



SGS Silver State Analytical Laboratories
3626 E. Sunset Road, Suite 100
Las Vegas, NV 89120
(702) 873-4478
www.ssalabs.com

April 03, 2025
Workorder **25031043**

Randy Sharpe
H2 Analytics
2505 Anthem Village Dr Ste E385
Henderson, NV 89052

Project: H2AP-250321-1

Dear Randy Sharpe:

It is the policy of SGS Silver State Analytical Laboratory - Las Vegas to strictly adhere to a comprehensive Quality Assurance Plan that ensures the data presented in this report are both accurate and precise. SGS Silver State Analytical Laboratory - Las Vegas maintains accreditation in the State of Nevada (NV-00930).

The data presented in this report was obtained from the analysis of samples received under a chain of custody. Unless otherwise noted below, samples were received in good condition, properly preserved and within hold time for the required analyses. Any anomalies associated with the analysis of the samples have been flagged in the Analytical Report with an appropriate explanation in the Definitions & Qualifiers.

Analytical Comments for SM 4500H+ B, Sample 25031043-01A, Batch ID R99820 : Analytical Method hold time was exceeded by 1.928 days.

Sincerely,

A handwritten signature in black ink, appearing to read 'Carly Wood'.

Carly Wood
Laboratory Director
3626 E. Sunset Road, Suite 100
Las Vegas, NV 89120



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Analytical Report

Workorder#: 25031043

Date Reported: 4/3/2025

Client: H2 Analytics

Sampled By: R Sharpe

Project Name: H2AP-250321-1

PO #:

Laboratory Accreditation Number: NV930/CA3029

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
25031043-01	Echo Hydrogen Prebiotic	03/24/2025 13:20	3/25/2025

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Aluminum	EPA 200.7	0.0500	mg/L	0.05	JG	03/31/2025 10:12	
Antimony	EPA200.8	< 1.0	µg/L	1	JG	03/28/2025 14:04	
Arsenic	EPA200.8	< 1.0	µg/L	1	JG	03/28/2025 14:04	
Barium	EPA200.8	27	µg/L	1	JG	03/28/2025 14:04	
Beryllium	EPA200.8	< 1.0	µg/L	1	JG	03/28/2025 14:04	
Boron	EPA 200.7	< 0.0500	mg/L	0.05	JG	03/31/2025 10:12	
Cadmium	EPA200.8	< 1.0	µg/L	1	JG	03/28/2025 14:04	
Calcium	EPA 200.7	4.56	mg/L	1	JG	03/31/2025 10:12	
Chloride	EPA 300.0	1.11	mg/L	0.1	DT	03/25/2025 19:19	L
Chromium	EPA200.8	16	µg/L	1	JG	03/28/2025 14:04	
Copper	EPA200.8	2.0	µg/L	1	JG	03/28/2025 14:04	
Cyanide, Free	SM 4500CN E	< 0.0500	mg/L	0.05	DT	04/02/2025 12:53	
Fluoride	EPA 300.0	< 0.0500	mg/L	0.05	DT	03/25/2025 19:19	
Hardness (As CaCO3)	SM 2340 B	654	mg/L	1	JG	04/01/2025 13:51	
Hardness, Calcium (As CaCO3)	SM 2340 B	11.4	mg/L	1	JG	04/01/2025 13:51	
Hardness, Magnesium (As CaCO3)	SM 2340 B	642	mg/L	1	JG	04/01/2025 13:51	
Iron	EPA 200.7	< 0.100	mg/L	0.1	JG	03/31/2025 10:12	
Lead	EPA200.8	1.9	µg/L	1	JG	03/28/2025 14:04	
Magnesium	EPA 200.7	156	mg/L	1	JG	03/31/2025 10:12	
Manganese	EPA200.8	14	µg/L	1	JG	03/28/2025 14:04	
Mercury	EPA 245.1	< 0.320	µg/L	0.32	JG	03/26/2025 15:18	
Nickel	EPA200.8	4.7	µg/L	1	JG	03/28/2025 14:04	
Nitrate as N	EPA 300.0	< 0.0500	mg/L	0.05	DT	03/25/2025 19:19	
Nitrite as N	EPA 300.0	< 0.0500	mg/L	0.05	DT	03/25/2025 19:19	
Nitrogen, Nitrate-Nitrite	EPA 300.0	< 0.0500	mg/L	0.05	DT	03/25/2025 19:19	
pH	SM 4500H+ B	2.56	pH Units		KR	03/26/2025 12:05	H
Potassium	EPA 200.7	1.92	mg/L	1	JG	03/31/2025 10:12	
Selenium	EPA200.8	< 1.0	µg/L	1	JG	03/28/2025 14:04	
Silica, Dissolved (as SiO2)	EPA 200.7	23.1	mg/L	0.1	JG	03/31/2025 12:03	
Silver	EPA200.8	< 1.0	µg/L	1	JG	03/28/2025 14:04	
Sodium	EPA 200.7	3.73	mg/L	1	JG	03/31/2025 10:12	
Sulfate	EPA 300.0	< 1.00	mg/L	1	DT	03/26/2025 16:07	L
Thallium	EPA200.8	< 1.0	µg/L	1	JG	03/28/2025 14:04	
Zinc	EPA200.8	< 10	µg/L	10	JG	03/28/2025 14:04	



