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Fax : 908 789 8922

Cover Page

Order ID : Q1782

Project ID : Ansonia Landfill 2025

Client : Lockwood, Kessler & Bartlett, Inc.

Lab Sample Number	Client Sample Number
Q1782-01	MW-1
Q1782-02	MW-1
Q1782-03	MW-2
Q1782-04	MW-2
Q1782-05	MW-3
Q1782-06	MW-3
Q1782-07	MW-4
Q1782-08	MW-4
Q1782-09	TRIP BLANK

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

Date: 4/19/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers **"P"** for ICP instrument **"PM"** for ICP when Microwave Digestion is used **"CV"** for Manual Cold Vapor AA **"AV"** for automated Cold Vapor AA **"CA"** for MIDI-Distillation Spectrophotometric **"AS"** for Semi –Automated Spectrophotometric **"C"** for Manual Spectrophotometric **"T"** for Titrimetric **"NR"** for analyte not required to be analyzed
OR	Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
H	Sample Analysis Out Of Hold Time

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q1782**

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

QA Review Signature: **KETAN PATEL** **Date:** **04/19/2025**

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LAB CHRONICLE

OrderID:	Q1782	**OrderDate:**	4/10/2025 1:22:00 PM
Client:	Lockwood, Kessler & Bartlett, Inc.	**Project:**	Ansonia Landfill 2025
Contact:	John Gerlach	**Location:**	K11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1782-01	**MW-1**	**WATER**			**04/09/25 10:15**			**04/10/25**
			Alkalinity	SM2320 B			04/16/25 10:26	
			Ammonia	SM4500-NH3		04/17/25	04/18/25 09:40	
			Anions Group1	300.0			04/11/25 09:35	
			BOD5	SM5210 B			04/11/25 10:00	
			pH	9040C			04/11/25 10:30	
			TDS	SM2540 C			04/11/25 12:30	
			TKN	SM4500-N Org C-11 plus NH3 B plus G-11		04/17/25	04/18/25 13:31	
			Total Nitrogen	Cal			04/18/25 13:31	
			TSS	SM2540 D			04/15/25 10:30	
			Turbidity	SM2130 B			04/11/25 10:07	
Q1782-01DL	**MW-1DL**	**WATER**			**04/09/25 10:15**			**04/10/25**
			Anions Group1	300.0			04/11/25 12:28	
Q1782-01DL2	**MW-1DL2**	**WATER**			**04/09/25 10:15**			**04/10/25**

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LAB CHRONICLE

			Anions Group1	300.0			04/11/25 14:37
Q1782-03	**MW-2**	**WATER**			**04/09/25 13:10**		**04/10/25**
			Alkalinity	SM2320 B			04/16/25 10:35
			Ammonia	SM4500-NH3		04/17/25	04/18/25 09:51
			Anions Group1	300.0			04/11/25 09:57
			BOD5	SM5210 B			04/11/25 10:00
			pH	9040C			04/11/25 10:35
			TDS	SM2540 C			04/11/25 12:30
			TKN	SM4500-N		04/17/25	04/18/25 13:32
			Total Nitrogen	Org C-11 plus NH3 B plus G-11 Cal			04/18/25 13:32
			TSS	SM2540 D			04/15/25 10:30
			Turbidity	SM2130 B			04/11/25 10:14
Q1782-03DL	**MW-2DL**	**WATER**			**04/09/25 13:10**		**04/10/25**
			Ammonia	SM4500-NH3		04/17/25	04/18/25 11:06
			Anions Group1	300.0			04/11/25 14:58
Q1782-05	**MW-3**	**WATER**			**04/09/25 11:30**		**04/10/25**
			Alkalinity	SM2320 B			04/16/25 10:41
			Ammonia	SM4500-NH3		04/17/25	04/18/25 09:51

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LAB CHRONICLE

			Anions Group1	300.0		04/11/25 10:18	
			BOD5	SM5210 B		04/11/25 10:00	
			pH	9040C		04/11/25 10:40	
			TDS	SM2540 C		04/11/25 12:30	
			TKN	SM4500-N	04/17/25	04/18/25 13:32	
			Total Nitrogen	Org C-11 plus NH3 B plus G-11 Cal		04/18/25 13:32	
			TSS	SM2540 D		04/15/25 10:30	
			Turbidity	SM2130 B		04/11/25 10:18	
Q1782-05DL	**MW-3DL**	**WATER**			**04/09/25 11:30**		**04/10/25**
			Anions Group1	300.0		04/11/25 15:20	
Q1782-07	**MW-4**	**WATER**			**04/09/25 12:10**		**04/10/25**
			Alkalinity	SM2320 B		04/16/25 10:44	
			Ammonia	SM4500-NH3	04/17/25	04/18/25 09:51	
			Anions Group1	300.0		04/11/25 10:40	
			BOD5	SM5210 B		04/11/25 10:00	
			pH	9040C		04/11/25 10:45	
			TDS	SM2540 C		04/11/25 12:30	

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LAB CHRONICLE

			TKN	SM4500-N Org C-11 plus NH3 B plus G-11		04/17/25	04/18/25 13:42
			Total Nitrogen	Cal			04/18/25 13:42
			TSS	SM2540 D			04/15/25 10:30
			Turbidity	SM2130 B			04/11/25 10:21
Q1782-07DL	**MW-4DL**	**WATER**			**04/09/25 12:10**		**04/10/25**
			Anions Group1	300.0			04/11/25 15:41
Q1782-07DL2	**MW-4DL2**	**WATER**			**04/09/25 12:10**		**04/10/25**
			Anions Group1	300.0			04/11/25 16:03

SAMPLE DATA

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/09/25 10:15
Project:	Ansonia Landfill 2025	Date Received:	04/10/25
Client Sample ID:	MW-1	SDG No.:	Q1782
Lab Sample ID:	Q1782-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	76.6		1	1.00	2.00	mg/L		04/16/25 10:26	SM 2320 B-11
Ammonia as N	0.030	U	1	0.030	0.10	mg/L	04/17/25 14:00	04/18/25 09:40	SM 4500-NH3 B plus G-11
Chloride	115	OR	1	0.19	0.60	mg/L		04/11/25 09:35	300.0
Nitrite	0.074	U	1	0.074	0.60	mg/L		04/11/25 09:35	300.0
Nitrate	2.10		1	0.095	0.50	mg/L		04/11/25 09:35	300.0
Sulfate	40.7	OR	1	0.46	3.00	mg/L		04/11/25 09:35	300.0
Nitrate+Nitrite	2.10		1	0.17	1.10	mg/L		04/11/25 09:35	300.0
BOD5	0.20	U	1	0.20	2.00	mg/L		04/11/25 10:00	SM 5210 B-16
pH	5.95	H	1	0	0	pH		04/11/25 10:30	9040C
TDS	331		1	1.00	10.0	mg/L		04/11/25 12:30	SM 2540 C-15
TKN	0.42	J	1	0.11	0.50	mg/L	04/17/25 08:50	04/18/25 13:31	SM4500-N Org C-11 plus NH3 B plus G-11
Nitrogen	2.52		1	0.31	1.30	mg/L		04/18/25 13:31	SM 4500-N Org C-11 plus NH3 B plus G-11
TSS	1.00	U	1	1.00	4.00	mg/L		04/15/25 10:30	SM 2540 D-15
Turbidity	0.79	J	1	0.15	1.00	NTU		04/11/25 10:07	SM 2130 B-11

Comments: The alkalinity to pH 4.32=76.6 mg CaCO3/L, pH result reported at temperature 20.1 °C

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/09/25 10:15
Project:	Ansonia Landfill 2025	Date Received:	04/10/25
Client Sample ID:	MW-1DL	SDG No.:	Q1782
Lab Sample ID:	Q1782-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	104	OR	2	0.38	1.20	mg/L		04/11/25 12:28	300.0
Sulfate	55.5	D	2	0.92	6.00	mg/L		04/11/25 12:28	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/09/25 10:15
Project:	Ansonia Landfill 2025	Date Received:	04/10/25
Client Sample ID:	MW-1DL2	SDG No.:	Q1782
Lab Sample ID:	Q1782-01DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	83.4	D	50	9.50	30.0	mg/L		04/11/25 14:37	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/09/25 13:10
Project:	Ansonia Landfill 2025	Date Received:	04/10/25
Client Sample ID:	MW-2	SDG No.:	Q1782
Lab Sample ID:	Q1782-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	387		1	1.00	2.00	mg/L		04/16/25 10:35	SM 2320 B-11
Ammonia as N	3.50	OR	1	0.030	0.10	mg/L	04/17/25 14:00	04/18/25 09:51	SM 4500-NH3 B plus G-11
Chloride	332	OR	1	0.19	0.60	mg/L		04/11/25 09:57	300.0
Nitrite	0.074	U	1	0.074	0.60	mg/L		04/11/25 09:57	300.0
Nitrate	2.70		1	0.095	0.50	mg/L		04/11/25 09:57	300.0
Sulfate	16.6		1	0.46	3.00	mg/L		04/11/25 09:57	300.0
Nitrate+Nitrite	2.70		1	0.17	1.10	mg/L		04/11/25 09:57	300.0
BOD5	0.20	U	1	0.20	2.00	mg/L		04/11/25 10:00	SM 5210 B-16
pH	6.82	H	1	0	0	pH		04/11/25 10:35	9040C
TDS	812		1	1.00	10.0	mg/L		04/11/25 12:30	SM 2540 C-15
TKN	4.10		1	0.11	0.50	mg/L	04/17/25 08:50	04/18/25 13:32	SM4500-N Org C-11 plus NH3 B plus G-11
Nitrogen	6.80		1	0.31	1.30	mg/L		04/18/25 13:32	SM 4500-N Org C-11 plus NH3 B plus G-11
TSS	1.00	U	1	1.00	4.00	mg/L		04/15/25 10:30	SM 2540 D-15
Turbidity	1.51		1	0.15	1.00	NTU		04/11/25 10:14	SM 2130 B-11

Comments: The alkalinity to pH 4.31=387 mg CaCO3/L, pH result reported at temperature 20.2 °C

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/09/25 13:10
Project:	Ansonia Landfill 2025	Date Received:	04/10/25
Client Sample ID:	MW-2DL	SDG No.:	Q1782
Lab Sample ID:	Q1782-03DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	3.40	D	2	0.060	0.20	mg/L	04/17/25 14:00	04/18/25 11:06	SM 4500-NH3 B plus G-11
Chloride	220	D	100	19.0	60.0	mg/L		04/11/25 14:58	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/09/25 11:30
Project:	Ansonia Landfill 2025	Date Received:	04/10/25
Client Sample ID:	MW-3	SDG No.:	Q1782
Lab Sample ID:	Q1782-05	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	144		1	1.00	2.00	mg/L		04/16/25 10:41	SM 2320 B-11
Ammonia as N	0.45		1	0.030	0.10	mg/L	04/17/25 14:00	04/18/25 09:51	SM 4500-NH3 B plus G-11
Chloride	613	OR	1	0.19	0.60	mg/L		04/11/25 10:18	300.0
Nitrite	0.074	U	1	0.074	0.60	mg/L		04/11/25 10:18	300.0
Nitrate	6.00		1	0.095	0.50	mg/L		04/11/25 10:18	300.0
Sulfate	17.2		1	0.46	3.00	mg/L		04/11/25 10:18	300.0
Nitrate+Nitrite	6.00		1	0.17	1.10	mg/L		04/11/25 10:18	300.0
BOD5	0.20	U	1	0.20	2.00	mg/L		04/11/25 10:00	SM 5210 B-16
pH	6.71	H	1	0	0	pH		04/11/25 10:40	9040C
TDS	954		1	1.00	10.0	mg/L		04/11/25 12:30	SM 2540 C-15
TKN	0.71		1	0.11	0.50	mg/L	04/17/25 08:50	04/18/25 13:32	SM4500-N Org C-11 plus NH3 B plus G-11
Nitrogen	6.71		1	0.31	1.30	mg/L		04/18/25 13:32	SM 4500-N Org C-11 plus NH3 B plus G-11
TSS	1.00	U	1	1.00	4.00	mg/L		04/15/25 10:30	SM 2540 D-15
Turbidity	0.48	J	1	0.15	1.00	NTU		04/11/25 10:18	SM 2130 B-11

Comments: The alkalinity to pH 4.34=144 mg CaCO3/L, pH result reported at temperature 20.3 °C

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time
J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/09/25 11:30
Project:	Ansonia Landfill 2025	Date Received:	04/10/25
Client Sample ID:	MW-3DL	SDG No.:	Q1782
Lab Sample ID:	Q1782-05DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	391	D	100	19.0	60.0	mg/L		04/11/25 15:20	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/09/25 12:10
Project:	Ansonia Landfill 2025	Date Received:	04/10/25
Client Sample ID:	MW-4	SDG No.:	Q1782
Lab Sample ID:	Q1782-07	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	142		1	1.00	2.00	mg/L		04/16/25 10:44	SM 2320 B-11
Ammonia as N	0.45		1	0.030	0.10	mg/L	04/17/25 14:00	04/18/25 09:51	SM 4500-NH3 B plus G-11
Chloride	616	OR	1	0.19	0.60	mg/L		04/11/25 10:40	300.0
Nitrite	0.074	U	1	0.074	0.60	mg/L		04/11/25 10:40	300.0
Nitrate	6.30	OR	1	0.095	0.50	mg/L		04/11/25 10:40	300.0
Sulfate	17.2		1	0.46	3.00	mg/L		04/11/25 10:40	300.0
Nitrate+Nitrite	5.80		1	0.26	1.60	mg/L		04/11/25 10:40	300.0
BOD5	0.20	U	1	0.20	2.00	mg/L		04/11/25 10:00	SM 5210 B-16
pH	6.68	H	1	0	0	pH		04/11/25 10:45	9040C
TDS	956		1	1.00	10.0	mg/L		04/11/25 12:30	SM 2540 C-15
TKN	1.00		1	0.11	0.50	mg/L	04/17/25 08:50	04/18/25 13:42	SM4500-N Org C-11 plus NH3 B plus G-11
Nitrogen	6.80		1	0.31	1.30	mg/L		04/18/25 13:42	SM 4500-N Org C-11 plus NH3 B plus G-11
TSS	1.00	U	1	1.00	4.00	mg/L		04/15/25 10:30	SM 2540 D-15
Turbidity	0.45	J	1	0.15	1.00	NTU		04/11/25 10:21	SM 2130 B-11

Comments: The alkalinity to pH 4.35=142 mg CaCO3/L, pH result reported at temperature 20.1 °C

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/09/25 12:10
Project:	Ansonia Landfill 2025	Date Received:	04/10/25
Client Sample ID:	MW-4DL	SDG No.:	Q1782
Lab Sample ID:	Q1782-07DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	585	OR	2	0.38	1.20	mg/L		04/11/25 15:41	300.0
Nitrate	5.80	HD	2	0.19	1.00	mg/L		04/11/25 15:41	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/09/25 12:10
Project:	Ansonia Landfill 2025	Date Received:	04/10/25
Client Sample ID:	MW-4DL2	SDG No.:	Q1782
Lab Sample ID:	Q1782-07DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	388	D	100	19.0	60.0	mg/L		04/11/25 16:03	300.0

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

QC RESULT SUMMARY

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Initial and Continuing Calibration Verification

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **RunNo.:** LB135389

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	10.4	10	104	90-110	03/21/2025
Chloride	mg/L	3	3	100	90-110	03/21/2025
Fluoride	mg/L	2	2	100	90-110	03/21/2025
Nitrite	mg/L	3.1	3	103	90-110	03/21/2025
Nitrate	mg/L	2.6	2.5	104	90-110	03/21/2025
Sulfate	mg/L	15.3	15	102	90-110	03/21/2025
Orthophosphate as P	mg/L	5.2	5	104	90-110	03/21/2025
Sample ID: CCV1						
Bromide	mg/L	10.8	10	108	90-110	04/11/2025
Chloride	mg/L	3.2	3	107	90-110	04/11/2025
Fluoride	mg/L	2.1	2	105	90-110	04/11/2025
Nitrite	mg/L	3.2	3	107	90-110	04/11/2025
Nitrate	mg/L	2.7	2.5	108	90-110	04/11/2025
Sulfate	mg/L	15.7	15	105	90-110	04/11/2025
Orthophosphate as P	mg/L	5.4	5	108	90-110	04/11/2025
Sample ID: CCV2						
Bromide	mg/L	10.6	10	106	90-110	04/11/2025
Chloride	mg/L	3.2	3	107	90-110	04/11/2025
Fluoride	mg/L	2.1	2	105	90-110	04/11/2025
Nitrite	mg/L	3.1	3	103	90-110	04/11/2025
Nitrate	mg/L	2.7	2.5	108	90-110	04/11/2025
Sulfate	mg/L	15.4	15	103	90-110	04/11/2025
Orthophosphate as P	mg/L	5.3	5	106	90-110	04/11/2025
Sample ID: CCV3						
Bromide	mg/L	10.6	10	106	90-110	04/11/2025
Chloride	mg/L	3.2	3	107	90-110	04/11/2025
Fluoride	mg/L	2.1	2	105	90-110	04/11/2025
Nitrite	mg/L	3.2	3	107	90-110	04/11/2025
Nitrate	mg/L	2.7	2.5	108	90-110	04/11/2025
Sulfate	mg/L	15.4	15	103	90-110	04/11/2025
Orthophosphate as P	mg/L	5.3	5	106	90-110	04/11/2025

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Initial and Continuing Calibration Verification

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **RunNo.:** LB135391

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: **ICV**						
pH	pH	7.01	7	100	90-110	04/11/2025
Sample ID: **CCV1**						
pH	pH	2.01	2.00	101	90-110	04/11/2025
Sample ID: **CCV2**						
pH	pH	12.02	12.00	100	90-110	04/11/2025
Sample ID: **CCV3**						
pH	pH	2.01	2.00	101	90-110	04/11/2025

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Initial and Continuing Calibration Verification

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **RunNo.:** LB135393

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV						
Turbidity		NTU	9.364	10	94	90-110	04/11/2025
Sample ID:	CCV1						
Turbidity		NTU	9.772	10	98	90-110	04/11/2025
Sample ID:	CCV2						
Turbidity		NTU	9.884	10	99	90-110	04/11/2025

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Initial and Continuing Calibration Verification

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **RunNo.:** LB135482

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: **ICV1**						
Ammonia as N	mg/L	0.98	1	98	90-110	04/18/2025
Sample ID: **CCV1**						
Ammonia as N	mg/L	0.96	1	96	90-110	04/18/2025
Sample ID: **CCV2**						
Ammonia as N	mg/L	0.95	1	95	90-110	04/18/2025
Sample ID: **CCV3**						
Ammonia as N	mg/L	1	1	100	90-110	04/18/2025
Sample ID: **CCV4**						
Ammonia as N	mg/L	1	1	100	90-110	04/18/2025

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Initial and Continuing Calibration Verification

Client:	Lockwood, Kessler & Bartlett, Inc.	**SDG No.:**	Q1782
Project:	Ansonia Landfill 2025	**RunNo.:**	LB135490

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	**ICV1**						
TKN		mg/L	4.9	5	98	90-110	04/18/2025
Sample ID:	**CCV1**						
TKN		mg/L	5	5	100	90-110	04/18/2025
Sample ID:	**CCV2**						
TKN		mg/L	4.8	5	96	90-110	04/18/2025
Sample ID:	**CCV3**						
TKN		mg/L	5.2	5	104	90-110	04/18/2025

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Initial and Continuing Calibration Blank Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **RunNo.:** LB135389

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	03/21/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	03/21/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	03/21/2025
Nitrite	mg/L	0.08	0.3000	J	0.074	0.6	03/21/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	03/21/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	03/21/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	03/21/2025
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	04/11/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	04/11/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	04/11/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	04/11/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	04/11/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	04/11/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	04/11/2025
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	04/11/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	04/11/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	04/11/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	04/11/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	04/11/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	04/11/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	04/11/2025
Sample ID: CCB3							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	04/11/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	04/11/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	04/11/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	04/11/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	04/11/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	04/11/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	04/11/2025

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Initial and Continuing Calibration Blank Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **RunNo.:** LB135393

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	ICB							
Turbidity		NTU	0.373	0.5000	J	0.15	1.0	04/11/2025
Sample ID:	CCB1							
Turbidity		NTU	0.390	0.5000	J	0.15	1	04/11/2025
Sample ID:	CCB2							
Turbidity		NTU	0.376	0.5000	J	0.15	1	04/11/2025

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Initial and Continuing Calibration Blank Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **RunNo.:** LB135482

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	04/18/2025
Sample ID: CCB1							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	04/18/2025
Sample ID: CCB2							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	04/18/2025
Sample ID: CCB3							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	04/18/2025
Sample ID: CCB4							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	04/18/2025

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Initial and Continuing Calibration Blank Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **RunNo.:** LB135490

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	ICB1							
TKN		mg/L	< 0.2500	0.2500	U	0.11	0.5	04/18/2025
Sample ID:	CCB1							
TKN		mg/L	< 0.2500	0.2500	U	0.11	0.5	04/18/2025
Sample ID:	CCB2							
TKN		mg/L	< 0.2500	0.2500	U	0.11	0.5	04/18/2025
Sample ID:	CCB3							
TKN		mg/L	< 0.2500	0.2500	U	0.11	0.5	04/18/2025

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Preparation Blank Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB135377BL							
TDS	mg/L	< 5.0000	5.0000	U	1.0	10	04/11/2025
Sample ID: LB135389BLW							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	04/11/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	04/11/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	04/11/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	04/11/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	04/11/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	04/11/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	04/11/2025
Sample ID: LB135390BL							
BOD5	mg/L	< 0.2000	0.2000	U	0.20	2.0	04/11/2025
Sample ID: LB135393BL							
Turbidity	NTU	0.446	0.5000	J	0.15	1.0	04/11/2025
Sample ID: LB135430BL							
TSS	mg/L	1	2.0000	J	1	4	04/15/2025
Sample ID: LB135460BLW							
Alkalinity	mg/L	< 1.0000	1.0000	U	1	2	04/16/2025
Sample ID: PB167617BL							
TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	04/18/2025
Sample ID: PB167618BL							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.03	0.1	04/18/2025

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Matrix Spike Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1782-01
Client ID: MW-1MS
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/L	75-125	0.97		0.030	U	1	1	97		04/18/2025
TKN	mg/L	75-125	5.40		0.42	J	5	1	100		04/18/2025

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Matrix Spike Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1782-01
Client ID: MW-1MSD
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/L	75-125	0.96		0.030	U	1	1	96		04/18/2025
TKN	mg/L	75-125	5.30		0.42	J	5	1	98		04/18/2025

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Matrix Spike Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1782-07
Client ID: MW-4MS
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	10.3		0.37	U	10	1	103		04/11/2025
Chloride	mg/L	80-120	587	OR	616	OR	3	1	-967	*	04/11/2025
Fluoride	mg/L	80-120	2.20		0.17	J	2	1	102		04/11/2025
Nitrite	mg/L	80-120	3.00		0.074	U	3	1	100		04/11/2025
Nitrate	mg/L	80-120	8.80	OR	6.30	OR	2.5	1	100		04/11/2025
Sulfate	mg/L	80-120	31.6		17.2		15	1	96		04/11/2025
Orthophosphate as P	mg/L	80-120	5.20		0.34	U	5	1	104		04/11/2025

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Matrix Spike Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1782-07
Client ID: MW-4MSD
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	10.0		0.37	U	10	1	100		04/11/2025
Chloride	mg/L	80-120	589	OR	616	OR	3	1	-900	*	04/11/2025
Fluoride	mg/L	80-120	2.10		0.17	J	2	1	97		04/11/2025
Nitrite	mg/L	80-120	2.90		0.074	U	3	1	97		04/11/2025
Nitrate	mg/L	80-120	8.70	OR	6.30	OR	2.5	1	96		04/11/2025
Sulfate	mg/L	80-120	31.2		17.2		15	1	93		04/11/2025
Orthophosphate as P	mg/L	80-120	5.10		0.34	U	5	1	102		04/11/2025

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Duplicate Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1763-02
Client ID: AUD-25-0047DUP
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
pH	pH	+/-20	5.66		5.67		1	0.18		04/11/2025

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Duplicate Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1765-02
Client ID: TOWERS-2DUP
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
TDS	mg/L	+/-5	3400		3420		1	0.47		04/11/2025

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Duplicate Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1782-01
Client ID: MW-1DUP
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Turbidity	NTU	+/-20	0.79	J	0.87	J	1	9.42		04/11/2025
Alkalinity	mg/L	+/-20	76.6		75.3		1	2		04/16/2025
Ammonia as N	mg/L	+/-20	0.030	U	0.030	U	1	0		04/18/2025
TKN	mg/L	+/-20	0.42	J	0.40	J	1	5		04/18/2025

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Duplicate Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1782-01
Client ID: MW-1MSD
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ammonia as N	mg/L	+/-20	0.97		0.96		1	1		04/18/2025
TKN	mg/L	+/-20	5.40		5.30		1	2		04/18/2025

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Duplicate Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1782-07
Client ID: MW-4DUP
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
BOD5	mg/L	+/-20	0.20	U	0.20	U	1	0		04/11/2025

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Duplicate Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1782-07
Client ID: MW-4MSD
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Chloride	mg/L	+/-20	587	OR	589	OR	1	0		04/11/2025
Sulfate	mg/L	+/-20	31.6		31.2		1	1		04/11/2025
Nitrate	mg/L	+/-20	8.80	OR	8.70	OR	1	1		04/11/2025
Orthophosphate as P	mg/L	+/-20	5.20		5.10		1	2		04/11/2025
Bromide	mg/L	+/-20	10.3		10.0		1	3		04/11/2025
Nitrite	mg/L	+/-20	3.00		2.90		1	3		04/11/2025
Fluoride	mg/L	+/-20	2.20		2.10		1	5		04/11/2025

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Duplicate Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc.
SDG No.: Q1782
Project: Ansonia Landfill 2025
Sample ID: Q1804-02
Client ID: 002-35TH-AVE(APR)DUP
Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
TSS	mg/L	+/-5	66.0		67.0		1	1.5		04/15/2025

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Laboratory Control Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **Run No.:** LB135377

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB135377BS								
TDS	mg/L	100	95.0		95	1	90-110	04/11/2025

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Laboratory Control Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **Run No.:** LB135389

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB135389BSW								
Bromide	mg/L	10	10.5		105	1	90-110	04/11/2025
Chloride	mg/L	3	3.20		107	1	90-110	04/11/2025
Fluoride	mg/L	2	2.10		105	1	90-110	04/11/2025
Nitrite	mg/L	3	3.10		103	1	90-110	04/11/2025
Nitrate	mg/L	2.5	2.70		108	1	90-110	04/11/2025
Sulfate	mg/L	15	15.3		102	1	90-110	04/11/2025
Orthophosphate as P	mg/L	5	5.30		106	1	90-110	04/11/2025

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Fax : 908 789 8922

Laboratory Control Sample Summary

Client:	Lockwood, Kessler & Bartlett, Inc.	**SDG No.:**	Q1782
Project:	Ansonia Landfill 2025	**Run No.:**	LB135390

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID **LB135390BS**								
BOD5	**mg/L**	**198**	**197**		**99**	**1**	**84.6-115.4**	**04/11/2025**

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Fax : 908 789 8922

Laboratory Control Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **Run No.:** LB135430

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB135430BS								
TSS	mg/L	550	533		97	1	90-110	04/15/2025

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Laboratory Control Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **Run No.:** LB135460

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB135460BSW								
Alkalinity	mg/L	50	55.2		110	1	80-120	04/16/2025

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Laboratory Control Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **Run No.:** LB135490

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID PB167617BS								
TKN	mg/L	5	4.80		96	1	90-110	04/18/2025

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Laboratory Control Sample Summary

Client: Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q1782

Project: Ansonia Landfill 2025 **Run No.:** LB135482

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID PB167618BS								
Ammonia as N	mg/L	1	0.95		95	1	90-110	04/18/2025

Alliance
TECHNICAL GROUP

RAW DATA

TOTAL Dissolved Solids - SM2540C

Run Number: LB135377

SUPERVISOR: Iwona **ANALYST:** jignesh

Date: 04/14/2025

BalanceID: WC SC-5

Filter ID: 17416528

EMPTY DISH TEMP IN:	103 °C	04/11/2025	11:00	**EMPTY DISH TEMP OUT:**	103 °C	04/11/2025	12:00	**OvenID:**	WC OVEN-1	**Thermo ID:**	WET OVNE#1
TEMP1 IN:	104 °C	04/11/2025	12:30	**TEMP1 OUT:**	104 °C	04/11/2025	13:30	**OvenID1:**	WC OVEN-1	**Thermo ID1:**	WET OVEN#1
TEMP2 IN:	103 °C	04/11/2025	15:30	**TEMP2 OUT:**	104 °C	04/14/2025	07:30	**OvenID2:**	WC OVEN-2	**Thermo ID2:**	WET OVEN#2
TEMP3 IN:	180 °C	04/14/2025	07:33	**TEMP3 OUT:**	180 °C	04/14/2025	09:30	**OvenID3:**	WC OVEN#2	**Thermo ID3:**	WET OVEN#2

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Sample Volume (ml)	1st Empty Dish+Sample weight after 1.5hr drying @180(±2)°C (g)	2nd Empty Dish+Sample weight after 1.5hr drying @180(±2)°C (g)	Final Empty Dish+Sample weight after 1.5hr drying @180(±2)°C (g)	Weight (g)	Result mg/L
1	LB135377BL	LB135377BL	85.9633	85.9633	100	85.9633	85.9633	85.9633	0.0000	0
2	LB135377BS	LB135377BS	74.0533	74.0533	100	74.0628	74.0628	74.0628	0.0095	95
3	Q1765-01	TOWERS-1	142.7748	142.7748	100	143.1649	143.1649	143.1649	0.3901	3901
4	Q1765-02	TOWERS-2	157.5220	157.5220	100	157.8620	157.8620	157.8620	0.3400	3400
5	Q1765-02DUP	TOWERS-2DUP	156.5614	156.5614	100	156.9030	156.9030	156.9030	0.3416	3416
6	Q1782-01	MW-1	110.2030	110.2030	100	110.2361	110.2361	110.2361	0.0331	331
7	Q1782-03	MW-2	90.2954	90.2954	100	90.3766	90.3766	90.3766	0.0812	812
8	Q1782-05	MW-3	106.1274	106.1274	100	106.2228	106.2228	106.2228	0.0954	954
9	Q1782-07	MW-4	152.7501	152.7501	100	152.8457	152.8457	152.8457	0.0956	956

A = Sample Volume (ml)
B = Empty Dish Weight (g)
C = 2nd Empty Dish + Sample weight after 1.5 hr drying @180(±2)°C(g)
D = Weight (g)

Weight (g) = C - B

Result mg/L = $\frac{D}{A} * 1000 * 1000$

WORKLIST(Hardcopy Internal Chain)

LB 135377

WorkList Name : tds q1770 **WorkList ID :** 188860 **Department :** Wet-Chemistry **Date :** 04-11-2025 07:53:46

Sample		Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1765-01	B	TOWERS-1	Water	TDS	Cool 4 deg C	PSEG04	L41	04/10/2025	SM2540 C
Q1765-02	B	TOWERS-2	Water	TDS	Cool 4 deg C	PSEG04	L41	04/10/2025	SM2540 C
Q1782-01	H	MW-1	Water	TDS	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2540 C
Q1782-03	H	MW-2	Water	TDS	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2540 C
Q1782-05	H	MW-3	Water	TDS	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2540 C
Q1782-07	H	MW-4	Water	TDS	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2540 C

