

Cover Page

Order ID : Q2202

Project ID : Con Ed Non MGP – Atlantic Ave 453957.600024.05

Client : PARSONS Engineering of New York, Inc.

Lab Sample Number

Q2202-01
Q2202-02
Q2202-03
Q2202-04
Q2202-05
Q2202-06

Client Sample Number

MW-9-20250603
MW-11-20250603
MW-12-20250603
MW-130-20250603
MW-1A-20250603
TB-20250603

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: 6/6/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

PARSONS Engineering of New York, Inc.

Project Name: Con Ed Non MGP – Atlantic Ave 453957.600024.05

Project # N/A

Order ID # Q2202

Test Name: Sulfate,TDS

A. Number of Samples and Date of Receipt:

6 Water samples were received on 06/03/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Sulfate, SVOCMS Group1, TDS and VOCMS Group1. This data package contains results for Sulfate,TDS.

C. Analytical Techniques:

The analysis of Sulfate was based on method 300.0 and The analysis of TDS was based on method SM2540 C.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

Sample MW-9-20250603 was diluted due to high concentrations for Sulfate.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

E. Additional Comments:

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. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2202

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 Custody

✓

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: 06/06/2025

LAB CHRONICLE

OrderID:	Q2202	OrderDate:	6/4/2025 11:59:00 AM
Client:	PARSONS Engineering of New York, Inc.	Project:	Con Ed Non MGP – Atlantic Ave 453957.600024.05
Contact:	Stephen Liberatore	Location:	N31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2202-01	MW-9-20250603	WATER			06/03/25 14:00			06/03/25
			Sulfate	300.0			06/04/25 12:46	
			TDS	SM2540 C			06/04/25 12:30	
Q2202-01DL	MW-9-20250603DL	WATER			06/03/25 14:00			06/03/25
			Sulfate	300.0			06/04/25 13:29	
Q2202-05	MW-1A-20250603	WATER			06/03/25 15:20			06/03/25
			Sulfate	300.0			06/04/25 13:08	
			TDS	SM2540 C			06/04/25 12:30	



SAMPLE DATA

Report of Analysis

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	06/03/25 14:00
Project:	Con Ed Non MGP – Atlantic Ave 453957.600024.05	Date Received:	06/03/25
Client Sample ID:	MW-9-20250603	SDG No.:	Q2202
Lab Sample ID:	Q2202-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	80.4	OR	1	0.46	3.00	mg/L		06/04/25 12:46	300.0
TDS	349		1	1.00	10.0	mg/L		06/04/25 12:30	SM 2540 C-15

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

Report of Analysis

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	06/03/25 14:00
Project:	Con Ed Non MGP – Atlantic Ave 453957.600024.05	Date Received:	06/03/25
Client Sample ID:	MW-9-20250603DL	SDG No.:	Q2202
Lab Sample ID:	Q2202-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	74.0	D	5	2.30	15.0	mg/L		06/04/25 13:29	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

Report of Analysis

Client:	PARSONS Engineering of New York, Inc.	Date Collected:	06/03/25 15:20
Project:	Con Ed Non MGP – Atlantic Ave 453957.600024.05	Date Received:	06/03/25
Client Sample ID:	MW-1A-20250603	SDG No.:	Q2202
Lab Sample ID:	Q2202-05	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	9.10		1	0.46	3.00	mg/L		06/04/25 13:08	300.0
TDS	53.0		1	1.00	10.0	mg/L		06/04/25 12:30	SM 2540 C-15

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

Initial and Continuing Calibration Verification

Client: PARSONS Engineering of New York, Inc.

SDG No.: Q2202

Project: Con Ed Non MGP – Atlantic Ave 453957.600024.05

RunNo.: LB135991

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	10.2	10	102	90-110	05/22/2025
Chloride	mg/L	3.1	3	103	90-110	05/22/2025
Fluoride	mg/L	2.1	2	105	90-110	05/22/2025
Nitrite	mg/L	3.1	3	103	90-110	05/22/2025
Nitrate	mg/L	2.6	2.5	104	90-110	05/22/2025
Sulfate	mg/L	15.1	15	101	90-110	05/22/2025
Orthophosphate as P	mg/L	5.3	5	106	90-110	05/22/2025
Sample ID: CCV1						
Bromide	mg/L	10.5	10	105	90-110	06/03/2025
Chloride	mg/L	3.1	3	103	90-110	06/03/2025
Fluoride	mg/L	2.1	2	105	90-110	06/03/2025
Nitrite	mg/L	3.1	3	103	90-110	06/03/2025
Nitrate	mg/L	2.6	2.5	104	90-110	06/03/2025
Sulfate	mg/L	15.5	15	103	90-110	06/03/2025
Orthophosphate as P	mg/L	5.2	5	104	90-110	06/03/2025
Sample ID: CCV2						
Bromide	mg/L	10.5	10	105	90-110	06/03/2025
Chloride	mg/L	3.1	3	103	90-110	06/03/2025
Fluoride	mg/L	2.1	2	105	90-110	06/03/2025
Nitrite	mg/L	3.1	3	103	90-110	06/03/2025
Nitrate	mg/L	2.6	2.5	104	90-110	06/03/2025
Sulfate	mg/L	15.6	15	104	90-110	06/03/2025
Orthophosphate as P	mg/L	5.4	5	108	90-110	06/03/2025
Sample ID: CCV3						
Bromide	mg/L	10.6	10	106	90-110	06/04/2025
Chloride	mg/L	3.2	3	107	90-110	06/04/2025
Fluoride	mg/L	2.1	2	105	90-110	06/04/2025
Nitrite	mg/L	3.2	3	107	90-110	06/04/2025
Nitrate	mg/L	2.6	2.5	104	90-110	06/04/2025
Sulfate	mg/L	15.7	15	105	90-110	06/04/2025
Orthophosphate as P	mg/L	5.2	5	104	90-110	06/04/2025
Sample ID: CCV4						
Bromide	mg/L	10.4	10	104	90-110	06/04/2025
Chloride	mg/L	3.1	3	103	90-110	06/04/2025
Fluoride	mg/L	2.1	2	105	90-110	06/04/2025
Nitrite	mg/L	3.1	3	103	90-110	06/04/2025
Nitrate	mg/L	2.6	2.5	104	90-110	06/04/2025
Sulfate	mg/L	15.4	15	103	90-110	06/04/2025

Initial and Continuing Calibration Verification

Client: PARSONS Engineering of New York, Inc.

SDG No.: Q2202

Project: Con Ed Non MGP – Atlantic Ave 453957.600024.05

RunNo.: LB135991

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Orthophosphate as P	mg/L	5.3	5	106	90-110	06/04/2025

Initial and Continuing Calibration Blank Summary

Client: PARSONS Engineering of New York, Inc.

SDG No.: Q2202

Project: Con Ed Non MGP – Atlantic Ave 453957.600024.05

RunNo.: LB135991

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	05/22/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	05/22/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	05/22/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	05/22/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	05/22/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	05/22/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	05/22/2025
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/03/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/03/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/03/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/03/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/03/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/03/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/03/2025
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/03/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/03/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/03/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/03/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/03/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/03/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/03/2025
Sample ID: CCB3							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/04/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/04/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/04/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/04/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/04/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/04/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/04/2025
Sample ID: CCB4							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/04/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/04/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/04/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/04/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/04/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/04/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/04/2025

Preparation Blank Summary

Client: PARSONS Engineering of New York, Inc.

SDG No.: Q2202

Project: Con Ed Non MGP – Atlantic Ave 453957.600024.05

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB135991BLW							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/03/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/03/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/03/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/03/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/03/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/03/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/03/2025
Sample ID: LB135991BLW2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/04/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/04/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/04/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/04/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/04/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/04/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/04/2025
Sample ID: LB136008BL							
TDS	mg/L	< 5.0000	5.0000	U	1.0	10	06/04/2025

Matrix Spike Summary

Client:	PARSONS Engineering of New York, Inc.	SDG No.:	Q2202
Project:	Con Ed Non MGP – Atlantic Ave 453957.600024.05	Sample ID:	Q2189-01
Client ID:	MW-7-20250602MS	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	10.5		0.43	J	10	1	101		06/03/2025
Chloride	mg/L	80-120	445	OR	462	OR	3	1	-567	*	06/03/2025
Fluoride	mg/L	80-120	2.10		0.11	U	2	1	105		06/03/2025
Nitrite	mg/L	80-120	3.00		0.074	U	3	1	100		06/03/2025
Nitrate	mg/L	80-120	11.6	OR	9.20	OR	2.5	1	96		06/03/2025
Sulfate	mg/L	80-120	78.3	OR	64.2	OR	15	1	94		06/03/2025
Orthophosphate as P	mg/L	80-120	5.20		0.34	U	5	1	104		06/03/2025

Matrix Spike Summary

Client:	PARSONS Engineering of New York, Inc.	SDG No.:	Q2202
Project:	Con Ed Non MGP – Atlantic Ave 453957.600024.05	Sample ID:	Q2189-01
Client ID:	MW-7-20250602MSD	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	10.5		0.43	J	10	1	101		06/03/2025
Chloride	mg/L	80-120	444	OR	462	OR	3	1	-600	*	06/03/2025
Fluoride	mg/L	80-120	2.10		0.11	U	2	1	105		06/03/2025
Nitrite	mg/L	80-120	3.00		0.074	U	3	1	100		06/03/2025
Nitrate	mg/L	80-120	11.6	OR	9.20	OR	2.5	1	96		06/03/2025
Sulfate	mg/L	80-120	78.3	OR	64.2	OR	15	1	94		06/03/2025
Orthophosphate as P	mg/L	80-120	5.20		0.34	U	5	1	104		06/03/2025

Duplicate Sample Summary

Client: PARSONS Engineering of New York, Inc.	SDG No.: Q2202
Project: Con Ed Non MGP – Atlantic Ave 453957.600024.05	Sample ID: Q2189-01
Client ID: MW-7-20250602MSD	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
Bromide	mg/L	+/-20	10.5		10.5		1	0		06/03/2025
Fluoride	mg/L	+/-20	2.10		2.10		1	0		06/03/2025
Nitrite	mg/L	+/-20	3.00		3.00		1	0		06/03/2025
Orthophosphate as P	mg/L	+/-20	5.20		5.20		1	0		06/03/2025
Chloride	mg/L	+/-20	445	OR	444	OR	1	0		06/03/2025
Nitrate	mg/L	+/-20	11.6	OR	11.6	OR	1	0		06/03/2025
Sulfate	mg/L	+/-20	78.3	OR	78.3	OR	1	0		06/03/2025

Duplicate Sample Summary

Client: PARSONS Engineering of New York, Inc.	SDG No.: Q2202
Project: Con Ed Non MGP – Atlantic Ave 453957.600024.05	Sample ID: Q2189-02
Client ID: MW-8-20250602DUP	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	562		543		1	3.44		06/04/2025

Laboratory Control Sample Summary

Client:	PARSONS Engineering of New York, Inc.	SDG No.:	Q2202
Project:	Con Ed Non MGP – Atlantic Ave 453957.600024.05	Run No.:	LB135991

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135991BSW							
Bromide	mg/L	10	10.5		105	1	90-110	06/03/2025
Chloride	mg/L	3	3.10		103	1	90-110	06/03/2025
Fluoride	mg/L	2	2.10		105	1	90-110	06/03/2025
Nitrite	mg/L	3	3.10		103	1	90-110	06/03/2025
Nitrate	mg/L	2.5	2.60		104	1	90-110	06/03/2025
Sulfate	mg/L	15	15.5		103	1	90-110	06/03/2025
Orthophosphate as P	mg/L	5	5.30		106	1	90-110	06/03/2025

Laboratory Control Sample Summary

Client:	PARSONS Engineering of New York, Inc.	SDG No.:	Q2202
Project:	Con Ed Non MGP – Atlantic Ave 453957.600024.05	Run No.:	LB135991

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135991BSW2							
Bromide	mg/L	10	10.7		107	1	90-110	06/04/2025
Chloride	mg/L	3	3.20		107	1	90-110	06/04/2025
Fluoride	mg/L	2	2.20		110	1	90-110	06/04/2025
Nitrite	mg/L	3	3.20		107	1	90-110	06/04/2025
Nitrate	mg/L	2.5	2.70		108	1	90-110	06/04/2025
Sulfate	mg/L	15	15.8		105	1	90-110	06/04/2025
Orthophosphate as P	mg/L	5	5.40		108	1	90-110	06/04/2025