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Quality Control Report

WO#: 25031043
4/3/2025

Analysis: PH - CWA
Method: SM 4500H+ B

Batch ID: R99820

Duplicate

RunID: 99820 SeqNo 2745123 Units: pH Units
Analysis Date: 3/26/2025 12:05:00 PM Analyst: KR

Analyte	Result	Rep Limit	Rep Qual	RPD	Sample Value
pH	2.61		H	0.0193424	2.56

Laboratory Control Sample (LCS)

RunID: 99820 SeqNo 2745119 Units: pH Units
Analysis Date: 3/26/2025 12:05:00 PM Analyst: KR

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
pH	7.000	7.05	101								

Analysis: Anions-CWA (Cl, F, NO₂, NO₃, SO)
Method: EPA 300.0

Batch ID: R99821

Method Blank

RunID: 99821 SeqNo 2745061 Units: mg/L
Analysis Date: 3/25/2025 5:24:00 PM Analyst: DT

Analyte	Result	Rep Limit	Rep Qual
Chloride	< 0.100	0.100	
Fluoride	< 0.0500	0.0500	
Nitrate as N	< 0.0500	0.0500	
Nitrite as N	< 0.0500	0.0500	
Nitrogen, Nitrate-Nitrite	< 0.0500	0.0500	

Laboratory Control Sample (LCS)

RunID: 99821 SeqNo 2745057 Units: mg/L
Analysis Date: 2/24/2025 5:26:00 PM Analyst: DT

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Chloride	5.000	5.30	106								
Fluoride	5.000	5.10	102								
Nitrate as N	5.000	4.99	99.8								
Nitrite as N	5.000	5.04	101								
Nitrogen, Nitrate-Nitrite	10.00	10.0	100								

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031027-01A

RunID: 99821 SeqNo 2745064 Units: mg/L
Analysis Date: 3/25/2025 6:33:00 PM Analyst: DT

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Quality Control Report

WO#: 25031043
4/3/2025

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Chloride	479.2	50.00	499	40.0	50.00	500	41.1	0.114	20	90	110	S
Fluoride	1.312	50.00	52.2	102	50.00	52.3	102	0.242	20	90	110	
Nitrate as N	12.91	50.00	62.9	99.9	50.00	63.1	100	0.285	20	90	110	
Nitrite as N	0	50.00	53.6	107	50.00	53.8	108	0.235	20	90	110	
Nitrogen, Nitrate-Nitrite	12.91	100.0	117	104	100.0	117	104	0.262	20	90	110	

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031027-01A

RunID: 99821 SeqNo 2745065 Units: mg/L

Analysis Date: 3/25/2025 6:56:00 PM Analyst: DT

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Chloride	479.2	50.00	500	41.1								
Fluoride	1.312	50.00	52.3	102								
Nitrate as N	12.91	50.00	63.1	100								
Nitrite as N	0	50.00	53.8	108								
Nitrogen, Nitrate-Nitrite	12.91	100.0	117	104								