Date/Time 04-11-25 12:30

Raw Sample Received by: JR WC

Raw Sample Relinquished by: CP SM

Date/Time 04-11-25 16:00

Raw Sample Received by: CP SM

Raw Sample Relinquished by: JR WC

Reviewed By:iwona
On:4/14/2025 12:14:10 PM
Inst Id :WC SC-3
LB :LB135377

Instrument IC-1 Analyst : NF Method: 300.0 / 9056A

Ident	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO4	Con SO4	Method name	date time	Initial wt/ Analyst
STD1	0	0	0	0	0	0	0	IC1-032125	3/21/2025 10:45	10 NF/IZ
STD2	0.421	0.619	0.631	2.075	0.523	1.052	3.247	IC1-032125	3/21/2025 11:07	10 NF/IZ
STD3	0.795	1.199	1.203	3.994	1.001	1.993	5.998	IC1-032125	3/21/2025 11:28	10 NF/IZ
STD4	0.977	1.475	1.468	4.904	1.226	2.407	7.216	IC1-032125	3/21/2025 11:50	10 NF/IZ
STD5	1.993	3.009	2.995	10.03	2.493	4.968	14.842	IC1-032125	3/21/2025 12:11	10 NF/IZ
STD6	4.034	5.988	5.986	19.975	5.011	10.256	30.502	IC1-032125	3/21/2025 12:32	10 NF/IZ
STD7	4.979	7.51	7.517	25.022	6.247	12.323	36.695	IC1-032125	3/21/2025 12:54	10 NF/IZ
ICV	2.031	3.038	3.08	10.364	2.568	5.199	15.269	IC1-032125	3/21/2025 13:37	10 NF/IZ
ICB	0	0.122	0.08	0	0	0	0	IC1-032125	3/21/2025 13:58	10 NF/IZ
CCV	2.123	3.246	3.205	10.778	2.74	5.408	15.725	IC1-032125	4/11/2025 8:49	10 NF/IZ
CCB	0	0	0	0	0	0	0	IC1-032125	4/11/2025 9:14	10 NF/IZ
Q1782-01	0.141	115.394	0	0.162	2.132	0	40.698	IC1-032125	4/11/2025 9:35	10 NF/IZ
Q1782-03	0.224	331.594	0	0.314	2.72	0	16.551	IC1-032125	4/11/2025 9:57	10 NF/IZ
Q1782-05	0.168	612.527	0	0.153	5.963	0	17.162	IC1-032125	4/11/2025 10:18	10 NF/IZ
Q1782-07	0.167	615.72	0	0	6.341	0	17.163	IC1-032125	4/11/2025 10:40	10 NF/IZ
Q1782-07MS	2.157	587.361	3.036	10.284	8.804	5.161	31.628	IC1-032125	4/11/2025 11:01	10 NF/IZ
Q1782-07MSD	2.077	589.34	2.947	9.994	8.742	5.065	31.239	IC1-032125	4/11/2025 11:23	10 NF/IZ
LB135389BLW	0	0	0	0	0	0	0	IC1-032125	4/11/2025 11:45	10 NF/IZ
LB135389BSW	2.073	3.167	3.146	10.505	2.673	5.305	15.342	IC1-032125	4/11/2025 12:06	10 NF/IZ
Q1782-01DLX2	0.079	51.843	0	0	1.073	0	27.749	IC1-032125	4/11/2025 12:28	10 NF/IZ
CCV	2.072	3.18	3.145	10.576	2.674	5.315	15.357	IC1-032125	4/11/2025 13:11	10 NF/IZ
CCB	0	0	0	0	0	0	0	IC1-032125	4/11/2025 13:32	10 NF/IZ
Q1782-01DL2X50	0	1.668	0	0	0.086	0	1.377	IC1-032125	4/11/2025 14:37	10 NF/IZ
Q1782-03DLX100	0	2.196	0	0	0.068	0	0.75	IC1-032125	4/11/2025 14:58	10 NF/IZ
Q1782-05DLX100	0	3.912	0	0	0.098	0	0.965	IC1-032125	4/11/2025 15:20	10 NF/IZ
Q1782-07DLX2	0.095	292.276	0	0	2.897	0	8.743	IC1-032125	4/11/2025 15:41	10 NF/IZ
Q1782-07DL2X100	0	3.883	0	0	0.095	0	0.943	IC1-032125	4/11/2025 16:03	10 NF/IZ
CCV	2.082	3.182	3.164	10.576	2.681	5.302	15.408	IC1-032125	4/11/2025 16:24	10 NF/IZ
CCB	0	0	0	0	0	0	0	IC1-032125	4/11/2025 16:46	10 NF/IZ

Reviewed By:Iwona
On:4/16/2025 12:57:24 PM
Inst Id :IC-2
LB :LB135389

Clear table

Instrument ID: IC-2 Analyst : IZ Method: 300.0 / 9056A

ident	concentration F-	concentration CL-	concentration NO2	concentration BR-	concentration NO3	concentration HPO4	concentration SO4	file name	date time	Initial wt/ Final	Analyst
STD1	0	0	0	0	0	0	0	IC1-012025	1/20/2025 11:14	10	NF/IZ
STD2	0.396	0.602	0.613	2.019	0.511	0.994	3.09	IC1-012025	1/20/2025 11:36	10	NF/IZ
STD3	0.835	1.258	1.254	4.184	1.047	2.089	6.324	IC1-012025	1/20/2025 11:57	10	NF/IZ
STD4	0.967	1.463	1.466	4.879	1.221	2.469	7.299	IC1-012025	1/20/2025 12:18	10	NF/IZ
STD5	1.996	2.973	2.959	9.912	2.468	4.936	14.741	IC1-012025	1/20/2025 12:40	10	NF/IZ
STD6	4.016	5.977	5.973	19.887	4.964	9.97	29.788	IC1-012025	1/20/2025 13:01	10	NF/IZ
STD7	4.99	7.527	7.535	25.119	6.289	12.542	37.258	IC1-012025	1/20/2025 13:23	10	NF/IZ

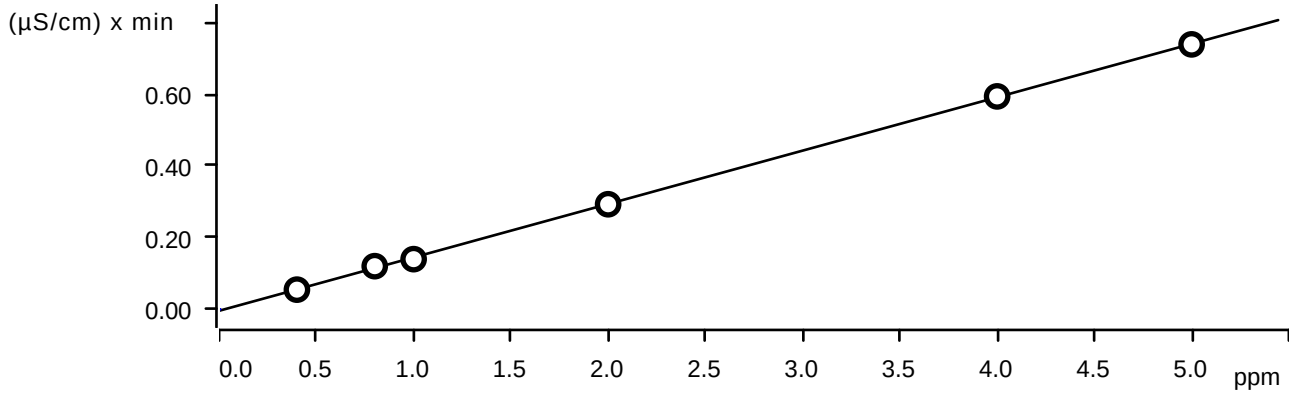
ident	True Value F-	True Value CL-	True Value NO2	True Value BR-	True Value NO3	True Value HPO4	True Value SO4
STD1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD2	0.4000	0.6000	0.6000	2.0000	0.5000	1.0000	3.0000
STD3	0.8000	1.2000	1.2000	4.0000	1.0000	2.0000	6.0000
STD4	1.0000	1.5000	1.5000	5.0000	1.2500	2.5000	7.5000
STD5	2.0000	3.0000	3.0000	10.0000	2.5000	5.0000	15.0000
STD6	4.0000	6.0000	6.0000	20.0000	5.0000	10.0000	30.0000
STD7	5.0000	7.5000	7.5000	25.0000	6.2500	12.5000	37.0000

ident	Relative Error F-	Relative Error CL-	Relative Error NO2	Relative Error BR-	Relative Error NO3	Relative Error HPO4	Relative Error SO4
STD1							
STD2	-1.0000	0.3333	2.1667	0.9500	2.2000	-0.6000	3.0000
STD3	4.3750	4.8333	4.5000	4.6000	4.7000	4.4500	5.4000
STD4	-3.3000	-2.4667	-2.2667	-2.4200	-2.3200	-1.2400	-2.6800
STD5	-0.2000	-0.9000	-1.3667	-0.8800	-1.2800	-1.2800	-1.7267
STD6	0.4000	-0.3833	-0.4500	-0.5650	-0.7200	-0.3000	-0.7067
STD7	-0.2000	0.3600	0.4667	0.4760	0.6240	0.3360	0.6973

Reviewed By:Iwona
On:4/16/2025 12:57:24 PM
Inst Id :IC-2
LB :LB135389

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

Fluoride (Anions)



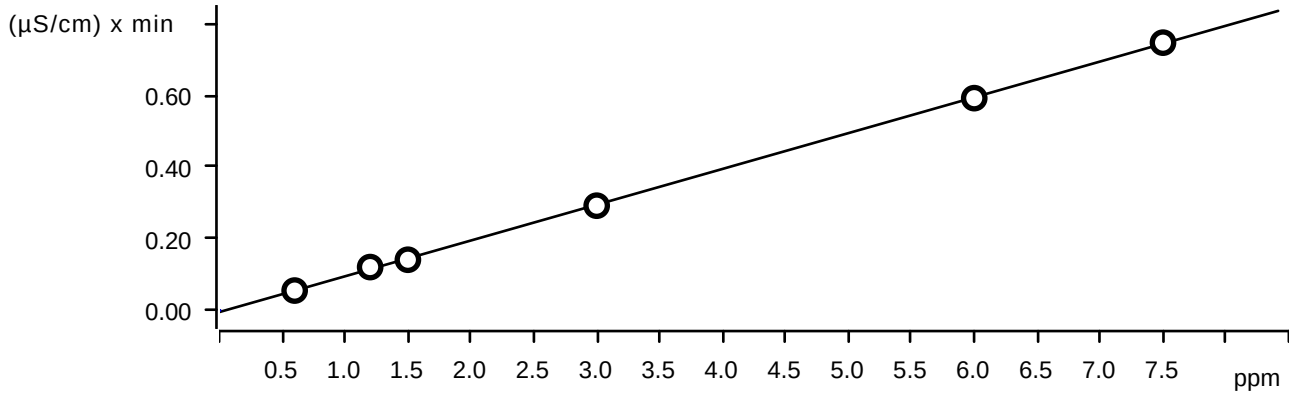
Function: . . . . . *A = - 4.02271E-3 + 0.0148839× Q*

Relative standard deviation . . . . . *1.203859 %*

Correlation coefficient *0.999923*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-01-20 11:14:39 UTC-5	used
Standard 2	1	0.400	10.0	1.0	1.0	0.055	STD2	2025-01-20 11:36:02 UTC-5	used
Standard 3	1	0.800	10.0	1.0	1.0	0.120	STD3	2025-01-20 11:57:26 UTC-5	used
Standard 4	1	1.000	10.0	1.0	1.0	0.140	STD4	2025-01-20 12:18:50 UTC-5	used
Standard 5	1	2.000	10.0	1.0	1.0	0.293	STD5	2025-01-20 12:40:15 UTC-5	used
Standard 6	1	4.000	10.0	1.0	1.0	0.594	STD6	2025-01-20 13:01:41 UTC-5	used
Standard 7	1	5.000	10.0	1.0	1.0	0.739	STD7	2025-01-20 13:23:08 UTC-5	used

Chloride (Anions)



Function: . . . . . *A = - 4.62538E-3 + 9.98029E-3× Q*

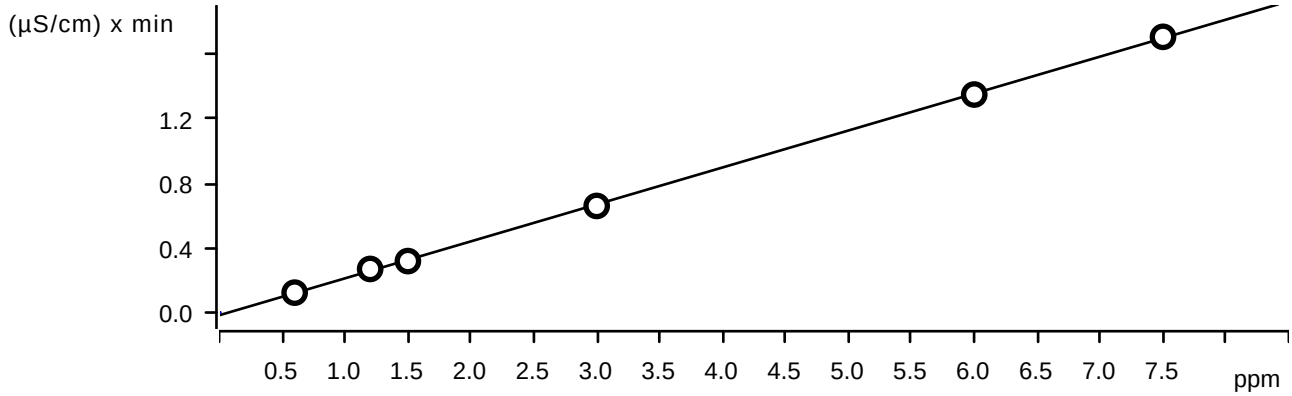
Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

Relative standard deviation . . . . . *1.261416 %*

Correlation coefficient *0.999916*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-01-20 11:14:39 UTC-5	used
Standard 2	1	0.600	10.0	1.0	1.0	0.055	STD2	2025-01-20 11:36:02 UTC-5	used
Standard 3	1	1.200	10.0	1.0	1.0	0.121	STD3	2025-01-20 11:57:26 UTC-5	used
Standard 4	1	1.500	10.0	1.0	1.0	0.141	STD4	2025-01-20 12:18:50 UTC-5	used
Standard 5	1	3.000	10.0	1.0	1.0	0.292	STD5	2025-01-20 12:40:15 UTC-5	used
Standard 6	1	6.000	10.0	1.0	1.0	0.592	STD6	2025-01-20 13:01:41 UTC-5	used
Standard 7	1	7.500	10.0	1.0	1.0	0.747	STD7	2025-01-20 13:23:08 UTC-5	used

Nitrite (Anions)



Function: . . . . . *A = - 0.0179856 + 0.0228967× Q*

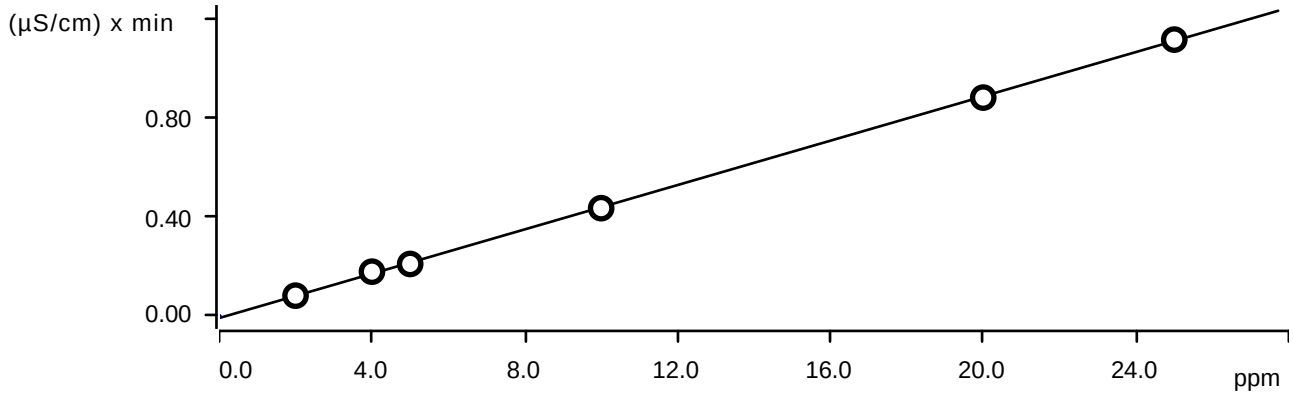
Relative standard deviation . . . . . *1.369596 %*

Correlation coefficient *0.999903*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-01-20 11:14:39 UTC-5	used
Standard 2	1	0.600	10.0	1.0	1.0	0.122	STD2	2025-01-20 11:36:02 UTC-5	used
Standard 3	1	1.200	10.0	1.0	1.0	0.269	STD3	2025-01-20 11:57:26 UTC-5	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-01-20 12:18:50 UTC-5	used
Standard 5	1	3.000	10.0	1.0	1.0	0.660	STD5	2025-01-20 12:40:15 UTC-5	used
Standard 6	1	6.000	10.0	1.0	1.0	1.350	STD6	2025-01-20 13:01:41 UTC-5	used
Standard 7	1	7.500	10.0	1.0	1.0	1.707	STD7	2025-01-20 13:23:08 UTC-5	used

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

Bromide (Anions)



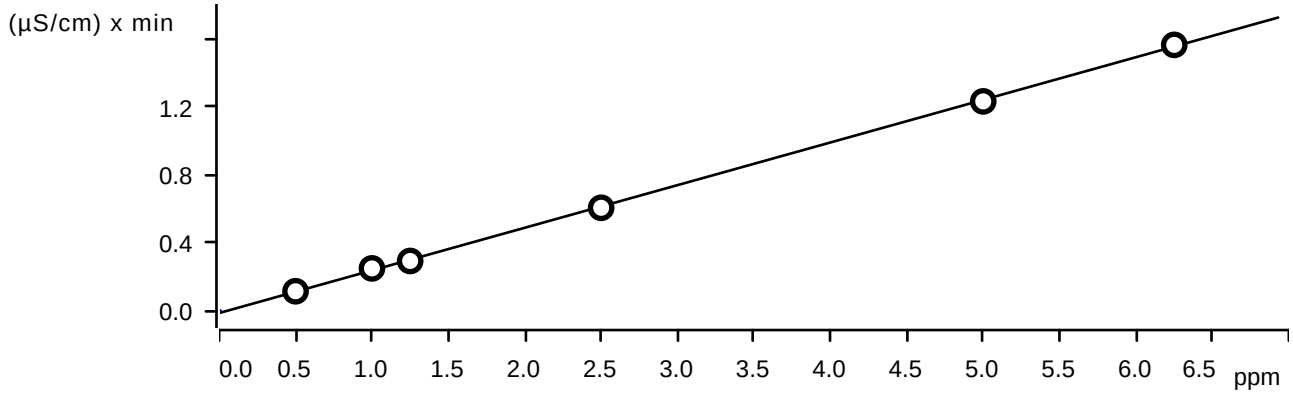
Function: . . . . . *A = - 8.89651E-3 + 4.46429E-3× Q*

Relative standard deviation . . . . . *1.338167 %*

Correlation coefficient *0.999906*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-01-20 11:14:39 UTC-5	used
Standard 2	1	2.000	10.0	1.0	1.0	0.081	STD2	2025-01-20 11:36:02 UTC-5	used
Standard 3	1	4.000	10.0	1.0	1.0	0.178	STD3	2025-01-20 11:57:26 UTC-5	used
Standard 4	1	5.000	10.0	1.0	1.0	0.209	STD4	2025-01-20 12:18:50 UTC-5	used
Standard 5	1	10.000	10.0	1.0	1.0	0.434	STD5	2025-01-20 12:40:15 UTC-5	used
Standard 6	1	20.000	10.0	1.0	1.0	0.879	STD6	2025-01-20 13:01:41 UTC-5	used
Standard 7	1	25.000	10.0	1.0	1.0	1.112	STD7	2025-01-20 13:23:08 UTC-5	used

Nitrate (Anions)



Function: . . . . . *A = - 0.0155875 + 0.0250988× Q*

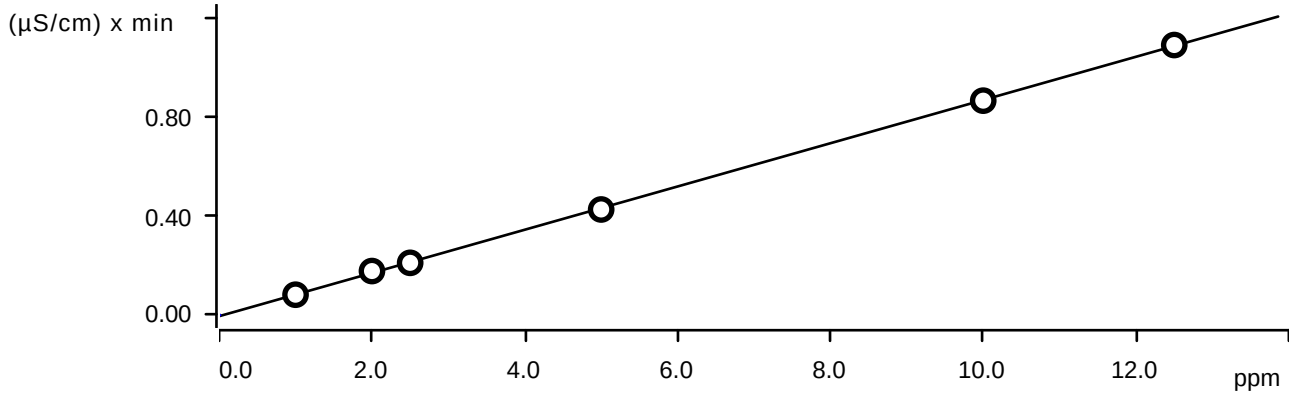
Relative standard deviation . . . . . *1.561944 %*

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

Correlation coefficient *0.999873*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-01-20 11:14:39 UTC-5	used
Standard 2	1	0.500	10.0	1.0	1.0	0.113	STD2	2025-01-20 11:36:02 UTC-5	used
Standard 3	1	1.000	10.0	1.0	1.0	0.247	STD3	2025-01-20 11:57:26 UTC-5	used
Standard 4	1	1.250	10.0	1.0	1.0	0.291	STD4	2025-01-20 12:18:50 UTC-5	used
Standard 5	1	2.500	10.0	1.0	1.0	0.604	STD5	2025-01-20 12:40:15 UTC-5	used
Standard 6	1	5.000	10.0	1.0	1.0	1.230	STD6	2025-01-20 13:01:41 UTC-5	used
Standard 7	1	6.250	10.0	1.0	1.0	1.563	STD7	2025-01-20 13:23:08 UTC-5	used

Phosphate (Anions)



Function: . . . . . *A = - 4.38887E-3 + 8.70711E-3× Q*

Relative standard deviation . . . . . *1.148005 %*

Correlation coefficient *0.999929*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-01-20 11:14:39 UTC-5	used
Standard 2	1	1.000	10.0	1.0	1.0	0.082	STD2	2025-01-20 11:36:02 UTC-5	used
Standard 3	1	2.000	10.0	1.0	1.0	0.177	STD3	2025-01-20 11:57:26 UTC-5	used
Standard 4	1	2.500	10.0	1.0	1.0	0.211	STD4	2025-01-20 12:18:50 UTC-5	used
Standard 5	1	5.000	10.0	1.0	1.0	0.425	STD5	2025-01-20 12:40:15 UTC-5	used
Standard 6	1	10.000	10.0	1.0	1.0	0.864	STD6	2025-01-20 13:01:41 UTC-5	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-01-20 13:23:08 UTC-5	used

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On:4/16/2025 12:5
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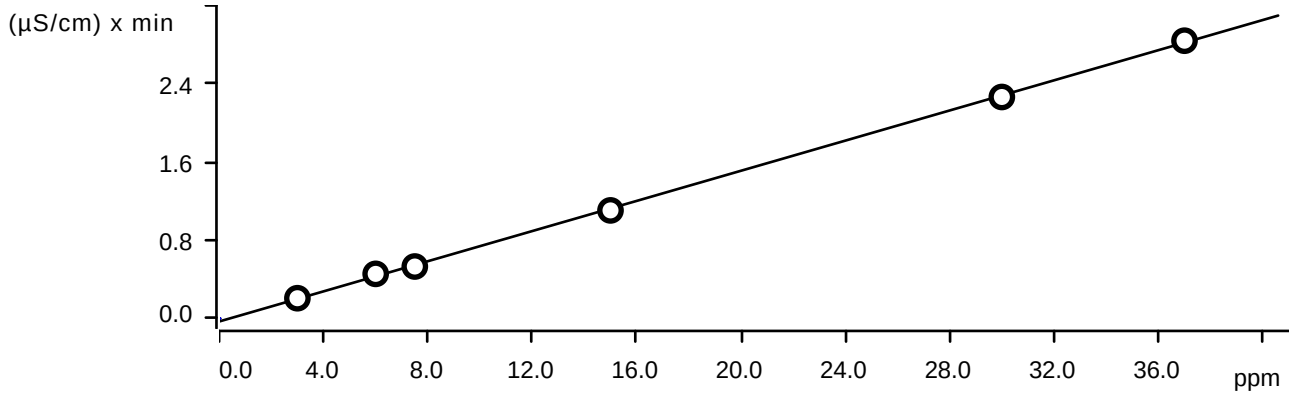
Inst Id :IC-2
LB :LB135389

Sulfate (Anions)



Function: . . . . . *A = - 0.0310554 + 7.70543E-3× Q*

Relative standard deviation . . . . . *1.797524 %*

Correlation coefficient *0.999831*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-01-20 11:14:39 UTC-5	used
Standard 2	1	3.000	10.0	1.0	1.0	0.207	STD2	2025-01-20 11:36:02 UTC-5	used
Standard 3	1	6.000	10.0	1.0	1.0	0.456	STD3	2025-01-20 11:57:26 UTC-5	used
Standard 4	1	7.500	10.0	1.0	1.0	0.531	STD4	2025-01-20 12:18:50 UTC-5	used
Standard 5	1	15.000	10.0	1.0	1.0	1.105	STD5	2025-01-20 12:40:15 UTC-5	used
Standard 6	1	30.000	10.0	1.0	1.0	2.264	STD6	2025-01-20 13:01:41 UTC-5	used
Standard 7	1	37.000	10.0	1.0	1.0	2.840	STD7	2025-01-20 13:23:08 UTC-5	used

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

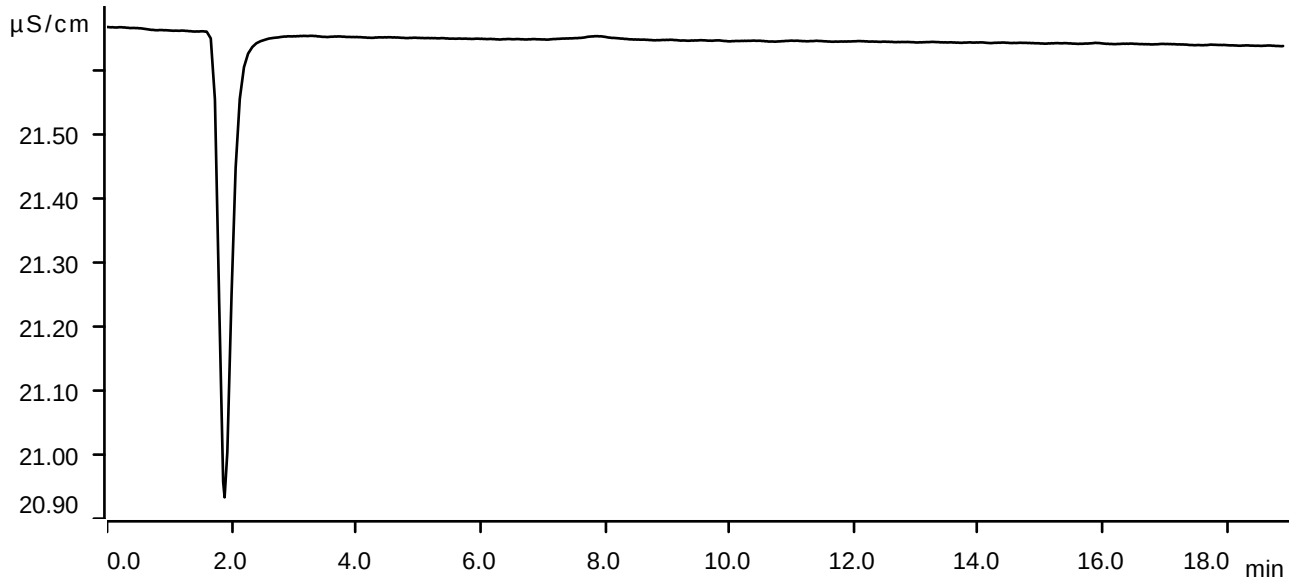
Sample data

Ident	STD1	
Sample type	Standard 1	
Determination start	2025-01-20 11:14:39 UTC-5	
Method	IC1-012025	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.39	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

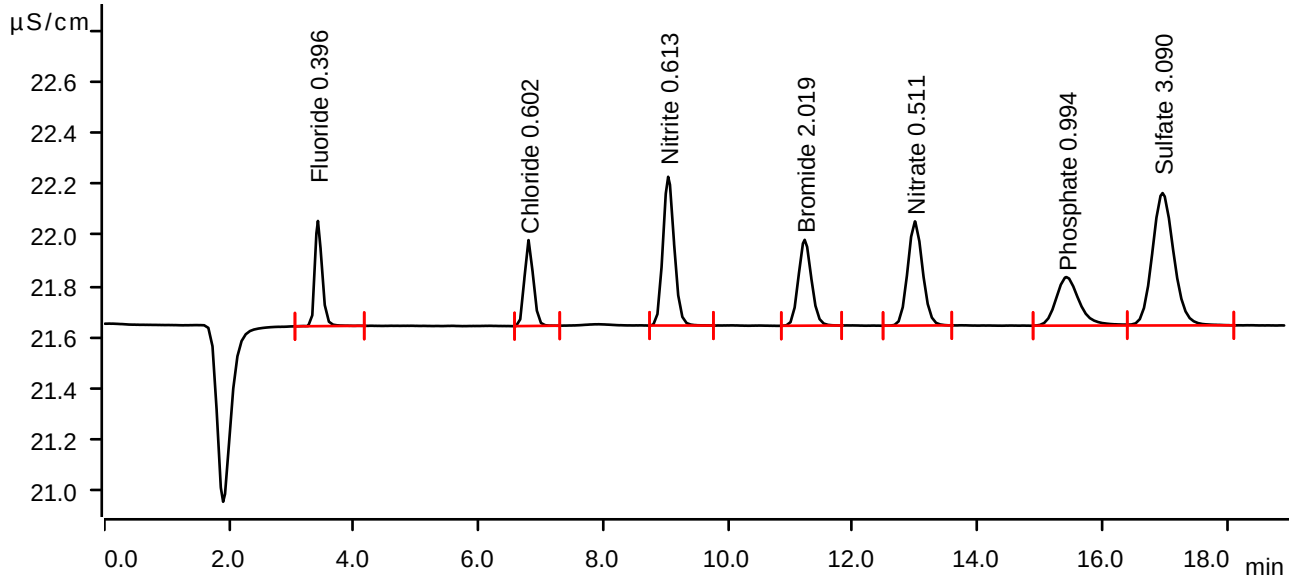
Sample data

Ident	STD2
Sample type	Standard 2
Determination start	2025-01-20 11:36:02 UTC-5
Method	IC1-012025
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.11	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.425	0.0549	0.411	0.396	Fluoride
2	6.802	0.0555	0.335	0.602	Chloride
3	9.040	0.1223	0.581	0.613	Nitrite
4	11.228	0.0813	0.335	2.019	Bromide
5	12.995	0.1126	0.407	0.511	Nitrate
6	15.423	0.0822	0.190	0.994	Phosphate
7	16.967	0.2070	0.517	3.090	Sulfate

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On:4/16/2025 12:5
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Inst Id :IC-2
LB :LB135389

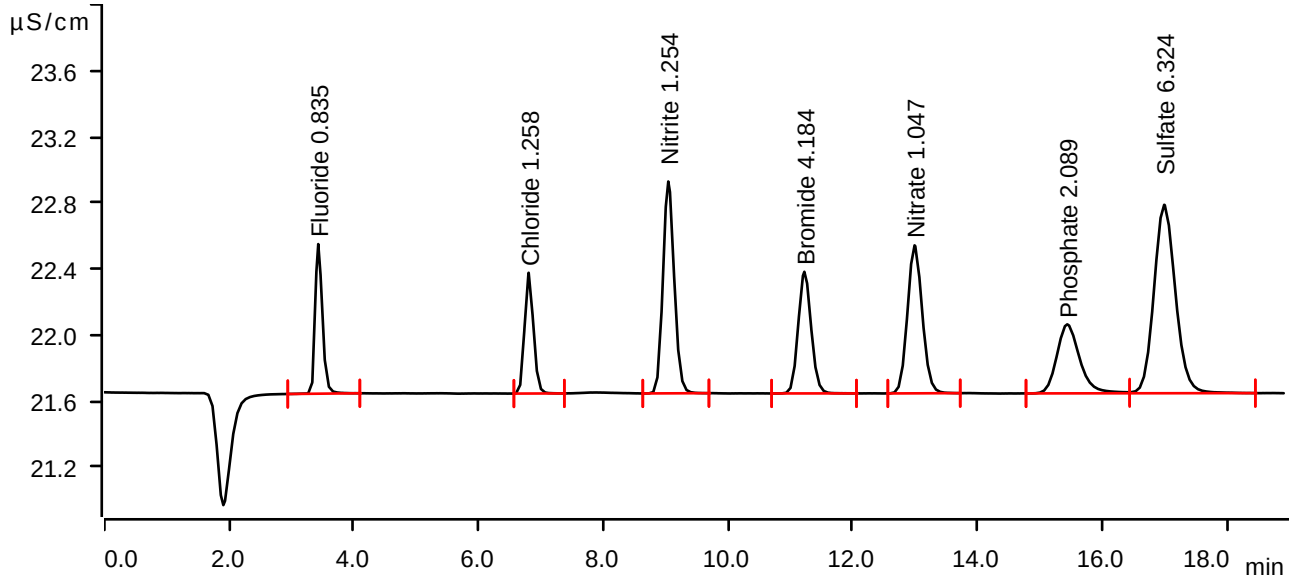
Sample data

Ident	STD3
Sample type	Standard 3
Determination start	2025-01-20 11:57:26 UTC-5
Method	IC1-012025
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.99	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.430	0.1203	0.906	0.835	Fluoride
2	6.803	0.1209	0.731	1.258	Chloride
3	9.042	0.2691	1.282	1.254	Nitrite
4	11.223	0.1779	0.736	4.184	Bromide
5	12.990	0.2472	0.896	1.047	Nitrate
6	15.438	0.1775	0.418	2.089	Phosphate
7	16.992	0.4562	1.141	6.324	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