Laboratory Control Sample Summary

Client:	PARSONS Engineering of New York, Inc.	SDG No.:	Q2202
Project:	Con Ed Non MGP – Atlantic Ave 453957.600024.05	Run No.:	LB136008

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136008BS							
TDS	mg/L	100	95.0		95	1	90-110	06/04/2025



RAW DATA

Ident	Instrument IC-1				Analyst: NF		Method: 300.0 / 9056A		Initial Analyst		
	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO4	Con SO4	Method name		date time	
STD1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	5/22/2025 11:09	10 NF/IZ
STD2	0.430	0.640	0.649	2.129	0.543	1.098	3.287	IC1-052225	5/22/2025 11:30	10 NF/IZ	
STD3	0.795	1.207	1.205	4.018	1.004	1.867	6.069	IC1-052225	5/22/2025 11:52	10 NF/IZ	
STD4	0.977	1.480	1.479	4.929	1.229	2.477	7.415	IC1-052225	5/22/2025 12:13	10 NF/IZ	
STD5	1.991	2.968	2.960	9.916	2.467	5.110	14.621	IC1-052225	5/22/2025 12:35	10 NF/IZ	
STD6	4.001	5.967	5.959	19.868	4.966	9.870	29.848	IC1-052225	5/22/2025 12:56	10 NF/IZ	
STD7	5.006	7.539	7.548	25.140	6.290	12.578	37.260	IC1-052225	5/22/2025 13:17	10 NF/IZ	
ICV	2.054	3.101	3.056	10.229	2.610	5.286	15.128	IC1-052225	5/22/2025 13:39	10 NF/IZ	
ICB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	5/22/2025 14:22	10 NF/IZ	
CCV	2.099	3.134	3.113	10.491	2.612	5.230	15.517	IC1-052225	6/3/2025 14:34	10 NF/IZ	
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	6/3/2025 14:55	10 NF/IZ	
LB135991BLW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	6/3/2025 15:17	10 NF/IZ	
LB135991BSW	2.110	3.127	3.120	10.470	2.609	5.333	15.532	IC1-052225	6/3/2025 15:38	10 NF/IZ	
Q2189-01	0.090	462.470	0.000	0.433	9.180	0.000	64.157	IC1-052225	6/3/2025 16:00	10 NF/IZ	
Q2189-01MS	2.097	445.282	3.043	10.535	11.607	5.212	78.254	IC1-052225	6/3/2025 16:21	10 NF/IZ	
Q2189-01MSD	2.104	444.161	3.020	10.474	11.598	5.236	78.268	IC1-052225	6/3/2025 16:43	10 NF/IZ	
Q2189-02	0.065	336.812	0.000	0.634	4.315	0.000	25.003	IC1-052225	6/3/2025 17:05	10 NF/IZ	
CCV	2.083	3.144	3.134	10.499	2.618	5.385	15.566	IC1-052225	6/3/2025 17:26	10 NF/IZ	
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	6/3/2025 17:48	10 NF/IZ	
CCV	2.129	3.173	3.152	10.567	2.638	5.242	15.665	IC1-052225	6/4/2025 10:15	10 NF/IZ	
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	6/4/2025 10:37	10 NF/IZ	
LB135991BLW2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	6/4/2025 10:58	10 NF/IZ	
LB135991BSW2	2.151	3.196	3.186	10.665	2.659	5.403	15.827	IC1-052225	6/4/2025 11:20	10 NF/IZ	
Q2189-01DLX5	0.037	77.607	0.000	0.208	1.757	0.000	12.157	IC1-052225	6/4/2025 11:41	10 NF/IZ	
Q2202-01	0.183	145.087	0.000	0.338	1.962	0.000	80.447	IC1-052225	6/4/2025 12:46	10 NF/IZ	
Q2202-05	0.037	59.654	0.095	0.000	1.180	0.000	9.093	IC1-052225	6/4/2025 13:08	10 NF/IZ	
Q2202-01DLX5	0.063	23.210	0.000	0.000	0.423	0.000	14.807	IC1-052225	6/4/2025 13:29	10 NF/IZ	
CCV	2.063	3.111	3.102	10.390	2.587	5.266	15.384	IC1-052225	6/4/2025 13:51	10 NF/IZ	
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	6/4/2025 14:12	10 NF/IZ	

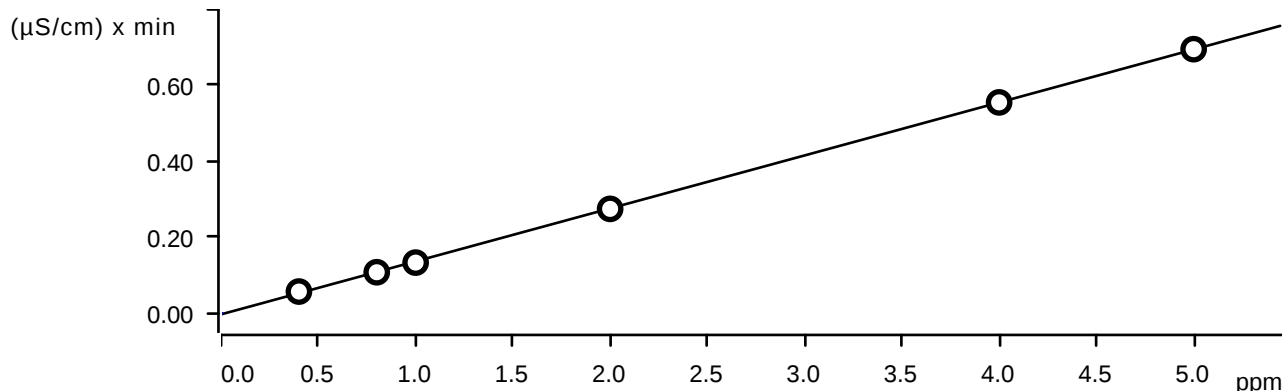
Clear table

Instrument ID: IC-2 Analyst : IZ Method: 300.0 / 9056A									
ident	concentra tion F-	concentratio n CL-	concentrati on NO2	concentrati on BR-	concentrati on NO3	concentrati on HPO4	concentrati on SO4	file name	Initial wt/ Final
STD1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	IC1-052225	10 NF/IZ
STD2	0.4300	0.6400	0.6490	2.1290	0.5430	1.0980	3.2870	IC1-052225	10 NF/IZ
STD3	0.7950	1.2070	1.2050	4.0180	1.0040	1.8670	6.0690	IC1-052225	10 NF/IZ
STD4	0.9770	1.4800	1.4790	4.9290	1.2290	2.4770	7.4150	IC1-052225	10 NF/IZ
STD5	1.9910	2.9680	2.9600	9.9160	2.4670	5.1100	14.6210	IC1-052225	10 NF/IZ
STD6	4.0010	5.9670	5.9590	19.8680	4.9660	9.8700	29.8480	IC1-052225	10 NF/IZ
STD7	5.0060	7.5390	7.5480	25.1400	6.2900	12.5780	37.2600	IC1-052225	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	7.5000	6.6667	8.1667	6.4500	8.6000	9.8000	9.5667
STD3	-0.6250	0.5833	0.4167	0.4500	0.4000	-6.6500	1.1500
STD4	-2.3000	-1.3333	-1.4000	-1.4200	-1.6800	-0.9200	-1.1333
STD5	-0.4500	-1.0667	-1.3333	-0.8400	-1.3200	2.2000	-2.5267
STD6	0.0250	-0.5500	-0.6833	-0.6600	-0.6800	-1.3000	-0.5067
STD7	0.1200	0.5200	0.6400	0.5600	0.6400	0.6240	0.7027

Fluoride (Anions)



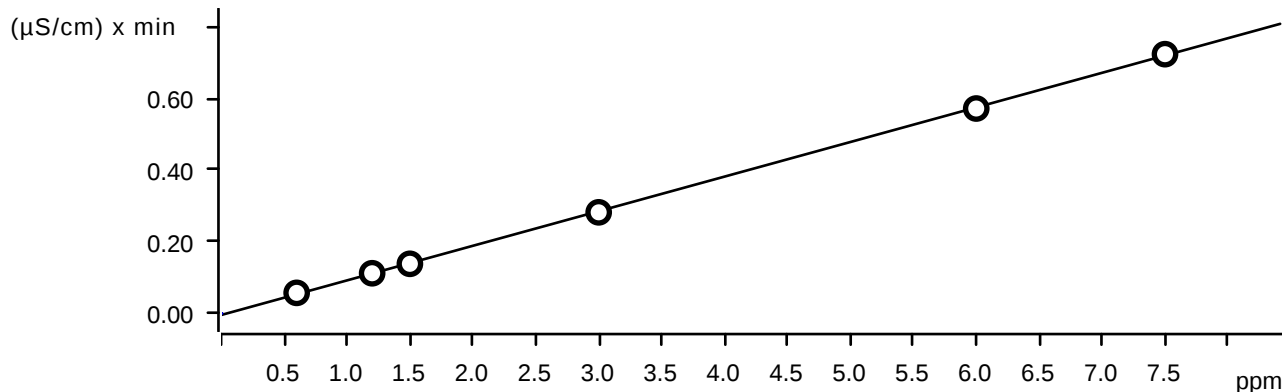
Function: $A = -2.82659E-3 + 0.0139492 \times Q$

Relative standard deviation 0.920519 %

Correlation coefficient 0.999955

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	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.057	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.108	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.133	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.275	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.555	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.695	STD7	2025-05-22 13:17:57 UTC-4	used

Chloride (Anions)

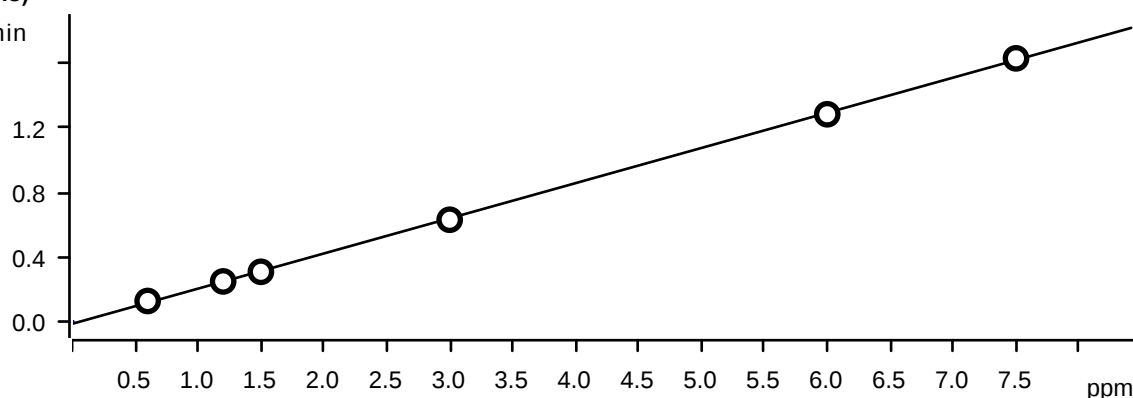


Function: $A = -4.33057E-3 + 9.64673E-3 \times Q$

Relative standard deviation 1.154335 %

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	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.057	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.112	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.138	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.282	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.571	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.723	STD7	2025-05-22 13:17:57 UTC-4	used

Nitrite (Anions) $(\mu\text{S/cm}) \times \text{min}$ Function: $A = -0.0150155 + 0.0217890 \times Q$