Analysis: Mercury - CWA

Method: EPA 245.1

Batch ID: R99843

Method Blank

RunID: 99843 SeqNo 2745293 Units: µg/L

Analysis Date: 3/26/2025 1:18:00 PM Analyst: JG

Analyte	Result	Rep Limit	Rep Qual
Mercury	< 0.320	0.320	

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Quality Control Report

WO#: 25031043
4/3/2025

Method Blank

RunID: 99843 SeqNo 2745296 Units: µg/L
Analysis Date: 3/26/2025 1:29:00 PM Analyst: JG

Analyte	Result	Rep Limit	Rep Qual
Mercury	< 0.320	0.320	

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Quality Control Report

WO#: 25031043
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Method Blank

RunID: 99843 SeqNo 2745325 Units: µg/L
Analysis Date: 3/26/2025 3:01:00 PM Analyst: JG

Analyte	Result	Rep Limit	Rep Qual
Mercury	< 0.320	0.320	

Laboratory Control Sample (LCS)

RunID: 99843 SeqNo 2745292 Units: µg/L
Analysis Date: 3/26/2025 1:15:00 PM Analyst: JG

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Mercury	5.000	4.94	98.8								

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031016-01B

RunID: 99843 SeqNo 2745298 Units: µg/L
Analysis Date: 3/26/2025 1:36:00 PM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Mercury	0	10.00	9.56	95.6	10.00	9.20	92.0	3.85	20	70	130	

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031016-01B

RunID: 99843 SeqNo 2745299 Units: µg/L
Analysis Date: 3/26/2025 1:39:00 PM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Mercury	0	10.00	9.20	92.0								

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031016-01A

RunID: 99843 SeqNo 2745312 Units: µg/L
Analysis Date: 3/26/2025 2:20:00 PM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Mercury	0	10.00	9.15	91.5	10.00	9.06	90.6	0.988	20	70	130	

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Quality Control Report

WO#: 25031043
4/3/2025

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031016-01A

RunID: 99843 SeqNo 2745313 Units: µg/L

Analysis Date: 3/26/2025 2:23:00 PM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Mercury	0	10.00	9.06	90.6								

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01B

RunID: 99843 SeqNo 2745331 Units: µg/L

Analysis Date: 3/26/2025 3:22:00 PM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Mercury	0	10.00	8.01	80.1	10.00	7.75	77.5	3.23	20	70	130	

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01B

RunID: 99843 SeqNo 2745332 Units: µg/L

Analysis Date: 3/26/2025 3:25:00 PM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Mercury	0	10.00	7.75	77.5								

Analysis: Anions-CWA (Cl, F, NO₂, NO₃, SO)
Method: EPA 300.0

Batch ID: R99872

Method Blank

RunID: 99872 SeqNo 2745691 Units: mg/L

Analysis Date: 3/26/2025 3:21:00 PM Analyst: DT

Analyte	Result	Rep Limit	Rep Qual
Sulfate	< 0.100	0.100	

Laboratory Control Sample (LCS)

RunID: 99872 SeqNo 2745687 Units: mg/L

Analysis Date: 2/24/2025 5:26:00 PM Analyst: DT

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Sulfate	5.000	5.02	100								

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Quality Control Report

WO#: 25031043
4/3/2025

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01A

RunID: 99872 SeqNo 2745694 Units: mg/L

Analysis Date: 3/26/2025 4:29:00 PM Analyst: DT

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Sulfate	860.6	50.00	49.0	-1620	50.00	49.1	-1620	0.185	20	90	110	S

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01A

RunID: 99872 SeqNo 2745695 Units: mg/L

Analysis Date: 3/26/2025 4:52:00 PM Analyst: DT

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Sulfate	860.6	50.00	49.1	-1620								

Analysis: Metals, 200.8 - CWA

Method: EPA200.8

Batch ID: R99913

Method Blank

RunID: 99913 SeqNo 2746212 Units: µg/L

Analysis Date: 3/28/2025 1:30:42 PM Analyst: JG

Analyte	Result	Rep Limit	Rep Qual
Antimony	< 1.0	1.0	
Arsenic	< 1.0	1.0	
Barium	< 1.0	1.0	
Beryllium	< 1.0	1.0	
Cadmium	< 1.0	1.0	
Chromium	< 1.0	1.0	
Copper	< 1.0	1.0	
Lead	< 1.0	1.0	
Manganese	< 1.0	1.0	
Nickel	< 1.0	1.0	
Selenium	< 1.0	1.0	
Silver	< 1.0	1.0	
Thallium	< 1.0	1.0	
Zinc	< 10	10	