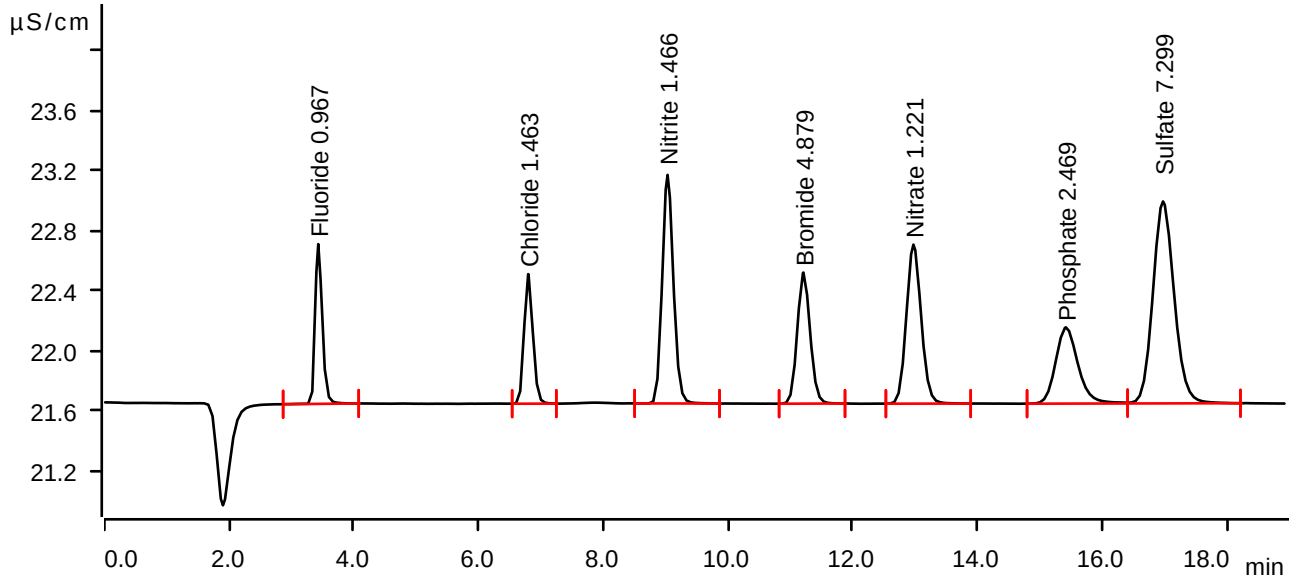
Sample data

Ident	STD4
Sample type	Standard 4
Determination start	2025-01-20 12:18:50 UTC-5
Method	IC1-012025
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.11	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.430	0.1399	1.061	0.967	Fluoride
2	6.795	0.1414	0.860	1.463	Chloride
3	9.030	0.3178	1.517	1.466	Nitrite
4	11.208	0.2089	0.870	4.879	Bromide
5	12.972	0.2908	1.056	1.221	Nitrate
6	15.417	0.2105	0.506	2.469	Phosphate
7	16.973	0.5314	1.341	7.299	Sulfate

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On:4/16/2025 12:5
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Inst Id :IC-2
LB :LB135389

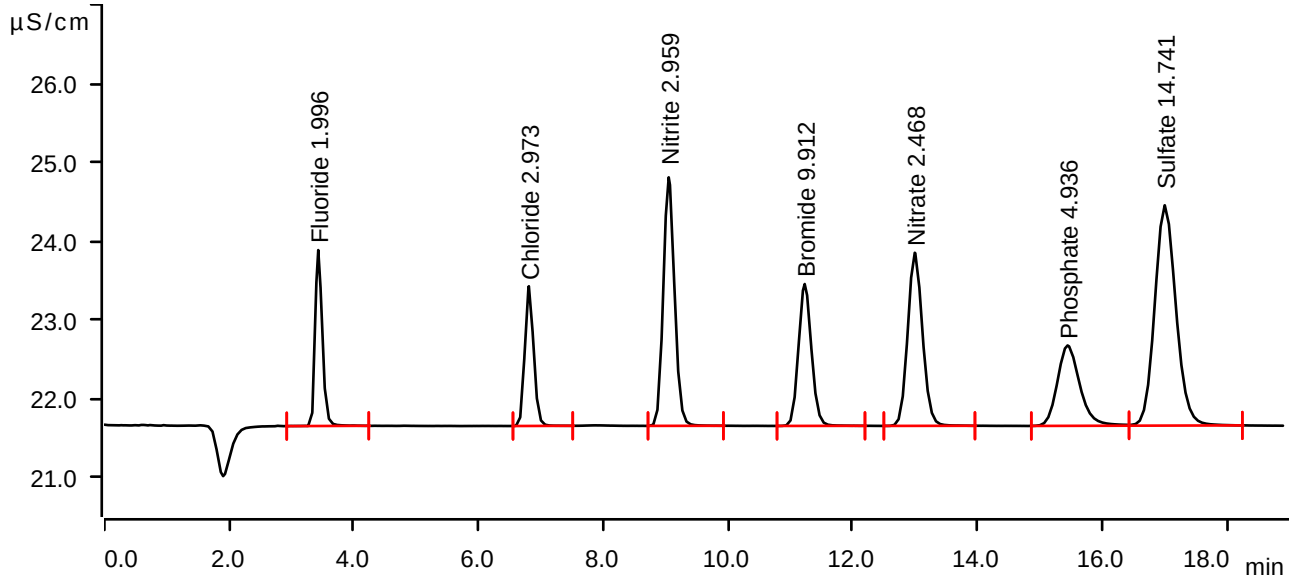
Sample data

Ident	STD5
Sample type	Standard 5
Determination start	2025-01-20 12:40:15 UTC-5
Method	IC1-012025
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.94	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.430	0.2930	2.233	1.996	Fluoride
2	6.807	0.2921	1.773	2.973	Chloride
3	9.048	0.6595	3.154	2.959	Nitrite
4	11.228	0.4336	1.801	9.912	Bromide
5	12.993	0.6039	2.197	2.468	Nitrate
6	15.443	0.4254	1.020	4.936	Phosphate
7	17.002	1.1048	2.795	14.741	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

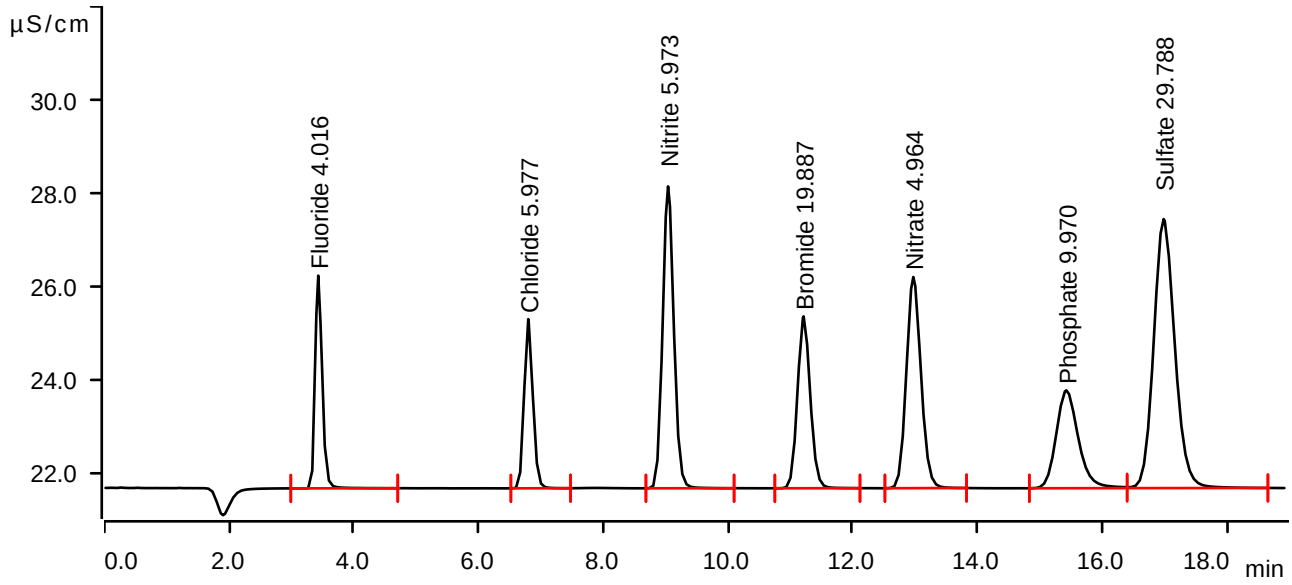
Sample data

Ident	STD6
Sample type	Standard 6
Determination start	2025-01-20 13:01:41 UTC-5
Method	IC1-012025
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.94	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.430	0.5937	4.568	4.016	Fluoride
2	6.797	0.5919	3.633	5.977	Chloride
3	9.038	1.3497	6.484	5.973	Nitrite
4	11.212	0.8789	3.691	19.887	Bromide
5	12.970	1.2302	4.535	4.964	Nitrate
6	15.423	0.8637	2.101	9.970	Phosphate
7	16.983	2.2643	5.777	29.788	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

Sample data

Ident	STD7	
Sample type	Standard 7	
Determination start	2025-01-20 13:23:08 UTC-5	
Method	IC1-012025	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.82	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

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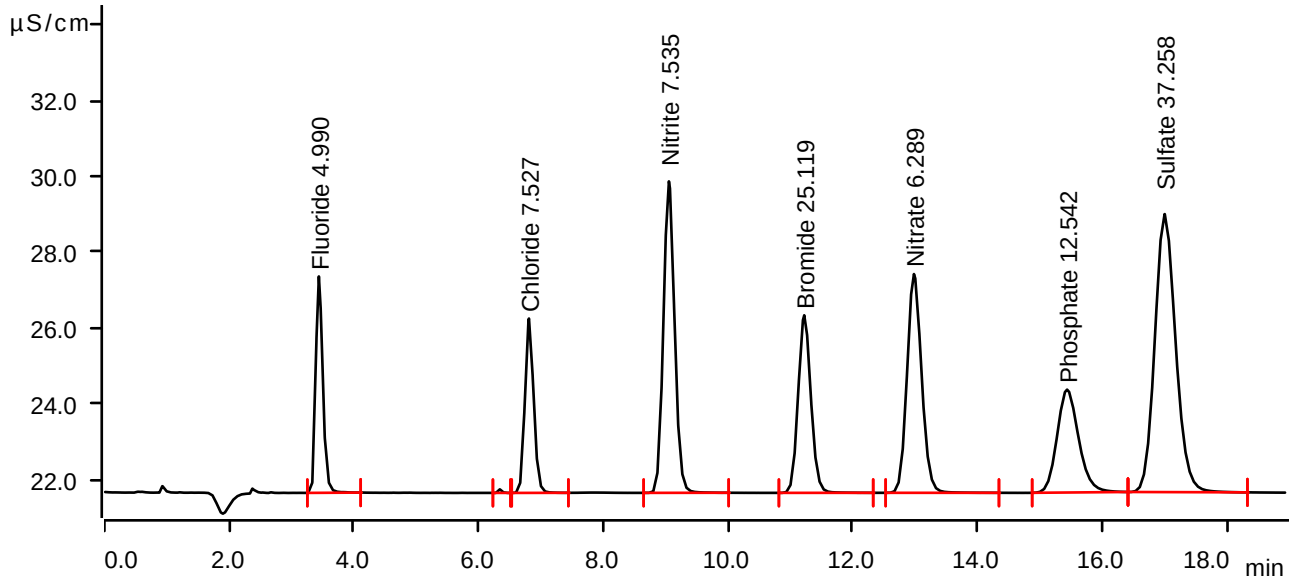
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.440	0.7387	5.703	4.990	Fluoride
2	6.342	0.0051	0.093	invalid	
3	6.808	0.7466	4.595	7.527	Chloride
4	9.052	1.7073	8.209	7.535	Nitrite
5	11.222	1.1125	4.681	25.119	Bromide
6	12.980	1.5629	5.766	6.289	Nitrate
7	15.435	1.0877	2.713	12.542	Phosphate
8	16.998	2.8398	7.327	37.258	Sulfate

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On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

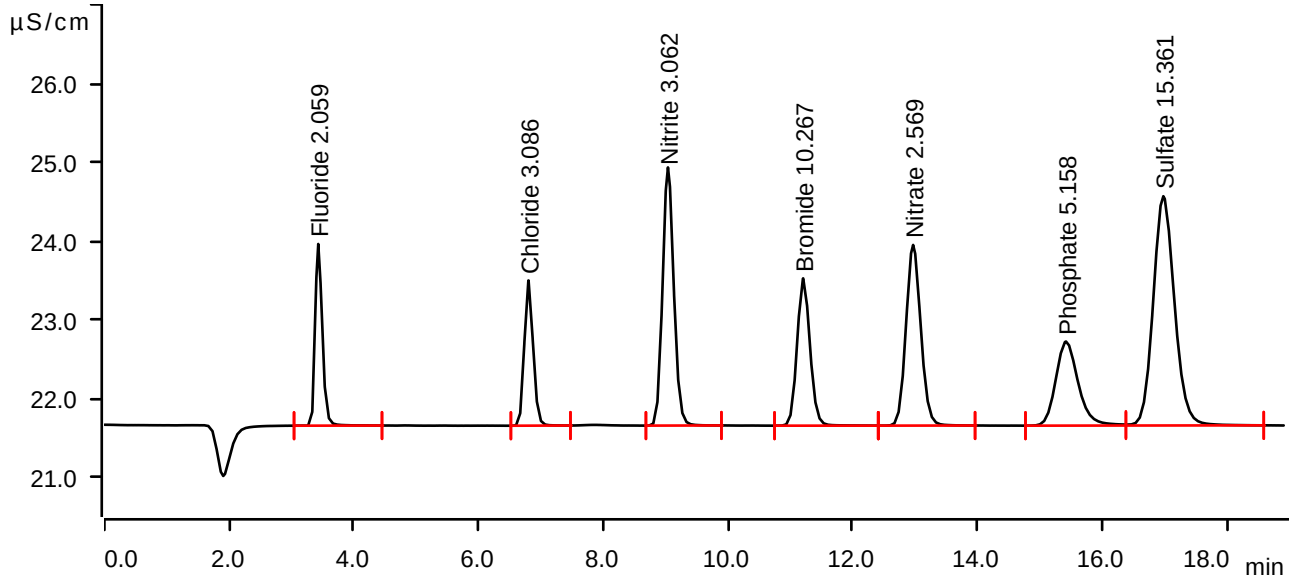
Sample data

Ident	ICV
Sample type	Check standard 1
Determination start	2025-01-20 13:44:36 UTC-5
Method	IC1-012025
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.88	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.430	0.3025	2.306	2.059	Fluoride
2	6.798	0.3033	1.843	3.086	Chloride
3	9.037	0.6832	3.276	3.062	Nitrite
4	11.205	0.4495	1.869	10.267	Bromide
5	12.967	0.6293	2.293	2.569	Nitrate
6	15.418	0.4447	1.067	5.158	Phosphate
7	16.978	1.1525	2.909	15.361	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

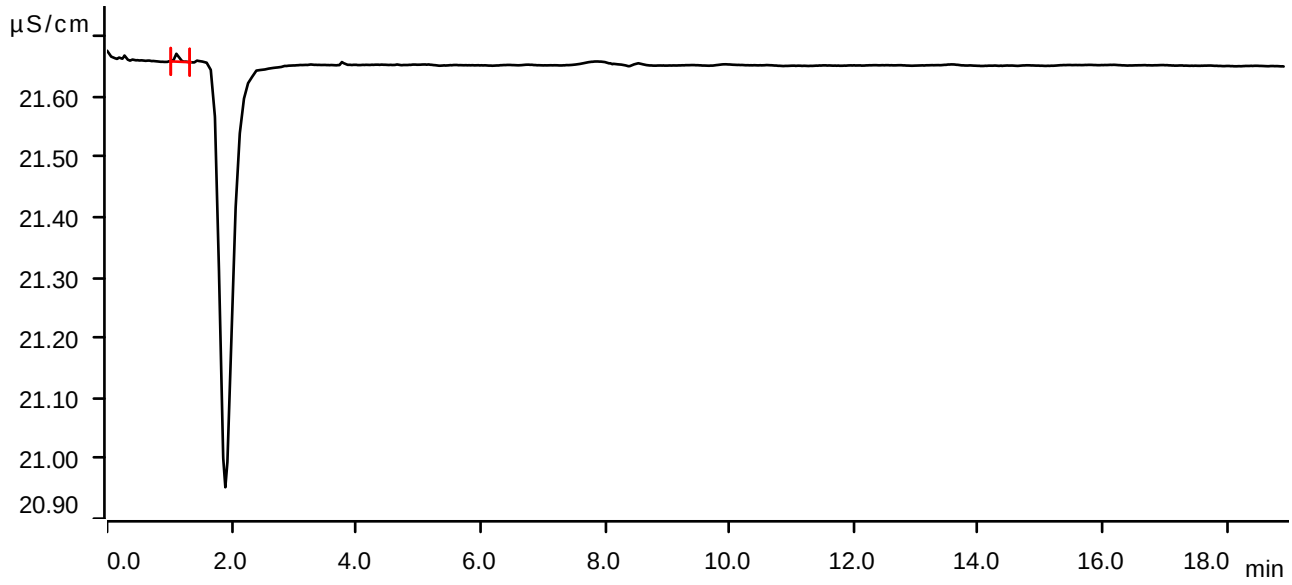
Sample data

Ident	ICB
Sample type	Sample
Determination start	2025-01-20 14:06:05 UTC-5
Method	IC1-012025
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.44	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	1.115	0.0010	0.013	invalid	

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

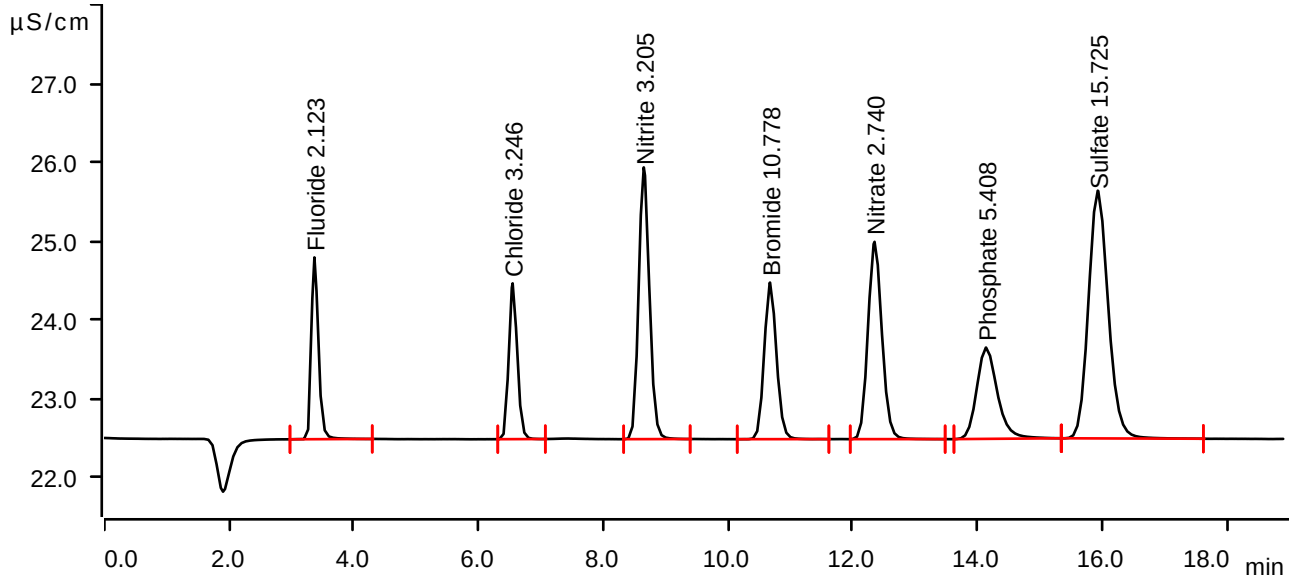
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2025-04-11 08:49:37 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.43	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.368	0.3032	2.306	2.123	Fluoride
2	6.547	0.3139	1.977	3.246	Chloride
3	8.648	0.6914	3.448	3.205	Nitrite
4	10.673	0.4547	1.987	10.778	Bromide
5	12.348	0.6529	2.504	2.740	Nitrate
6	14.137	0.4451	1.159	5.408	Phosphate
7	15.927	1.1580	3.144	15.725	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

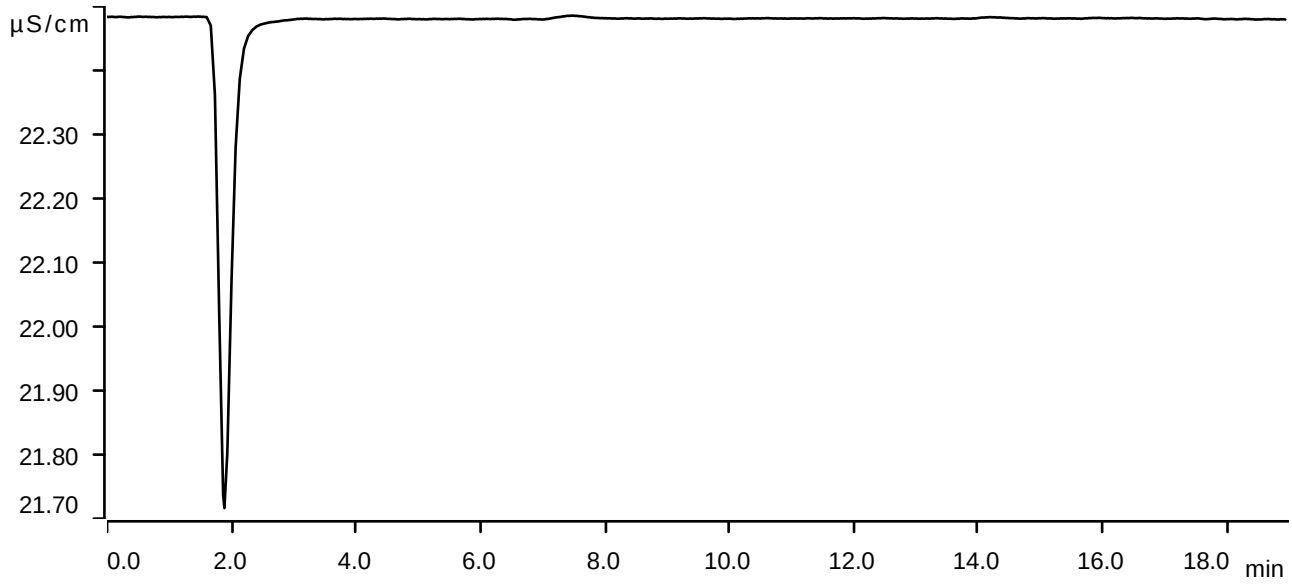
Sample data

Ident	CCB
Sample type	Sample
Determination start	2025-04-11 09:14:13 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.49	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Metrohm

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

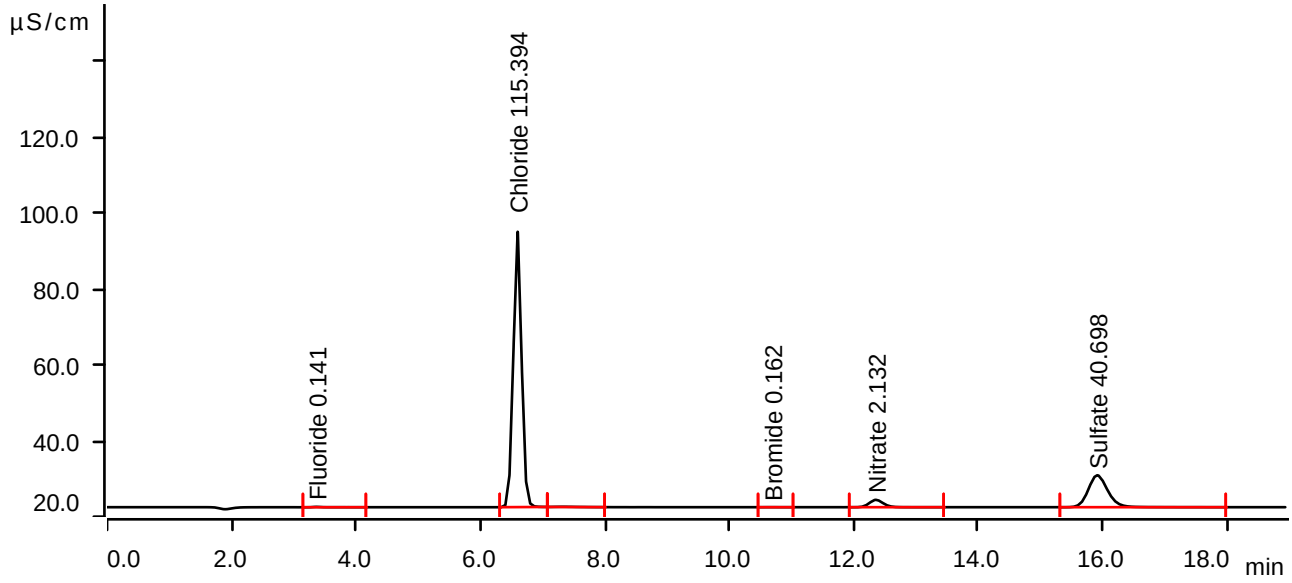
Sample data

Ident	Q1782-01
Sample type	Sample
Determination start	2025-04-11 09:35:43 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.54	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.365	0.0164	0.100	0.141	Fluoride
2	6.598	11.2383	72.563	115.394	Chloride
3	7.313	0.0234	0.059	invalid	
4	10.688	0.0027	0.011	0.162	Bromide
5	12.355	0.5060	1.946	2.132	Nitrate
6	15.912	3.0477	8.427	40.698	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

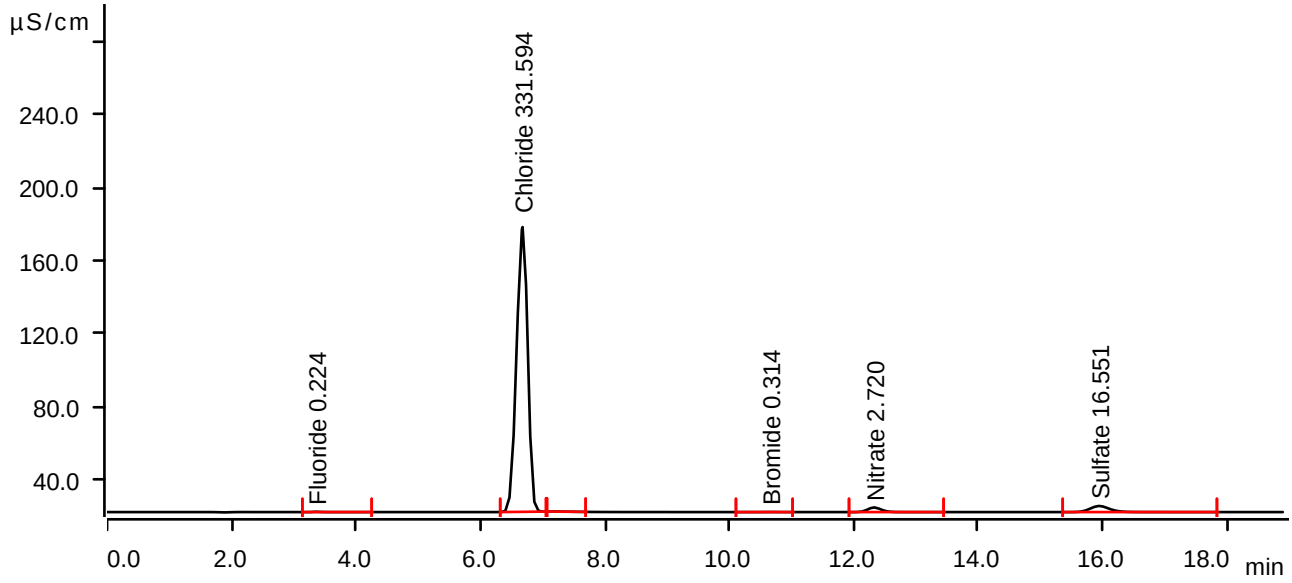
Sample data

Ident	Q1782-03
Sample type	Sample
Determination start	2025-04-11 09:57:16 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.37	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.362	0.0284	0.184	0.224	Fluoride
2	6.678	32.2984	155.666	331.594	Chloride
3	7.190	0.0242	0.073	invalid	
4	10.655	0.0091	0.039	0.314	Bromide
5	12.325	0.6481	2.519	2.720	Nitrate
6	15.942	1.2205	3.334	16.551	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

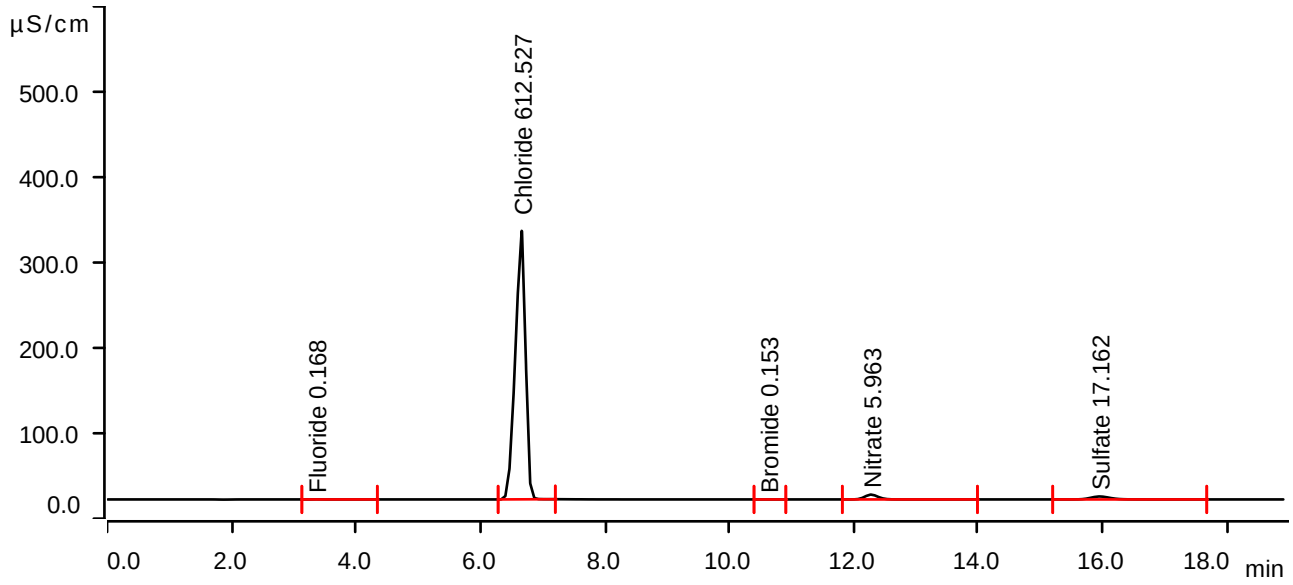
Sample data

Ident	Q1782-05
Sample type	Sample
Determination start	2025-04-11 10:18:50 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.37	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.358	0.0203	0.131	0.168	Fluoride
2	6.663	59.6642	314.503	612.527	Chloride
3	10.623	0.0023	0.010	0.153	Bromide
4	12.277	1.4317	5.646	5.963	Nitrate
5	15.950	1.2668	3.469	17.162	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