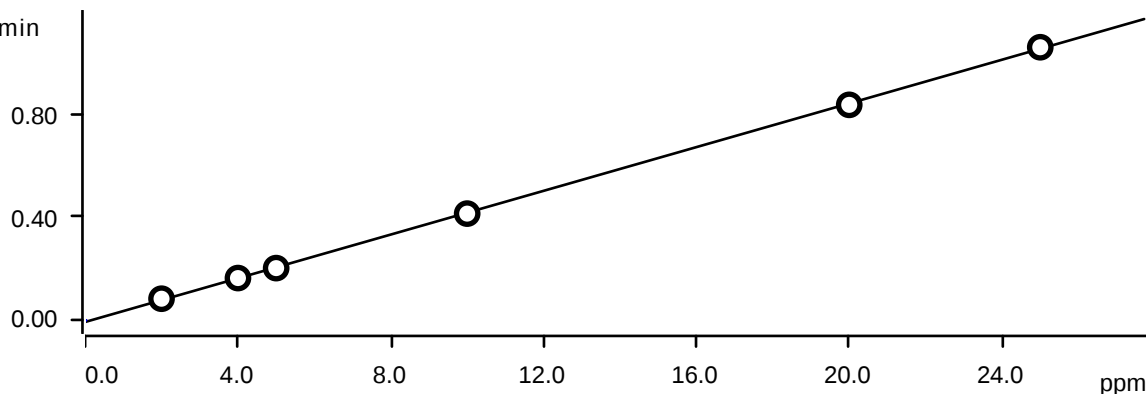
Relative standard deviation 1.428639 %

Correlation coefficient 0.999893

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	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.126	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.248	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.307	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.630	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.283	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.630	STD7	2025-05-22 13:17:57 UTC-4	used

Bromide (Anions)

($\mu\text{S}/\text{cm}$) $\times$ min



Function: $A = -6.27114E-3 + 4.23162E-3 \times Q$

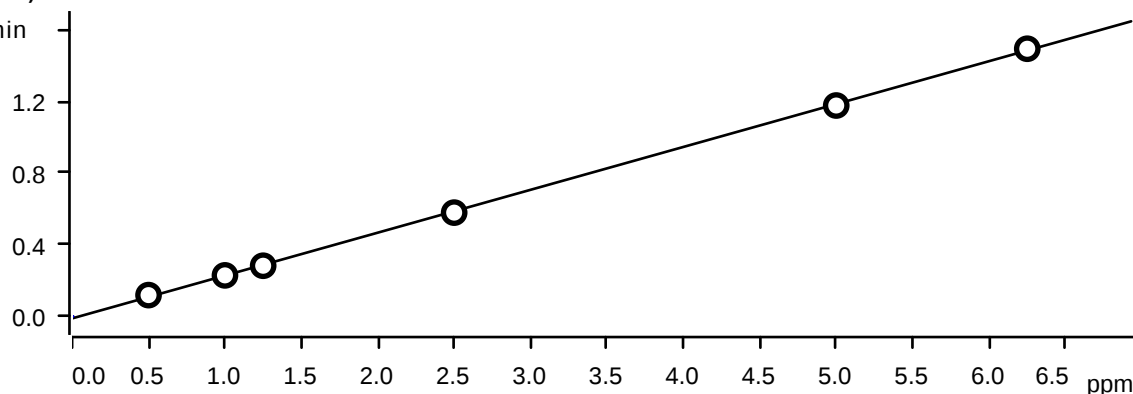
Relative standard deviation: 1.185575 %

Correlation coefficient: 0.999925

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	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.084	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.164	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.202	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.413	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.834	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.058	STD7	2025-05-22 13:17:57 UTC-4	used

Nitrate (Anions)

($\mu\text{S}/\text{cm}$) $\times$ min

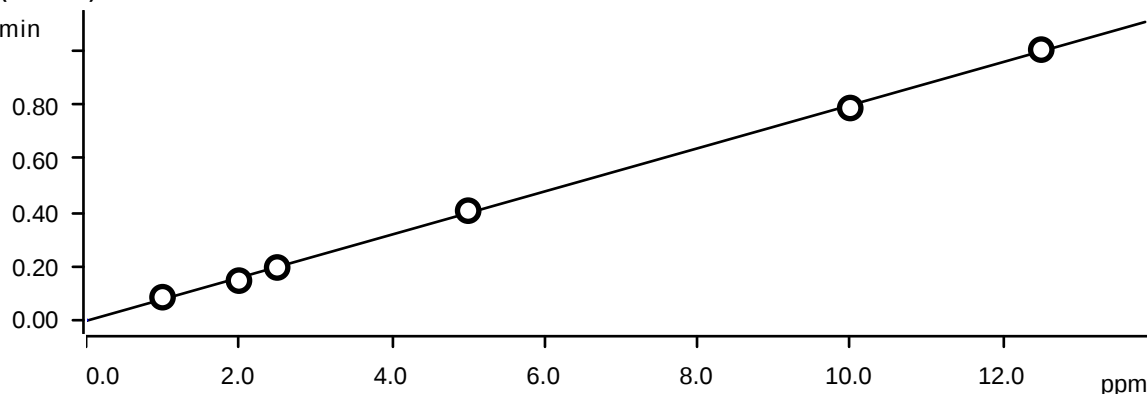


Function: $A = -0.0109593 + 0.0239055 \times Q$

Relative standard deviation: 1.451672 %

Correlation coefficient 0.999889

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	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.119	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.229	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.283	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.579	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.176	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.493	STD7	2025-05-22 13:17:57 UTC-4	used

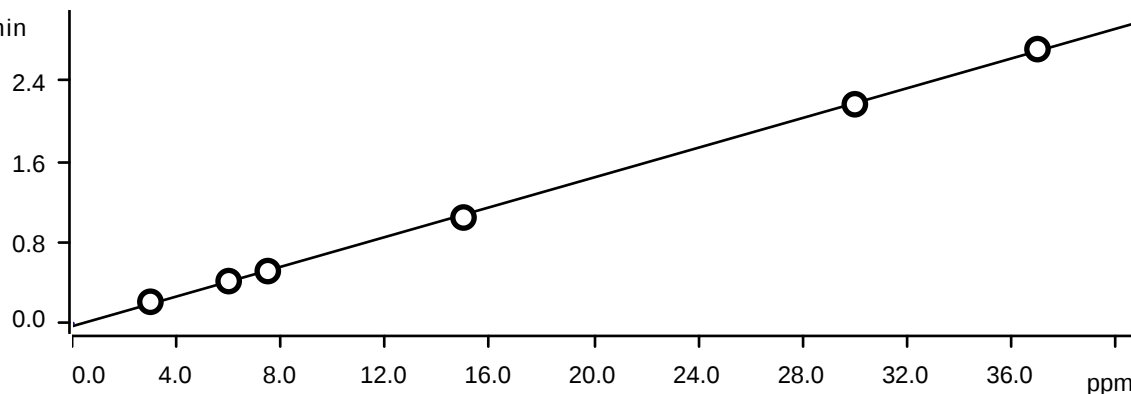
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.02035E-3 + 8.01761E-3 \times Q$

Relative standard deviation 2.297726 %

Correlation coefficient 0.999716

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	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.085	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.147	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.196	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.407	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.788	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.005	STD7	2025-05-22 13:17:57 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0303663 + 7.37295E-3 \times Q$

Relative standard deviation 1.792871 %

Correlation coefficient 0.999832

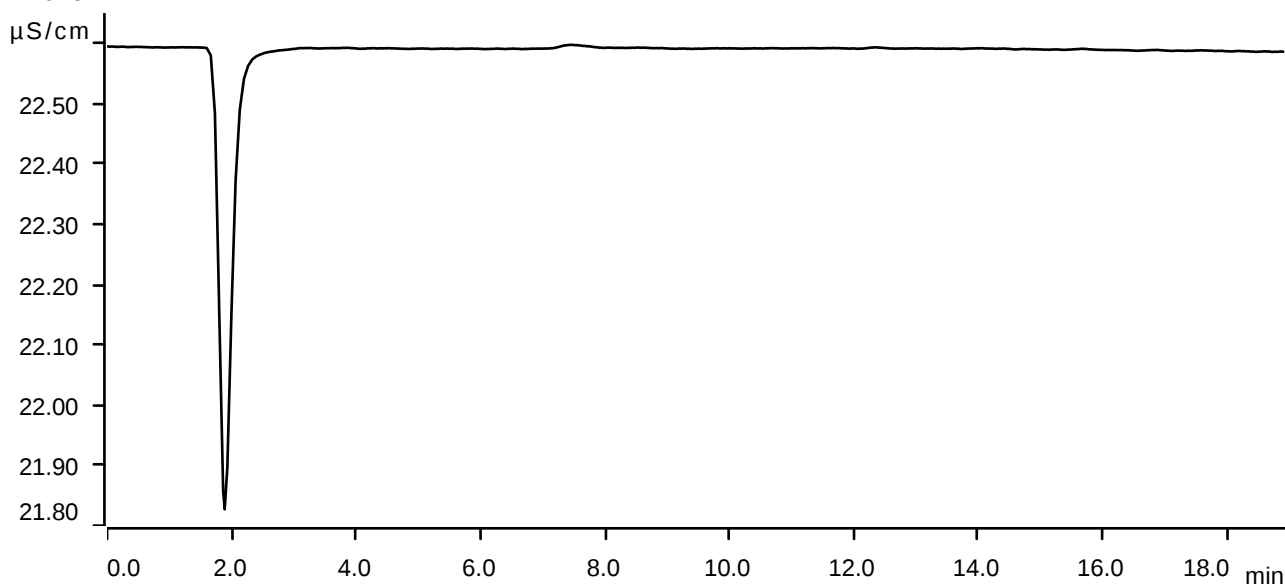
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.212	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.417	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.516	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.048	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.170	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.717	STD7	2025-05-22 13:17:57 UTC-4	used

Sample data

Ident STD1
Sample type Standard 1
Determination start 2025-05-22 11:09:38 UTC-4
Method IC1-052225
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

Anions

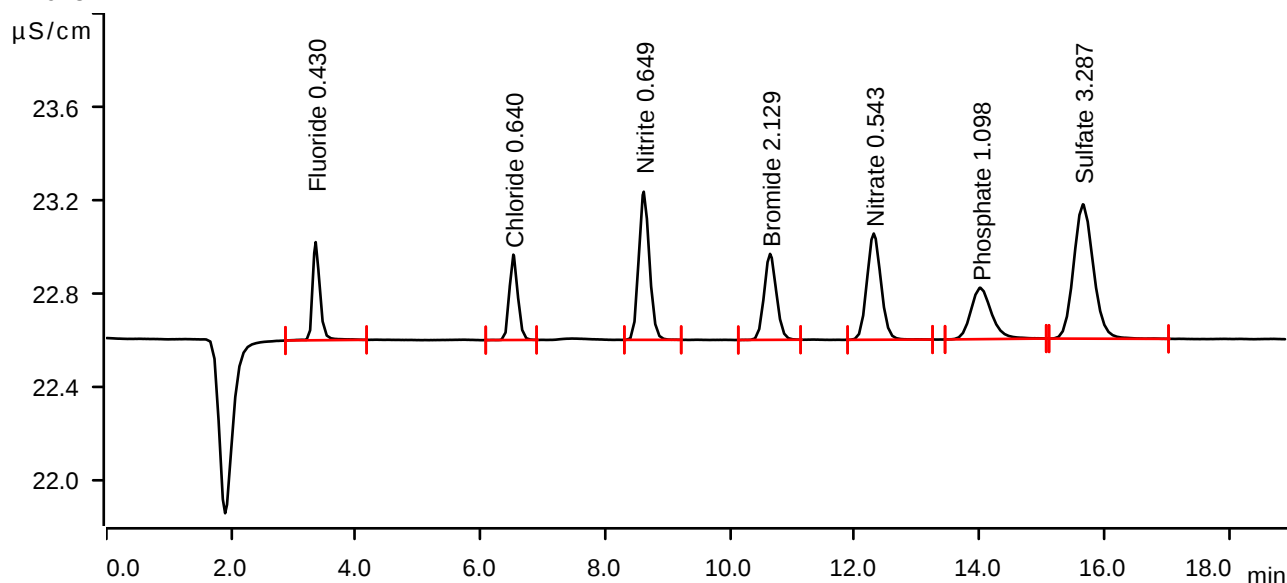
Sample data

Ident STD2
Sample type Standard 2
Determination start 2025-05-22 11:30:53 UTC-4
Method IC1-052225
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 11.77 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	0.0572	0.421	0.430	Fluoride
2	6.525	0.0574	0.366	0.640	Chloride
3	8.617	0.1264	0.636	0.649	Nitrite
4	10.642	0.0838	0.369	2.129	Bromide
5	12.303	0.1190	0.456	0.543	Nitrate
6	14.013	0.0850	0.221	1.098	Phosphate
7	15.657	0.2120	0.577	3.287	Sulfate