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WO#: 25031043
4/3/2025

Method Blank

RunID: 99913 SeqNo 2746213 Units: µg/L
Analysis Date: 3/28/2025 1:36:17 PM Analyst: JG

Analyte	Result	Rep Limit	Rep Qual
Antimony	< 1.0	1.0	
Arsenic	< 1.0	1.0	
Barium	< 1.0	1.0	
Beryllium	< 1.0	1.0	
Cadmium	< 1.0	1.0	
Chromium	< 1.0	1.0	
Copper	< 1.0	1.0	
Lead	< 1.0	1.0	
Manganese	< 1.0	1.0	
Nickel	< 1.0	1.0	
Selenium	< 1.0	1.0	
Silver	< 1.0	1.0	
Thallium	< 1.0	1.0	
Zinc	< 10	10	

Laboratory Control Sample (LCS)

RunID: 99913 SeqNo 2746210 Units: µg/L
Analysis Date: 3/28/2025 1:19:33 PM Analyst: JG

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Antimony	40.00	40	99.3								

Laboratory Control Sample (LCS)

RunID: 99913 SeqNo 2746211 Units: µg/L
Analysis Date: 3/28/2025 1:25:07 PM Analyst: JG

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Arsenic	40.00	41	102								
Barium	40.00	40	101								
Beryllium	40.00	41	102								
Cadmium	40.00	40	100								
Chromium	40.00	40	101								
Copper	40.00	40	99.6								
Lead	40.00	40	101								
Manganese	40.00	41	103								
Nickel	40.00	40	101								
Selenium	200.0	200	102								
Silver	40.00	41	102								
Thallium	40.00	41	103								
Zinc	40.00	41	102								

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Quality Control Report

WO#: 25031043
4/3/2025

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01B

RunID: 99913 SeqNo 2746232 Units: µg/L

Analysis Date: 3/28/2025 2:09:48 PM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Antimony	0.1670	40.00	41	101	40.00	41	101	0.0861	20	70	130	
Arsenic	0.5590	40.00	43	105	40.00	42	104	0.951	20	70	130	
Barium	26.88	40.00	66	98.9	40.00	66	96.7	1.34	20	70	130	
Beryllium	0	40.00	38	95.8	40.00	39	96.9	1.05	20	70	130	
Cadmium	0	40.00	39	97.9	40.00	39	96.4	1.61	20	70	130	
Chromium	15.62	40.00	55	98.0	40.00	55	99.5	1.15	20	70	130	
Copper	1.962	40.00	40	94.7	40.00	40	94.1	0.571	20	70	130	
Lead	1.906	40.00	40	96.4	40.00	40	95.4	1.04	20	70	130	
Manganese	13.80	40.00	52	95.4	40.00	52	94.9	0.351	20	70	130	
Nickel	4.659	40.00	43	95.2	40.00	43	95.1	0.0585	20	70	130	
Selenium	0.4620	200.0	260	128	200.0	260	128	0.113	20	70	130	
Silver	0	40.00	38	93.8	40.00	37	93.1	0.779	20	70	130	
Thallium	0	40.00	39	98.2	40.00	39	96.9	1.30	20	70	130	
Zinc	6.304	40.00	45	95.7	40.00	44	95.2	0.421	20	70	130	

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01B

RunID: 99913 SeqNo 2746233 Units: µg/L

Analysis Date: 3/28/2025 2:15:21 PM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Antimony	0.1670	40.00	41	101								
Arsenic	0.5590	40.00	42	104								
Barium	26.88	40.00	66	96.7								
Beryllium	0	40.00	39	96.9								
Cadmium	0	40.00	39	96.4								
Chromium	15.62	40.00	55	99.5								
Copper	1.962	40.00	40	94.1								
Lead	1.906	40.00	40	95.4								
Manganese	13.80	40.00	52	94.9								
Nickel	4.659	40.00	43	95.1								
Selenium	0.4620	200.0	260	128								
Silver	0	40.00	37	93.1								
Thallium	0	40.00	39	96.9								
Zinc	6.304	40.00	44	95.2								