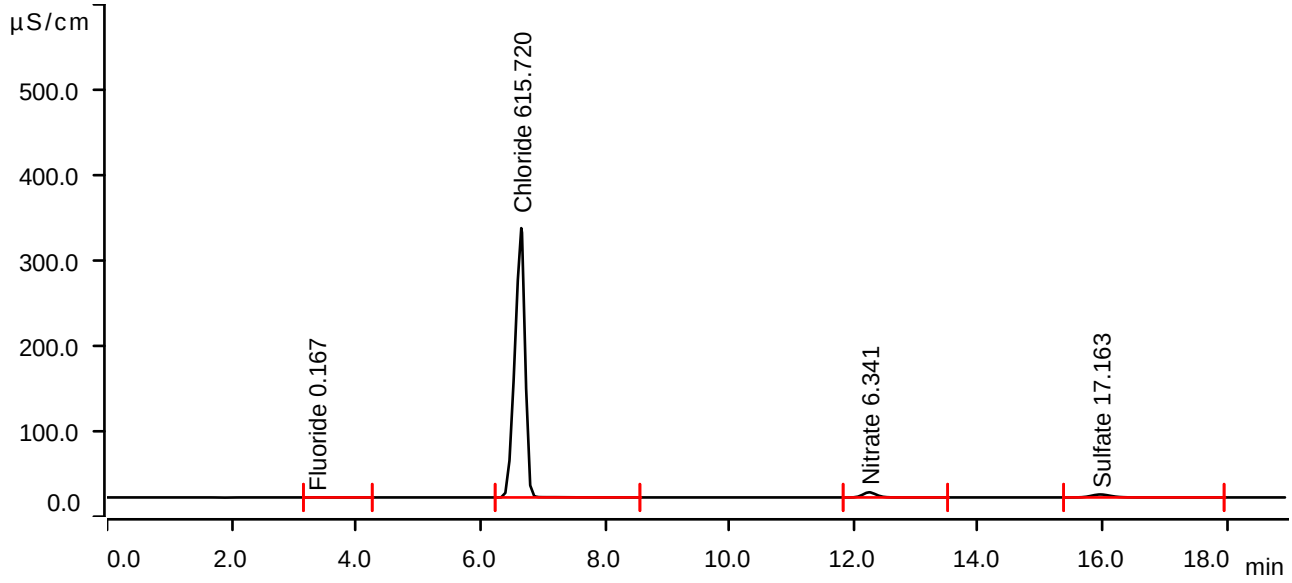
Sample data

Ident	Q1782-07
Sample type	Sample
Determination start	2025-04-11 10:40:24 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.43	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.363	0.0202	0.132	0.167	Fluoride
2	6.657	59.9752	315.451	615.720	Chloride
3	12.247	1.5230	6.037	6.341	Nitrate
4	15.962	1.2669	3.472	17.163	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

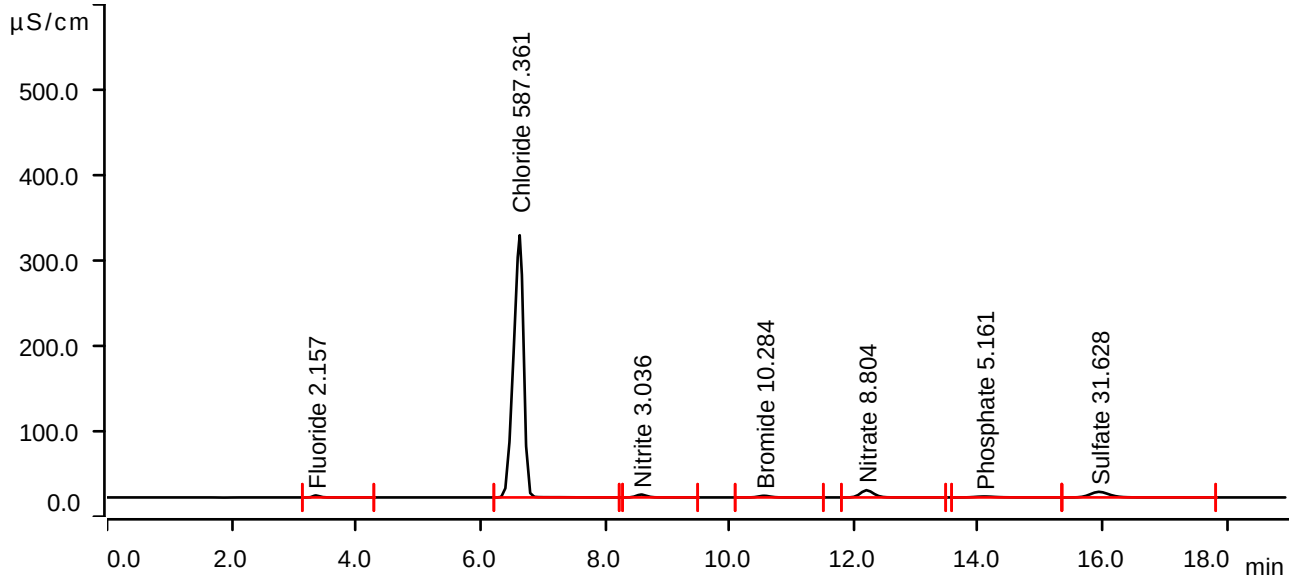
Sample data

Ident	Q1782-07MS
Sample type	Sample
Determination start	2025-04-11 11:01:58 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.66	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.357	0.3081	2.330	2.157	Fluoride
2	6.632	57.2127	307.136	587.361	Chloride
3	8.583	0.6543	3.372	3.036	Nitrite
4	10.558	0.4337	1.942	10.284	Bromide
5	12.205	2.1181	8.475	8.804	Nitrate
6	14.097	0.4244	1.091	5.161	Phosphate
7	15.940	2.3614	6.557	31.628	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

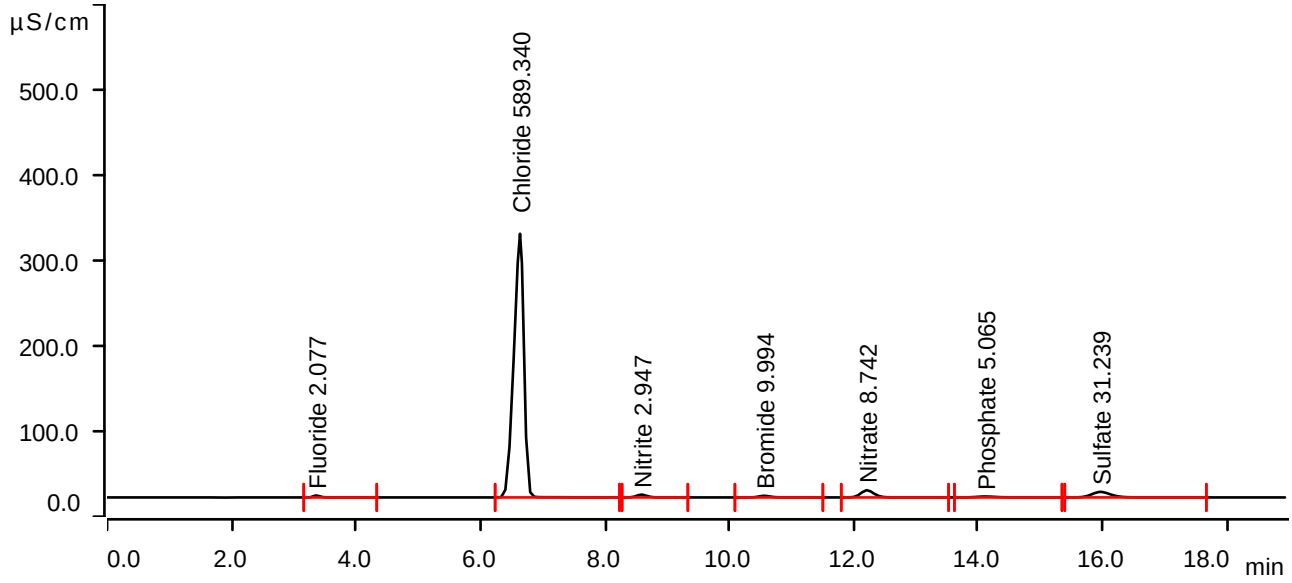
Sample data

Ident	Q1782-07MSD
Sample type	Sample
Determination start	2025-04-11 11:23:33 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.32	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.362	0.2965	2.244	2.077	Fluoride
2	6.637	57.4055	308.879	589.340	Chloride
3	8.588	0.6347	3.277	2.947	Nitrite
4	10.562	0.4214	1.889	9.994	Bromide
5	12.212	2.1030	8.423	8.742	Nitrate
6	14.110	0.4164	1.077	5.065	Phosphate
7	15.965	2.3319	6.480	31.239	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

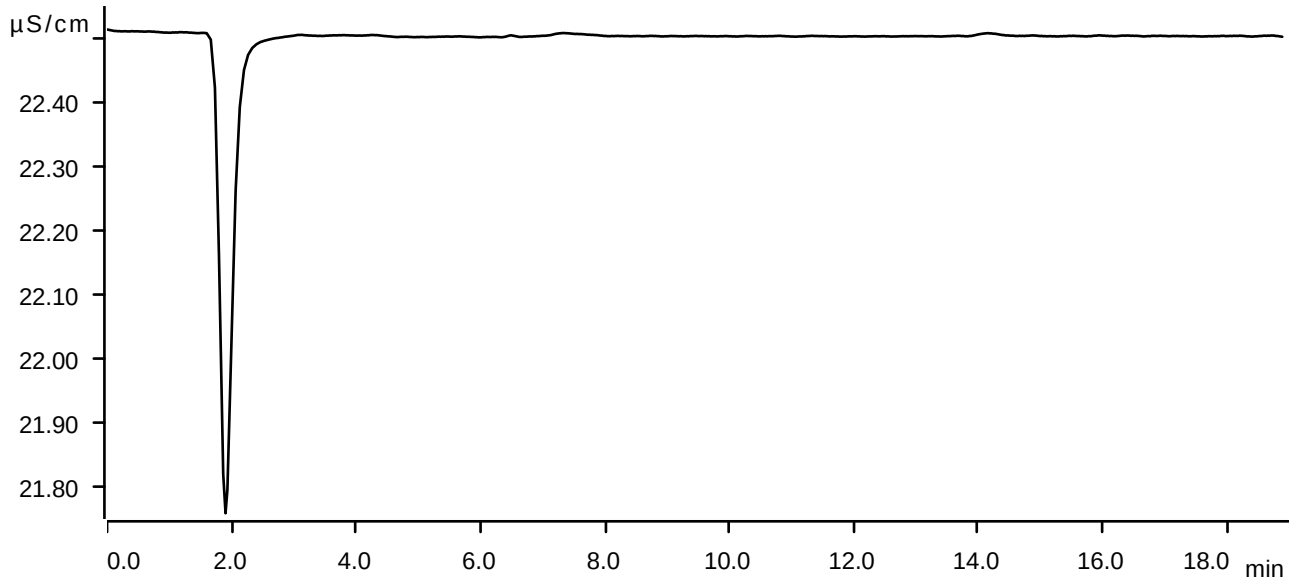
Sample data

Ident	LB135389BLW
Sample type	Sample
Determination start	2025-04-11 11:45:06 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.49	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

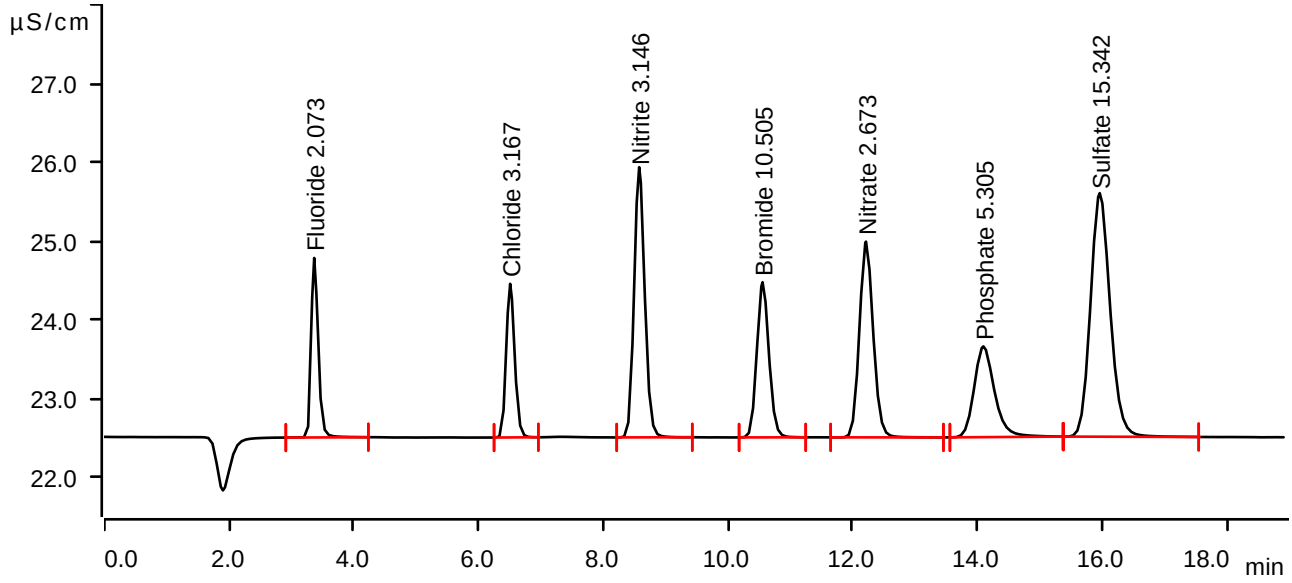
Sample data

Ident	LB135389BSW
Sample type	Check standard 1
Determination start	2025-04-11 12:06:37 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.32	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.365	0.2959	2.277	2.073	Fluoride
2	6.507	0.3062	1.950	3.167	Chloride
3	8.575	0.6784	3.428	3.146	Nitrite
4	10.553	0.4431	1.969	10.505	Bromide
5	12.212	0.6367	2.484	2.673	Nitrate
6	14.093	0.4365	1.152	5.305	Phosphate
7	15.958	1.1290	3.091	15.342	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

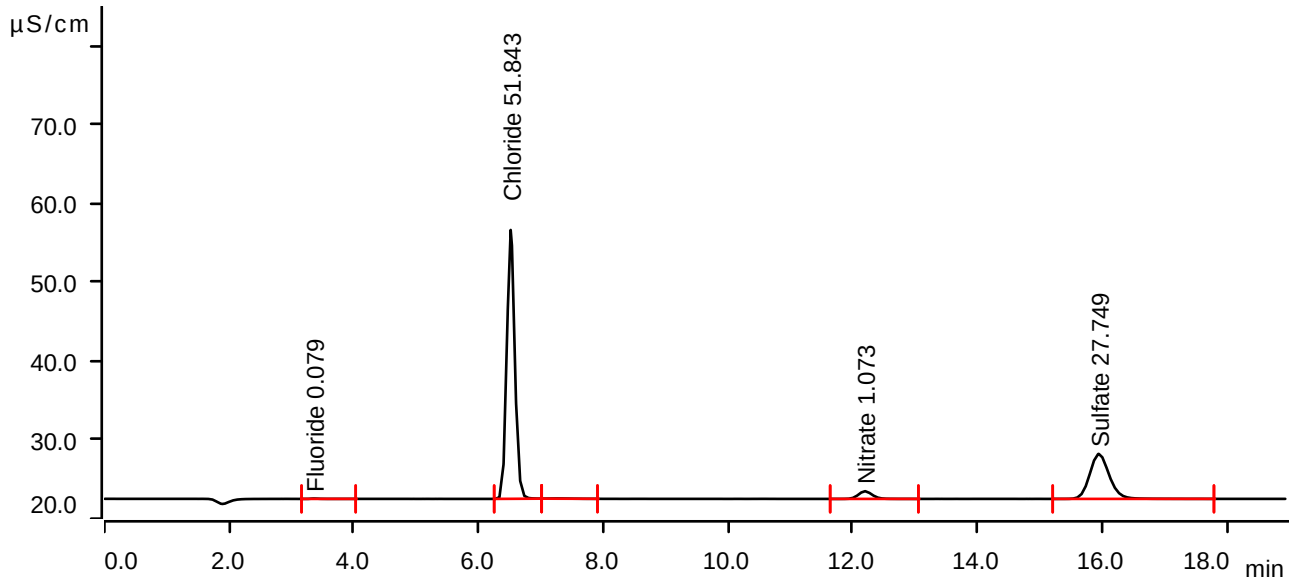
Sample data

Ident	Q1782-01DLX2
Sample type	Sample
Determination start	2025-04-11 12:28:09 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.44	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.360	0.0075	0.048	0.079	Fluoride
2	6.515	5.0478	34.112	51.843	Chloride
3	7.270	0.0099	0.027	invalid	
4	12.195	0.2501	0.971	1.073	Nitrate
5	15.943	2.0679	5.713	27.749	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

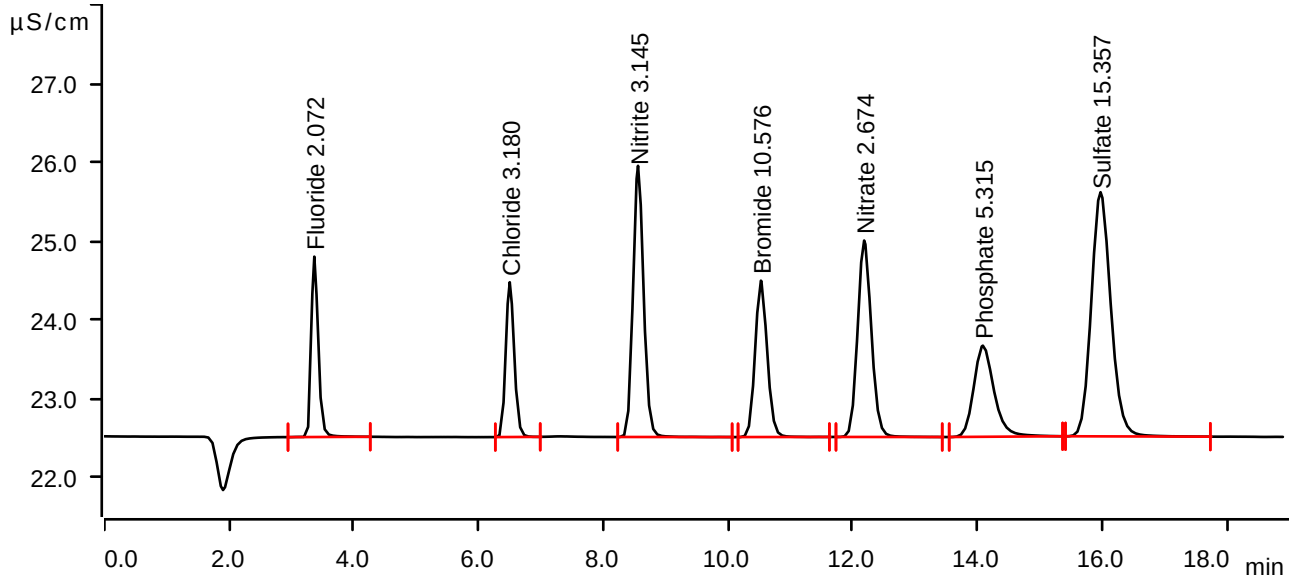
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2025-04-11 13:11:13 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.26	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.367	0.2958	2.288	2.072	Fluoride
2	6.500	0.3075	1.964	3.180	Chloride
3	8.557	0.6782	3.441	3.145	Nitrite
4	10.527	0.4461	1.985	10.576	Bromide
5	12.182	0.6369	2.493	2.674	Nitrate
6	14.085	0.4373	1.157	5.315	Phosphate
7	15.972	1.1302	3.099	15.357	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

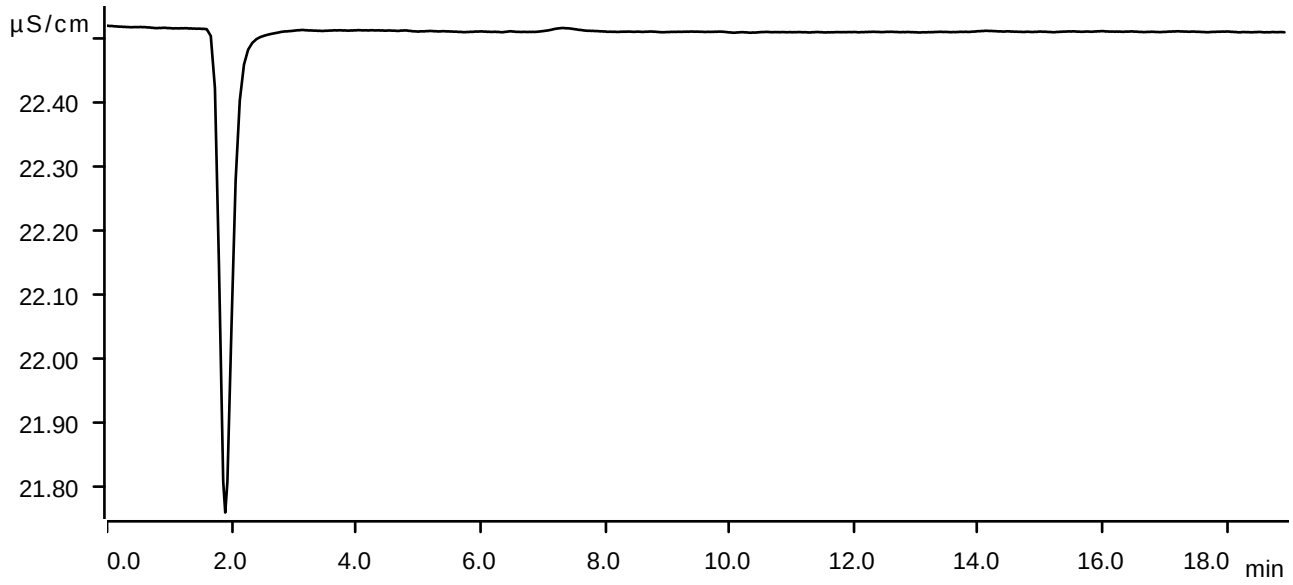
Sample data

Ident	CCB
Sample type	Sample
Determination start	2025-04-11 13:32:43 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.66	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

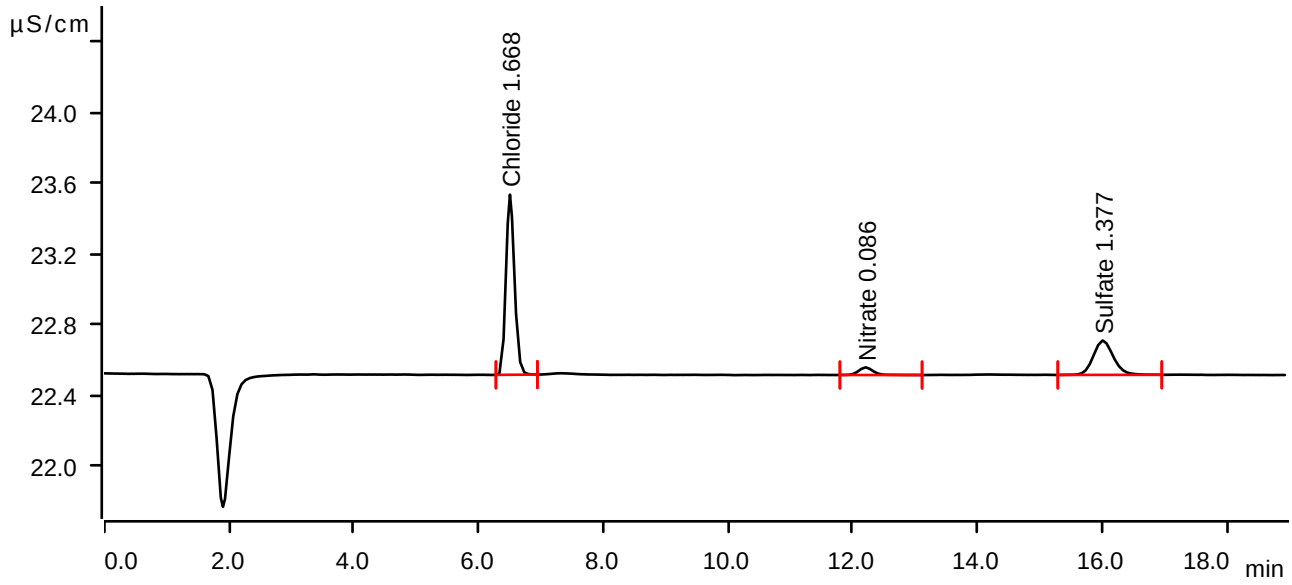
Sample data

Ident	Q1782-01DL2X50
Sample type	Sample
Determination start	2025-04-11 14:37:14 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.26	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.503	0.1602	1.020	1.668	Chloride
2	12.210	0.0116	0.043	0.086	Nitrate
3	16.010	0.0723	0.194	1.377	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

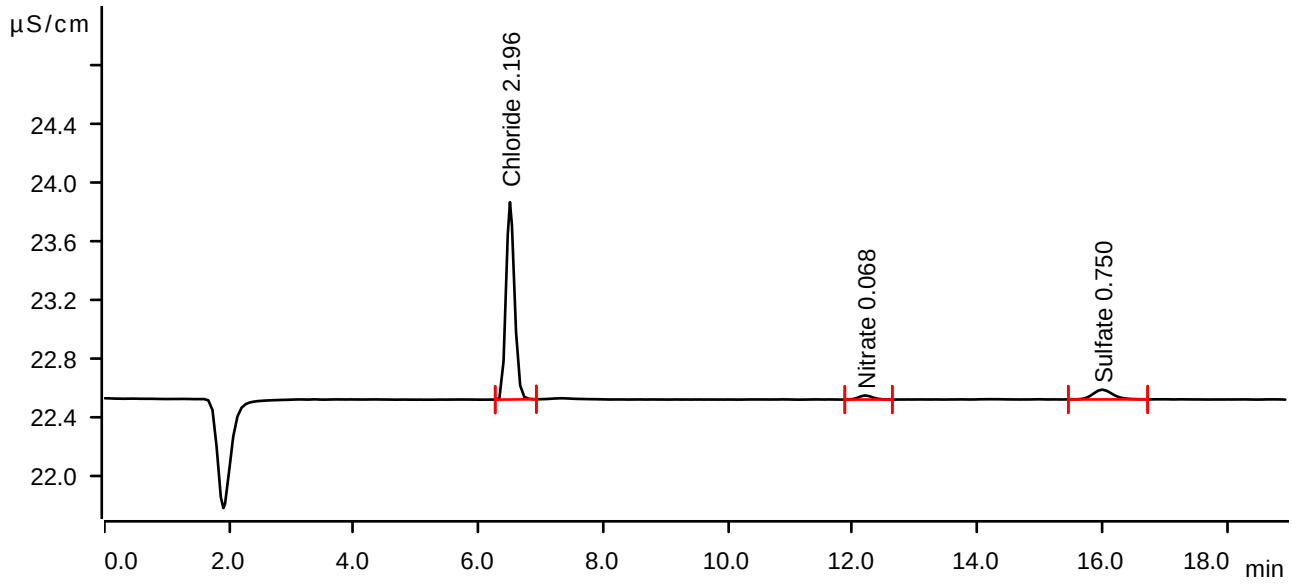
Sample data

Ident	Q1782-03DLX100
Sample type	Sample
Determination start	2025-04-11 14:58:42 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.15	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.503	0.2116	1.348	2.196	Chloride
2	12.198	0.0073	0.028	0.068	Nitrate
3	15.997	0.0249	0.067	0.750	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

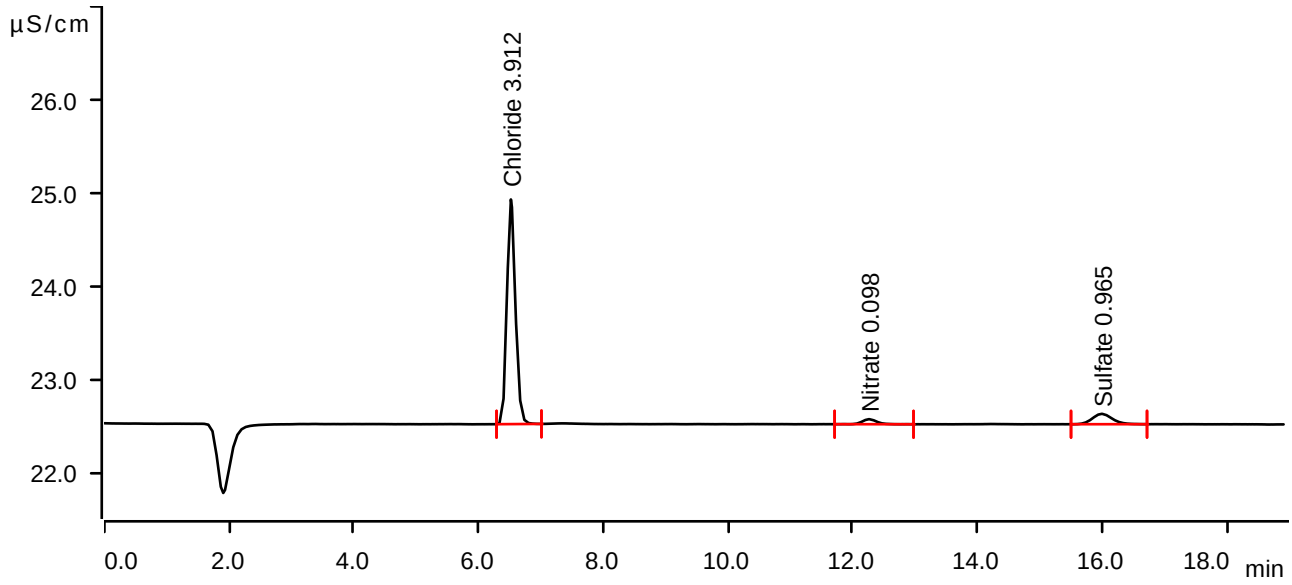
Sample data

Ident	Q1782-05DLX100
Sample type	Sample
Determination start	2025-04-11 15:20:09 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.15	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.518	0.3788	2.412	3.912	Chloride
2	12.257	0.0145	0.054	0.098	Nitrate
3	15.990	0.0412	0.111	0.965	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

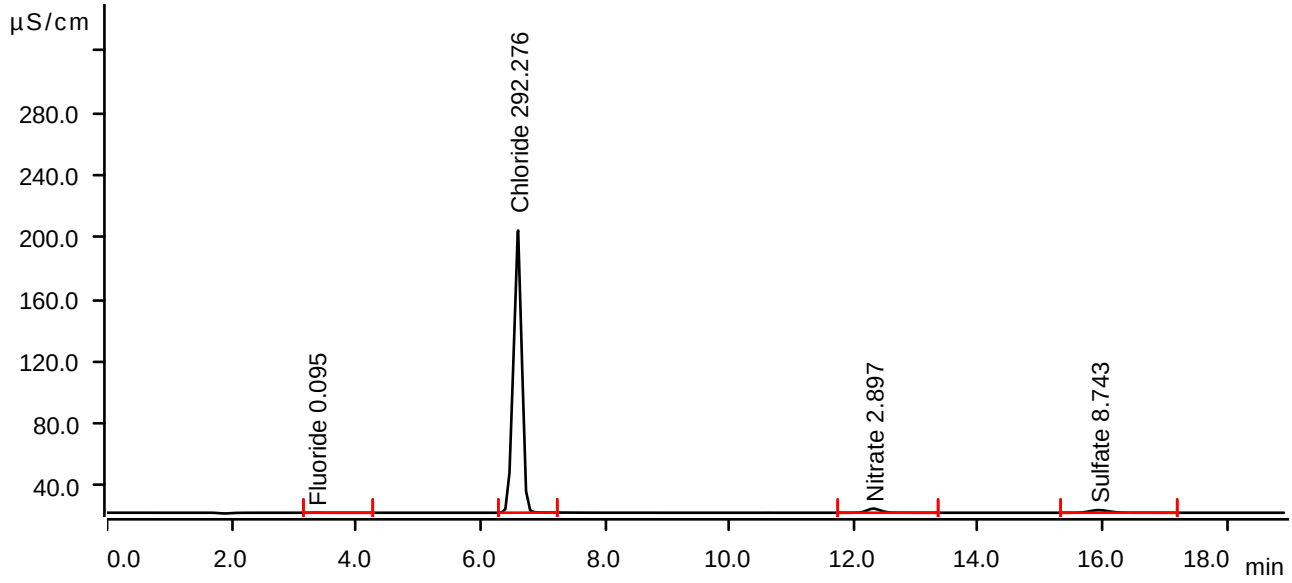
Sample data

Ident	Q1782-07DLX2
Sample type	Sample
Determination start	2025-04-11 15:41:36 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.43	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.362	0.0098	0.065	0.095	Fluoride
2	6.607	28.4684	181.795	292.276	Chloride
3	12.315	0.6908	2.679	2.897	Nitrate
4	15.937	0.6297	1.716	8.743	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

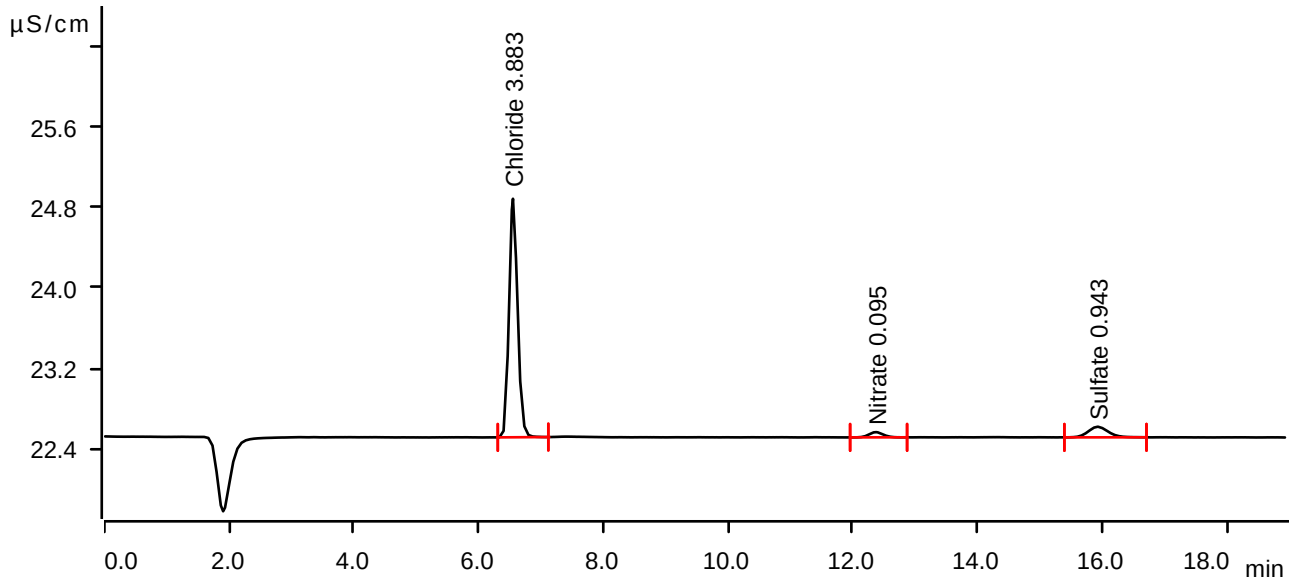
Sample data

Ident	Q1782-07DL2X100
Sample type	Sample
Determination start	2025-04-11 16:03:05 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.60	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.552	0.3760	2.375	3.883	Chloride
2	12.375	0.0137	0.052	0.095	Nitrate
3	15.925	0.0395	0.105	0.943	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