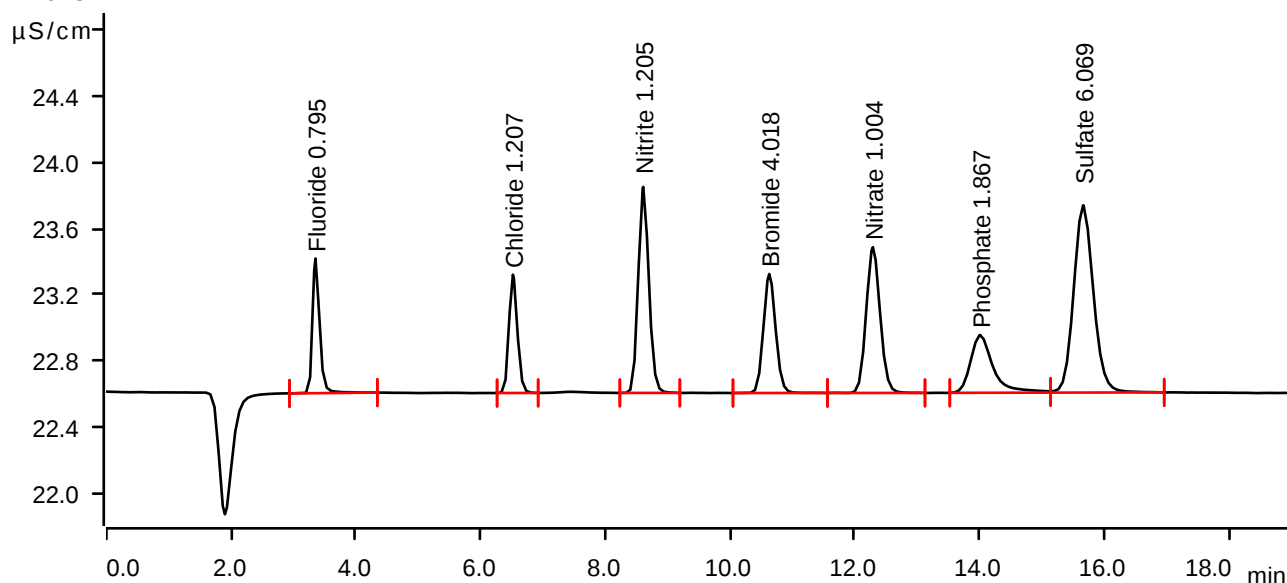
Sample data

Ident STD3
Sample type Standard 3
Determination start 2025-05-22 11:52:16 UTC-4
Method IC1-052225
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 11.71 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	3.353	0.1081	0.814	0.795	Fluoride
2	6.518	0.1121	0.716	1.207	Chloride
3	8.608	0.2475	1.247	1.205	Nitrite
4	10.628	0.1637	0.720	4.018	Bromide
5	12.290	0.2290	0.882	1.004	Nitrate
6	14.008	0.1467	0.350	1.867	Phosphate
7	15.660	0.4171	1.133	6.069	Sulfate

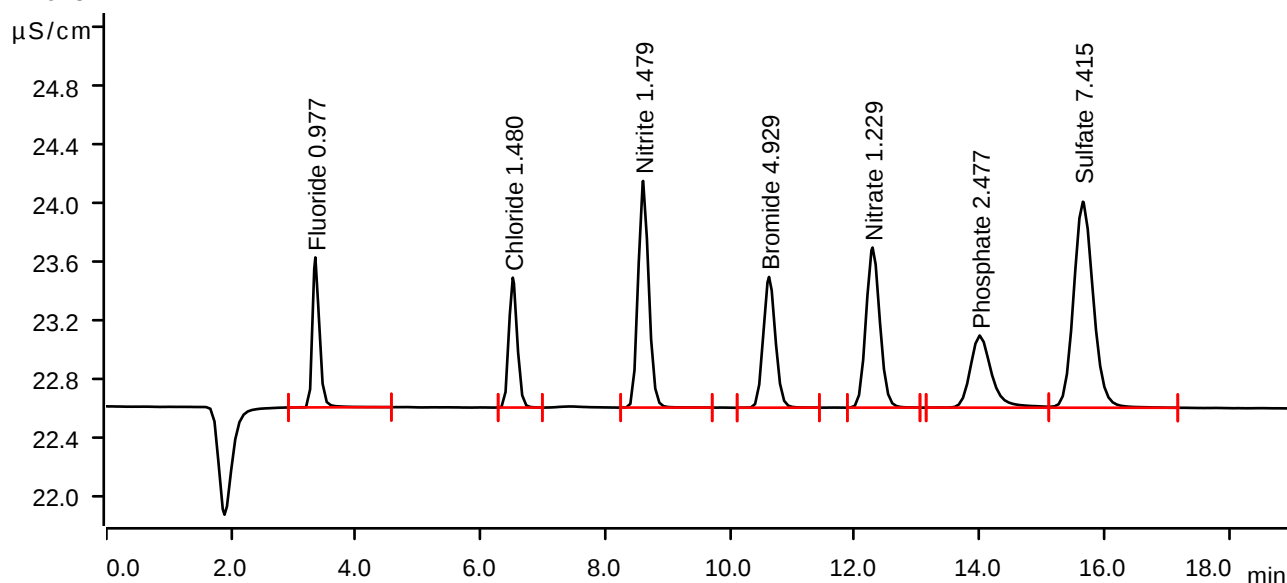
Sample data

Ident STD4
Sample type Standard 4
Determination start 2025-05-22 12:13:41 UTC-4
Method IC1-052225
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 11.71 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	3.352	0.1334	1.024	0.977	Fluoride
2	6.517	0.1384	0.888	1.480	Chloride
3	8.607	0.3073	1.549	1.479	Nitrite
4	10.625	0.2023	0.894	4.929	Bromide
5	12.285	0.2828	1.094	1.229	Nitrate
6	14.003	0.1955	0.493	2.477	Phosphate
7	15.657	0.5164	1.408	7.415	Sulfate

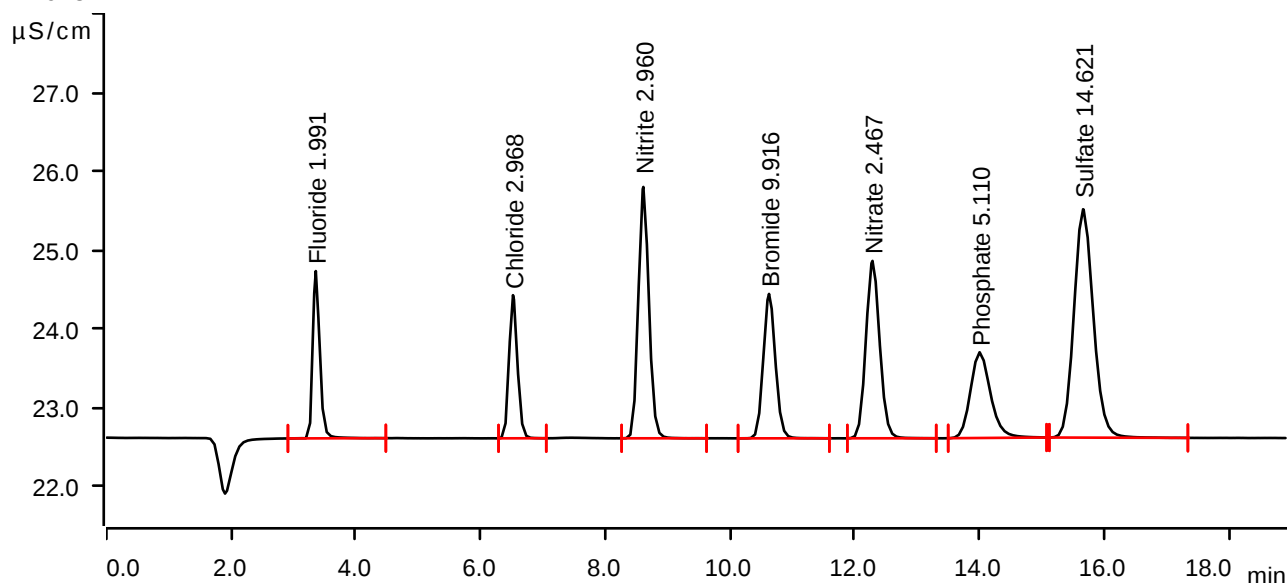
Sample data

Ident STD5
Sample type Standard 5
Determination start 2025-05-22 12:35:06 UTC-4
Method IC1-052225
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	3.358	0.2749	2.123	1.991	Fluoride
2	6.520	0.2820	1.816	2.968	Chloride
3	8.610	0.6298	3.190	2.960	Nitrite
4	10.625	0.4133	1.833	9.916	Bromide
5	12.283	0.5789	2.251	2.467	Nitrate
6	14.002	0.4067	1.087	5.110	Phosphate
7	15.660	1.0476	2.898	14.621	Sulfate

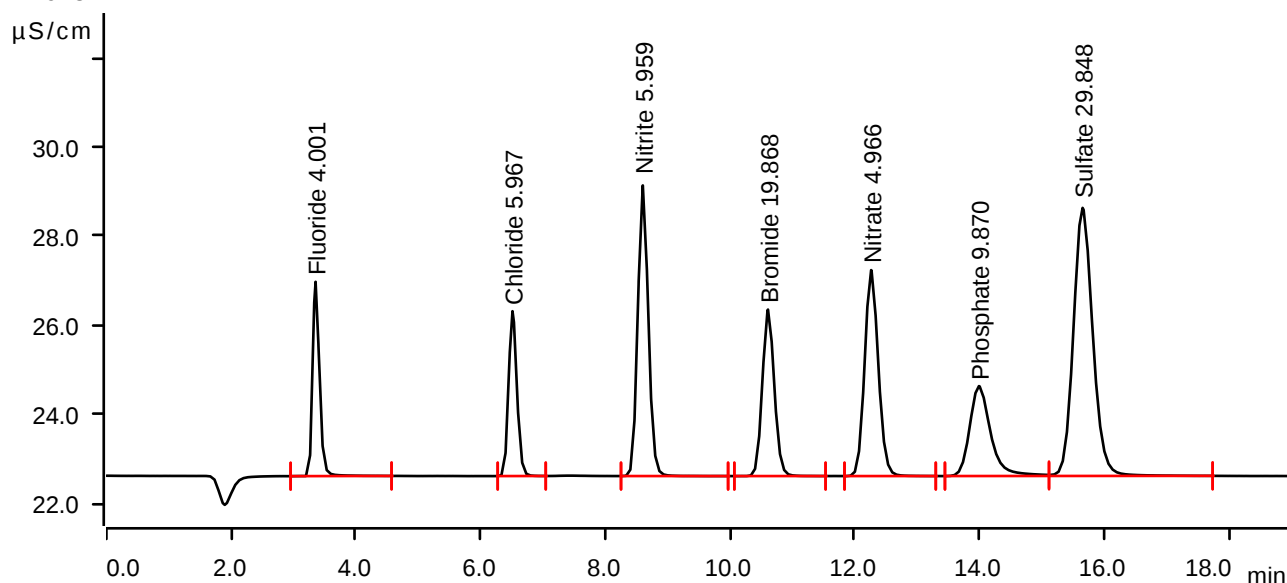
Sample data

Ident STD6
Sample type Standard 6
Determination start 2025-05-22 12:56:31 UTC-4
Method IC1-052225
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	3.355	0.5553	4.361	4.001	Fluoride
2	6.512	0.5713	3.701	5.967	Chloride
3	8.602	1.2834	6.525	5.959	Nitrite
4	10.608	0.8345	3.739	19.868	Bromide
5	12.262	1.1762	4.624	4.966	Nitrate
6	13.990	0.7883	2.019	9.870	Phosphate
7	15.652	2.1703	6.019	29.848	Sulfate

