0-115	

L1850131-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1850131-05 04/20/25 22:26 • (MS) R4202414-6 04/20/25 22:28 • (MSD) R4202414-7 04/20/25 22:29

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Phosphorus,Total	2500	225	2590	2480	94.6	90.2	1	90.0-110			4.34	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4205628-1 04/26/25 15:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Phosphorus,Total	U		64.2	100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1849540-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1849540-04 04/26/25 15:20 • (DUP) R4205628-5 04/26/25 15:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Phosphorus,Total	152	185	1	19.6		20

L1849540-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1849540-07 04/26/25 15:26 • (DUP) R4205628-6 04/26/25 15:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Phosphorus,Total	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4205628-2 04/26/25 15:03

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Phosphorus,Total	1690	1630	96.7	85.0-115	

L1848948-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848948-03 04/26/25 15:06 • (MS) R4205628-3 04/26/25 15:08 • (MSD) R4205628-4 04/26/25 15:09

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Phosphorus,Total	2500	85.0	2500	2590	96.6	100	1	90.0-110			3.54	20

Method Blank (MB)

(MB) R4201254-1 04/17/25 18:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
MBAS	U		19.0	100

L1848948-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1848948-01 04/17/25 18:32 • (DUP) R4201254-3 04/17/25 18:32

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

Laboratory Control Sample (LCS)

(LCS) R4201254-2 04/17/25 18:29

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
MBAS	1000	1090	109	85.0-115	

L1848948-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848948-03 04/17/25 18:34 • (MS) R4201254-4 04/17/25 18:33 • (MSD) R4201254-5 04/17/25 18:33

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
MBAS	1000	255	1250	1240	99.6	98.7	1	85.0-115			0.722	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4202945-1 04/21/25 20:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	U		0.100	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1848762-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1848762-01 04/21/25 22:27 • (DUP) R4202945-5 04/21/25 22:37

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

L1848948-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1848948-06 04/22/25 01:04 • (DUP) R4202945-7 04/22/25 01:14

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) R4202945-2 04/21/25 20:27

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	2.00	2.05	102	90.0-110	↓

L1847769-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1847769-02 04/21/25 20:47 • (MS) R4202945-3 04/21/25 20:57 • (MSD) R4202945-4 04/21/25 21:07

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	50.0	U	48.3	48.9	96.5	97.7	1	90.0-110			1.24	20

L1848823-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1848823-01 04/21/25 23:16 • (MS) R4202945-6 04/21/25 23:26

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	50.0	U	49.2	98.4	1	90.0-110	

Method Blank (MB)

(MB) R4204248-1 04/23/25 09:57

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	U		0.100	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1848959-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1848959-01 04/23/25 11:15 • (DUP) R4204248-5 04/23/25 11:25

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

L1849358-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1849358-01 04/23/25 14:41 • (DUP) R4204248-6 04/23/25 14:51

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) R4204248-2 04/23/25 10:06

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	2.00	2.12	106	90.0-110	↓

L1848948-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848948-03 04/23/25 10:26 • (MS) R4204248-3 04/23/25 10:36 • (MSD) R4204248-4 04/23/25 10:46

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	50.0	U	47.1	47.8	94.2	95.6	1	90.0-110			1.52	20

L1848948-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1848948-08 04/23/25 11:05 • (MS) R4204248-7 04/23/25 15:31

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	50.0	U	47.1	94.1	1	90.0-110	

Method Blank (MB)

(MB) R4201911-2 04/18/25 09:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TOC (Total Organic Carbon)	U		495	1000

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1848844-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1848844-03 04/18/25 11:25 • (DUP) R4201911-5 04/18/25 11:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
TOC (Total Organic Carbon)	8320	8340	1	0.240		20

L1848860-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1848860-03 04/18/25 15:31 • (DUP) R4201911-6 04/18/25 15:51

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
TOC (Total Organic Carbon)	1200	1270	1	5.66		20

Laboratory Control Sample (LCS)