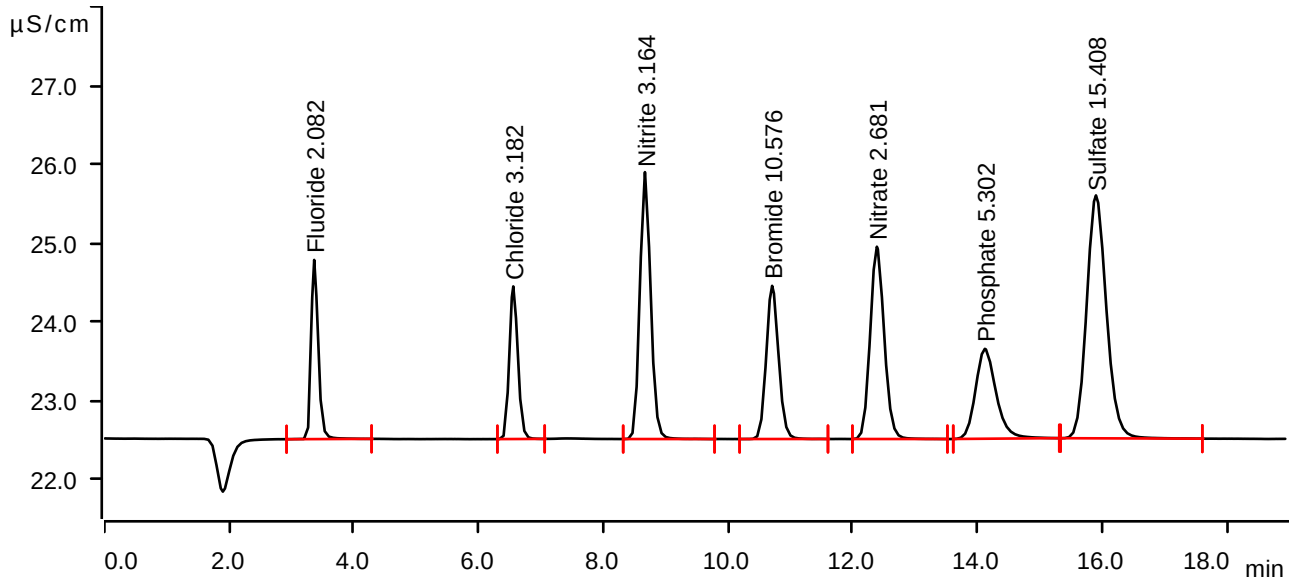
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2025-04-11 16:24:35 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.60	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.365	0.2973	2.273	2.082	Fluoride
2	6.557	0.3077	1.937	3.182	Chloride
3	8.668	0.6825	3.386	3.164	Nitrite
4	10.707	0.4462	1.944	10.576	Bromide
5	12.385	0.6386	2.441	2.681	Nitrate
6	14.117	0.4362	1.141	5.302	Phosphate
7	15.898	1.1340	3.083	15.408	Sulfate

Reviewed By:Iwon
On:4/16/2025 12:5
PM
Inst Id :IC-2
LB :LB135389

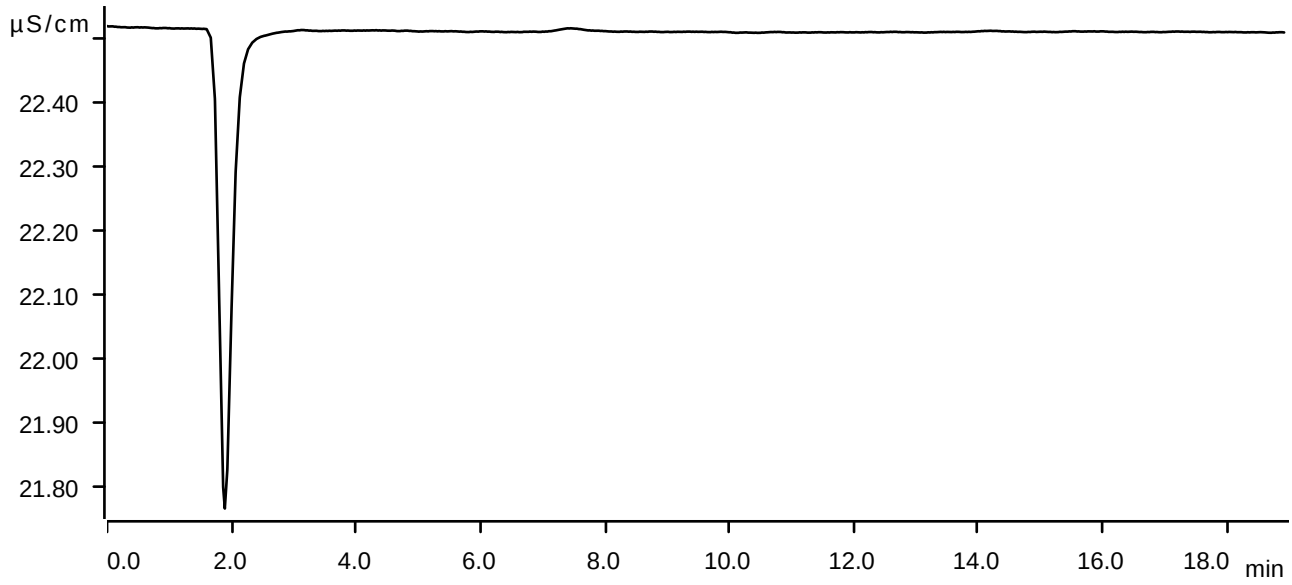
Sample data

Ident	CCB
Sample type	Sample
Determination start	2025-04-11 16:46:05 UTC-4
Method	IC1-032125
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.66	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Reviewed By:Iwona
On:4/16/2025 1:45:40 PM
Inst Id :DO METER
LB :LB135390

BOD5 LOG

ANALYST: rubir
SUPERVISOR: Iwona

QC BATCH ID: LB135390
Analysis Date: 04/11/2025
BOD Water: WP112675
MANGANOUS SULFATE SOLUTION: W3103
Starch: W3149
Alkaline Iodide Azide: W3109
Sulfuric acid, 1N: WP110386
Sodium Thiosulfate, 0.025N: W3105
POLYSEED: WP112677
NaOH, 1N: WP111323
GGA: WP112676
IncubatorID: INCUBATOR #3
Chlorine Strips: W3155
GuageID: 0511062
pH Strips: W3140
Zero DO: WP112277

Lab SampleID	Client ID	Bottle No.	VOL. ML	Initial Reading(ML)	Final Reading(ML)	Difference	Average
WINKLER 1	WINKLER 1	1	300	0.0	9.7	9.7	9.7
WINKLER 2	WINKLER 2	2	300	9.9	19.6	9.7	9.7

Meter Calibration1: 9.46 Zero DO Reading1: 0.12 mg/L (<=0.2 Criteria)

Barometric Pressure1: 765 mmHg DO Meter BOD fluid reading for winkler comparison: 9.79

After Incubation

Meter Calibration2: 9.51 Zero DO Reading2: 0.15 mg/L (<=0.2 Criteria)

Barometric Pressure2: 755 mmHg

Reviewed By:Iwona
On:4/16/2025 1:45:40 PM
Inst Id :DO METER
LB :LB135390

Alliance TECHNICAL GROUP

QC BATCH ID: LB135390

INCUBATOR TEMP IN(C): 20.0

INCUBATOR TEMP OUT(C): 20.0

TIME IN: 10:00

TIME OUT: 08:30

DATE IN: 04/11/2025

DATE OUT: 04/16/2025

Lab SampleID	Bottle No.	Check CL	Initial PH	Final PH	Temp °C	Sam Vol. (mL)	D.O.1 Initial	D.O.2 Final	Depletion	BOD Result (mg/L)	Avg Result (mg/L)	Comment
LB135390BL	1	No	6.58	N/A	20.70	300	9.78	9.77	0.01	0.01	0.01	
POLYSEED	1					10	9.69	6.48	3.21	0.64	0.69	
POLYSEED	2					15	9.64	4.01	5.63	0.75		
POLYSEED	3					20	9.60	2.89	6.71	0.67		
GGA	1					6	9.71	5.21	4.5	190.5	196.83	
GGA	2					6	9.71	5.05	4.66	198.5		
GGA	3					6	9.70	4.98	4.72	201.5		
Q1782-01	1	No	5.95	6.95	20.00	5	9.70	8.89	-	0		pH Adjuste
Q1782-01	2					20	9.68	8.61	-	0		
Q1782-01	3					50	9.59	8.19	-	0		
Q1782-01	4					150	8.97	7.92	-	0		
Q1782-03	1	No	6.82	N/A	20.00	5	9.77	8.90	-	0		
Q1782-03	2					20	9.75	8.65	-	0		
Q1782-03	3					50	9.71	8.30	-	0		
Q1782-03	4					150	8.85	8.14	-	0		
Q1782-05	1	No	6.71	N/A	20.00	5	9.77	8.85	-	0		
Q1782-05	2					20	9.70	8.72	-	0		
Q1782-05	3					50	9.65	8.21	-	0		
Q1782-05	4					150	9.58	7.99	-	0		
Q1782-07	1	No	6.68	N/A	20.00	5	9.76	8.75	-	0		
Q1782-07	2					20	9.66	8.68	-	0		
Q1782-07	3					50	9.45	7.84	-	0		
Q1782-07	4					150	8.91	7.02	-	0		
Q1782-07DUP	1	No	6.68	N/A	20.00	5	9.76	8.85	-	0		
Q1782-07DUP	2					20	9.65	8.68	-	0		
Q1782-07DUP	3					50	9.42	7.73	-	0		
Q1782-07DUP	4					150	8.92	7.19	-	0		

NOTE: 2ml POLYSEED added to GGA and all the Samples, but not in Blank.

NOTE (For, CBOD5): 0.16 g Nitrification Inhibitor added to GGA and all the Samples, but not in Blank.

WORKLIST(Hardcopy Internal Chain)

L6135390

WorkList Name : bod5-04-11 **WorkList ID :** 188868 **Department :** Wet-Chemistry **Date :** 04-11-2025 07:40:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1782-01	MW-1	Water	BOD5	Cool 4 deg C	LOCK01	K11	04/09/2025	SM5210 B
Q1782-03	MW-2	Water	BOD5	Cool 4 deg C	LOCK01	K11	04/09/2025	SM5210 B
Q1782-05	MW-3	Water	BOD5	Cool 4 deg C	LOCK01	K11	04/09/2025	SM5210 B
Q1782-07	MW-4	Water	BOD5	Cool 4 deg C	LOCK01	K11	04/09/2025	SM5210 B

Date/Time 04/11/2025 08:00

Raw Sample Received by: RM (WC)

Raw Sample Relinquished by: (WC)

Date/Time 04/11/2025 09:30

Raw Sample Received by: (WC)

Raw Sample Relinquished by: RM (WC)

Reviewed By:lwona
On:4/16/2025 1:45:40 PM
Inst Id :DO METER
LB :LB135390

Reviewed By:Iwona
On:4/11/2025 11:29:43 AM
Inst Id :WC PH METER-1

Analytical Summary Report

Analysis Method: 9040C
Analyst By : jignesh
Parameter: pH
Supervisor Review By : Iwona
Run Number: LB135391
Slope : 98.6
pH Meter ID : WC PH METER-1

Calibration Standards	Chemtech Log#
PH 4 BUFFER SOLUTION	W3178
BUFFER PH 7.00 GREEN 1PINT PK6	W3093
PH 10.01 BUFFER,COLOR CD 475ML	W3191
buffer solution pH 7 yellow	W3071
Buffer Solution, PH2 (500ml)	W3161
Buffer Solution, PH12 (500ml)	W3072

True Value of ICV = 7.00 Control Limits[+/- 0.1].

True Value of CCV1 = 2.00 Control Limits[+/- 0.1].

True Value of CCV2 = 12.00 Control Limits[+/- 0.1].

True Value of CCV3 = 2.00 Control Limits[+/- 0.1].

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.2	4.01	04/11/2025	09:15
2	CAL2	1	Water	NA	NA	20.2	7.00	04/11/2025	09:16
3	CAL3	1	Water	NA	NA	20.3	10.02	04/11/2025	09:17
4	ICV	1	Water	NA	NA	20.3	7.01	04/11/2025	09:20
5	CCV1	1	Water	NA	NA	20.3	2.01	04/11/2025	09:25
6	Q1763-02	1	Water	NA	NA	20.4	5.66	04/11/2025	09:33
7	Q1763-02DUP	1	Water	NA	NA	20.5	5.67	04/11/2025	09:34
8	Q1764-02	1	Water	NA	NA	20.2	6.17	04/11/2025	09:37
9	Q1767-01	1	Water	NA	NA	20.3	6.87	04/11/2025	09:44
10	Q1774-02	1	Water	NA	NA	20.2	8.73	04/11/2025	10:00
11	Q1774-03	1	Water	NA	NA	20.3	7.05	04/11/2025	10:10
12	Q1774-04	1	Water	NA	NA	20.9	6.62	04/11/2025	10:15
13	Q1782-01	1	Water	NA	NA	20.1	5.95	04/11/2025	10:30
14	Q1782-03	1	Water	NA	NA	20.2	6.82	04/11/2025	10:35
15	Q1782-05	1	Water	NA	NA	20.3	6.71	04/11/2025	10:40
16	CCV2	1	Water	NA	NA	20.2	12.02	04/11/2025	10:41
17	Q1782-07	1	Water	NA	NA	20.1	6.68	04/11/2025	10:45
18	CCV3	1	Water	NA	NA	20.3	2.01	04/11/2025	10:47

WORKLIST(Hardcopy Internal Chain)

VB 135391

WorkList Name : ph w q1764 **WorkList ID :** 188859 **Department :** Wet-Chemistry **Date :** 04-11-2025 07:52:57

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1763-02 A	AUD-25-0047	Water	pH	Cool 4 deg C	PSEG03	I31	04/10/2025	9040C
Q1764-02 A	BUR-25-COMP	Water	pH	Cool 4 deg C	PSEG03	L41	04/10/2025	9040C
Q1767-01 C	NWB-2152	Water	pH	Cool 4 deg C	PSEG03	F11	04/10/2025	9040C
Q1774-02 C	TT-073-IDWGW-20250409	Water	pH	Cool 4 deg C	TETR06	F11	04/09/2025	9040C
Q1774-03 C	TT-074-IDWGW-20250409	Water	pH	Cool 4 deg C	TETR06	F11	04/09/2025	9040C
Q1774-04 C	TT-075-IDWGW-20250409	Water	pH	Cool 4 deg C	TETR06	F11	04/09/2025	9040C
Q1782-01 I	MW-1	Water	pH	Cool 4 deg C	LOCK01	K11	04/09/2025	9040C
Q1782-03 I	MW-2	Water	pH	Cool 4 deg C	LOCK01	K11	04/09/2025	9040C
Q1782-05 I	MW-3	Water	pH	Cool 4 deg C	LOCK01	K11	04/09/2025	9040C
Q1782-07 I	MW-4	Water	pH	Cool 4 deg C	LOCK01	K11	04/09/2025	9040C

Date/Time 04.11.25 0910

Raw Sample Received by: JD WC1

Raw Sample Relinquished by: CP SM

Date/Time 04.11.25 1310

Raw Sample Received by: CP SM

Raw Sample Relinquished by: JD WC

Reviewed By:lwona
On:4/11/2025 11:29:43 AM
Inst Id :WC PH METER-1

Reviewed By:jignesh
On:4/11/2025 12:07:25 PM
Inst Id :WC TURBIDIMETER-1

Analytical Summary Report

Analysis Method: SM2130 B
ANALYST: Iwona
Parameter: Turbidity
SUPERVISOR REVIEW BY: jignesh
Run Number: LB135393

Reagent/Standard	Lot/Log #
Turbidity Calibration std, 20NTU	WP112679
Turbidity Calibration std, 40NTU	WP112678
Turbidity Calibration std, 1NTU	WP112682
Turbidity Calibration std, 5NTU	WP112681
Turbidity Calibration - CCV std, 10 NTU	WP112680
10 NTU Standard 500 ml	W3116

Intercept: -0.2264 **Slope:** 0.981 **Regression:** 0.9998

Seq	Lab ID	True Value (NTU)	Dilution	Reading	Result (mg/l)	%D	Anal Date	Anal Time
1	CAL1	0	1	0.129	0.36		04/11/2025	09:30
2	CAL2	1	1	0.940	1.19	18.9	04/11/2025	09:33
3	CAL3	5	1	4.360	4.68	-6.5	04/11/2025	09:37
4	CAL4	10	1	9.370	9.78	-2.2	04/11/2025	09:40
5	CAL5	20	1	19.200	19.80	-1	04/11/2025	09:44
6	CAL6	40	1	39.200	40.19	0.5	04/11/2025	09:47

Reviewed By:jignesh
On:4/11/2025 12:07:25 PM
Inst Id :WC TURBIDIMETER-1

Analytical Summary Report

Analysis Method: SM2130 B
Parameter: Turbidity
Run Number: LB135393

ANALYST: Iwona
SUPERVISOR REVIEW BY: jignesh

Seq	Lab ID	True Value (NTU)	Dilution	Reading	Result (NTU)	AnalDate	Anal Time
1	ICV	10	1	8.960	9.364	04/11/2025	09:50
2	ICB		1	0.140	0.373	04/11/2025	09:53
3	CCV1	10	1	9.360	9.772	04/11/2025	09:56
4	CCB1		1	0.156	0.390	04/11/2025	10:00
5	LB135393BL		1	0.211	0.446	04/11/2025	10:03
6	Q1782-01		1	0.548	0.789	04/11/2025	10:07
7	Q1782-01DUP		1	0.624	0.867	04/11/2025	10:10
8	Q1782-03		1	1.250	1.505	04/11/2025	10:14
9	Q1782-05		1	0.247	0.483	04/11/2025	10:18
10	Q1782-07		1	0.216	0.451	04/11/2025	10:21
11	CCV2	10	1	9.470	9.884	04/11/2025	10:25
12	CCB2		1	0.142	0.376	04/11/2025	10:28

WORKLIST(Hardcopy Internal Chain)

LB135393

WorkList Name : TURBIDITY-041125 **WorkList ID :** 188878 **Department :** Wet-Chemistry **Date :** 04-11-2025 09:10:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1782-01	MW-1	Water	Turbidity	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2130 B
Q1782-03	MW-2	Water	Turbidity	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2130 B
Q1782-05	MW-3	Water	Turbidity	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2130 B
Q1782-07	MW-4	Water	Turbidity	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2130 B

Date/Time 04/11/25 09:15

Raw Sample Received by: 12(WC)

Raw Sample Relinquished by: [illegible] WC)

Date/Time 04/11/25 10:45

Raw Sample Received by: [illegible] WC)

Raw Sample Relinquished by: 12(WC)

Reviewed By:jignesh
On:4/11/2025 12:07:25 PM
Inst Id :WC
TURBIDIMETER-1

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona
ANALYST: jignesh
Date: 04/14/2025
Run Number: LB135430
BalanceID: WC SC-6
OvenID: WC OVEN-1
FilterID: 17416528
ThermometerID: WET OVEN#1

TEMP1 IN:	103 °C	04/14/2025 14:00	**TEMP1 OUT:**	103 °C	04/14/2025 15:00
TEMP2 IN:	104 °C	04/14/2025 15:30	**TEMP2 OUT:**	103 °C	04/14/2025 16:30
TEMP3 IN:	104 °C	04/15/2025 10:30	**TEMP3 OUT:**	103 °C	04/15/2025 12:10
TEMP4 IN:	104 °C	04/15/2025 13:00	**TEMP4 OUT:**	104 °C	04/15/2025 14:35

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Sample Volume (ml)	1st Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	2nd Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Final Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Weight (g)	Result mg/L
1	LB135430BL	LB135430BL	1.3562	1.3562	100	1.3563	1.3563	1.3563	0.0001	1
2	LB135430BS	LB135430BS	1.4802	1.4802	100	1.5335	1.5335	1.5335	0.0533	533
3	Q1782-01	MW-1	1.4988	1.4988	2000	1.4992	1.4992	1.4992	0.0004	0.2
4	Q1782-03	MW-2	1.4826	1.4826	2000	1.4834	1.4834	1.4834	0.0008	0.4
5	Q1782-05	MW-3	1.4831	1.4831	2000	1.4835	1.4835	1.4835	0.0004	0.2
6	Q1782-07	MW-4	1.4658	1.4658	2000	1.4660	1.4660	1.4660	0.0002	0.1
7	Q1804-01	001-WILLETS-PT-BLVD(APR)	1.4859	1.4859	100	1.4939	1.4939	1.4939	0.0080	80
8	Q1804-02	002-35TH-AVE(APR)	1.4965	1.4965	100	1.5031	1.5031	1.5031	0.0066	66
9	Q1804-02DUP	002-35TH-AVE(APR)DUP	1.4629	1.4629	100	1.4696	1.4696	1.4696	0.0067	67
10	Q1810-02	MOO-25-0118	1.4764	1.4764	1000	1.5515	1.5515	1.5515	0.0751	75.1

A = Sample Volume (ml)
B = Final Empty Dish Weight (g)
C = Final Empty Dish + Sample weight after 1.5 hr drying @105°C(g)
D = Weight (g)

Weight (g) = C - B

Result mg/L = $\frac{D}{A} * 1000 * 1000$

WORKLIST(Hardcopy Internal Chain)

LB 135430

WorkList Name : TSS Q1782 **WorkList ID :** 188917 **Department :** Wet-Chemistry **Date :** 04-15-2025 08:04:32

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1782-01 F,4	MW-1	Water	TSS	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2540 D
Q1782-03 F,4	MW-2	Water	TSS	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2540 D
Q1782-05 F,4	MW-3	Water	TSS	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2540 D
Q1782-07 F,4	MW-4	Water	TSS	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2540 D
Q1804-01 F	001-WILLETS-PT-BLVD(APR)	Water	TSS	Cool 4 deg C	LOCK01	K11	04/09/2025	SM2540 D
Q1804-02 F	002-35TH-AVE(APR)	Water	TSS	Cool 4 deg C	TULL01	L31	04/10/2025	SM2540 D
Q1810-02 12	MOO-25-0118	Water	TSS	Cool 4 deg C	TULL01	L31	04/10/2025	SM2540 D
					PSEG03	L51	04/14/2025	SM2540 D

Date/Time 04-15-25 08:15

Raw Sample Received by: JD WC SM

Raw Sample Relinquished by: CP SM

Date/Time 04-15-25 13:3

Raw Sample Received by: CB SM

Raw Sample Relinquished by: JD WC

Reviewed By:lwona
On:4/16/2025 2:25:08 PM
Inst Id :WC SC-3
LB :LB135430

Reviewed By:Iwona
On:4/17/2025 12:14:57 PM
Inst Id :Titroline Alpha Titrator

TitriSoft Report

Ident	Amount	DateTime	Alkalinity	Final pH (sample)	Initial pH (sample)	slope	offset
LB135460BLW	100	~~16/04/2025~~ 10:16	0.00	3.89	3.91	102.3	7.02
LB135460BSW	100	16/04/2025 10:20	55.24	4.46	9.54	102.3	7.02
Q1782-01	50	16/04/2025 10:26	76.64	4.32	6.07	102.3	7.02
Q1782-02DUP	50	16/04/2025 10:30	75.28	4.29	6.06	102.3	7.02
Q1782-03	50	16/04/2025 10:35	387.04	4.31	6.74	102.3	7.02
Q1782-05	50	16/04/2025 10:41	143.92	4.34	6.79	102.3	7.02
Q1782-07	50	~~16/04/2025~~ 10:44	142.34	4.35	6.69	102.3	7.02

04/16/2025

12 4/16/25

LB135482

Reviewed By:Iwona
On:4/21/2025 1:09:57 PM
Inst Id :Konelab 20
LB :LB135482

Test results | Aquakem 7.2AQ1 | Page:

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM

4/18/2025 11:08 | Instrument ID : Konelab

Test: Ammonia-N

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	0.976	0.0	0.198	
ICB1	0.011	0.0	0.019	
CCV1	0.964	0.0	0.196	
CCB1	0.001	0.0	0.017	
RL CHECK	0.098	0.0	0.035	98% (50-150) 04/18/2025 RM
PB167618BL	0.002	0.0	0.017	
PB167618BS	0.945	0.0	0.192	
Q1782-01	0.013	0.0	0.019	
Q1782-01DUP	0.008	0.0	0.019	
Q1782-01MS	0.969	0.0	0.196	
Q1782-01MSD	0.959	0.0	0.195	
Q1782-03	3.543	0.0	0.673	Test limit high
Q1782-05	0.449	0.0	0.100	
Q1782-07	0.450	0.0	0.100	
CCV2	0.951	0.0	0.193	
CCB2	0.008	0.0	0.019	
Q1810-02	0.010	0.0	0.019	
Q1831-01	0.775	0.0	0.161	
Q1835-01	12.079	0.0	2.253	Test limit high
Q1835-05	3.865	0.0	0.732	Test limit high
CCV3	1.002	0.0	0.203	
CCB3	0.005	0.0	0.018	
Q1782-03DLX2	1.692	0.0	0.330	
Q1835-01DLX10	1.036	0.0	0.209	
Q1835-05DLX2	1.844	0.0	0.358	
CCV4	1.001	0.0	0.202	
CCB4	0.009	0.0	0.019	

N	27
Mean	1.247
SD	2.3803
CV%	190.90

Reviewed By:Iwona
On:4/21/2025 1:09:57 PM
Inst Id :Konelab 20
LB :LB135482

Aquakem v. 7.2AQ1
Results from time period:
Fri Apr 18 08:45:14 2025
Fri Apr 18 11:06:48 2025

Sample Id	Sam/Ctr/c	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	Ammonia-ᴧ	P	0.0062	mg/l	4/18/2025 8:45:14	
0.1PPM	A	Ammonia-ᴧ	P	0.1114	mg/l	4/18/2025 8:45:15	
0.2PPM	A	Ammonia-ᴧ	P	0.1975	mg/l	4/18/2025 8:45:16	
0.4PPM	A	Ammonia-ᴧ	P	0.3814	mg/l	4/18/2025 8:45:17	
1.0PPM	A	Ammonia-ᴧ	P	0.9971	mg/l	4/18/2025 8:45:18	
1.3PPM	A	Ammonia-ᴧ	P	1.3383	mg/l	4/18/2025 8:45:19	
2.0PPM	A	Ammonia-ᴧ	P	2.0016	mg/l	4/18/2025 8:45:20	
ICV1	S	Ammonia-ᴧ	P	0.9765	mg/l	4/18/2025 9:29:52	
ICB1	S	Ammonia-ᴧ	P	0.0108	mg/l	4/18/2025 9:29:53	
CCV1	S	Ammonia-ᴧ	P	0.964	mg/l	4/18/2025 9:29:55	
CCB1	S	Ammonia-ᴧ	P	0.001	mg/l	4/18/2025 9:29:58	
RL CHECK	S	Ammonia-ᴧ	P	0.0977	mg/l	4/18/2025 9:29:59	
PB167618BL	S	Ammonia-ᴧ	P	0.002	mg/l	4/18/2025 9:40:35	
PB167618BS	S	Ammonia-ᴧ	P	0.9454	mg/l	4/18/2025 9:40:37	
Q1782-01	S	Ammonia-ᴧ	P	0.0127	mg/l	4/18/2025 9:40:39	
Q1782-01DUP	S	Ammonia-ᴧ	P	0.0076	mg/l	4/18/2025 9:40:42	
Q1782-01MS	S	Ammonia-ᴧ	P	0.969	mg/l	4/18/2025 9:40:43	
Q1782-01MSD	S	Ammonia-ᴧ	P	0.9588	mg/l	4/18/2025 9:40:44	
Q1782-03	S	Ammonia-ᴧ	P	3.5432	mg/l	4/18/2025 9:51:17	
Q1782-05	S	Ammonia-ᴧ	P	0.4491	mg/l	4/18/2025 9:51:18	
Q1782-07	S	Ammonia-ᴧ	P	0.4497	mg/l	4/18/2025 9:51:19	
CCV2	S	Ammonia-ᴧ	P	0.9511	mg/l	4/18/2025 9:51:21	
CCB2	S	Ammonia-ᴧ	P	0.0083	mg/l	4/18/2025 9:51:23	
Q1810-02	S	Ammonia-ᴧ	P	0.0104	mg/l	4/18/2025 9:51:24	
Q1831-01	S	Ammonia-ᴧ	P	0.7751	mg/l	4/18/2025 9:51:25	
Q1835-01	S	Ammonia-ᴧ	P	12.0792	mg/l	4/18/2025 9:51:26	
Q1835-05	S	Ammonia-ᴧ	P	3.8647	mg/l	4/18/2025 9:51:27	
CCV3	S	Ammonia-ᴧ	P	1.0023	mg/l	4/18/2025 9:56:46	
CCB3	S	Ammonia-ᴧ	P	0.005	mg/l	4/18/2025 9:56:48	
Q1782-03DLX2	S	Ammonia-ᴧ	P	1.6924	mg/l	4/18/2025 11:06:40	
Q1835-01DLX10	S	Ammonia-ᴧ	P	1.036	mg/l	4/18/2025 11:06:42	
Q1835-05DLX2	S	Ammonia-ᴧ	P	1.8444	mg/l	4/18/2025 11:06:44	
CCV4	S	Ammonia-ᴧ	P	1.0007	mg/l	4/18/2025 11:06:46	
CCB4	S	Ammonia-ᴧ	P	0.0095	mg/l	4/18/2025 11:06:48	

Reviewed By:Iwona
On:4/21/2025 1:09:57 PM
Inst Id :Konelab 20
LB :LB135482

Calibration results Aquakem 7.2AQ1 Page: 1

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM Instrument ID : Konelab

4/18/2025 8:47

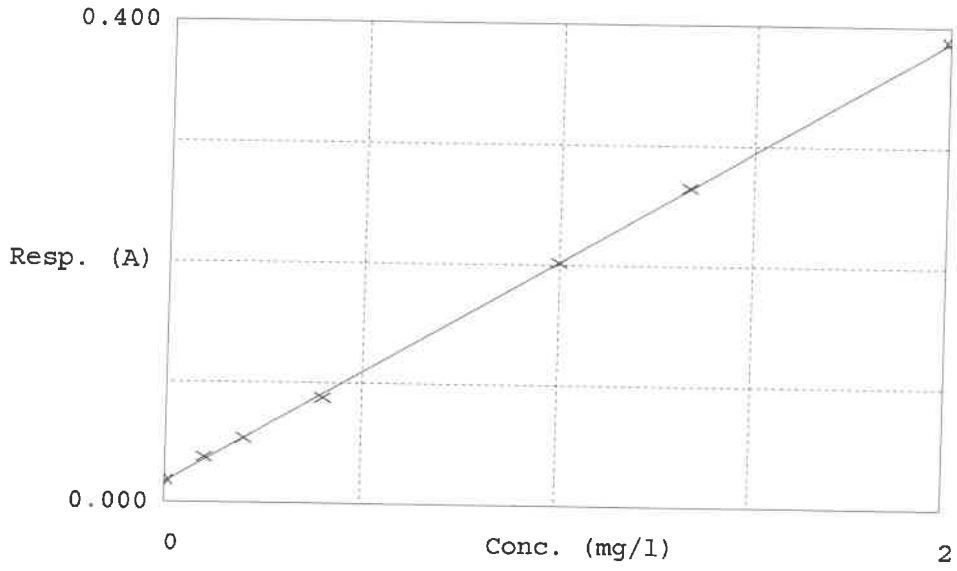
Test Ammonia-N

Accepted 4/18/2025 8:47

Factor 5.403
Bias 0.017

Coeff. of det. 0.999835

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.00PPM	0.018	0.0062	0.0000	11.4
2	NH3-2PPM	0.038	0.1114	0.1000	-1.3
3	NH3-2PPM	0.054	0.1975	0.2000	-4.7
4	NH3-2PPM	0.088	0.3814	0.4000	-0.3
5	NH3-2PPM	0.202	0.9971	1.0000	2.9
6	NH3-2PPM	0.265	1.3383	1.3333	0.1
7	NH3-2PPM	0.388	2.0016	2.0000	