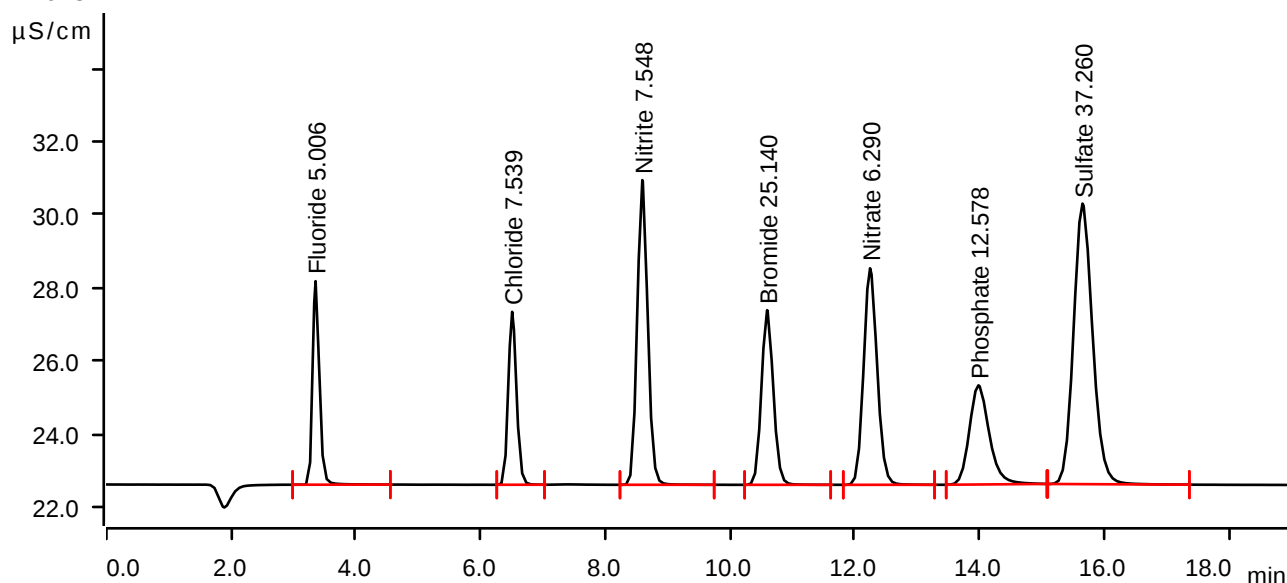
Sample data

Ident STD7
Sample type Standard 7
Determination start 2025-05-22 13:17:57 UTC-4
Method IC1-052225
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	3.355	0.6954	5.562	5.006	Fluoride
2	6.507	0.7229	4.726	7.539	Chloride
3	8.593	1.6297	8.328	7.548	Nitrite
4	10.593	1.0576	4.774	25.140	Bromide
5	12.245	1.4927	5.918	6.290	Nitrate
6	13.982	1.0054	2.711	12.578	Phosphate
7	15.650	2.7168	7.668	37.260	Sulfate

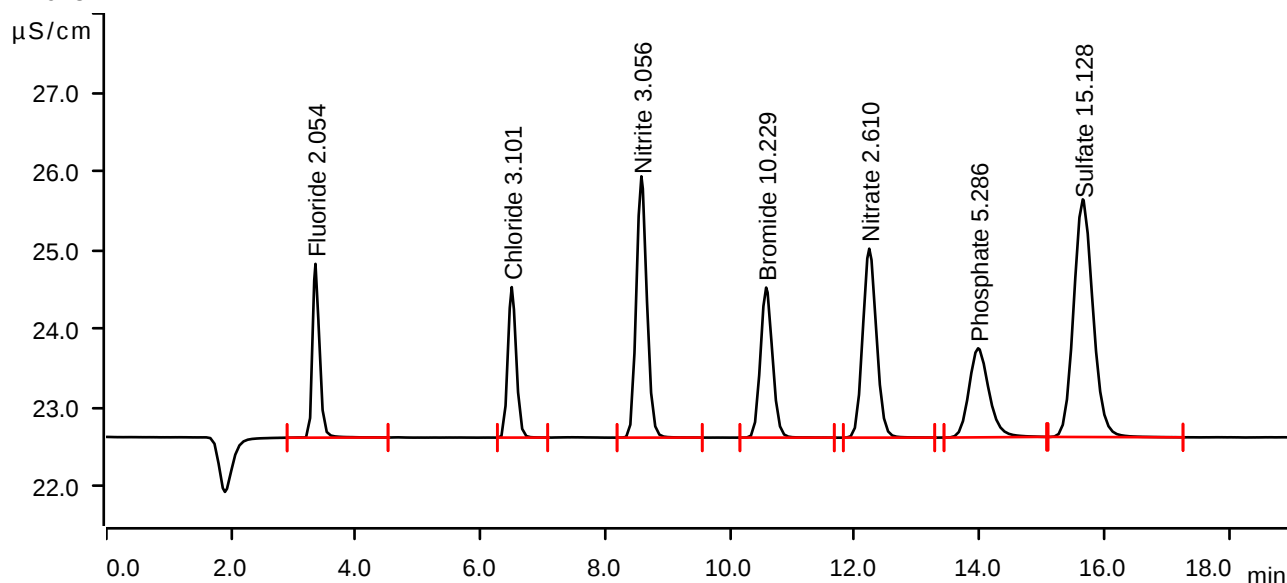
Sample data

Ident ICV
Sample type Check standard 1
Determination start 2025-05-22 13:39:25 UTC-4
Method IC1-052225
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



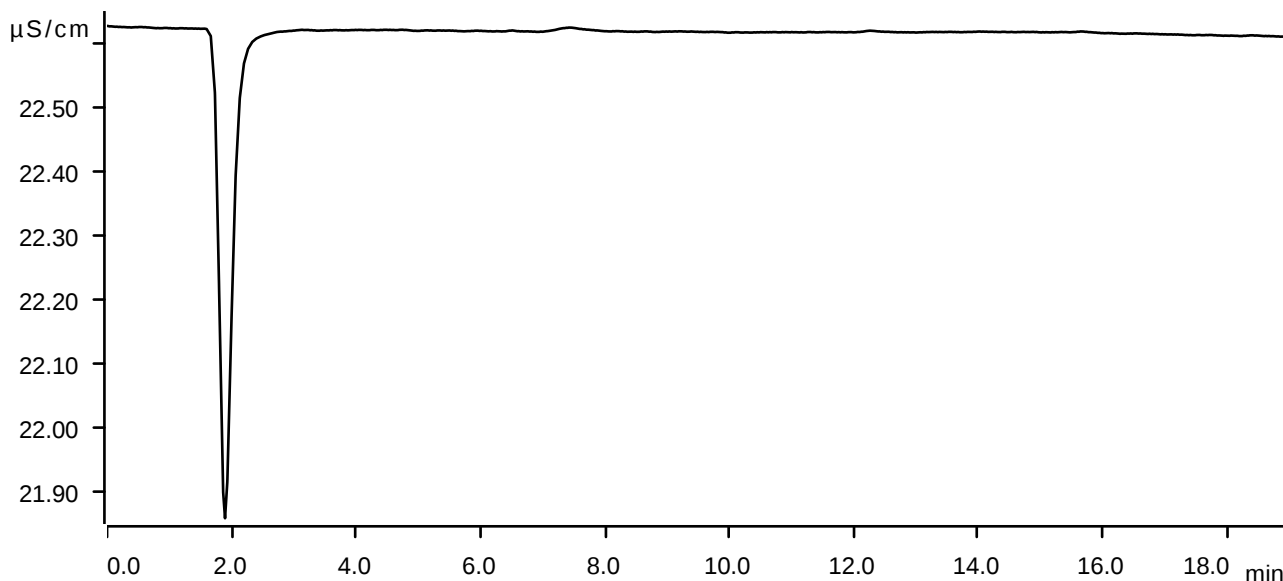
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.353	0.2837	2.205	2.054	Fluoride
2	6.500	0.2948	1.910	3.101	Chloride
3	8.578	0.6509	3.316	3.056	Nitrite
4	10.578	0.4266	1.904	10.229	Bromide
5	12.232	0.6129	2.398	2.610	Nitrate
6	13.977	0.4208	1.130	5.286	Phosphate
7	15.655	1.0850	3.016	15.128	Sulfate

Sample data

Ident ICB
Sample type Sample
Determination start 2025-05-22 14:22:21 UTC-4
Method IC1-052225
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

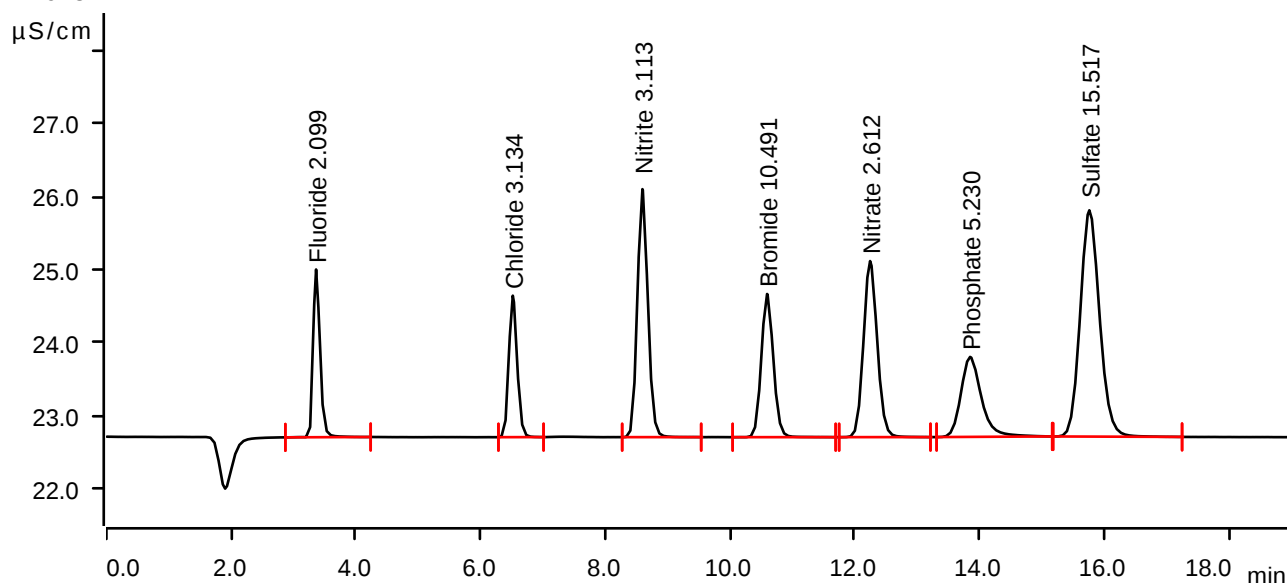
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-06-03 14:34:19 UTC-4
Method IC1-052225
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



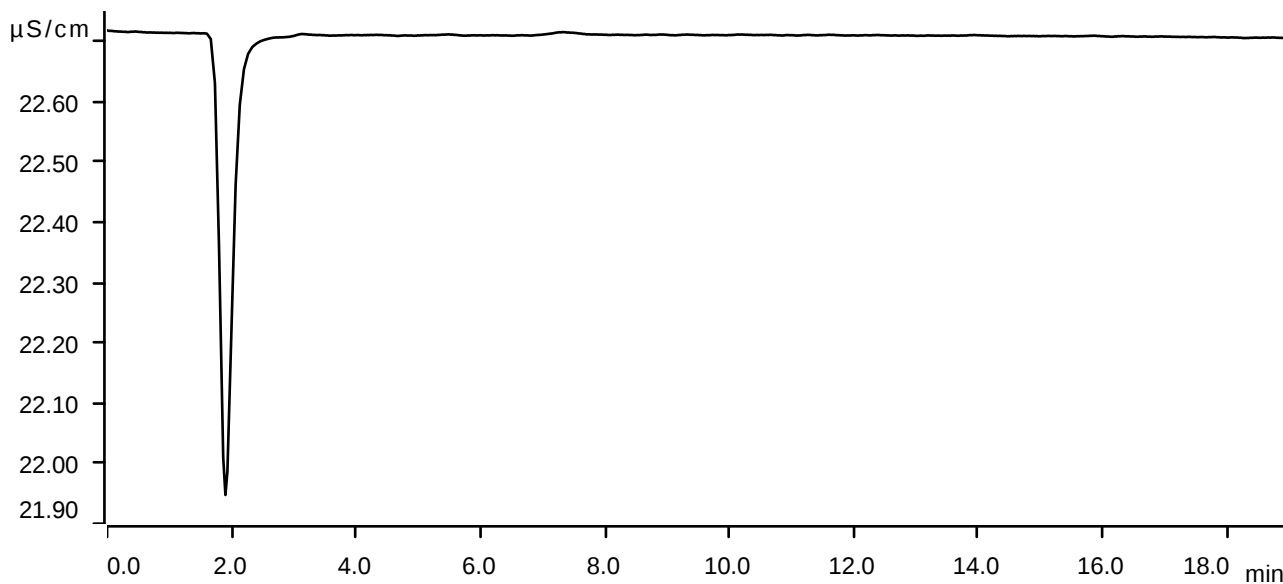
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.363	0.2899	2.292	2.099	Fluoride
2	6.517	0.2980	1.933	3.134	Chloride
3	8.595	0.6632	3.389	3.113	Nitrite
4	10.593	0.4377	1.957	10.491	Bromide
5	12.245	0.6134	2.406	2.612	Nitrate
6	13.848	0.4163	1.093	5.230	Phosphate
7	15.760	1.1137	3.093	15.517	Sulfate