Analysis: Metals, 200.7 - CWA
Method: EPA 200.7

Batch ID: R99931

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Quality Control Report

WO#: 25031043
4/3/2025

Method Blank

RunID: 99931 SeqNo 2746681 Units: mg/L
Analysis Date: 3/31/2025 10:03:20 AM Analyst: JG

Analyte	Result	Rep Limit	Rep Qual
Aluminum	< 0.0500	0.0500	
Boron	< 0.0500	0.0500	
Calcium	< 1.00	1.00	
Iron	< 0.100	0.100	
Magnesium	< 1.00	1.00	
Potassium	< 1.00	1.00	
Sodium	< 1.00	1.00	

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Quality Control Report

WO#: 25031043
4/3/2025

Method Blank

RunID: 99931 SeqNo 2746682 Units: mg/L
Analysis Date: 3/31/2025 10:05:31 AM Analyst: JG

Analyte	Result	Rep Limit	Rep Qual
Aluminum	< 0.0500	0.0500	
Boron	< 0.0500	0.0500	
Calcium	< 1.00	1.00	
Iron	< 0.100	0.100	
Magnesium	< 1.00	1.00	
Potassium	< 1.00	1.00	
Sodium	< 1.00	1.00	

Laboratory Control Sample (LCS)

RunID: 99931 SeqNo 2746680 Units: mg/L
Analysis Date: 3/31/2025 10:00:53 AM Analyst: JG

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Sodium	10.00	10.5	105								

Laboratory Control Sample (LCS)

RunID: 99931 SeqNo 2746714 Units: mg/L
Analysis Date: 3/31/2025 9:58:06 AM Analyst: JG

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Aluminum	10.00	10.2	103								
Boron	10.00	10.1	101								
Calcium	10.00	10.4	104								
Iron	10.00	10.4	104								
Magnesium	10.00	10.5	105								
Potassium	10.00	10.1	101								

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01B

RunID: 99931 SeqNo 2746686 Units: mg/L
Analysis Date: 3/31/2025 10:15:35 AM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Aluminum	0.05000	5.000	5.31	105	5.000	5.29	105	0.377	20	70	130	
Boron	0	5.000	5.15	103	5.000	5.12	102	0.584	20	70	130	
Calcium	4.560	20.00	25.7	106	20.00	25.7	106	0.117	20	70	130	
Iron	0.03000	5.000	5.28	105	5.000	5.25	104	0.570	20	70	130	
Magnesium	155.6	20.00	173	84.9	20.00	172	81.9	0.354	20	70	130	
Potassium	1.920	20.00	22.4	102	20.00	22.4	102	0.0893	20	70	130	
Sodium	3.730	20.00	24.7	105	20.00	24.7	105	0.162	20	70	130	

Original



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Quality Control Report

WO#: 25031043
4/3/2025

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01B

RunID: 99931 SeqNo 2746687 Units: mg/L

Analysis Date: 3/31/2025 10:18:17 AM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Aluminum	0.05000	5.000	5.29	105								
Boron	0	5.000	5.12	102								
Calcium	4.560	20.00	25.7	106								
Iron	0.03000	5.000	5.25	104								
Magnesium	155.6	20.00	172	81.9								
Potassium	1.920	20.00	22.4	102								
Sodium	3.730	20.00	24.7	105								

Analysis: Metals, 200.7 - CWA

Method: EPA 200.7

Batch ID: R99934

Method Blank

RunID: 99934 SeqNo 2746763 Units: mg/L

Analysis Date: 3/31/2025 11:56:47 AM Analyst: JG

Analyte	Result	Rep Limit	Rep Qual
Silica, Dissolved (as SiO ₂)	< 0.100	0.100	

Original



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Quality Control Report

WO#: 25031043
4/3/2025

Method Blank

RunID: 99934 SeqNo 2746764 Units: mg/L
Analysis Date: 3/31/2025 11:58:21 AM Analyst: JG

Analyte	Result	Rep Limit	Rep Qual
Silica, Dissolved (as SiO ₂)	< 0.100	0.100	

Laboratory Control Sample (LCS)