04/18/2025
RM

Reviewed By:Iwona
On:4/21/2025 1:09:49 PM
Inst Id :Konelab 20
LB :LB135490

LB135490

Test results — Aquakem 7.2AQ1 —

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

4/18/2025 14:17 — Reviewed by : RM — Instrument ID : Konelab

Test: TKN-NH3

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	4.926	0.0	0.945	
ICB1	0.071	0.0	0.016	
CCV1	4.980	0.0	0.955	
CCB1	0.068	0.0	0.016	
RL CHECK	0.478	0.0	0.094	95% (50-150)
PB167617BL	0.068	0.0	0.016	
PB167617BS	4.793	0.0	0.919	
Q1782-01	0.422	0.0	0.083	04/18/2025 RM
Q1782-01DUP	0.404	0.0	0.080	
Q1782-01MS	5.433	0.0	1.041	
Q1782-01MSD	5.333	0.0	1.022	
Q1782-03	4.085	0.0	0.784	
Q1782-05	0.714	0.0	0.139	
Q1782-07	0.995	0.0	0.193	
CCV2	4.818	0.0	0.924	
CCB2	0.081	0.0	0.018	
Q1810-02	0.346	0.0	0.069	
CCV3	5.192	0.0	0.995	
CCB3	0.076	0.0	0.017	

N	19
Mean	2.278
SD	2.3625
CV%	103.71

Reviewed By:Iwona
On:4/21/2025 1:09:49 PM
Inst Id :Konelab 20
LB :LB135490

Aquakem v. 7.2AQ1
Results from time period:
Fri Apr 18 12:28:39 2025
Fri Apr 18 13:45:47 2025

Sample Id	Sam/Ctr/cA	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	TKN-NH3	P	0.092	mg/l	4/18/2025 12:28:39	
0.5PPM	A	TKN-NH3	P	0.5065	mg/l	4/18/2025 12:28:40	
1.0PPM	A	TKN-NH3	P	0.9648	mg/l	4/18/2025 12:28:41	
2.5PPM	A	TKN-NH3	P	2.5013	mg/l	4/18/2025 12:28:42	
5.0PPM	A	TKN-NH3	P	4.8237	mg/l	4/18/2025 12:28:43	
6.7PPM	A	TKN-NH3	P	6.7286	mg/l	4/18/2025 12:28:44	
10.0PPM	A	TKN-NH3	P	10.0497	mg/l	4/18/2025 12:28:45	
ICV1	S	TKN-NH3	P	4.9263	mg/l	4/18/2025 13:21:05	
ICB1	S	TKN-NH3	P	0.0706	mg/l	4/18/2025 13:21:07	
CCV1	S	TKN-NH3	P	4.9801	mg/l	4/18/2025 13:21:10	
CCB1	S	TKN-NH3	P	0.0681	mg/l	4/18/2025 13:21:12	
RL CHECK	S	TKN-NH3	P	0.4779	mg/l	4/18/2025 13:21:13	
PB167617BL	S	TKN-NH3	P	0.068	mg/l	4/18/2025 13:21:15	
PB167617BS	S	TKN-NH3	P	4.7933	mg/l	4/18/2025 13:31:51	
Q1782-01	S	TKN-NH3	P	0.422	mg/l	4/18/2025 13:31:53	
Q1782-01DUP	S	TKN-NH3	P	0.4036	mg/l	4/18/2025 13:31:54	
Q1782-01MS	S	TKN-NH3	P	5.433	mg/l	4/18/2025 13:31:56	
Q1782-01MSD	S	TKN-NH3	P	5.3325	mg/l	4/18/2025 13:31:57	
Q1782-03	S	TKN-NH3	P	4.085	mg/l	4/18/2025 13:32:00	
Q1782-05	S	TKN-NH3	P	0.7144	mg/l	4/18/2025 13:32:01	
Q1782-07	S	TKN-NH3	P	0.9955	mg/l	4/18/2025 13:42:31	
CCV2	S	TKN-NH3	P	4.8176	mg/l	4/18/2025 13:42:32	
CCB2	S	TKN-NH3	P	0.0808	mg/l	4/18/2025 13:42:35	
Q1810-02	S	TKN-NH3	P	0.3458	mg/l	4/18/2025 13:42:38	
CCV3	S	TKN-NH3	P	5.1917	mg/l	4/18/2025 13:42:40	
CCB3	S	TKN-NH3	P	0.0757	mg/l	4/18/2025 13:45:47	

Reviewed By:Iwona
On:4/21/2025 1:09:49 PM
Inst Id :Konelab 20
LB :LB135490

Calibration results — Aquakem 7.2AQ1 —

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

4/18/2025 12:48 — Reviewed by : RM — Instrument ID : Konelab

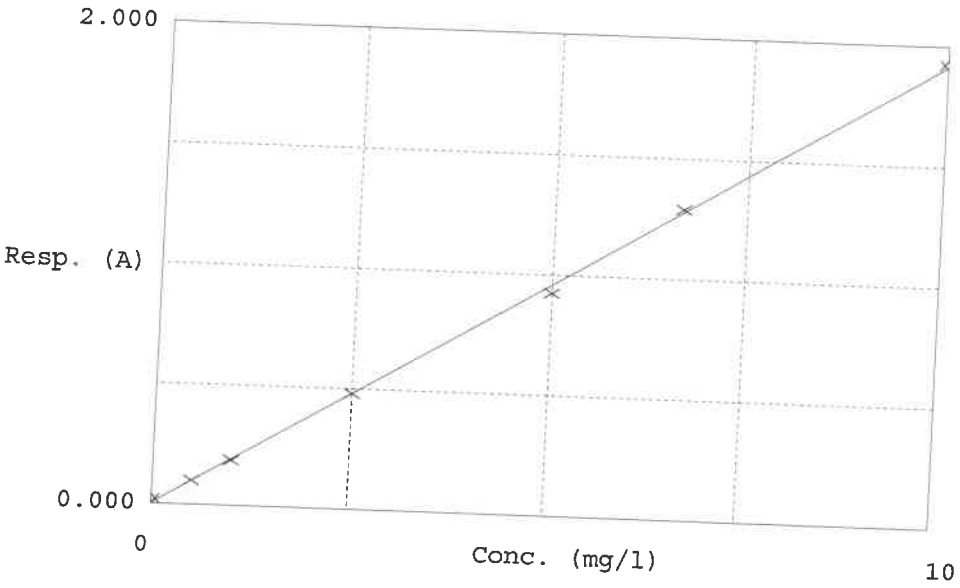
Test TKN-NH3

Accepted 4/18/2025 12:47

Factor 5.23
Bias 0.003

Coeff. of det. 0.999431

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.00PPM	0.020	0.0920	0.0000	—
2	TKN-10	0.100	0.5065	0.5000	1.3
3	TKN-10	0.187	0.9648	1.0000	-3.5
4	TKN-10	0.481	2.5013	2.5000	0.1
5	TKN-10	0.925	4.8237	5.0000	-3.5
6	TKN-10	1.289	6.7286	6.6667	0.4
7	TKN-10	1.924	10.0497	10.0000	0.5

04/18/2025
RM

Alliance TECHNICAL GROUP

Water TKN Preparation Sheet

PB167617

SOP ID : MSM4500-N Org C-TKN-11

SDG No : N/A

Matrix : WATER

Pippete ID : WC

Balance ID : N/A

Hood ID : HOOD#2&3

Block ID : WC-DIST-BLOCK-1

Weigh By : N/A

Start Digest Date: 04/17/2025 **Time :** 08:50 **Temp :** 380 °C

End Digest Date: 04/17/2025 **Time :** 10:20 **Temp :** 385 °C

Start Distillation Date: 04/17/2025 **Time :** 11:00 **Temp :** 150 °C

End Distillation Date: 04/17/2025 **Time :** 12:00 **Temp :** 160 °C

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : Therm#2(2179)

Prep Technician Signature: RM

Supervisor Signature: IZ

Standared Name	MLS USED	STD REF. # FROM LOG
TKN CAL STD	50.0ML	WP112737
TKN CCV STD	50.0ML	WP112738
TKN ICV STD	50.0ML	WP112739
TKN LCS STD	50.0ML	WP112740
MS/MSD SPIKE SOL.	0.25ML	WP112611

Chemical Used	ML/SAMPLE USED	Lot Number
TKN DIGESTION FLUID	10.0ML	WP111319
TKN DISTILLATION BUFFER	10.0ML	WP112079
H2SO4 0.04N	5.0ML	WP110335
pH Paper 0-14	N/A	W3140
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

RL CHECK 10ML FROM WP112738 ,ALL GLASSWEAR ARE STEAMED OUT AND THERE WERE NO TRACE OF AMMONIA USING NESLER REAGENT WP111604. Due to foamy matrix 10ML was taken as an initial vol for S18/0-02 RM

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/17/2025 13:55	RM CWC	RM CWA
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water TKN Preparation Sheet

PB167617

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167617BL	PBW617	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
PB167617BS	LCS617	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1782-01DUP	MW-1DUP	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1782-01MS	MW-1MS	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1782-01MSD	MW-1MSD	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1782-01	MW-1	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1782-03	MW-2	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1782-05	MW-3	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1782-07	MW-4	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1810-02	MOO-25-0118	10	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : tkn-4-15 **WorkList ID :** 188946 **Department :** Distillation **Date :** 04-15-2025 14:43:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1782-01 D	MW-1	Water	TKN	Conc H2SO4 to pH < 2	LOCK01	K11	04/09/2025	SM4500 N Org
Q1782-03 D	MW-2	Water	TKN	Conc H2SO4 to pH < 2	LOCK01	K11	04/09/2025	SM4500 N Org
Q1782-05 D	MW-3	Water	TKN	Conc H2SO4 to pH < 2	LOCK01	K11	04/09/2025	SM4500 N Org
Q1782-07 B	MW-4	Water	TKN	Conc H2SO4 to pH < 2	LOCK01	K11	04/09/2025	SM4500 N Org
Q1810-02 F	MOO-25-0118	Water	TKN	Conc H2SO4 to pH < 2	PSEG03	L51	04/14/2025	SM4500 N Org

Date/Time 04/17/2025 08:15

Raw Sample Received by: RM (WC)

Raw Sample Relinquished by: [signature]

Date/Time 04/17/2025 10:45

Raw Sample Received by: [signature]

Raw Sample Relinquished by: RM (WC)

Alliance TECHNICAL GROUP

Water Ammonia Preparation Sheet

PB167618

SOP ID : MSM4500-NH3 B,G-Ammonia-17

SDG No : N/A

Matrix : WATER

Pippete ID : WC

Balance ID : N/A

Start Digest Date: 04/17/2025 **Time :** 14:00 **Temp :** 150 °C

End Digest Date: 04/17/2025 **Time :** 15:00 **Temp :** 160 °C

If both 04/17/2025 15:00 150C 04/17/2025 16:00 160C RM

Hood ID : HOOD#2

Block ID : WC-DIST-BLOCK-1

Weigh By : N/A

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : WC CYANIDE

Prep Technician Signature: RM

Supervisor Signature: 12

Standared Name	MLS USED	STD REF. # FROM LOG
LCSW	1.0ML	WP112614
MS/MSD SPIKE SOL.	1.0ML	WP112613
PBW	50.0ML	W3112
RL CHECK	0.1ML	WP112613
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
BORATE BUFFER	2.5ML	WP111325
NAOH 6N	0.5-2.0ML	WP111318
H2SO4 0.04N	5.0ML	WP110335
pH strip-Ammonia	N/A	W3133
KI-starch paper	N/A	W3155
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

ALL GLASSWEAR ARE STEAMED OUT AND THERE WERE NO TRACE OF AMMONIA USING NESLER REAGENT WP111604. Due to bad matrix and client history 1ML was taken as an initial vol for Q1835-01,Q1835-05,Q1831-01

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/17/2025 17:00	RM (WC)	RM (WC)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Ammonia Preparation Sheet

PB167618

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167618BL	PBW618	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
PB167618BS	LCS618	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1782-01DUP	MW-1DUP	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1782-01MS	MW-1MS	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1782-01MSD	MW-1MSD	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1782-01	MW-1	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1782-03	MW-2	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1782-05	MW-3	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1782-07	MW-4	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1810-02	MOO-25-0118	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1831-01	EFFLUENT-COMPOSITE	1	50	<2	N/A	Negative	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1835-01	EFFLUENT	1	50	<2	N/A	Negative	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1835-05	INFLUENT	1	50	<2	N/A	Negative	N/A	PH AFTER ADDING DIST BUFFER>11	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : ammonia-4-15 **WorkList ID :** 188947 **Department :** Distillation **Date :** 04-15-2025 14:43:44

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1782-01	MW-1	Water	Ammonia	Conc H2SO4 to pH < 2	LOCK01	K11	04/09/2025	SM4500-NH3
Q1782-03	MW-2	Water	Ammonia	Conc H2SO4 to pH < 2	LOCK01	K11	04/09/2025	SM4500-NH3
Q1782-05	MW-3	Water	Ammonia	Conc H2SO4 to pH < 2	LOCK01	K11	04/09/2025	SM4500-NH3
Q1782-07	MW-4	Water	Ammonia	Conc H2SO4 to pH < 2	LOCK01	K11	04/09/2025	SM4500-NH3
Q1810-02	MOO-25-0118	Water	Ammonia	Conc H2SO4 to pH < 2	PSEG03	L51	04/14/2025	SM4500-NH3

Date/Time 04/17/2025 13.00

Raw Sample Received by: RM (WLS)

Raw Sample Relinquished by: [signature]

Date/Time 04/17/2025 15.50

Raw Sample Received by: [signature]

Raw Sample Relinquished by: RM (WLS)

WORKLIST(Hardcopy Internal Chain)

WorkList Name : ammonia-2 **WorkList ID :** 189015 **Department :** Distillation **Date :** 04-17-2025 14:36:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1831-01	EFFLUENT-COMPOSITE	Water	Ammonia	Conc H2SO4 to pH < 2	M&MM01	L31	04/17/2025	SM4500-NH3
Q1835-01	EFFLUENT	Water	Ammonia	Conc H2SO4 to pH < 2	HOLL01	L31	04/17/2025	SM4500-NH3
Q1835-05	INFLUENT	Water	Ammonia	Conc H2SO4 to pH < 2	HOLL01	L31	04/17/2025	SM4500-NH3

Date/Time 04/17/2025 15.15
Raw Sample Received by: RMcwc,
Raw Sample Relinquished by: JACOB

Date/Time 04/17/2025 15.50
Raw Sample Received by: JACOB
Raw Sample Relinquished by: RMcwc,

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QCBatch ID # LB135377

Review By	jignesh	Review On	4/14/2025 11:28:32 AM
Supervise By	Iwona	Supervise On	4/14/2025 12:14:10 PM
SubDirectory	LB135377	Test	TDS

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	N/A

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB135377BL	LB135377BL	MB	04/11/25 12:30		jignesh	OK
2	LB135377BS	LB135377BS	LCS	04/11/25 12:30		jignesh	OK
3	Q1765-01	TOWERS-1	SAM	04/11/25 12:30		jignesh	OK
4	Q1765-02	TOWERS-2	SAM	04/11/25 12:30		jignesh	OK
5	Q1765-02DUP	TOWERS-2DUP	DUP	04/11/25 12:30		jignesh	OK
6	Q1782-01	MW-1	SAM	04/11/25 12:30		jignesh	OK
7	Q1782-03	MW-2	SAM	04/11/25 12:30		jignesh	OK
8	Q1782-05	MW-3	SAM	04/11/25 12:30		jignesh	OK
9	Q1782-07	MW-4	SAM	04/11/25 12:30		jignesh	OK

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: IC-2

Daily Analysis Runlog For Sequence/QCBatch ID # LB135389

Review By	rubina	Review On	4/16/2025 12:56:38 PM
Supervise By	Iwona	Supervise On	4/16/2025 12:57:24 PM
SubDirectory	LB135389	Test	Anions

STD. NAME	STD REF.#
ICAL Standard	WP112435,WP112436,WP112437,WP112438,WP112439,WP112440,WP112441
ICV Standard	WP112442
CCV Standard	WP112684
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP112685
Chk Standard	WP112443,WP112444

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	STD1	STD1	CAL1	03/21/25 10:45	All standards, samples, and	NF/IZ	OK
2	STD2	STD2	CAL2	03/21/25 11:07	QC are filtered through	NF/IZ	OK
3	STD3	STD3	CAL3	03/21/25 11:28	0.45um, filter lot W3160	NF/IZ	OK
4	STD4	STD4	CAL4	03/21/25 11:50		NF/IZ	OK
5	STD5	STD5	CAL5	03/21/25 12:11		NF/IZ	OK
6	STD6	STD6	CAL6	03/21/25 12:32		NF/IZ	OK
7	STD7	STD7	CAL7	03/21/25 12:54		NF/IZ	OK
8	ICV1	ICV1	ICV	03/21/25 13:37		NF/IZ	OK
9	ICB1	ICB1	ICB	03/21/25 13:58		NF/IZ	OK
10	CCV1	CCV1	CCV	04/11/25 08:49		NF/IZ	OK
11	CCB1	CCB1	CCB	04/11/25 09:14		NF/IZ	OK
12	Q1782-01	MW-1	SAM	04/11/25 09:35	CL,SO4 high	NF/IZ	Dilution
13	Q1782-03	MW-2	SAM	04/11/25 09:57	CL high	NF/IZ	Dilution
14	Q1782-05	MW-3	SAM	04/11/25 10:18	CL high	NF/IZ	Dilution
15	Q1782-07	MW-4	SAM	04/11/25 10:40	CL,NO3 high	NF/IZ	Dilution
16	Q1782-07MS	MW-4MS	MS	04/11/25 11:01	9.5ml of sample, 0.5mL W3092	NF/IZ	OK
17	Q1782-07MSD	MW-4MSD	MSD	04/11/25 11:23	9.5ml of sample, 0.5mL W3092	NF/IZ	OK
18	LB135389BLW	LB135389BLW	MB	04/11/25 11:45		NF/IZ	OK

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: IC-2

Daily Analysis Runlog For Sequence/QCBatch ID # LB135389

Review By	rubina	Review On	4/16/2025 12:56:38 PM
Supervise By	Iwona	Supervise On	4/16/2025 12:57:24 PM
SubDirectory	LB135389	Test	Anions

STD. NAME	STD REF.#
ICAL Standard	WP112435,WP112436,WP112437,WP112438,WP112439,WP112440,WP112441
ICV Standard	WP112442
CCV Standard	WP112684
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP112685
Chk Standard	WP112443,WP112444

19	LB135389BSW	LB135389BSW	LCS	04/11/25 12:06		NF/IZ	OK
20	Q1782-01DL	MW-1DL	SAM	04/11/25 12:28	2X for CL,SO4,Still CL high	NF/IZ	Dilution
21	CCV2	CCV2	CCV	04/11/25 13:11		NF/IZ	OK
22	CCB2	CCB2	CCB	04/11/25 13:32		NF/IZ	OK
23	Q1782-01DL2	MW-1DL2	SAM	04/11/25 14:37	50X for CL	NF/IZ	Confirms
24	Q1782-03DL	MW-2DL	SAM	04/11/25 14:58	100X for CL	NF/IZ	Confirms
25	Q1782-05DL	MW-3DL	SAM	04/11/25 15:20	100X for CL	NF/IZ	Confirms
26	Q1782-07DL	MW-4DL	SAM	04/11/25 15:41	2X for CL,NO3,Still CL high	NF/IZ	Dilution
27	Q1782-07DL2	MW-4DL2	SAM	04/11/25 16:03	100X for CL	NF/IZ	Confirms
28	CCV3	CCV3	CCV	04/11/25 16:24		NF/IZ	OK
29	CCB3	CCB3	CCB	04/11/25 16:46		NF/IZ	OK

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Instrument ID: DO METER

Daily Analysis Runlog For Sequence/QCBatch ID # LB135390

Review By	rubina	Review On	4/16/2025 1:45:20 PM
Supervise By	Iwona	Supervise On	4/16/2025 1:45:40 PM
SubDirectory	LB135390	Test	BOD5

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP112675,W3149,WP110386,W3103,W3109,W3105,WP112677,WP112676,WP111323

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB135390BL	LB135390BL	MB	04/11/25 10:00		rubina	OK
2	LB135390BS	LB135390BS	LCS	04/11/25 10:00		rubina	OK
3	Q1782-01	MW-1	SAM	04/11/25 10:00		rubina	OK
4	Q1782-03	MW-2	SAM	04/11/25 10:00		rubina	OK
5	Q1782-05	MW-3	SAM	04/11/25 10:00		rubina	OK
6	Q1782-07	MW-4	SAM	04/11/25 10:00		rubina	OK
7	Q1782-07DUP	MW-4DUP	DUP	04/11/25 10:00		rubina	OK

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Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135391

Review By	jignesh	Review On	4/11/2025 11:18:58 AM
Supervise By	Iwona	Supervise On	4/11/2025 11:29:43 AM
SubDirectory	LB135391	Test	pH

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	W3178,W3093,W3191,W3071,W3161,W3072

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	04/11/25 09:15		jignesh	OK
2	CAL2	CAL2	CAL	04/11/25 09:16		jignesh	OK
3	CAL3	CAL3	CAL	04/11/25 09:17		jignesh	OK
4	ICV	ICV	ICV	04/11/25 09:20		jignesh	OK
5	CCV1	CCV1	CCV	04/11/25 09:25		jignesh	OK
6	Q1763-02	AUD-25-0047	SAM	04/11/25 09:33		jignesh	OK
7	Q1763-02DUP	AUD-25-0047DUP	DUP	04/11/25 09:34		jignesh	OK
8	Q1764-02	BUR-25-COMP	SAM	04/11/25 09:37		jignesh	OK
9	Q1767-01	NWB-2152	SAM	04/11/25 09:44		jignesh	OK
10	Q1774-02	TT-073-IDWGW-2025	SAM	04/11/25 10:00		jignesh	OK
11	Q1774-03	TT-074-IDWGW-2025	SAM	04/11/25 10:10		jignesh	OK
12	Q1774-04	TT-075-IDWGW-2025	SAM	04/11/25 10:15		jignesh	OK
13	Q1782-01	MW-1	SAM	04/11/25 10:30		jignesh	OK
14	Q1782-03	MW-2	SAM	04/11/25 10:35		jignesh	OK
15	Q1782-05	MW-3	SAM	04/11/25 10:40		jignesh	OK
16	CCV2	CCV2	CCV	04/11/25 10:41		jignesh	OK
17	Q1782-07	MW-4	SAM	04/11/25 10:45		jignesh	OK
18	CCV3	CCV3	CCV	04/11/25 10:47		jignesh	OK

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Instrument ID: WC TURBIDIMETER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135393

Review By	lwona	Review On	4/11/2025 12:06:39 PM
Supervise By	jignesh	Supervise On	4/11/2025 12:07:25 PM
SubDirectory	LB135393	Test	Turbidity

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP112679,WP112678,WP112682,WP112681,WP112680,W3116

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	04/11/25 09:30		lwona	OK
2	CAL2	CAL2	CAL	04/11/25 09:33		lwona	OK
3	CAL3	CAL3	CAL	04/11/25 09:37		lwona	OK
4	CAL4	CAL4	CAL	04/11/25 09:40		lwona	OK
5	CAL5	CAL5	CAL	04/11/25 09:44		lwona	OK
6	CAL6	CAL6	CAL	04/11/25 09:47		lwona	OK
7	ICV	ICV	ICV	04/11/25 09:50		lwona	OK
8	ICB	ICB	ICB	04/11/25 09:53		lwona	OK
9	CCV1	CCV1	CCV	04/11/25 09:56		lwona	OK
10	CCB1	CCB1	CCB	04/11/25 10:00		lwona	OK
11	LB135393BL	LB135393BL	MB	04/11/25 10:03		lwona	OK
12	Q1782-01	MW-1	SAM	04/11/25 10:07		lwona	OK
13	Q1782-01DUP	MW-1DUP	DUP	04/11/25 10:10		lwona	OK
14	Q1782-03	MW-2	SAM	04/11/25 10:14		lwona	OK
15	Q1782-05	MW-3	SAM	04/11/25 10:18		lwona	OK
16	Q1782-07	MW-4	SAM	04/11/25 10:21		lwona	OK
17	CCV2	CCV2	CCV	04/11/25 10:25		lwona	OK
18	CCB2	CCB2	CCB	04/11/25 10:28		lwona	OK

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Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QCBatch ID # LB135430

Review By	jignesh	Review On	4/16/2025 12:23:35 PM
Supervise By	Iwona	Supervise On	4/16/2025 2:25:08 PM
SubDirectory	LB135430	Test	TSS

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	N/A

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB135430BL	LB135430BL	MB	04/15/25 10:30		jignesh	OK
2	LB135430BS	LB135430BS	LCS	04/15/25 10:30		jignesh	OK
3	Q1782-01	MW-1	SAM	04/15/25 10:30		jignesh	OK
4	Q1782-03	MW-2	SAM	04/15/25 10:30		jignesh	OK
5	Q1782-05	MW-3	SAM	04/15/25 10:30		jignesh	OK
6	Q1782-07	MW-4	SAM	04/15/25 10:30		jignesh	OK
7	Q1804-01	001-WILLETS-PT-BL\	SAM	04/15/25 10:30		jignesh	OK
8	Q1804-02	002-35TH-AVE(APR)	SAM	04/15/25 10:30		jignesh	OK
9	Q1804-02DUP	002-35TH-AVE(APR)[	DUP	04/15/25 10:30		jignesh	OK
10	Q1810-02	MOO-25-0118	SAM	04/15/25 10:30		jignesh	OK

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Instrument ID: TITRATOR

Daily Analysis Runlog For Sequence/QCBatch ID # LB135460

Review By	rubina	Review On	4/17/2025 12:13:21 PM
Supervise By	Iwona	Supervise On	4/17/2025 12:14:57 PM
SubDirectory	LB135460	Test	Alkalinity

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP112723
Chk Standard	W3071,W3178,W3150

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB135460BLW	LB135460BLW	MB	04/16/25 10:16	pH=3.89	Iwona	OK
2	LB135460BSW	LB135460BSW	LCS	04/16/25 10:20	pH=4.46	Iwona	OK
3	Q1782-01	MW-1	SAM	04/16/25 10:26	pH=4.32	Iwona	OK
4	Q1782-01DUP	MW-1DUP	DUP	04/16/25 10:30	pH=4.29	Iwona	OK
5	Q1782-03	MW-2	SAM	04/16/25 10:35	pH=4.31	Iwona	OK
6	Q1782-05	MW-3	SAM	04/16/25 10:41	pH=4.34	Iwona	OK
7	Q1782-07	MW-4	SAM	04/16/25 10:44	pH=4.35	Iwona	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB135482

Review By	rubina	Review On	4/21/2025 9:42:09 AM
Supervise By	Iwona	Supervise On	4/21/2025 1:09:57 PM
SubDirectory	LB135482	Test	Ammonia

STD. NAME	STD REF.#
ICAL Standard	WP112763
ICV Standard	WP112765
CCV Standard	WP112764
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP112614
Chk Standard	WP112537,WP111745,WP111385,WP111660

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	04/18/25 08:45		rubina	OK
2	0.1PPM	0.1PPM	CAL2	04/18/25 08:45		rubina	OK
3	0.2PPM	0.2PPM	CAL3	04/18/25 08:45		rubina	OK
4	0.4PPM	0.4PPM	CAL4	04/18/25 08:45		rubina	OK
5	1.0PPM	1.0PPM	CAL5	04/18/25 08:45		rubina	OK
6	1.3PPM	1.3PPM	CAL6	04/18/25 08:45		rubina	OK
7	2.0PPM	2.0PPM	CAL7	04/18/25 08:45		rubina	OK
8	ICV1	ICV1	ICV	04/18/25 09:29		rubina	OK
9	ICB1	ICB1	ICB	04/18/25 09:29		rubina	OK
10	CCV1	CCV1	CCV	04/18/25 09:29		rubina	OK
11	CCB1	CCB1	CCB	04/18/25 09:29		rubina	OK
12	RL	RL	SAM	04/18/25 09:29		rubina	OK
13	PB167618BL	PB167618BL	MB	04/18/25 09:40		rubina	OK
14	PB167618BS	PB167618BS	LCS	04/18/25 09:40		rubina	OK
15	Q1782-01	MW-1	SAM	04/18/25 09:40		rubina	OK
16	Q1782-01DUP	MW-1DUP	DUP	04/18/25 09:40		rubina	OK
17	Q1782-01MS	MW-1MS	MS	04/18/25 09:40		rubina	OK
18	Q1782-01MSD	MW-1MSD	MSD	04/18/25 09:40		rubina	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB135482

Review By	rubina	Review On	4/21/2025 9:42:09 AM
Supervise By	Iwona	Supervise On	4/21/2025 1:09:57 PM
SubDirectory	LB135482	Test	Ammonia

STD. NAME	STD REF.#
ICAL Standard	WP112763
ICV Standard	WP112765
CCV Standard	WP112764
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP112614
Chk Standard	WP112537,WP111745,WP111385,WP111660

19	Q1782-03	MW-2	SAM	04/18/25 09:51	High	rubina	Dilution
20	Q1782-05	MW-3	SAM	04/18/25 09:51		rubina	OK
21	Q1782-07	MW-4	SAM	04/18/25 09:51		rubina	OK
22	CCV2	CCV2	CCV	04/18/25 09:51		rubina	OK
23	CCB2	CCB2	CCB	04/18/25 09:51		rubina	OK
24	Q1810-02	MOO-25-0118	SAM	04/18/25 09:51		rubina	OK
25	Q1831-01	EFFLUENT-COMPOS	SAM	04/18/25 09:51		rubina	OK
26	Q1835-01	EFFLUENT	SAM	04/18/25 09:51	High	rubina	Dilution
27	Q1835-05	INFLUENT	SAM	04/18/25 09:51	High	rubina	Dilution
28	CCV3	CCV3	CCV	04/18/25 09:56		rubina	OK
29	CCB3	CCB3	CCB	04/18/25 09:56		rubina	OK
30	Q1782-03DL	MW-2DL	SAM	04/18/25 11:06	Report 2X	rubina	Confirms
31	Q1835-01DL	EFFLUENTDL	SAM	04/18/25 11:06	Report 10X	rubina	Confirms
32	Q1835-05DL	INFLUENTDL	SAM	04/18/25 11:06	Report 2X	rubina	Confirms
33	CCV4	CCV4	CCV	04/18/25 11:06		rubina	OK
34	CCB4	CCB4	CCB	04/18/25 11:06		rubina	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB135490

Review By	rubina	Review On	4/21/2025 9:43:55 AM
Supervise By	Iwona	Supervise On	4/21/2025 1:09:49 PM
SubDirectory	LB135490	Test	TKN

STD. NAME	STD REF.#
ICAL Standard	WP112737
ICV Standard	WP112739
CCV Standard	WP112738
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP112740
Chk Standard	WP112537,WP111745,WP111385,WP111660

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	04/18/25 12:28		rubina	OK
2	0.5PPM	0.5PPM	CAL2	04/18/25 12:28		rubina	OK
3	1.0PPM	1.0PPM	CAL3	04/18/25 12:28		rubina	OK
4	2.5PPM	2.5PPM	CAL4	04/18/25 12:28		rubina	OK
5	5.0PPM	5.0PPM	CAL5	04/18/25 12:28		rubina	OK
6	6.7PPM	6.7PPM	CAL6	04/18/25 12:28		rubina	OK
7	10.0PPM	10.0PPM	CAL7	04/18/25 12:28		rubina	OK
8	ICV1	ICV1	ICV	04/18/25 13:21		rubina	OK
9	ICB1	ICB1	ICB	04/18/25 13:21		rubina	OK
10	CCV1	CCV1	CCV	04/18/25 13:21		rubina	OK
11	CCB1	CCB1	CCB	04/18/25 13:21		rubina	OK
12	RL	RL	SAM	04/18/25 13:21		rubina	OK
13	PB167617BL	PB167617BL	MB	04/18/25 13:21		rubina	OK
14	PB167617BS	PB167617BS	LCS	04/18/25 13:31		rubina	OK
15	Q1782-01	MW-1	SAM	04/18/25 13:31		rubina	OK
16	Q1782-01DUP	MW-1DUP	DUP	04/18/25 13:31		rubina	OK
17	Q1782-01MS	MW-1MS	MS	04/18/25 13:31		rubina	OK
18	Q1782-01MSD	MW-1MSD	MSD	04/18/25 13:31		rubina	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB135490

Review By	rubina	Review On	4/21/2025 9:43:55 AM
Supervise By	Iwona	Supervise On	4/21/2025 1:09:49 PM
SubDirectory	LB135490	Test	TKN

STD. NAME	STD REF.#
ICAL Standard	WP112737
ICV Standard	WP112739
CCV Standard	WP112738
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP112740
Chk Standard	WP112537,WP111745,WP111385,WP111660