Sample data

Ident CCB
Sample type Sample
Determination start 2025-06-03 14:55:49 UTC-4
Method IC1-052225
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

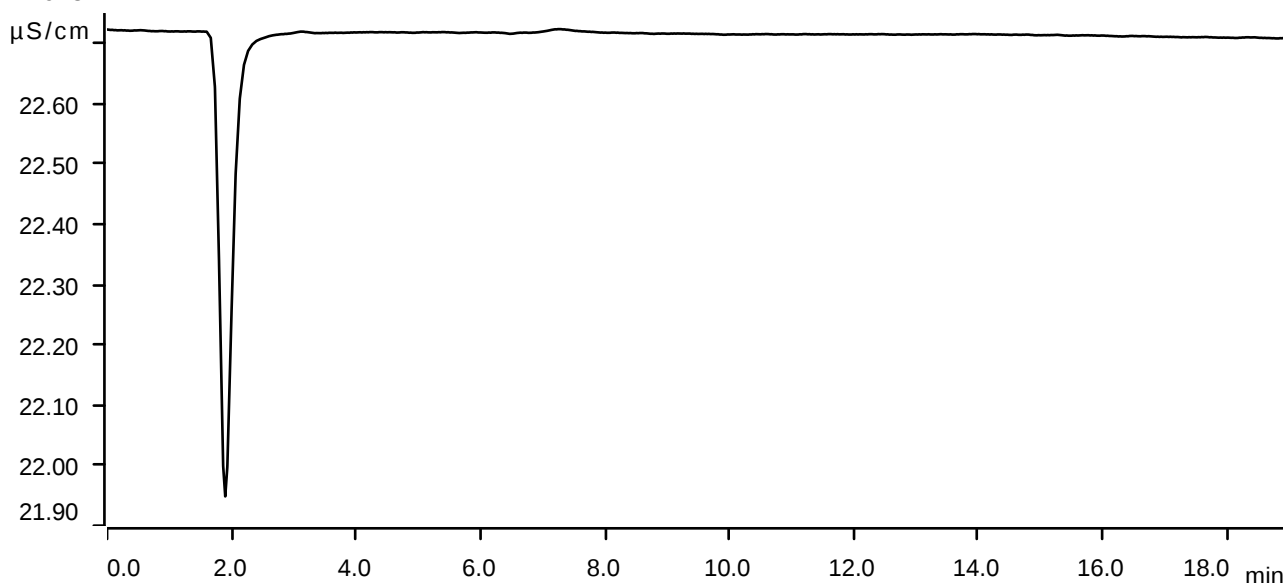
Anions

Sample data

Ident LB135991BLW
Sample type Sample
Determination start 2025-06-03 15:17:19 UTC-4
Method IC1-052225
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

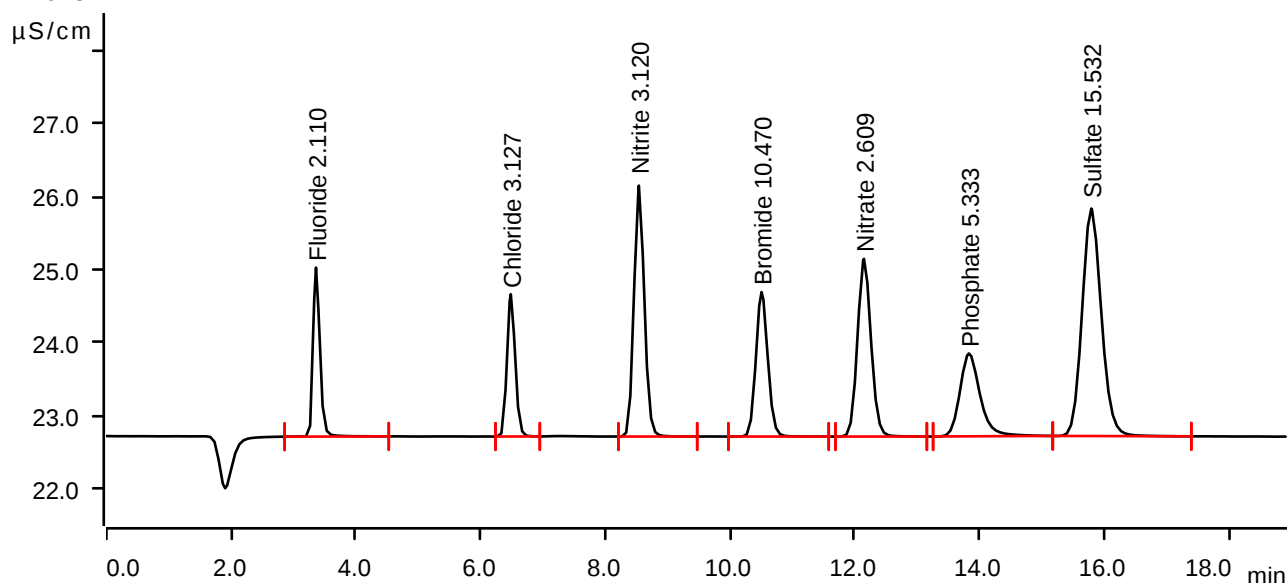
Sample data

Ident LB135991BSW
Sample type Check standard 1
Determination start 2025-06-03 15:38:49 UTC-4
Method IC1-052225
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	0.2915	2.309	2.110	Fluoride
2	6.485	0.2973	1.944	3.127	Chloride
3	8.538	0.6647	3.429	3.120	Nitrite
4	10.505	0.4368	1.975	10.470	Bromide
5	12.147	0.6127	2.429	2.609	Nitrate
6	13.830	0.4246	1.132	5.333	Phosphate
7	15.792	1.1148	3.109	15.532	Sulfate

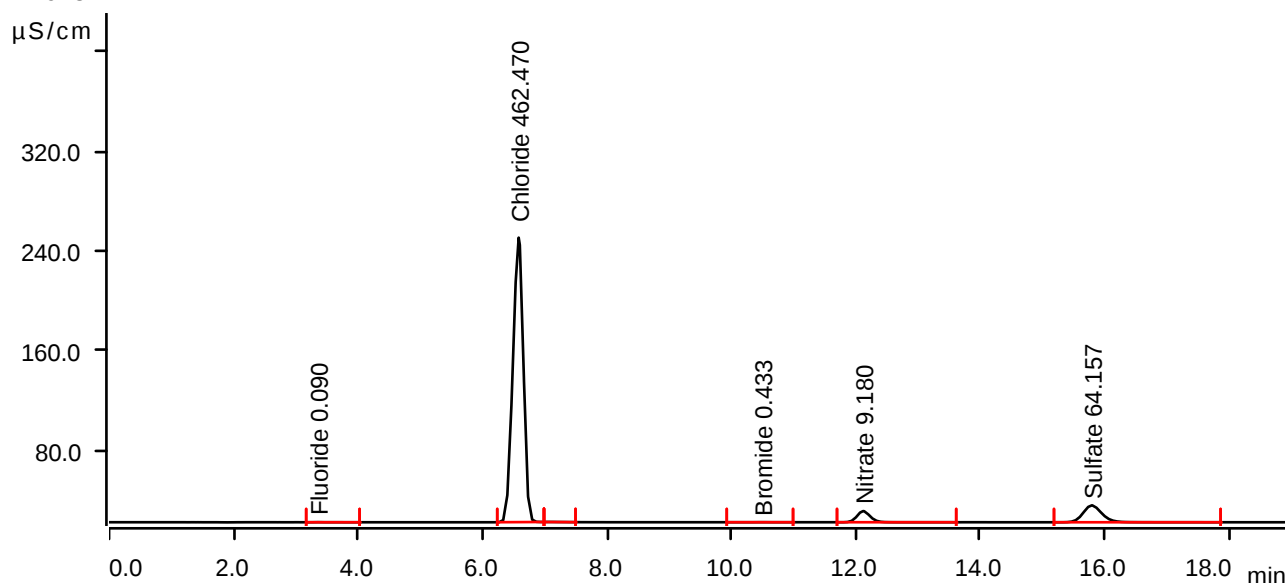
Sample data

Ident Q2189-01
Sample type Sample
Determination start 2025-06-03 16:00:21 UTC-4
Method IC1-052225
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 11.77 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	3.353	0.0097	0.071	0.090	Fluoride
2	6.583	44.6089	227.716	462.470	Chloride
3	7.077	0.0104	0.035	invalid	
4	10.495	0.0121	0.052	0.433	Bromide
5	12.118	2.1835	8.940	9.180	Nitrate
6	15.792	4.6999	13.519	64.157	Sulfate

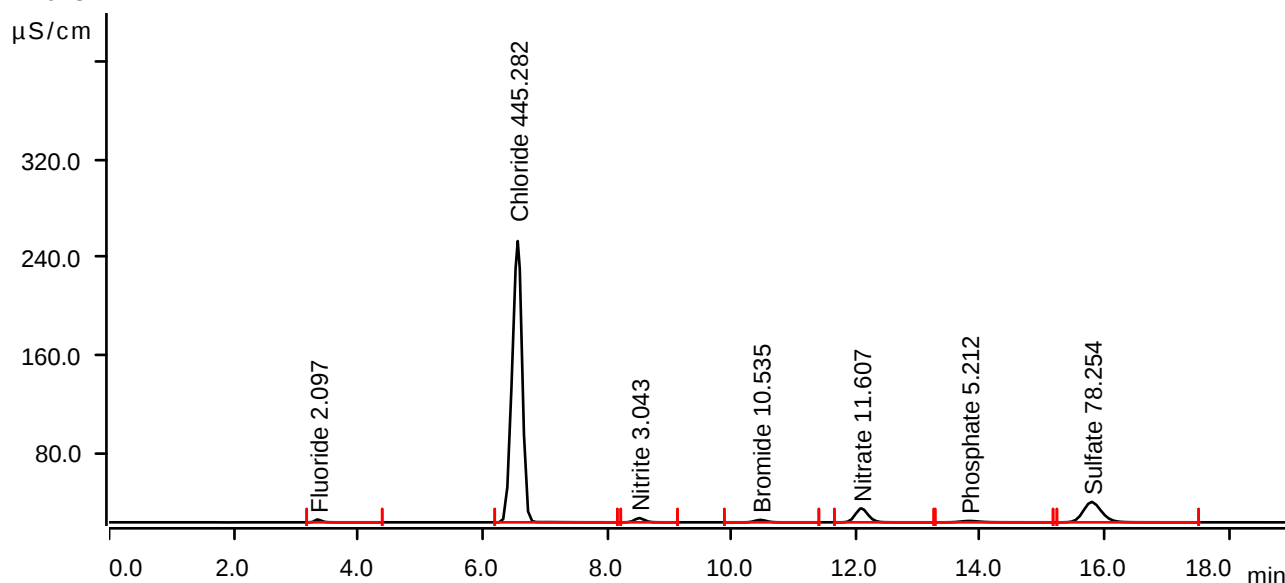
Sample data

Ident Q2189-01MS
Sample type Sample
Determination start 2025-06-03 16:21:54 UTC-4
Method IC1-052225
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	3.355	0.2898	2.295	2.097	Fluoride
2	6.568	42.9509	230.631	445.282	Chloride
3	8.522	0.6481	3.425	3.043	Nitrite
4	10.467	0.4395	2.022	10.535	Bromide
5	12.088	2.7638	11.442	11.607	Nitrate
6	13.822	0.4149	1.108	5.212	Phosphate
7	15.790	5.7393	16.663	78.254	Sulfate