RunID: 99934 SeqNo 2746761 Units: mg/L
Analysis Date: 3/31/2025 11:53:07 AM Analyst: JG

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Silica, Dissolved (as SiO ₂)	5.000	5.00	100								

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01B

RunID: 99934 SeqNo 2746768 Units: mg/L
Analysis Date: 3/31/2025 12:05:19 PM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Silica, Dissolved (as SiO ₂)	23.12	20.00	39.3	80.7	20.00	39.5	82.0	0.635	20	70	130	

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01B

RunID: 99934 SeqNo 2746769 Units: mg/L
Analysis Date: 3/31/2025 12:07:10 PM Analyst: JG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Silica, Dissolved (as SiO ₂)	23.12	20.00	39.5	82.0								

Analysis: Cyanide, Free

Method: SM 4500CN E

Batch ID: R99995

Method Blank

RunID: 99995 SeqNo 2747648 Units: mg/L
Analysis Date: 4/2/2025 12:53:00 PM Analyst: DT

Analyte	Result	Rep Limit	Rep Qual
Cyanide, Free	< 0.0500	0.0500	

Laboratory Control Sample (LCS)

RunID: 99995 SeqNo 2747649 Units: mg/L
Analysis Date: 4/2/2025 12:53:00 PM Analyst: DT

Original



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Quality Control Report

WO#: 25031043
4/3/2025

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	LCSD Spike Added	LCSD Result	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Cyanide, Free	0.4000	0.397	99.2								

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01C

RunID: 99995 SeqNo 2747652 Units: mg/L

Analysis Date: 4/2/2025 12:53:00 PM Analyst: DT

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Cyanide, Free	0.009000	0.4000	0.433	106	0.4000	0.434	106	0.231	20	80	120	

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 25031043-01C

RunID: 99995 SeqNo 2747653 Units: mg/L

Analysis Date: 4/2/2025 12:53:00 PM Analyst: DT

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Cyanide, Free	0.009000	0.4000	0.434	106								

Original



1

Page 16 of 17

Page 16 of 17

Page 16 of 17

Page 16 of 17

Page 16 of 17



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Definitions & Qualifiers

WO#: 25031043

Date: 4/3/2025

Definitions:

LCS: Laboratory Control Sample; prepared by adding a known mass of target analytes to a specified amount of de-ionized water and prepared with the batch of samples, used to calculate Accuracy (%REC).

LCSD: LCS Duplicate; used to calculate both Accuracy (%REC) and Precision (%RPD)

MBLK: Method Blank; a sample of similar matrix that is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedure, and in which no target analytes or interferences are present at concentrations that impact the analytical results for sample analyses.

MS: Matrix Spike; prepared by adding a known mass of target analytes to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available, used to calculate Accuracy (%REC)

MSD: Matrix Spike Duplicate; used to calculate both Accuracy (%REC) and Precision (%RPD)

RPD: Relative Percent Difference; comparison between sample and duplicate and/or MS and MSD.

PQL: Practical Quantitation Limit; the limit to which data is quantitated for reporting.

MDL: Method Detection Limit; the limit to which the instrument can reliably detect.

MCL: Maximum Contaminant Level; value set according to EPA guidelines.

TNTC: Too Numerous to Count; colony density is too thick to be individually counted or greater than method reporting requirements.

Qualifiers:

* - Analyte exceeds Safe Drinking Water Act MCL, does not meet drinking water standards.

- Laboratory not accredited for this analyte.

C - Analyte value below Safe Drinking Water Act MCL, does not meet drinking water standards.

B - Analyte found above the PQL in associated method blank.

G - Calibration blank analyte detected above PQL.

H - Sample analyzed beyond holding time for this parameter.

J - Estimated Value; Analyte found between MDL and PQL limits.

L - Sample concentration is at least 5 times greater than spike contribution. Spike recovery criteria do not apply.

R - RPD between sample and duplicate sample outside the RPD acceptance limits.

S - Batch MS and/or MSD were outside acceptance limits, batch LCS was acceptable.

W - Sample temperature when received was out of limit as specified by method.

Z - Batch LCS and/or LCSD were outside acceptance limits.