(LCS) R4201911-1 04/18/25 08:48

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TOC (Total Organic Carbon)	25000	24500	98.0	85.0-115	

L1848844-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848844-02 04/18/25 10:14 • (MS) R4201911-3 04/18/25 10:39 • (MSD) R4201911-4 04/18/25 11:04

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TOC (Total Organic Carbon)	25000	1540	25300	25600	95.2	96.1	1	85.0-115			0.825	20

L1848948-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848948-03 04/18/25 17:27 • (MS) R4201911-7 04/18/25 17:54 • (MSD) R4201911-8 04/18/25 18:21

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TOC (Total Organic Carbon)	25000	6830	29400	29700	90.2	91.6	1	85.0-115			1.15	20

Method Blank (MB)

(MB) R4204809-1 04/24/25 19:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Cadmium,Dissolved	U		0.120	1.00
Copper,Dissolved	U		0.700	5.00
Lead,Dissolved	U		0.500	2.00
Manganese,Dissolved	U		0.700	5.00
Nickel,Dissolved	1.19	U	0.500	2.00
Zinc,Dissolved	8.22	U	4.00	25.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R4204809-2 04/24/25 19:59

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Cadmium,Dissolved	50.0	51.4	103	80.0-120	
Copper,Dissolved	50.0	50.2	100	80.0-120	
Lead,Dissolved	50.0	48.6	97.3	80.0-120	
Manganese,Dissolved	50.0	47.3	94.7	80.0-120	
Nickel,Dissolved	50.0	48.8	97.7	80.0-120	
Zinc,Dissolved	50.0	53.3	107	80.0-120	

L1848948-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848948-03 04/24/25 20:03 • (MS) R4204809-4 04/24/25 20:09 • (MSD) R4204809-5 04/24/25 20:13

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Cadmium,Dissolved	50.0	U	49.1	49.3	98.2	98.6	1	75.0-125			0.380	20
Copper,Dissolved	50.0	8.06	56.5	52.9	96.9	89.6	1	75.0-125			6.67	20
Lead,Dissolved	50.0	U	48.4	47.8	96.9	95.5	1	75.0-125			1.36	20
Manganese,Dissolved	50.0	135	181	181	91.3	92.4	1	75.0-125			0.291	20
Nickel,Dissolved	50.0	2.10	51.3	50.2	98.3	96.2	1	75.0-125			2.10	20
Zinc,Dissolved	50.0	U	54.2	51.4	108	103	1	75.0-125			5.24	20

Method Blank (MB)

(MB) R4204770-6 04/24/25 20:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium	U		92.5	1000
Iron	U		22.6	100
Magnesium	U		82.7	1000
Manganese	U		0.700	5.00
Potassium	U		96.5	2000
Sodium	U		142	2000

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4204770-7 04/24/25 20:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	5000	5120	102	80.0-120	
Iron	1000	952	95.2	80.0-120	
Magnesium	5000	4760	95.1	80.0-120	
Manganese	50.0	50.6	101	80.0-120	
Potassium	5000	4890	97.8	80.0-120	
Sodium	5000	5030	101	80.0-120	

L1848948-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1848948-03 04/24/25 20:38 • (MS) R4204770-9 04/24/25 20:44 • (MSD) R4204770-10 04/24/25 20:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	5000	250000	251000	250000	19.5	7.06	1	75.0-125	V	V	0.248	20
Iron	1000	95.6	1070	1080	97.8	98.2	1	75.0-125			0.404	20
Magnesium	5000	183000	185000	187000	53.5	81.2	1	75.0-125	V		0.744	20
Manganese	50.0	149	198	197	99.2	96.8	1	75.0-125			0.597	20
Potassium	5000	9950	14600	14500	93.2	90.2	1	75.0-125			1.02	20
Sodium	5000	436000	441000	437000	112	24.9	1	75.0-125		V	0.996	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

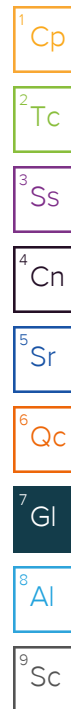
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
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.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
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.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