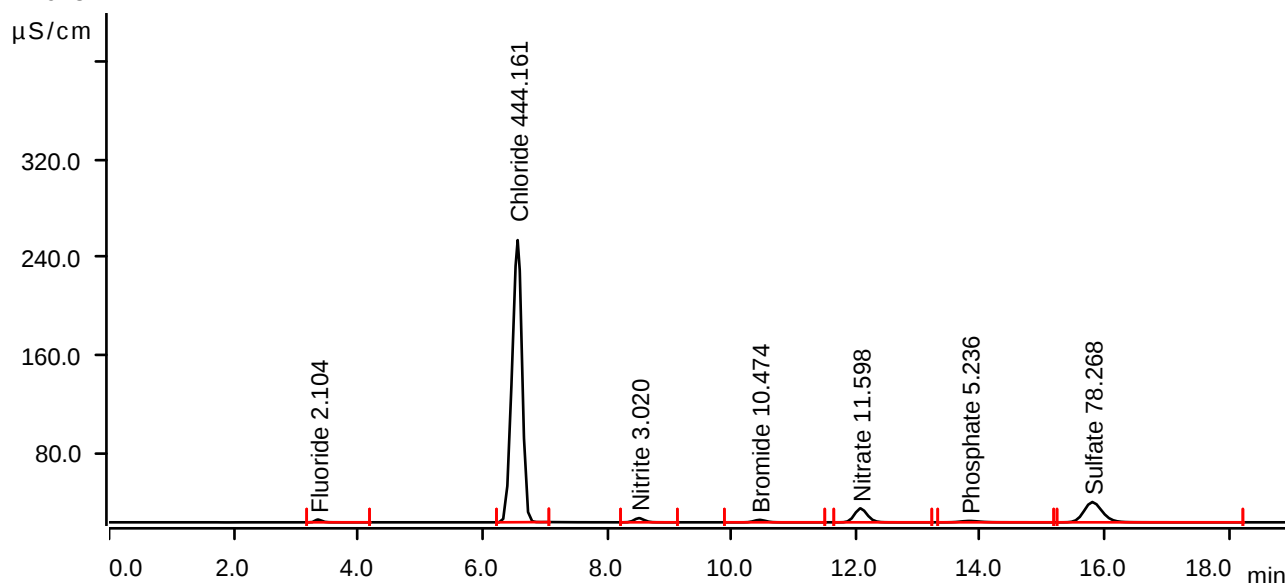
Sample data

Ident Q2189-01MSD
Sample type Sample
Determination start 2025-06-03 16:43:27 UTC-4
Method IC1-052225
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	3.358	0.2907	2.294	2.104	Fluoride
2	6.567	42.8427	231.316	444.161	Chloride
3	8.515	0.6431	3.399	3.020	Nitrite
4	10.455	0.4369	2.008	10.474	Bromide
5	12.077	2.7617	11.431	11.598	Nitrate
6	13.825	0.4168	1.113	5.236	Phosphate
7	15.802	5.7403	16.631	78.268	Sulfate

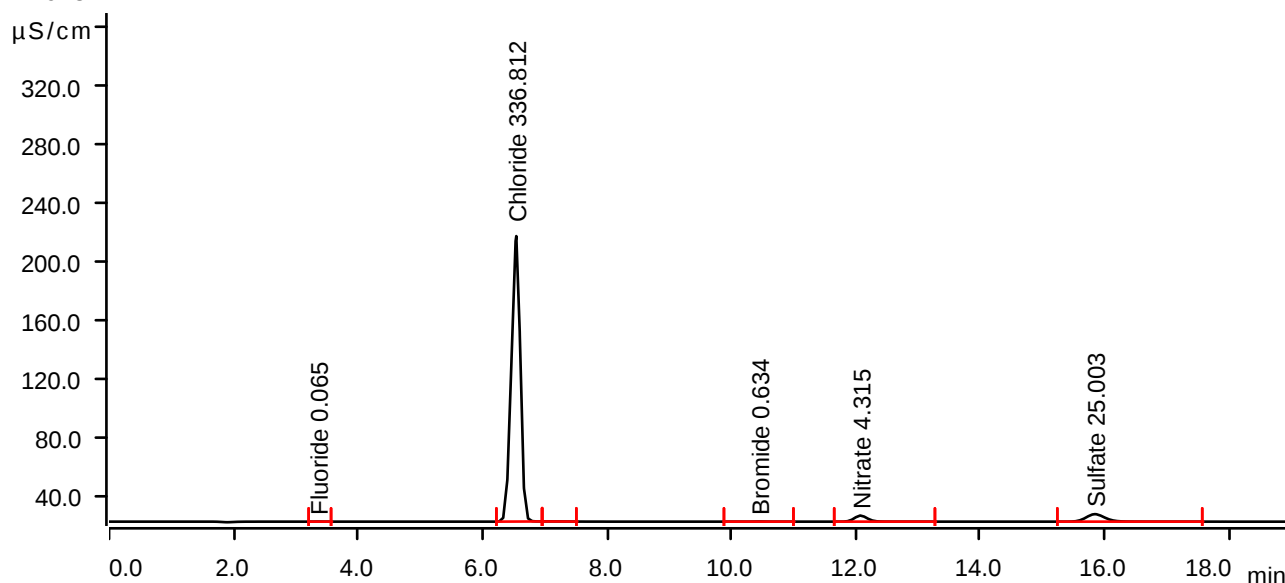
Sample data

Ident Q2189-02
Sample type Sample
Determination start 2025-06-03 17:05:00 UTC-4
Method IC1-052225
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	3.358	0.0063	0.050	0.065	Fluoride
2	6.545	32.4870	195.058	336.812	Chloride
3	7.078	0.0093	0.030	invalid	
4	10.448	0.0206	0.090	0.634	Bromide
5	12.075	1.0205	4.136	4.315	Nitrate
6	15.842	1.8131	5.123	25.003	Sulfate

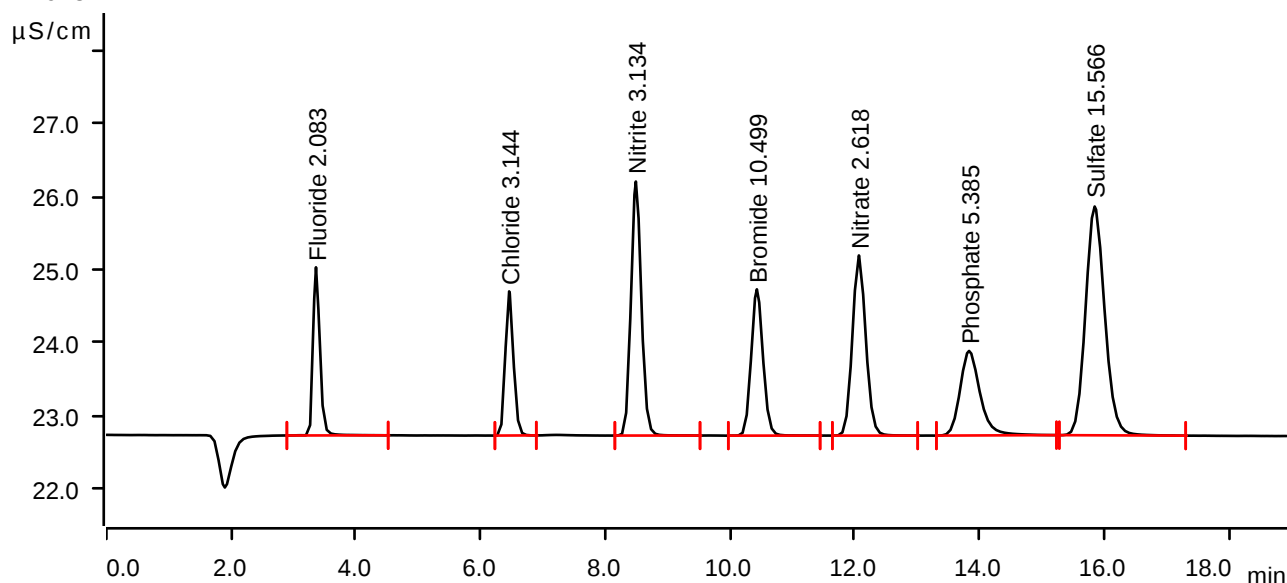
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-06-03 17:26:35 UTC-4
Method IC1-052225
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



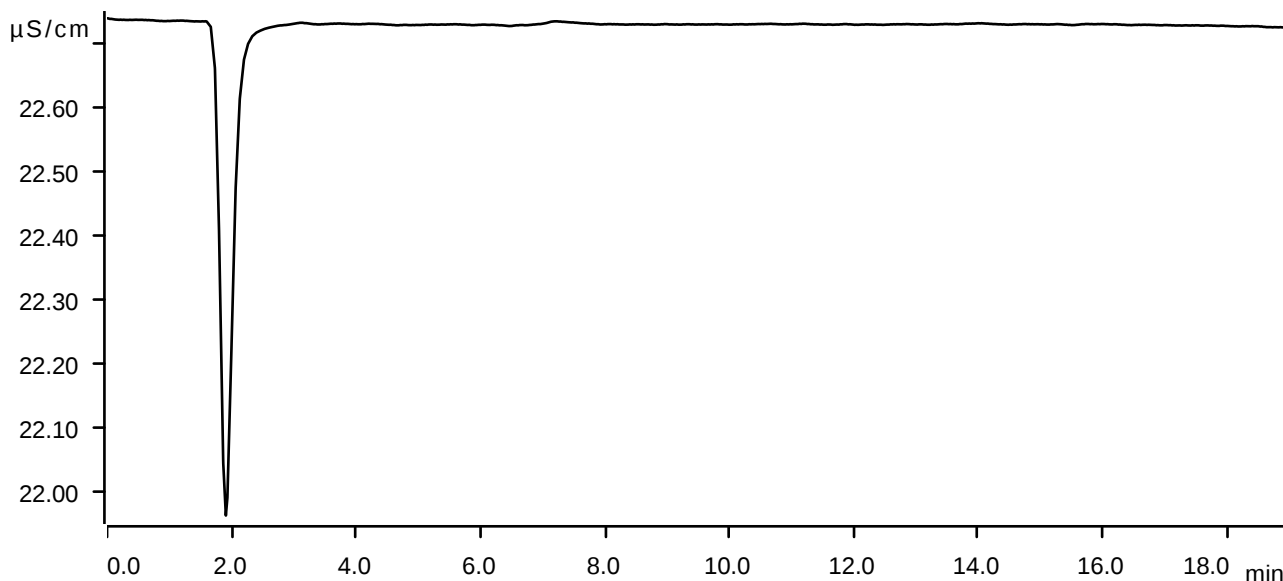
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.362	0.2878	2.297	2.083	Fluoride
2	6.458	0.2989	1.969	3.144	Chloride
3	8.490	0.6679	3.471	3.134	Nitrite
4	10.430	0.4380	2.000	10.499	Bromide
5	12.065	0.6148	2.462	2.618	Nitrate
6	13.832	0.4288	1.155	5.385	Phosphate
7	15.845	1.1173	3.127	15.566	Sulfate

Sample data

Ident CCB
Sample type Sample
Determination start 2025-06-03 17:48:04 UTC-4
Method IC1-052225
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

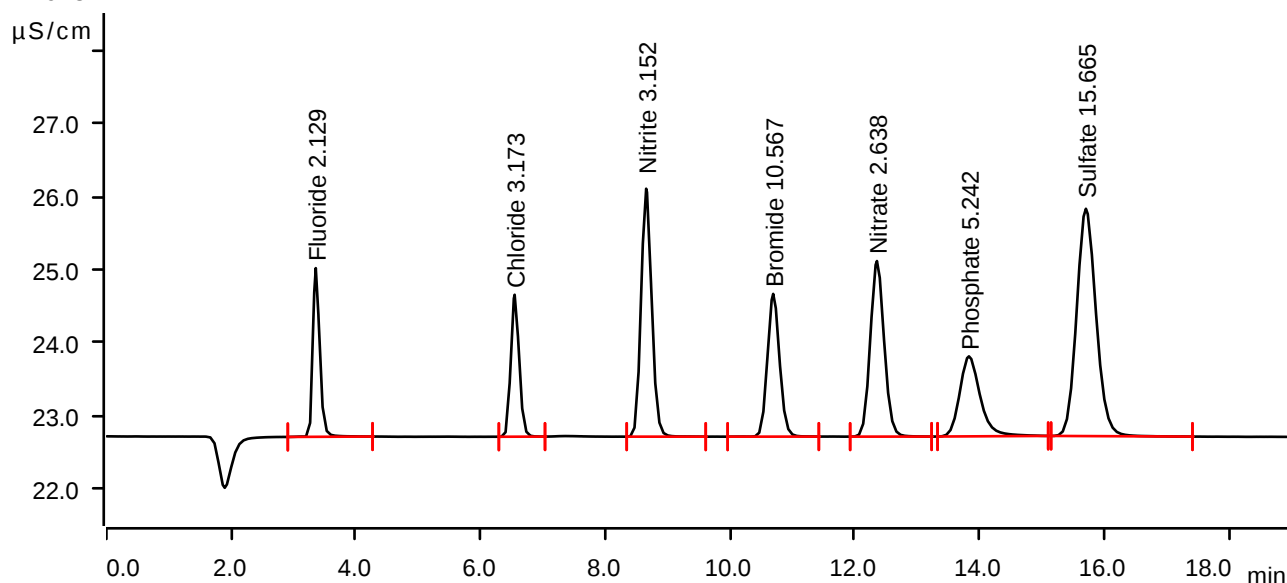
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-06-04 10:15:52 UTC-4
Method IC1-052225
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 12.22 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