19	Q1782-03	MW-2	SAM	04/18/25 13:32		rubina	OK
20	Q1782-05	MW-3	SAM	04/18/25 13:32		rubina	OK
21	Q1782-07	MW-4	SAM	04/18/25 13:42		rubina	OK
22	CCV2	CCV2	CCV	04/18/25 13:42		rubina	OK
23	CCB2	CCB2	CCB	04/18/25 13:42		rubina	OK
24	Q1810-02	MOO-25-0118	SAM	04/18/25 13:42		rubina	OK
25	CCV3	CCV3	CCV	04/18/25 13:42		rubina	OK
26	CCB3	CCB3	CCB	04/18/25 13:45		rubina	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q1782

Test : Alkalinity,Ammonia,Anions Group1,BOD5,pH,TDS,TKN,Total Nitrogen,TSS,Turbidity

Prepbatch ID : PB167617,PB167618,

Sequence ID/Qc Batch ID: LB135377,LB135389,LB135390,LB135391,LB135393,LB135430,LB135460,LB135482,LB135490,LB13

Standard ID :
WP110259,WP110335,WP110386,WP111317,WP111318,WP111319,WP111323,WP111325,WP111385,WP111660,WP111745,WP112079,WP112435,WP112436,WP112437,WP112438,WP112439,WP112440,WP112441,WP112442,WP112443,WP112444,WP112513,WP112516,WP112517,WP112537,WP112611,WP112612,WP112613,WP112614,WP112675,WP112676,WP112677,WP112678,WP112679,WP112680,WP112681,WP112682,WP112684,WP112685,WP112722,WP112723,WP112737,WP112738,WP112739,WP112740,WP112763,WP112764,WP112765,

Chemical ID :
M5673,M6041,W2647,W2653,W2654,W2666,W2697,W2700,W2858,W2983,W3058,W3059,W3063,W3071,W3072,W3078,W3081,W3093,W3103,W3105,W3109,W3112,W3113,W3116,W3132,W3133,W3140,W3144,W3148,W3149,W3150,W3155,W3161,W3163,W3174,W3178,W3180,W3191,W3195,W3196,W3197,

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4035	IC ELUENT CONCENTRATE FOR IC-1	WP110259	10/16/2024	04/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCSC-5)	None	Jignesh Parikh 10/17/2024

FROM 2.10000gram of W2647 + 84.75000gram of W3058 + 913.15000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1597	0.04 N H2SO4	WP110335	10/22/2024	04/22/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/22/2024

FROM 1.00000ml of M5673 + 999.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1841	Sulfuric Acid, 1N	WP110386	10/24/2024	04/24/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/24/2024

FROM 2.80000ml of M5673 + 97.20000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1796	NaOH, 0.1N	WP111317	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_7 (WCSC-6)	None	Iwona Zarych 01/09/2025

FROM 4.00000gram of W3113 + 996.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1471	NaOH Solution, 6N	WP111318	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_7 (WCSC-6)	None	Iwona Zarych 01/09/2025

FROM 240.00000gram of W3113 + 760.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
619	TKN digestion solution	WP111319	01/09/2025	04/23/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	None	Iwona Zarych 01/09/2025

FROM 134.00000gram of W2983 + 134.00000ml of M6041 + 7.30000gram of W2697 + 725.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1571	Sodium hydroxide, 1N	WP111323	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	None	Iwona Zarych 01/09/2025

FROM 4.00000gram of W3113 + 96.00000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1494	BORATE BUFFER	WP111325	01/09/2025	07/09/2025	Rubina Mughal	None	None	Iwona Zarych 01/09/2025

FROM 100.00000L of W3112 + 9.50000gram of W2700 + 88.00000ml of WP111317 = Final Quantity: 100.000 L

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
290	Phenol reagent for Ammonia	WP111385	01/13/2025	07/13/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	None	Iwona Zarych 01/13/2025

FROM 3.20000gram of W3113 + 8.30000gram of W2858 + 88.80000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
635	EDTA BUFFER FOR AMMONIA	WP111660	01/28/2025	07/28/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	None	Iwona Zarych 01/28/2025

FROM 5.50000gram of W3113 + 50.00000gram of W3132 + 950.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
289	Sodium Hypochlorite for Ammonia	WP111745	02/03/2025	07/31/2025	Rubina Mughal	None	None	Iwona Zarych 02/03/2025

FROM 50.00000ml of W3112 + 50.00000ml of W3174 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1338	TKN DISTILLING BUFFER	WP112079	02/27/2025	08/27/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	None	Iwona Zarych 02/27/2025

FROM 0.47500L of W3112 + 25.00000gram of W3148 + 500.00000gram of W3113 = Final Quantity: 1.000 L

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2487	Anions 300/9056 calibration standard 1	WP112435	03/21/2025	03/22/2025	Niha Farheen Shaik	None	None	Iwona Zarych 03/24/2025

FROM 10.00000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
24	Anions 300/9056 calibration standard 2	WP112436	03/21/2025	03/22/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/24/2025

FROM 0.20000ml of W3180 + 9.80000ml of W3112 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
25	Anions 300/9056 calibration standard 3	WP112437	03/21/2025	03/22/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/24/2025

FROM 0.40000ml of W3180 + 9.60000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
26	Anions 300/9056 calibration standard 4	WP112438	03/21/2025	03/22/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/24/2025

FROM 0.50000ml of W3180 + 9.50000ml of W3112 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3680	Anions 300/9056 calibration standard 5-CCV	WP112439	03/21/2025	03/22/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/24/2025

FROM 45.00000ml of W3112 + 5.00000ml of W3180 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3679	Anions 300/9056 calibration standard 6	WP112440	03/21/2025	03/22/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/24/2025

FROM 2.00000ml of W3180 + 8.00000ml of W3112 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3681	Anions 300/9056 calibration standard 7	WP112441	03/21/2025	03/22/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/24/2025

FROM 2.50000ml of W3180 + 7.50000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3233	Anions 300/9056 ICV-LCS std	WP112442	03/21/2025	03/22/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/24/2025

FROM 45.00000ml of W3112 + 5.00000ml of W3063 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4036	IC ELUENT FOR IC-1	WP112443	03/21/2025	04/16/2025	Niha Farheen Shaik	None	None	Iwona Zarych 03/24/2025

FROM 1980.00000ml of W3112 + 20.00000ml of WP110259 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4037	IC H2SO4 FOR IC-1	WP112444	03/21/2025	04/21/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/24/2025

FROM 5.60000ml of M6041 + 994.40000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1843	HEXAMETHYLENETETRAMINE SOLUTION 1	WP112513	03/26/2025	04/26/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 03/28/2025

FROM 10.00000gram of W3081 + 90.00000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1167	hydrazine sulfate solution 1	WP112516	03/26/2025	04/26/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 03/28/2025

FROM 1.00000gram of W3078 + 90.00000ml of W3112 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1102	Formazin turbidity 400 NTU suspension	WP112517	03/26/2025	04/26/2025	Niha Farheen Shaik	None	None	Iwona Zarych 03/28/2025

FROM 90.00000ml of W3112 + 5.00000ml of WP112513 + 5.00000ml of WP112516 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
740	sodium nitroferricyanide for ammonia	WP112537	03/28/2025	04/28/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 03/28/2025

FROM 0.05000gram of W2666 + 99.95000ml of W3112 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
153	Ammonia Stock Std. (1000 ppm)	WP112611	04/07/2025	10/07/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	None	Iwona Zarych 04/07/2025

FROM 3.81900gram of W3196 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1895	Ammonia Stock Std, 1000PPM-SS	WP112612	04/07/2025	10/07/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	None	Iwona Zarych 04/07/2025

FROM 3.81900gram of W3195 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1322	Ammonia Intermediate Std, 50PPM	WP112613	04/07/2025	05/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/07/2025

FROM 95.00000ml of W3112 + 5.00000ml of WP112611 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1639	Ammonia Intermediate Std-Second source, 50PPM	WP112614	04/07/2025	05/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/07/2025

FROM 95.00000ml of W3112 + 5.00000ml of WP112612 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
127	BOD Dilution fluid	WP112675	04/11/2025	04/12/2025	Rubina Mughal	None	None	Iwona Zarych 04/14/2025

FROM 18.00000L of W3112 + 3.00000PILLOW of W3144 = Final Quantity: 18.000 L

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
129	Glutamic acid-glucose mix for BOD	WP112676	04/11/2025	04/12/2025	Rubina Mughal	WETCHEM_SCALE_7 (WCSC-6)	None	Iwona Zarych 04/14/2025

FROM 0.15000gram of W2653 + 0.15000gram of W2654 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
128	polyseed seed control	WP112677	04/11/2025	04/12/2025	Rubina Mughal	None	None	Iwona Zarych 04/14/2025

FROM 1.00000PILLOW of W3059 + 300.00000ml of WP112675 = Final Quantity: 300.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3718	Turbidity Calibration std, 40NTU	WP112678	04/11/2025	04/12/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 04/16/2025

FROM 90.00000ml of W3112 + 10.00000ml of WP112517 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3714	Turbidity Calibration std, 20NTU	WP112679	04/11/2025	04/12/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 04/16/2025

FROM 95.00000ml of W3112 + 5.00000ml of WP112517 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3807	Turbidity Calibration - CCV std, 10 NTU	WP112680	04/11/2025	04/12/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 04/16/2025

FROM 97.50000ml of W3112 + 2.50000ml of WP112517 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3722	Turbidity Calibration std, 5NTU	WP112681	04/11/2025	04/12/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 04/16/2025

FROM 87.50000ml of W3112 + 12.50000ml of WP112678 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3720	Turbidity Calibration std, 1NTU	WP112682	04/11/2025	04/12/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 04/16/2025

FROM 97.50000ml of W3112 + 2.50000ml of WP112678 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3680	Anions 300/9056 calibration standard 5-CCV	WP112684	04/11/2025	04/12/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 04/16/2025

FROM 45.00000ml of W3112 + 5.00000ml of W3180 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3233	Anions 300/9056 ICV-LCS std	WP112685	04/11/2025	04/12/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 04/16/2025

FROM 45.00000ml of W3112 + 5.00000ml of W3197 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3407	Acidity-Alkalinity Stock Std(-+2500PPM)	WP112722	04/16/2025	04/23/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCSC-5)	None	Jignesh Parikh 04/16/2025

FROM 0.62500gram of W3163 + 249.40000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
293	alkalinity LCSW 50 ppm	WP112723	04/16/2025	04/23/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 04/16/2025

FROM 196.00000ml of W3112 + 4.00000ml of WP112722 = Final Quantity: 200.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
295	TKN Calibration Std (10 ppm)	WP112737	04/17/2025	04/24/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/18/2025

FROM 49.75000ml of W3112 + 0.50000ml of WP112611 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
297	TKN CCV STD 5 ppm	WP112738	04/17/2025	04/24/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/18/2025

FROM 49.75000ml of W3112 + 0.25000ml of WP112611 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
296	TKN ICV STD 5 ppm	WP112739	04/17/2025	04/24/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/18/2025

FROM 49.75000ml of W3112 + 0.25000ml of WP112612 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
298	TKN LCS STD 5 ppm	WP112740	04/17/2025	04/24/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/18/2025

FROM 49.75000ml of W3112 + 0.25000ml of WP112612 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
275	Ammonia Calibration Std. (2 ppm)	WP112763	04/18/2025	04/19/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 04/18/2025

FROM 48.00000ml of W3112 + 2.00000ml of WP112613 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
285	Ammonia CCV Std. (1 ppm)	WP112764	04/18/2025	04/19/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 04/18/2025

FROM 49.00000ml of W3112 + 1.00000ml of WP112613 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
286	Ammonia ICV Std. (1 ppm)	WP112765	04/18/2025	04/19/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 04/18/2025

FROM 49.00000ml of W3112 + 1.00000ml of WP112614 = Final Quantity: 50.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	09/21/2023 / mohan	09/05/2023 / mohan	M5673

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3506-5 / SODIUM BICARBONATE, PWD, ACS, 2.5KG	0000240594	06/03/2026	02/24/2020 / AMANDEEP	01/20/2020 / apatel	W2647

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AC156212500 / GLUTAMIC ACID BIOCHEM REG, 250G	A0405990	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2653

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	D16-500 / DEXTROSE ANHYDROUS ACS REAGENT, 500G(New)	186122A	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2654

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	87683 / Sodium Nitroferricyanide 250g	W12F013	02/10/2030	02/10/2020 / apatel	02/10/2020 / apatel	W2666

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	0330-500G / Cupric Sulfate Pentahydrate	CPECG2635	04/23/2025	04/23/2020 / apatel	04/23/2020 / apatel	W2697

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3568-1 / Sodium Borate, 500 gms	2019111354	04/23/2025	04/23/2020 / apatel	03/11/2020 / apatel	W2700

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P1060-10 / PHENOL, ACS, 500G	M13H048	01/07/2026	07/07/2021 / apatel	07/07/2021 / apatel	W2858

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3278-5 / Potassium Sulfate, 2.5 Kgs	SLCM9788	11/21/2027	11/21/2022 / lwona	11/21/2022 / lwona	W2983

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-SX0395-3 / SODIUM CARBONATE ANHYDR 2.5KG	2023012653	10/19/2028	09/03/2024 / jignesh	10/19/2023 / lwona	W3058

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	136742-80 / POLYSEED	152305	05/30/2025	02/15/2024 / Rubina	10/18/2023 / lwona	W3059

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	300-CAL-A-500ML / 300.0 Calibration Standard, 500 ml	U2-MEB735684	04/09/2025	04/09/2024 / Iwona	11/16/2023 / Iwona	W3063

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14455-3 / buffer solution pH 7 yellow	4308H30	07/31/2025	01/02/2024 / JIGNESH	12/06/2023 / Iwona	W3071

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14940-1 / Buffer Solution, PH12 (500ml)	2310P21	04/30/2025	01/02/2024 / JIGNESH	12/07/2023 / Iwona	W3072

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J2177-1 / Hydrazine sulfate, 500 gms	BCCK9980	10/13/2028	01/26/2024 / Iwona	01/26/2024 / Iwona	W3078

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA36462-36 / hexamethylenetetramine	M02K021	01/02/2027	02/26/2024 / Iwona	02/26/2024 / Iwona	W3081

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	566002 / BUFFER PH 7.00 GREEN 1PINT PK6	44001f99	12/31/2025	04/03/2024 / jignesh	04/02/2024 / jignesh	W3093

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	4620-32 / MANGANOUS SULFATE SOLUTION-364	2403J02	03/31/2026	04/22/2024 / Iwona	04/22/2024 / Iwona	W3103

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL69870-8 / SODIUM THIOSULFATE,0.025N,4LITRE	4403S13	09/30/2025	04/22/2024 / Iwona	04/22/2024 / Iwona	W3105

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL04100-4 / Alkaline Iodide Azide, 1 L	1405D67	04/30/2026	05/23/2024 / Iwona	05/23/2024 / Iwona	W3109

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-7 / Sodium Hydroxide Pellets 12 Kg	23B1556310	12/31/2025	07/08/2024 / Iwona	07/08/2024 / Iwona	W3113

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
HACH	2659949 / 10 NTU Standard 500 ml	A4151	05/30/2026	07/12/2024 / Iwona	07/12/2024 / Iwona	W3116

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC05050-1 / EDTA, disodium salt, dihydrate 1 lb	2ND0156	07/10/2026	07/26/2024 / Iwona	07/26/2024 / Iwona	W3132

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140476 / Test Paper,PH Short Range 9.0/10.0	L23	08/22/2029	08/22/2024 / Iwona	08/22/2024 / Iwona	W3133

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140444 / TEST PAPERS,PH 0-14,.5 SENSI,100PK	10D0142	09/17/2029	09/17/2024 / Iwona	09/17/2024 / Iwona	W3140

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
HACH	1486266 / BOD Nutrient Buffer Pillows, 6 mL concentrate to make 6 L, 50/pk	A4169	06/30/2029	11/20/2024 / rubina	10/01/2024 / Iwona	W3144

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3946-1 / Sodium Thiosulfate Pentahydrate, 500 gms	MKCW3077	07/31/2029	10/07/2024 / Iwona	10/07/2024 / Iwona	W3148

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL70850-8 / Starch Solution, 4L	4408P62	08/31/2026	10/16/2024 / Iwona	10/16/2024 / Iwona	W3149

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL74050-8 / SULFURIC ACID, 0.02N, 4L	235420	03/31/2029	11/04/2024 / Iwona	11/04/2024 / Iwona	W3150

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140730 / TEST PAPER,POT.IOD-STRCH,PK100,CS12	14-860	12/02/2029	12/02/2024 / Iwona	12/02/2024 / Iwona	W3155

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL13850-1 / Buffer Solution, PH2 (500ml)	2411E26	10/31/2026	12/09/2024 / Iwona	12/09/2024 / Iwona	W3161

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-SX0395-3 / SODIUM CARBONATE ANHYDR 2.5KG	24E3156178	09/30/2027	12/10/2024 / Iwona	12/10/2024 / Iwona	W3163

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J9416-1 / Sodium Hypochlorite 500 ml	2501J28	07/31/2025	01/24/2025 / Iwona	01/24/2025 / Iwona	W3174

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14055-3 / PH 4 BUFFER SOLUTION	2411A93	10/30/2026	04/01/2025 / JIGNESH	01/27/2025 / jignesh	W3178

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	300-CAL-A-500ML / 300.0 Calibration Standard, 500 ml	V2-MEB742616	02/19/2026	02/19/2025 / Iwona	01/27/2025 / Iwona	W3180

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	1601-1 / PH 10.01 BUFFER,COLOR CD 475ML	2410F80	03/31/2026	04/01/2025 / JIGNESH	03/13/2025 / jignesh	W3191

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	24L0356561	08/31/2027	03/19/2025 / Iwona	03/19/2025 / Iwona	W3195

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	MKCV1009	09/30/2026	03/19/2025 / Iwona	03/19/2025 / Iwona	W3196

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	300-CAL-A-500ML / 300.0 Calibration Standard, 500 ml	040525	04/05/2027	04/08/2025 / Iwona	04/08/2025 / Iwona	W3197

W2647 Received on 01/20/2020 by AP

Sodium Bicarbonate, Powder
BAKER ANALYZED® A.C.S. Reagent

(sodium hydrogen carbonate)

Material No.: 3506-05
Batch No.: 0000240594
Manufactured Date: 2019/06/05
Retest Date: 2026/06/03
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NaHCO_3$) (dried basis)	99.7 - 100.3 %	100.1
Insoluble Matter	<= 0.015 %	< 0.002
Chloride (Cl)	<= 0.003 %	0.003
Phosphate (PO_4)	<= 0.001 %	0.001
Sulfur Compounds (as SO_4)	<= 0.003 %	0.003
Calcium (Ca)	<= 0.02 %	0.02
Trace Impurities - Iron (Fe)	<= 0.001 %	0.001
Magnesium (Mg)	<= 0.005 %	0.005
Potassium (K)	<= 0.005 %	0.005
Ammonium (NH_4)	<= 5 ppm	5
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	5

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

ThermoFisher SCIENTIFIC

Certificate of Analysis

W2858 Received by AP on 07/07/2021

Product No.: 33213

Product: Phenol, ACS, 99+%, stab.

Lot No.: M13H048

Test	Limits	Results
Assay	99.0 % min	99.8 %
Freezing point	40.5ºC min	40.5 ºC
Clarity of solution	To pass test	Passes
Residue after evaporation	0.05 % max	< 0.05 %
Water	0.5 % max	0.2 %

Retest date: January 7, 2026

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ThermoFisher SCIENTIFIC

Certificate of Analysis

W2666 Recived on 02/10/2020 by AP

Product No.: 87683

Product: Sodium pentacyanonitrosylferrate(III) dihydrate, ACS, 99.0-102.0%

Lot No.: W12F013

Test	Limits	Results
Assay	99.0 - 102.0 %	99.67 %
Insoluble	0.01 % max	0.0079 %
Chloride	0.02 % max	Not detected
Sulfate	To pass test	Passes test
Aqueous solubility	To pass test	Passes test
Limit on Ferricyanide	To pass test	Passes test
Limit on Ferrocyanide	To pass test	Passes test

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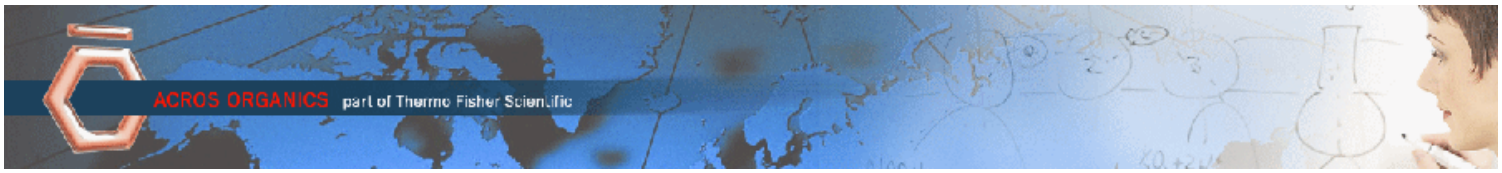
W2653 Received on 1/24/2020 by AP



ACROS ORGANICS

Version	0
Molecular weight	147.13
Molecular formula	C5 H9 N O4
CAS No	56-86-0
Linear formula	HO2CCH2CH2CH(NH2)CO2H
Flash point (°C)	

Certificate of Analysis

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Catalog Number	15621	**Quality Test / Release Date**	13 March 2019
Lot Number	A0405990	**Suggested Retest Date**	March 2022

Description	L(+)-Glutamic acid,99%
Country of Origin	CHINA
Declaration of Origin	plant

Origin Comment	The product is made by fermentation of sugar molasses

Result Name	Specifications	Test Value
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Infrared spectrum	Conforms	Conforms
Titration with NaOH	98.5 to 100.5 % (On dried substance)	99.32 % (On dried substance)
Loss on drying	=<0.5 % (105°C, 3 hrs)	0.002 % (105°C, 3 hrs)
Heavy metals (as Pb)	=<10 ppm	=<10 ppm
Sulfated ash	=<0.1 %	0.08 %
Other amino acids	not detectable	not detectable
Specific optical rotation	+30.5° to +32.5° (20°C, 589 nm) (on dried substance)	+32° (20°C, 589 nm) (on dried substance)
Specific optical rotation	(c=10, 2N HCl)	(c=10, 2N HCl)
Chloride (Cl)	=<200 ppm	=<200 ppm
Iron (Fe)	=<30 ppm	=<10 ppm
Sulfate (SO4)	=<300 ppm	=<200 ppm
Ammonium (NH4)	=<200 ppm	=<200 ppm
Arsenic oxide (As2O3)	=<1 ppm	=<1 ppm

L. Van den Broek, QA Manager Issued: 24 January 2020

Acros Organics
ENA23, zone 1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: http://www.acros.com
1 Reagent Lane, Fair Lawn, NJ 07410,USA Fax 201-796-1329

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

W3071
Rec 12/6/23

Certificate of Analysis 12

Buffer, Reference Standard, pH 7.00 ± 0.01 at 25°C (Color Coded Yellow)

Lot Number: 4308H30 **Product Number:** 1551

Manufacture Date: AUG 09, 2023
Expiration Date: JUL 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.
The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	0	5	10	15	20	25	30	35	40	45	50
pH	7.12	7.09	7.06	7.04	7.02	7.00	6.99	6.98	6.98	6.97	6.97

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Phosphate Dibasic	7558-79-4	ACS
Potassium Dihydrogen Phosphate	7778-77-0	ACS
Preservative	Proprietary	
Yellow Dye	Proprietary	
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result	
Appearance	Yellow liquid	Passed	*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.002	0.02	186-I-g, 186-II-g, 191d

Specification	Reference
Commercial Buffer Solutions	ASTM (D 1293 B)
Buffer A	ASTM (D 5464)
Buffer A	ASTM (D 5128)

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1551-2.5	10 L Cubitainer®	24 months
1551-5	20 L Cubitainer®	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Paul Brandon (08/09/2023)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Sigma-Aldrich.

~~H2278~~ W2983

Rec. 11/21/22 ,2

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Potassium sulfate - ReagentPlus®, ≥99.0%

Product Number:	**P0772**
Batch Number:	**SLCM9788**
Brand:	SIGALD
CAS Number:	7778-80-5
MDL Number:	MFCD00011388
Formula:	K2O4S
Formula Weight:	174.26 g/mol
Quality Release Date:	03 MAR 2022

K_2SO_4

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity) 10 g plus 150 mL, H2O	Clear	Clear
Titration with NaOH	≥ 99.0 %	99.2 %

Brian Dulle

Brian Dulle, Supervisor
Quality Assurance
St. Louis, Missouri US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Certificate Of Analysis

W 3058
Rec. 10/19/23 12

Date of Release: 1/27/2023

Name: **Sodium Carbonate, Anhydrous**
Powder, ACS
Item No: **SX0395 All Sizes**
Lot / Batch No: **2023012653**
Country of Origin: **India**

Item	Specifications	Analysis
Assay (calculated on dried substance)	99.5% min.	100.2%
Calcium (Ca)	0.03% max.	0.004%
Chloride (Cl)	0.001% max.	<0.001%
Color	White	Passes Test
Form	Powder	Passes Test
Heavy metals (by ICP-OES)	5 ppm max.	<5 ppm
Insoluble Matter	0.01% max.	0.003%
Iron (Fe)	5 ppm max.	<5 ppm
Loss on heating at 285C	1.0% max.	0.1%
Magnesium (Mg)	0.005% max.	0.0008%
Phosphate (PO4)	0.001% max.	<0.001%
Potassium (K)	0.005% max.	0.003%
Silica (SiO2)	0.005% max.	<0.005%
Sulfur compounds (as SO4)	0.003% max.	<0.003%

Joe Schoellkopff

Quality Control Manager

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EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

EMD Millipore Corporation
400 Summit Drive
Burlington, MA 01803
U.S.A.

W 3059
rec. 10/18/23 12

POLYSEED®

CERTIFICATE OF ANALYSIS

PO BOX 130549 Spring, TX 77393
Phone: (281) 298-9410 Fax: (281) 298-9411

FINISHED PRODUCT, LOT NUMBER, MFG. /EXP DATE:
PolySeed® • Part No. P-110 • Lot 152305 • Mfg. Date: 05/2023 • Exp. Date: 05/2025

FORMULATION:
The formulation for this product contains a range of naturally occurring microorganisms, which are known to be non-pathogenic to man or animals.

VIABLE COUNT, FINAL TEST RESULT:
The product has been fully tested in accordance with Finished Product Specifications and contains a minimum viable count of 4.00 x10^9 cfu/g.

GLUCOSE/GLUTAMIC-ACID RESULTS:
Tested results within acceptable range 198 +/- 30.5 mg/L (167.5 - 228.5 mg/L). GGA Lot# L257-09 – Average Test Result: 203.4

See www.polyseed.com for details.

SEED CONTROL FACTOR:
Tested results within acceptable range 0.6 – 1.0 see www.polyseed.com for details

SALMONELLA TEST RESULT:
The product has been shown to be Salmonella negative using procedures recommended in the Microbiology Laboratory Guidebook, published by the USDA Food Safety and Inspection Service.

The purpose of this document is to assure that the Finished Product conforms to the above specification.

Signature: _____ Date: 05/15/2023
Quality Control Department

POLYSEED.Ref.1.19 Revised Jan 23

InterLab®
International Laboratory Supply

ISO 9002 DNV DNV Certification, Inc. REGISTERED FIRM

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Certificate of Analysis

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Christiansburg, VA 24073 USA
inorganicventures.com

W3063
rec. 11/16/23 12

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Ion Chromatography Solution
Catalog Number:	300-CAL-A
Lot Number:	U2-MEB735684
Matrix:	H2O
Value / Analyte(s):	150 µg/mL ea: Sulfate, 100 µg/mL ea: Bromide, 50 µg/mL ea: o-Phosphate as P, 30 µg/mL ea: Chloride, Nitrite as N, 25 µg/mL ea: Nitrate as N, 20 µg/mL ea: Fluoride

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Bromide, Br	100.0 ± 0.5 µg/mL	Chloride, Cl	30.00 ± 0.14 µg/mL
Fluoride, F-	20.00 ± 0.06 µg/mL	Nitrate as N, NNO3-	25.00 ± 0.09 µg/mL
Nitrite as N, NNO2-	30.00 ± 0.15 µg/mL	o-Phosphate as P, PPO4	50.00 ± 0.18 µg/mL
Sulfate, SO4	150.0 ± 0.8 µg/mL		

Density: 0.999 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Br	IC Assay	3184	151130
Br	Fajans	999c	999c
Cl	IC Assay	3182	190830
Cl	Fajans	999c	999c
F-	IC Assay	3183	140203
NNO3-	IC Assay	3185	170309
NNO2-	IC Assay		traceable to 40h
PPO4	IC Assay	3186	170606
SO4	IC Assay	3181	080603

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 10, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- August 10, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

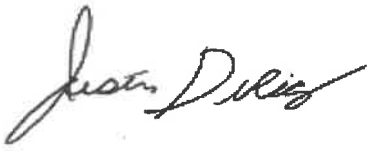
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor



Certificate Approved By:

Nicholas Plymale
Custom VSM Coordinator

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

W3072
Rec. 12/01/23
, 2

Certificate of Analysis

Buffer, Reference Standard, pH 12.00 ± 0.01 at 25°C

Lot Number: 2310P21 **Product Number:** 1615

Manufacture Date: OCT 24, 2023
Expiration Date: APR 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.

°C	15	20	25	30	35	40
pH	12.35	12.17	11.99	11.78	11.62	11.46

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Chloride	7447-40-7	ACS
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result	
Appearance	Colorless liquid	Passed	*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	12.005	0.02	186-I-g, 186-II-g, 191d

pH measurements were performed in our Pocomoke City, MD laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.01) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1615-1	4 L natural poly	18 months
1615-16	500 mL clear PET-G	18 months
1615-32	1 L natural poly	18 months
1615-5	20 L Cubitainer®	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Sharon Travers (10/24/2023)
Operations Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Certificate Of Analysis

Date of Release: 11/14/2019

W2700 Recived by AP on 3/11/2020

Name: **Sodium Borate, Decahydrate**
ACS

Item No: **SX0355 All Sizes**
Lot / Batch No: **2019111354**
Country of Origin: **India**

Item	Specifications	Analysis
Assay (Na2B4O7 • 10H2O)	99.5 - 105.0%	101.7%
Calcium (Ca)	0.005% max.	0.003%
Chloride (Cl)	0.001% max.	<0.001%
Color	White	Passes Test
Form	Crystals	Passes Test
Heavy Metals (as Pb)	0.001% max.	<0.001%
Insoluble Matter	0.005% max.	0.002%
Iron (Fe)	5 ppm max.	<5 ppm
pH of a 0.01 M solution at 25C	9.15 - 9.20	9.17
Phosphate (PO4)	0.001% max.	<0.001%
Sulfate (SO4)	0.005% max.	<0.005%

Joe Schoellkopff

Quality Control Manager

This document has been produced electronically and is valid without a signature.

EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

EMD Millipore Corporation
400 Summit Drive
Burlington, MA 01803
U.S.A.

W2654 Received on 1/24/2020 by AP

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	D16	Quality Test / Release Date	03/19/2019
Lot Number	186122A		
Description	DEXTROSE, ANHYDROUS, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Mar/2022
Chemical Origin	Organic - Plant		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	White, granular powder
TITRATABLE ACID	MEQ/G	<= 0.002	<0.002
STARCH		= PASS TEST	pass test
SPECIFIC ROTATION @ 25 C	DEGREES (+ OR -)	Inclusive Between +52.5 - +53.0	53.0
SULFATE & SULFITE	%	<= 0.005	<0.005
IRON (Fe)	ppm	<= 5	<5
CHLORIDE	%	<= 0.01	<0.01
IGNITION RESIDUE	%	<= 0.02	<0.02
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
HEAVY METALS (as Pb)	ppm	<= 5	<5
LOSS ON DRYING @ 105 C	%	<= 0.2	<0.2
INSOLUBLE MATTER	%	<= 0.005	0.002

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Allan Chemical Corporation

235 Margaret King Avenue
Ringwood NJ 07456

Telephone: 973-962-4014
Fax: 973-962-6820
E-Mail: allanchem@allanchem.com

W2697

ATTN: ALLAN CHEMICAL - QC DEPT.
DATE: September 20, 2021
P.O. #: 14410
PART #: N/A
LOT #: CPECG2635

CERTIFICATE OF ANALYSIS

CUPRIC SULFATE CRYSTAL – ACS GRADE

ASSAY:	102.0 %
LEAD:	< 0.0001 %
NITROGEN COMPOUNDS:	< 0.001 %
ZINC:	< 0.0001 %
INSOLUBLE MATTER:	< 0.001 %
CHLORIDE:	< 0.001 %
CHROMIUM:	< 0.00002 %
IRON:	0.0003 %
NICKEL:	< 0.0001 %
CADMIUM:	< 0.0001 %
MANGANESE:	< 0.0001 %
CALCIUM:	< 0.005 %
POTASSIUM:	< 0.001 %
SODIUM:	< 0.001 %

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H_2SO_4)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH_4)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO_3)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO_4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities - Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities - Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory,Research,or Manufacturing Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

M 6041-46
MS

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H_2SO_4)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH_4)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO_3)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO_4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities - Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities - Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory,Research,or Manufacturing Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

W 3078 Rec. on 1/26/24 by 12

Sigma-Aldrich.