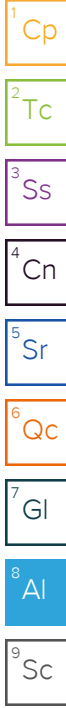
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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: **CTEH - ER**
5120 North Shore Drive
North Little Rock, AR 72118

Billing Information:
Accounts Payable
10700 Prairie Lakes Drive
Eden Prairie, MN 55344

Report to:
CTEH 501-801-8500

Email To:
labresults@cteh.com;ahenault@cteh.com;kyle

Project Description:
Bishop Loss of Containment Incident

City/State Collected: **Galeton, CO**

Please Circle:
 PT M CT ET

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

Client Project # **PROJ-054017**

Lab Project # **CTEHER-054017**

Collected by (print): **Spencer Beghtol**

Site/Facility ID #: **Chevron, Galeton, CO**

Collected by (signature): **Spencer Beghtol**

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

Immediately Packed on Ice N ___ Y

Date Results Needed

No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Pres Chk	*Anions / Alkalinity 250mlHDPE-NoPres	CR6ICFP 50mlTube/plungerPres	Cations / Hardness 250mlHDPE-HNO3	Diss. Metals 200.8 250mlHDPE HNO3	MBAS 500mlHDPE-NoPres	PT, TKN 250mlHDPE-H2SO4	RA-226,RA-228,KPA-U 1L-HDPE-Add-HNO3	TDS 1L-HDPE NoPres	TOC 250mlAmb-HCl	TSS 1L-HDPE NoPres	Remarks	Sample # (lab only)
GACO0416W001	G	NPWSW	—	4/16/25	1009	9	X	X	X	X	X	X	—	X	X	X		-01
GACO0416W002	G	NPWSW	—	4/16/25	1126	9	X	X	X	X	X	X	—	X	X	X		-02
GACO0416W003	G	NPWSW	—	4/16/25	1208	9	X	X	X	X	X	X	—	X	X	X		-03
GACO0416W004	G	NPWSW	—	4/16/25	1150	9	X	X	X	X	X	X	—	X	X	X		-04
GACO0416W005	G	NPWSW	—	4/16/25	1018	9	X	X	X	X	X	X	—	X	X	X		-05
GACO0416W006	G	NPWSW	—	4/16/25	1325	9	X	X	X	X	X	X	—	X	X	X		-06
GACO0416W003MS	G	NPWSW	—	4/16/25	1236	9	X	X	X	X	X	X	—	X	X	X		-03
GACO0416W003MSD	G	NPWSW	—	4/16/25	1250	9	X	X	X	X	X	X	—	X	X	X		-03
GACO0416F001	G	NPWSW	—	4/16/25	1329	9	X	X	X	X	X	X	—	X	X	X		-07
GACO0416V001	G	NPWSW	—	4/16/25	1018	9	X	X	X	X	X	X	—	X	X	X		-08

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

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/hubs/pas-standard-terms.pdf>

SDG # **L1848949**

Table # **K450**

Acctnum: **CTEHER**

Template: **T271979**

Prelogin: **P1144451**

PM: **546 - Jared Starkey**

PB:

Shipped Via:

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

Remarks:

Samples returned via: ___ UPS ___ FedEx ___ Courier

Tracking #

Relinquished by: (Signature) **Spencer Beghtol** Date: **4/16/25** Time: **16:49**

Received by: (Signature) **Jared Starkey**

Trip Blank Received: **6** (Yes/No) **HCl/MeOH TBR**

Temp: **90** °C Bottles Received: **90**

Relinquished by: (Signature) **Jared Starkey** Date: **4-16-25** Time: **18:00**

Received by: (Signature) **Jared Starkey**

Temp: **90** °C Bottles Received: **90**

Relinquished by: (Signature) **Jared Starkey** Date: **4-17-25** Time: **0900**

Received for lab by: (Signature) **Jared Starkey**

Date: **4-17-25** Time: **0900**

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