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Hydrazine sulfate salt - ACS reagent, ≥99.0%

$NH_2NH_2 \cdot H_2SO_4$

Product Number:	**216046**
Batch Number:	**BCCK9980**
Brand:	SIAL
CAS Number:	10034-93-2
Formula:	H4N2 · H2SO4
Formula Weight:	130,12 g/mol
Quality Release Date:	13 OCT 2023

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals or Chunk(s)	Crystals
Redox Titration With Iodine	≥ 99.0 %	99.4 %
Residue on Ignition	≤ 0.05 %	0.01 %
Infrared Spectrum	Conforms to Structure	Conforms
Meets ACS Requirements	Corresponds to Requirements	Corresponds
ACS Specifications Heavy Metals < = 0.002 % (as Pb), Insoluble Matter < = 0.005 % (C= 6.67%, H2O)	Corresponds to Requirements	Corresponds
Iron (Fe)	≤ 10 mg/kg	< 10 mg/kg
Chloride (Cl)	≤ 50 mg/kg	< 50 mg/kg

Dr.Reinhold Schwenninger
Quality Assurance
Buchs,Switzerland CH

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing

ThermoFisher SCIENTIFIC

Certificate of Analysis

W3081 Recieved on 02/26/2024 by IZ

Product No.: 036462

Product: Hexamethylenetetramine, ACS, 99+%

Lot No.: M02K021

Appearance White solid

Test	Limits	Results
Assay	99.0 % min	100.7 %
Loss on drying	2.0 % max	0.2 %
Heavy metals (as Pb)	0.001 % max	< 0.001 %
Residue after ignition	0.1 % max	< 0.1 %

Retest Date: January 2, 2027

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Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

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customerservice@riccachemical.com

W3093 0941.. 04/03/2024 LG

Certificate of Analysis

Buffer, Reference Standard, pH 7.00 ± 0.01 at 25°C (Color Coded Yellow)

Lot Number: 4401F99 **Product Number:** 1551

Manufacture Date: JAN 08, 2024
Expiration Date: DEC 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.
The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	0	5	10	15	20	25	30	35	40	45	50
pH	7.12	7.09	7.06	7.04	7.02	7.00	6.99	6.98	6.98	6.97	6.97

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Phosphate Dibasic	7558-79-4	ACS
Potassium Dihydrogen Phosphate	7778-77-0	ACS
Preservative	Proprietary	
Yellow Dye	Proprietary	
Sodium Hydroxide	1310-73-2	

Test	Specification	Result	
Appearance	Yellow liquid	Passed	*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.004	0.02	186-I-g, 186-II-g, 191d

Specification	Reference
Commercial Buffer Solutions	ASTM (D 1293 B)
Buffer A	ASTM (D 5464)
Buffer A	ASTM (D 5128)

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1551-1	4 L natural poly	24 months
1551-1CT	4 L Cubitainer®	24 months
1551-2.5	10 L Cubitainer®	24 months
1551-5	20 L Cubitainer®	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Paul Brandon (01/08/2024)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

RICCA CHEMICAL COMPANY®
W3103 Received on 4/22/24 by IZ

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Manganous Sulfate Solution, 364 g/L

Lot Number: 2403J02 **Product Number:** 4620

Manufacture Date: MAR 15, 2024
Expiration Date: MAR 2026

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Manganous Sulfate Monohydrate	10034-96-5	Reagent
Sulfuric Acid	7664-93-9	ACS

Test	Specification	Result
Appearance	Pink liquid	Passed
Assay (by Refractive Index)	360-368 g/L	367 g/L

Specification	Reference
Manganous Sulfate Solution	ASTM (D 888 A)
Manganous Sulfate Solution	ASTM (D 888 A)
Manganous Sulfate Solution	APHA (4500-O E)
Manganous Sulfate Solution	APHA (4500-O F)
Manganous Sulfate Solution	APHA (4500-O D)
Manganous Sulfate Solution	APHA (4500-O E)
Manganous Sulfate Solution	APHA (4500-O F)
Manganous Sulfate Solution	APHA (4500-O D)
Manganous Sulfate Solution	APHA (4500-O C)
Manganous Sulfate Solution	APHA (4500-O C)
Manganous Sulfate Solution	EPA (360.2)
Manganous Sulfate Solution	EPA (360.2)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
4620-32	1 L natural poly	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Jose Pena (03/15/2024)

Operations Manager

This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
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customerservice@riccachemical.com

W3105 Received on 4/22/24 by IZ

Certificate of Analysis

Sodium Thiosulfate, 0.0250 Normal (N/40)

Lot Number: 4403S13 **Product Number:** 7900

Manufacture Date: MAR 29, 2024
Expiration Date: SEP 2025

This product is specially formulated to increase its stability. A preservative is added to prevent bacterial contamination. However, all Sodium Thiosulfate solutions are subject to slow chemical deterioration and should be restandardized periodically.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Thiosulfate Pentahydrate	10102-17-7	ACS
Organic Preservative	Proprietary	
Sodium Carbonate	497-19-8	ACS

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Potassium Iodate/Starch)	0.02499-0.02501 N at 20°C	0.02501 N at 20°C	136

Specification	Reference
Standard Sodium Thiosulfate Solution, 0.0250 N	APHA (4500-S2- F)
Standard Sodium Thiosulfate Titrant	APHA (4500-O D)
Standard Sodium Thiosulfate Titrant	APHA (4500-O E)
Standard Sodium Thiosulfate Titrant	APHA (4500-O F)
Standard Sodium Thiosulfate Titrant, 0.025 N	APHA (4500-Cl B)
Standard Sodium Thiosulfate Titrant	APHA (4500-O C)
Standard Sodium Thiosulfate Titrant, 0.025 M	APHA (5530 C)
Standard Sodium Thiosulfate Solution (0.025 N)	EPA (SW-846) (9031)
Standard Sodium Thiosulfate solution (0.025 N)	EPA (SW-846) (9034)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
7900-1	4 L natural poly	18 months
7900-16	500 mL natural poly	18 months
7900-1CT	4 L Cubitainer®	18 months
7900-32	1 L natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Paul Brandon (03/29/2024)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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Certificate of Analysis

Alkaline-Iodide-Azide, Pomeroy Formulation for Dissolved Oxygen (DO) Analysis

Lot Number: 1405D67 **Product Number:** 535

Manufacture Date: APR 05, 2024
Expiration Date: APR 2026

This solution is intended for use with samples with high Dissolved Oxygen content (above 15 mg/L) and for samples with high concentrations of organic material.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Iodide	7681-82-5	ACS
Sodium Hydroxide	1310-73-2	ACS
Sodium Azide	26628-22-8	Reagent

Test	Specification	Result
Appearance	Colorless liquid	Passed
Free Iodine	To Pass Test	Passed

Specification	Reference
Alkaline Iodide-Sodium Azide Solution II	ASTM (D 888 A)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
535-32	1 L natural poly	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Heidi J Green (04/05/2024)
Operations Manager

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Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: 0583

Grade: ACS GRADE

Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

Pellets

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	<= 0.005 %	<0.005 %	PASS
Chloride	<= 0.005 %	0.002 %	PASS
Heavy Metals	<= 0.002 %	<0.002 %	PASS
Iron	<= 0.001 %	<0.001 %	PASS
Magnesium	<= 0.002 %	<0.002 %	PASS
Mercury	<= 0.1 ppm	<0.1 ppm	PASS
Nickel	<= 0.001 %	<0.001 %	PASS
Nitrogen Compounds	<= 0.001 %	<0.001 %	PASS
Phosphate	<= 0.001 %	<0.001 %	PASS
Potassium	<= 0.02 %	<0.02 %	PASS
Purity	>= 97.0 %	99.2 %	PASS
Sodium Carbonate	<= 1.0 %	0.5 %	PASS
Sulfate	<= 0.003 %	<0.003 %	PASS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: **0583**

Grade: **ACS GRADE**

Batch Number: **23B1556310**

Chemical Formula:	NaOH	Manufacture Date:	12/14/2022
Molecular Weight:	40	Expiration Date:	12/31/2025
CAS #:	1310-73-2		
Appearance:		Storage:	Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

Certificate of Analysis List

For request number 2018129

Catalog Number Entered	Lot Number Entered	Related Catalog Number	Related Lot Code	Description
2659949	4151	N/A	N/A	StablCal|sup|TS|sup Standard, 10 NTU

Total Enclosures: 1

HACH COMPANY

P.O.Box 389
Loveland, CO 80539
(970) 669-3050

An ISO 9001 Certified Company

Certificate of Analysis

COMMODITY:**StablCal|sup|TS|sup Standard, 10 NTU**
COMMODITY NUMBER: **2659949** MANUFACTURE DATE: **6/4/2024** DATE OF ANALYSIS: **6/7/2024**
LOT NUMBER: **A4151**

TEST	*SPECIFICATIONS*	*RESULTS*
Turbidity	9.5 to 10.5 NTU	9.99 NTU

The expiration date is May 2026

Formazin and StablCal® solutions provided by Hach are not NIST traceable because the NIST does not carry turbidity standards. However, the use of Formazin and StablCal® as used in Hach method 8195 are accepted by the EPA as a primary standard to be used in the calibration of turbidity instruments.

Certified by Scott Als

Scott Als
Analytical Services Chemist

spectrum® CHEMICAL MFG CORP

Certificate Of Analysis

Item Number	ED150	Lot Number	2ND0156
Item	Edetate Disodium, Dihydrate, USP	CAS Number	6381-92-6
Molecular Formula	$C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$	Molecular Weight	372.24

TEST	SPECIFICATION		RESULT
	MIN	MAX	
ASSAY (DRIED BASIS)	99.0	101.0 %	99.5 %
pH OF A 5% SOLUTION @ 25°C	4.0	6.0	4.6
LOSS ON DRYING	8.7	11.4 %	8.90 %
CALCIUM (Ca)	NO PRECIPITATE IS FORMED		NO PRECIPITATE IS FORMED
ELEMENTAL IMPURITIES:			.
NICKEL (Ni)	AS REPORTED		<0.3 ppm
CHROMIUM (Cr)	AS REPORTED		<0.3 ppm
NITRILOTRIACETIC ACID[$n[(HOCOCH_2)_3N]$]		0.1 %	<0.10 %
IDENTIFICATION A	MATCHES REFERENCE		MATCHES REFERENCE
IDENTIFICATION B	RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION		RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION
IDENTIFICATION C	MEETS THE REQUIREMENTS FOR SODIUM		MEETS THE REQUIREMENTS FOR SODIUM
CERTIFIED HALAL			CERTIFIED HALAL
EXPIRATION DATE			10-JUL-2026
DATE OF MANUFACTURE			11-JUL-2023
APPEARANCE			WHITE CRYSTALLINE POWDER
RESIDUAL SOLVENTS		AS REPORTED	NO RESIDUAL SOLVENTS PRESENT
MONOGRAPH EDITION			USP 2024

Certificate of Analysis Results Entered By:

CACEVEDO
Charmian Acevedo
22-MAY-24 08:12:30

Certificate of Analysis Results Approved By:

GHERRERA
Genaro Herrera
22-MAY-24 12:32:01

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ

All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

Read and understand label and SDS before handling any chemicals. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. It is the customer's responsibility to provide adequate hazardous material training and ensure that appropriate Personal Protective Equipment (PPE) is used before handling any chemical.

The Elemental Impurities standards implemented by USP and other Pharmaceutical Compendia reflect a growing understanding of the toxicology of trace levels of elemental impurities that can remain in drug substances originating from either raw materials or manufacturing processes. Identifying and quantifying impurities can be critical to predicting the best possible patient outcomes. Elemental Impurities has been a requirement of all products meeting USP/NF, EP and BP monographs since January 1, 2018. More information can be found in USP sections <232> Elemental Impurities – Limits and <233> Elemental Impurities – Procedures. Data for drug substances furnished by Spectrum Chemical Mfg. Corp can be used to ensure that patient daily exposures by oral administration to the selected elements are not exceeded in the formulation of pharmaceutical products.

Loveland, CO 80539
(970) 669-3050

An ISO 9001 Certified Company

Certificate of Analysis

This is a Component of 1486266 / LOT A4169

PRODUCT: BOD Nutrient Buffer Pillows

PRODUCT NUMBER: 1486227

LOT NUMBER: A4169

MANUFACTURE DATE: 06/24/2024

DATE OF ANALYSIS: 07/03/2024

TEST	SPECIFICATIONS	RESULTS
Calcium Concentration of a diluted pillow	0.93 to 1.29 ppm	0.960 ppm
Magnesium Concentration of a diluted pillow	0.35 to 0.48 ppm	0.390 ppm
pH in a 6 L of DI water	7.1 to 7.6	7.37
Ammonia Concentration of a diluted pillow	0.57 to 0.79 ppm	0.593 ppm
Iron Concentration of a diluted pillow	0.27 to 0.36 ppm	0.311 ppm
Sterility	To Pass	Passed
Phosphorus Concentration of a diluted pillow	7.6 to 10.3 ppm	8.32 ppm
Five Day Change in Dissolved Oxygen Concentration	-0.2 to 0.2 ppm	0.03 ppm

The expiration date is Jun 2029

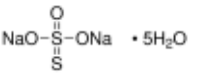
Certified by: Scott Als

Analytical Services Chemist

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Sodium thiosulfate pentahydrate - ACS reagent, ≥99.5%



Product Number:	**217247**
Batch Number:	**MKCW3077**
Brand:	SIGALD
CAS Number:	10102-17-7
MDL Number:	MFCD00149186
Formula:	Na2O3S2 · 5H2O
Formula Weight:	248.18 g/mol
Quality Release Date:	12 JUL 2024
Recommended Retest Date:	JUL 2029

Test	Specification	Result
Appearance (Color)	Colorless or White	White
Appearance (Form)	Powder or Crystals or Pellets	Crystals
ICP Major Analysis Confirms Sodium and Sulfur Components	Confirmed	Confirmed
Titration by Iodine	99.5 - 101.0 %	100.2 %
pH c = 5%; Water; At 25 Deg C	6.0 - 8.4	6.1
Insoluble Matter c = 10%; Water	≤ 0.005 %	< 0.001 %
Nitrogen Compounds	≤ 0.002 %	< 0.002 %
Sulfate & Sulfite (as SO4)	≤ 0.1 %	< 0.1 %
Sulfide	Pass	Pass
Meets ACS Requirements	Current ACS Specification	Conforms
Recommended Retest Period 5 Years	----------	----------

Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

RICCA CHEMICAL COMPANY®

W3149 Received on 10/16/24 by IZ

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Batesville, IN 47006
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Certificate of Analysis

Starch Indicator, 0.5% (w/v), Mercury Free, for Iodometric Titrations

Lot Number: 4408P62 **Product Number:** 8000

Manufacture Date: AUG 28, 2024
Expiration Date: AUG 2026

This product is Mercury-free.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Starch, soluble	9005-84-9	ACS
Salicylic Acid	69-72-7	ACS

Test	Specification	Result
Appearance	White translucent liquid	Passed
Suitability for Use	Colorless (Iodine absent) - Blue (Iodine present)	Passed

Specification	Reference
Starch Solution	APHA (4500-S2- F)
Starch Indicator Solution	APHA (4500-Cl B)
Starch Indicator	APHA (4500-SO32- B)
Starch indicator solution	APHA (2350 B)
Starch indicator solution	APHA (2350 E)
Starch Solution	APHA (510 B)
Starch Solution	APHA (5530 C)
Starch Indicator	APHA (4500-Cl C)
Starch Indicator	EPA (345.1)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
8000-1	4 L natural poly	24 months
8000-16	500 mL natural poly	24 months
8000-32	1 L natural poly	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Paul Brandon (08/28/2024)
Production Manager

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W3150 Received on 11/4/24 by IZ

Certificate of Analysis

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	SA226	Quality Test / Release Date	03/18/2024
Lot Number	235420		
Description	SULFURIC ACID, 0.02N, CERTIFIED		
Country of Origin	United States	Suggested Retest Date	Mar/2029

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid
COLOR	APHA	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
NORMALITY		Inclusive Between 0.0198 - 0.0202	0.0200
TRACEABLE TO NIST KHP STD	POT. ACID PHTHALATE	= LOT 84L	SRM 84l

Harout Sahagian - Quality Control Manager - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

RICCA CHEMICAL COMPANY®

W3161 Rec. on 12/09/24 by IZ

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
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Certificate of Analysis

Buffer, Reference Standard, pH 2.00 ± 0.01 at 25°C

Lot Number: 2411E26 **Product Number:** 1493

Manufacture Date: NOV 11, 2024
Expiration Date: OCT 2026

The certified value for this product is confirmed in independent testing by a second qualified chemist.
The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	10	15	20	25	30	35	40	45	50
pH	1.93	1.98	1.98	2.00	2.01	2.03	2.03	2.04	2.04

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Chloride	7447-40-7	ACS
Hydrochloric Acid	7647-01-0	ACS

Test	Specification	Result	
Appearance	Colorless liquid	Passed	*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	1.994	0.02	185i, 186-I-g, 186-II-g

pH measurements were performed in our Pocomoke City, MD laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.01) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1493-1	4 L natural poly	24 months
1493-16	500 mL natural poly	24 months
1493-1CT	4 L Cubitainer®	24 months
1493-2.5	10 L Cubitainer®	24 months
1493-32	1 L natural poly	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Jose Pena (11/11/2024)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

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W3163 Rec. on 12/10/24 by IZ

Certificate of Analysis

Material	BDH9284-2.5KG
Material Description	BDH SODIUM CARB ANHYD ACS 2.5KG
Grade	U S P REAGENT (ACS GRADE)
Batch	24E3156178
Reassay Date	09/30/2027
CAS Number	497-19-8
Molecular Formula	Na2CO3
Molecular Mass	105.99
Date of Manufacture	09/01/2023
Storage	Room Temperature

Material is hygroscopic. Protect from Moisture.
Additional Product Description:

Characteristics	Specifications	Measured Values
Appearance	Fine white granular powder	Fine white granular powder
Calcium	<= 0.03 %	0.003 %
Chloride	<= 0.001 %	0.0003 %
Heavy Metals (as Pb)	<= 0.0005 %	0.0001 %
Insolubles	<= 0.01 %	0.001 %
Iron	<= 0.0005 %	0.0001 %
Loss on Heating	<= 1.0 %	0.03 %
Magnesium	<= 0.005 %	0.001 %
Phosphate	<= 0.001 %	0.001 %
Potassium	<= 0.005 %	0.003 %
Purity	>= 99.5 %	100.0 %
Silica	<= 0.005 %	0.001 %
Sulfur Compounds	<= 0.003 %	0.002 %

Extra Description: Meets Reagent Specifications for testing USP/NF monographs

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed above.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

Analysis may have been rounded to significant digits in specification limits

Product meets analytical specifications of the grades listed.

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Sodium Hypochlorite Solution, 5% available Chlorine

Lot Number: 2501J28 **Product Number:** 7495.5

Manufacture Date: JAN 17, 2025
Expiration Date: JUL 2025

This solution is subject to slow decomposition upon exposure to air. Keep container tightly capped. Refrigeration may improve stability. When used in the Phenate method for Ammonia, APHA recommends replacing this solution about every 2 months.

Name	CAS#	Grade
Water	7732-18-5	Commercial
Sodium Hypochlorite	7681-52-9	Commercial

Test	Specification	Result	NIST SRM#
Appearance	Colorless to greenish-yellow liquid	Passed	
Assay (vs. Sodium Thiosulfate/Starch)	4.75-5.25 % (w/w) Cl_2	5.17 % (w/w) Cl_2	136

Specification	Reference
Sodium Hypochlorite, 5%	APHA (4500-NH3 F)
Sodium Hypochlorite	ASTM (D 4785)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
7495.5-1	4 L black poly	6 months
7495.5-16	500 mL amber poly	6 months
7495.5-32	1 L amber poly	6 months
7495.5-8	250 mL amber poly	6 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Jose Pena (01/17/2025)
Operations Manager

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Certificate of Analysis

W3178 58

Buffer, Reference Standard, pH 4.00 ± 0.01 at 25°C (Color Coded Red)

Lot Number: 2411A93 **Product Number:** 1501 **Manufacture Date:** NOV 04, 2024
Expiration Date: OCT 2026

The certified value for this product is confirmed in independent testing by a second qualified chemist.
The NIST Traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	0	5	10	15	20	25	30	35	40	45	50
pH	4.00	4.00	4.00	4.00	4.00	4.00	4.01	4.02	4.03	4.04	4.06

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Acid Phthalate	877-24-7	Buffer
Preservative	Proprietary	Commercial
Red Dye	Proprietary	Purified

Test	Specification	Result	
Appearance	Red liquid	Passed	*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	4.008	0.02	185i, 186-I-g, 186-II-g

Specification	Reference
Commercial Buffer Solutions	ASTM (D 1293 B)
Buffer B	ASTM (D 5464)
Buffer B	ASTM (D 5128)

pH measurements were performed in our Pocomoke City, MD laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.01) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1501-16	500 mL natural poly	24 months
1501-2.5	10 L Cubitainer®	24 months
1501-5	20 L Cubitainer®	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Ion Chromatography Solution
Catalog Number:	300-CAL-A
Lot Number:	V2-MEB742616
Matrix:	H2O
Value / Analyte(s):	150 µg/mL ea: Sulfate, 100 µg/mL ea: Bromide, 50 µg/mL ea: o-Phosphate as P, 30 µg/mL ea: Chloride, Nitrite as N, 25 µg/mL ea: Nitrate as N, 20 µg/mL ea: Fluoride

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Bromide, Br	**100.0 ± 0.5 µg/mL**	**Chloride, Cl**	**30.01 ± 0.13 µg/mL**
Fluoride, F-	**20.00 ± 0.07 µg/mL**	**Nitrate as N, NNO3-**	**25.00 ± 0.10 µg/mL**
Nitrite as N, NNO2-	**30.00 ± 0.10 µg/mL**	**o-Phosphate as P, PPO4**	**50.00 ± 0.18 µg/mL**
Sulfate, SO4	**150.0 ± 0.8 µg/mL**		

Density: 0.999 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Br	IC Assay	3184	151130
Br	Fajans	999c	999c
Cl	IC Assay	3182	190830
Cl	Fajans	999c	999c
F-	IC Assay	3183	140203
NNO3-	IC Assay	3185	170309
NNO2-	IC Assay	Traceable to 40H	08228TH-H2
NNO2-	Calculated	40h	40h
PPO4	IC Assay	3186	170606
SO4	IC Assay	3181	080603

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 02, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 02, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

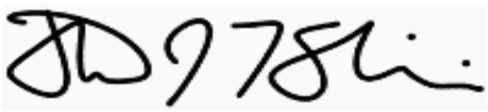
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor

Certificate Approved By:

Thomas Kozikowski
Stock VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

RICCA CHEMICAL COMPANY®
1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

W3191 W3191 Receive Date: 03/18/25 JP

Certificate of Analysis

Buffer, Reference Standard, pH 10.00 ± 0.01 at 25°C (Color Coded Blue)

Lot Number: 2410F80 **Product Number:** 1601 **Manufacture Date:** OCT 09, 2024

Expiration Date: MAR 2026

The certified value for this product is confirmed in independent testing by a second qualified chemist.
The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	0	5	10	15	20	25	30	35	40	50
pH	10.31	10.23	10.17	10.11	10.05	10.00	9.95	9.91	9.87	9.81

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Carbonate	497-19-8	ACS
Sodium Bicarbonate	144-55-8	ACS
Sodium Hydroxide	1310-73-2	Reagent
Preservative	Proprietary	
Blue Dye	Proprietary	

Test	Specification	Result	
Appearance	Blue liquid	Passed	*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	10.009	0.02	186-I-g, 186-II-g, 191d

Specification	Reference
Commercial Buffer Solutions	
Buffer C	ASTM (D 1293 B)
Buffer C	ASTM (D 5464)
	ASTM (D 5128)

pH measurements were performed in our Pocomoke City, MD laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.01) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1601-1	4 L natural poly	18 months
1601-16	500 mL natural poly	18 months
1601-1CT	4 L Cubitainer®	18 months
1601-2.5	10 L Cubitainer®	18 months
1601-32	1 L natural poly	18 months
1601-5	20 L Cubitainer®	18 months

W3195 Received on 03/19/2025 by IZ

Certificate of Analysis

Material	BDH9208-500G
Material Description	BDH AMMONIUM CHLORIDE ACS 500G
Grade	U S P REAGENT (ACS GRADE)
Batch	24L0356561
Reassay Date	08/31/2027
CAS Number	12125-02-9
Molecular Formula	NH4Cl
Molecular Mass	53.49
Date of Manufacture	08/01/2024
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	White granular powder	White granular powder
Calcium	<= 0.001 %	0.001 %
Heavy Metals (as Pb)	<= 0.0005 %	<0.0002 %
Insolubles	<= 0.005 %	0.001 %
Iron	<= 0.0002 %	<0.0002 %
Magnesium	<= 0.0005 %	0.0001 %
pH (5%, Water) @25C	4.5 - 5.5	4.8
Phosphate	<= 0.0002 %	<0.0002 %
Purity	>= 99.5 %	99.8 %
Residue on Ignition	<= 0.01 %	0.003 %
Sulfate	<= 0.002 %	<0.002 %

Extra Description: Meets Reagent Specifications for testing USP/NF monographs

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed above.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

Analysis may have been rounded to significant digits in specification limits

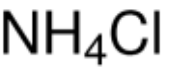
Product meets analytical specifications of the grades listed.

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

W3196 Received on 03/19/2025 by IZ

Certificate of Analysis

Product Name:
Ammonium chloride - ACS reagent, ≥99.5%



Product Number:	**213330**
Batch Number:	**MKCV1009**
Brand:	SIGALD
CAS Number:	12125-02-9
MDL Number:	MFCD00011420
Formula:	H4ClN
Formula Weight:	53.49 g/mol
Quality Release Date:	23 OCT 2023
Recommended Retest Date:	SEP 2026

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals or Chunk(s)	Crystals
Titration by AgNO3	≥ 99.5 %	100.2 %
pH @ 25 Deg c (5% Solution)	4.5 - 5.5	4.9
Insoluble Matter 10%, H2O	≤ 0.005 %	0.001 %
Residue on ignition (Ash)	≤ 0.01 %	< 0.01 %
Calcium (Ca)	≤ 0.001 %	< 0.001 %
Magnesium (Mg)	≤ 5 ppm	1 ppm
Heavy Metals by ICP	≤ 5 ppm	< 1 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Phosphate (PO4)	≤ 2 ppm	< 2 ppm
Sulfate (SO4)	≤ 0.002 %	< 0.002 %
Meets ACS Requirements	Current ACS Specification	Conforms
Recommended Retest Period 3 Years	----------	----------

Larry Coers, Director

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Number: **213330**
Batch Number: **MKCV1009**

Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Instrument IC-1 Analyst : NF Method: 300.0 / 9056A

Ident	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO4	Con SO4	Method name	date time	Initial	Analyst
STD1	0	0	0	0	0	0	0	IC1-032125	3/21/2025 10:45	10	NF/IZ
STD2	0.421	0.619	0.631	2.075	0.523	1.052	3.247	IC1-032125	3/21/2025 11:07	10	NF/IZ
STD3	0.795	1.199	1.203	3.994	1.001	1.993	5.998	IC1-032125	3/21/2025 11:28	10	NF/IZ
STD4	0.977	1.475	1.468	4.904	1.226	2.407	7.216	IC1-032125	3/21/2025 11:50	10	NF/IZ
STD5	1.993	3.009	2.995	10.03	2.493	4.968	14.842	IC1-032125	3/21/2025 12:11	10	NF/IZ
STD6	4.034	5.988	5.986	19.975	5.011	10.256	30.502	IC1-032125	3/21/2025 12:32	10	NF/IZ
STD7	4.979	7.51	7.517	25.022	6.247	12.323	36.695	IC1-032125	3/21/2025 12:54	10	NF/IZ
ICV	2.031	3.038	3.08	10.364	2.568	5.199	15.269	IC1-032125	3/21/2025 13:37	10	NF/IZ
ICB	0	0.122	0.08	0	0	0	0	IC1-032125	3/21/2025 13:58	10	NF/IZ
CCV	2.034	3.119	3.093	10.383	2.559	5.188	15.179	IC1-032125	4/3/2025 9:38	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-032125	4/3/2025 9:59	10	NF/IZ
LB135296BSW	2.028	3.121	3.103	10.387	2.561	5.226	15.185	IC1-032125	4/3/2025 10:43	10	NF/IZ
LB135296BLW	0	0	0	0	0	0	0	IC1-032125	4/3/2025 11:04	10	NF/IZ
Q1711-01	0.332	26.59	0	0.215	0	2.108	10.666	IC1-032125	4/3/2025 12:29	10	NF/IZ
Q1711-02MS	2.301	28.881	3.076	10.43	2.571	2.367	24.892	IC1-032125	4/3/2025 12:50	10	NF/IZ
Q1711-03MSD	2.172	28.857	2.983	10.101	2.479	1.573	24.485	IC1-032125	4/3/2025 13:12	10	NF/IZ
Q1711-04	0.275	20.1	0	0.221	0	0	4.529	IC1-032125	4/3/2025 13:55	10	NF/IZ
Q1711-08	0	0.047	0	0	0	0	0	IC1-032125	4/3/2025 14:16	10	NF/IZ
Q1716-01	0.433	427.687	0	0.63	0.296	0	54.697	IC1-032125	4/3/2025 14:38	10	NF/IZ
Q1711-01DLX10	0.054	2.364	0	0	0	0	1.413	IC1-032125	4/3/2025 14:59	10	NF/IZ
Q1711-04DLX5	0.071	3.687	0	0	0	0	1.238	IC1-032125	4/3/2025 15:21	10	NF/IZ
CCV	2.072	3.107	3.112	10.418	2.589	5.237	15.386	IC1-032125	4/3/2025 15:43	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-032125	4/3/2025 17:16	10	NF/IZ

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 · Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO. Q1782
QUOTE NO. BOTTLE ORDER # B2503017
COC Number 2045911

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: LKB, INC.
ADDRESS: 1 AERIAL WAY
CITY SYOSSET STATE: NY ZIP: 11791
ATTENTION: JOHN GERLACH
PHONE: 516-210-8931 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: ANSONIA LANDFILL
PROJECT NO.: 0774-08 LOCATION: CT
PROJECT MANAGER: JOHN GERLACH
e-mail: jgerlach@LKBINC.COM
PHONE: SAME FAX:

CLIENT BILLING INFORMATION

BILL TO: LKB, INC. PO#: NA for Lab
ADDRESS: SAME
CITY STATE: ZIP:
ATTENTION: SHARON F PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): STD. DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 4 (QC + Full Raw Data)
- ☑ Level 2 (Results + QC)
- ☐ NJ Reduced
- ☐ US EPA CLP
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ NYS ASP A
- ☐ NYS ASP B
- ☐ Other _____
- ☑ EDD FORMAT NYSDEC

ANALYSIS

PRESERVATIVES

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1 A/E	2 E + OTHERS AS APPROPRIATE	3	4	5	6	7	8	9	COMMENTS
1.	MW-1	GW		X	4/9/25	10:15	10		X								SAMPLE FOR DISS. Fe + Mn FILTERED IN FIELD
2.	MW-2	GW		X	4/9/25	13:10	10		X								
3.	MW-3	GW		X		11:30	10		X								
4.	MW-4	GW		X		12:10	8		X								
5.	TRIP BLANK	DI		X	↓		2	X									
6.																	
7.																	
8.																	
9.																	
10.																	

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	4/10/25 8:52	1. 1303	4-10-25
2.		2.	
3.	4-10-25 1758	3.	

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.8 °C
Comments: Temp 3.8° CAdjustment factor +1) IR Gun # 1 PH 1.3 Lot #-80A0441.

Page ____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

QA Control Code: A2070148

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1782 LOCK01
Client Name : Lockwood, Kessler & Bartl
Client Contact : John Gerlach
Invoice Name : Lockwood, Kessler & Bartl
Invoice Contact : John Gerlach

Order Date : 4/10/2025 1:22:00 PM
Project Name : Ansonia Landfill 2025
Receive DateTime : 4/10/2025 5:58:00 PM
Purchase Order :

Project Mgr : Kiran
Report Type : ~~NYS ASP B~~ Level 2
EDD Type : EXCEL NOCLEANUP
Hard Copy Date :
Date Signoff : 4/11/2025 10:21:31 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1782-01	MW-1	Water	04/09/2025	10:15					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1782-03	MW-2	Water	04/09/2025	13:10					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1782-05	MW-3	Water	04/09/2025	11:30					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1782-09	TRIP BLANK	Water	04/09/2025	12:10					
					VOCMS Group1		8260-Low		10 Bus. Days

Relinguished By :
Date / Time : 4-11-25 1033

Received By :
Date / Time : 4.11.25 10:33

Storage Area : VOA Refridgerator Room