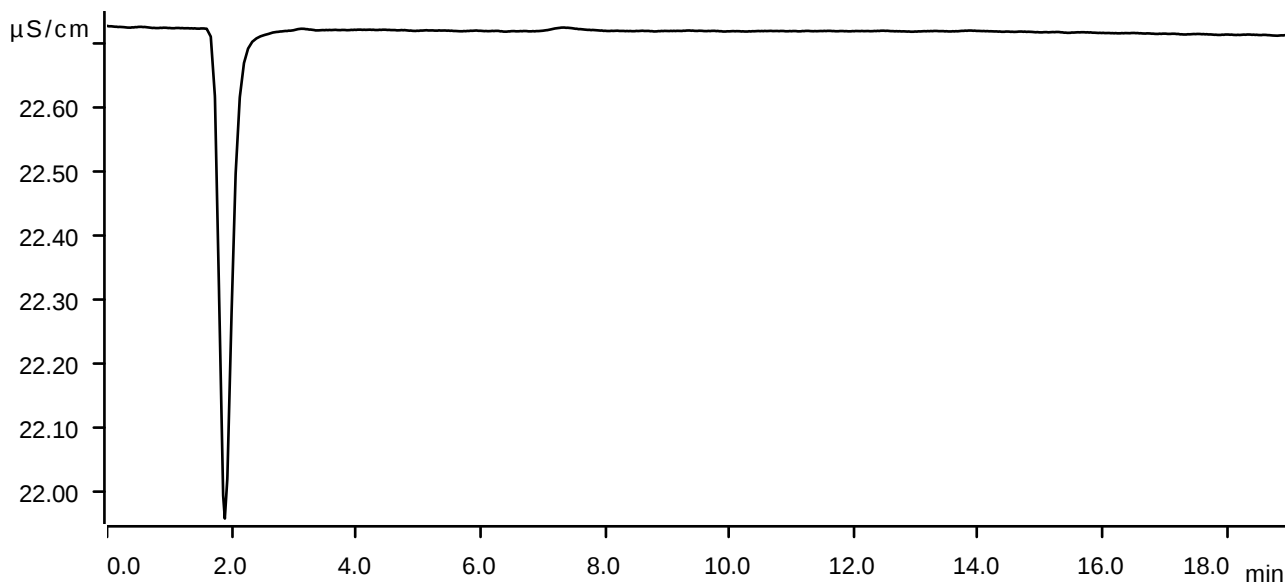
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.358	0.2942	2.305	2.129	Fluoride
2	6.547	0.3018	1.940	3.173	Chloride
3	8.655	0.6717	3.389	3.152	Nitrite
4	10.692	0.4409	1.951	10.567	Bromide
5	12.355	0.6197	2.400	2.638	Nitrate
6	13.830	0.4173	1.094	5.242	Phosphate
7	15.705	1.1246	3.107	15.665	Sulfate

Sample data

Ident CCB
Sample type Sample
Determination start 2025-06-04 10:37:22 UTC-4
Method IC1-052225
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

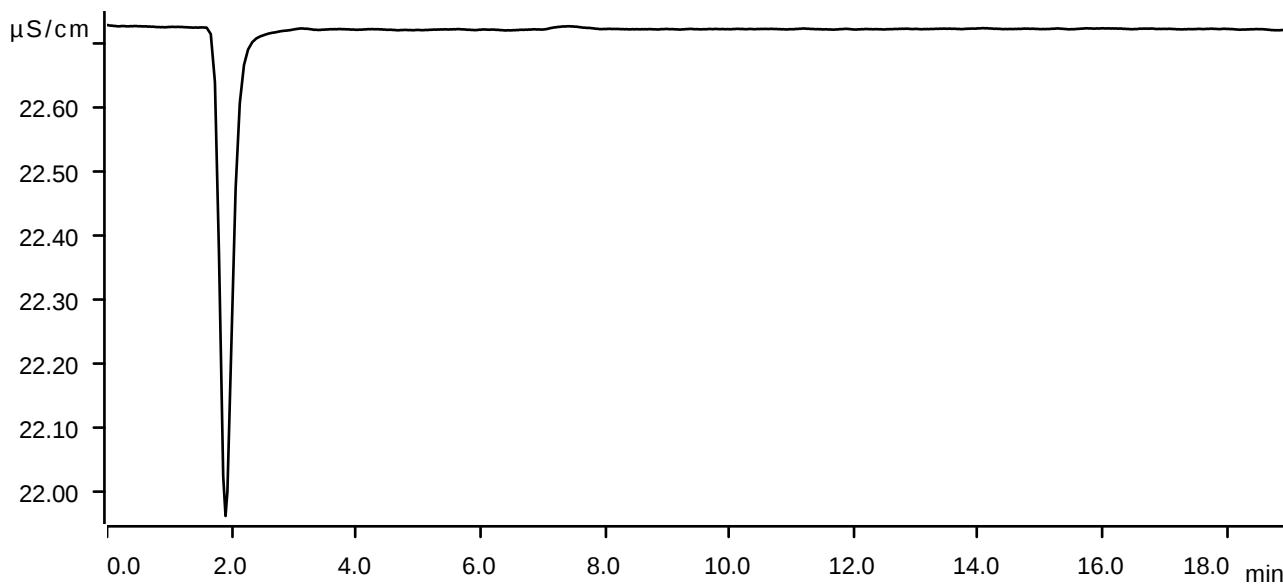
Anions

Sample data

Ident LB135991BLW2
Sample type Sample
Determination start 2025-06-04 10:58:52 UTC-4
Method IC1-052225
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

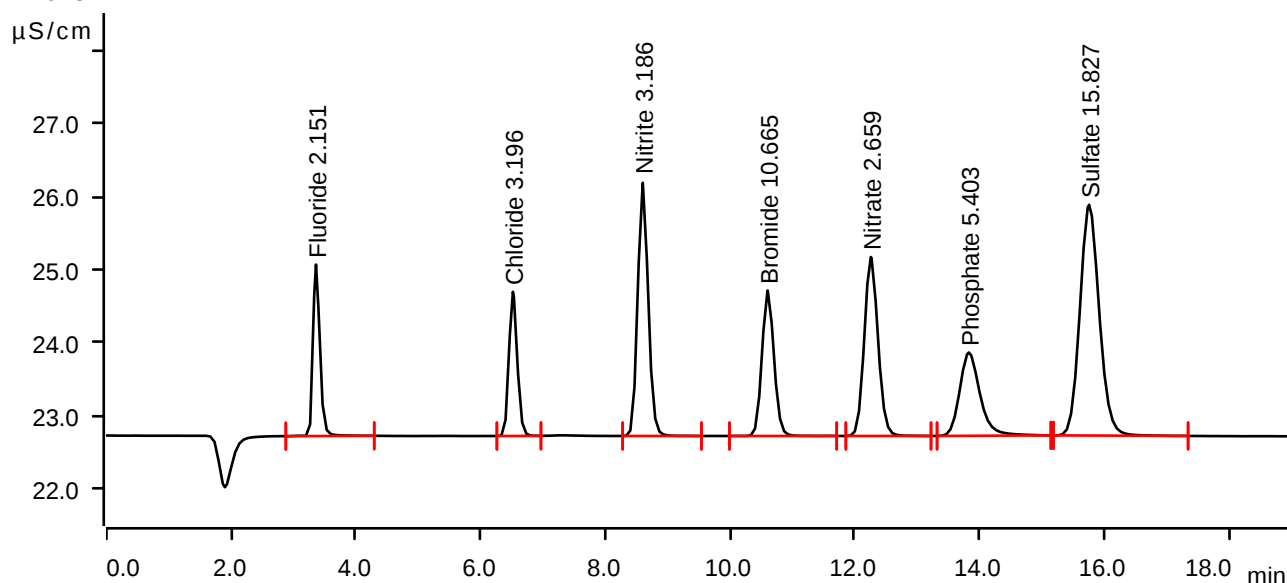
Sample data

Ident LB135991BSW2
Sample type Check standard 1
Determination start 2025-06-04 11:20:23 UTC-4
Method IC1-052225
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 11.71 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	0.2972	2.343	2.151	Fluoride
2	6.518	0.3040	1.970	3.196	Chloride
3	8.600	0.6791	3.459	3.186	Nitrite
4	10.603	0.4450	1.988	10.665	Bromide
5	12.257	0.6248	2.446	2.659	Nitrate
6	13.828	0.4302	1.139	5.403	Phosphate
7	15.757	1.1366	3.153	15.827	Sulfate

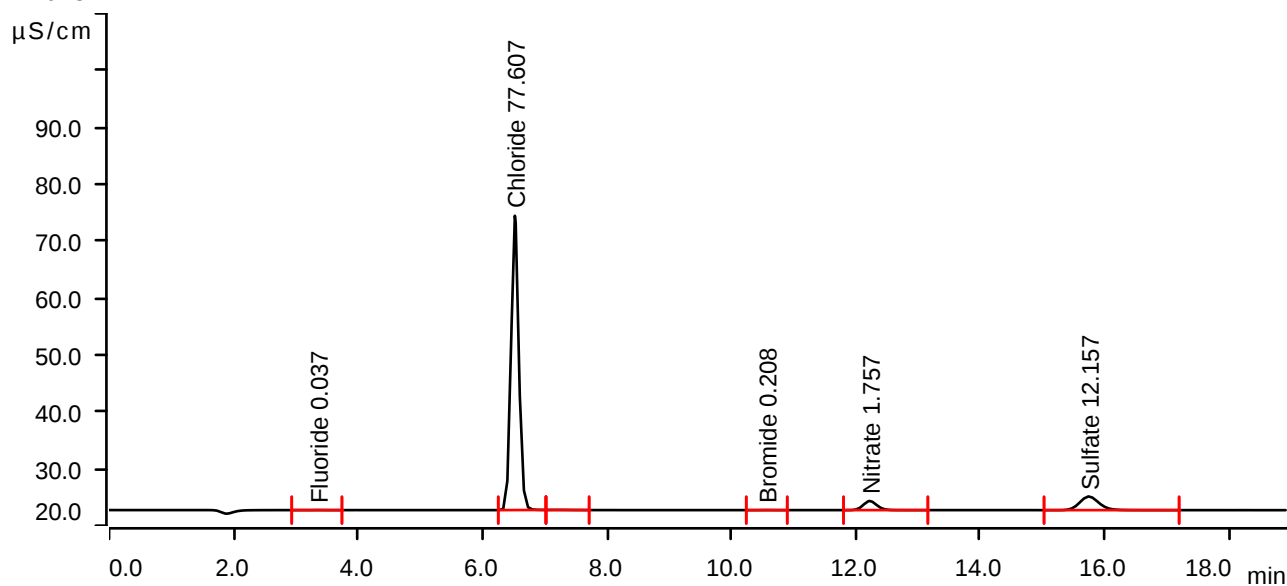
Sample data

Ident Q2189-01DLX5
Sample type Sample
Determination start 2025-06-04 11:41:55 UTC-4
Method IC1-052225
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 11.77 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	3.355	0.0024	0.014	0.037	Fluoride
2	6.522	7.4822	51.710	77.607	Chloride
3	7.205	0.0043	0.013	invalid	
4	10.567	0.0025	0.011	0.208	Bromide
5	12.223	0.4091	1.602	1.757	Nitrate
6	15.743	0.8659	2.397	12.157	Sulfate

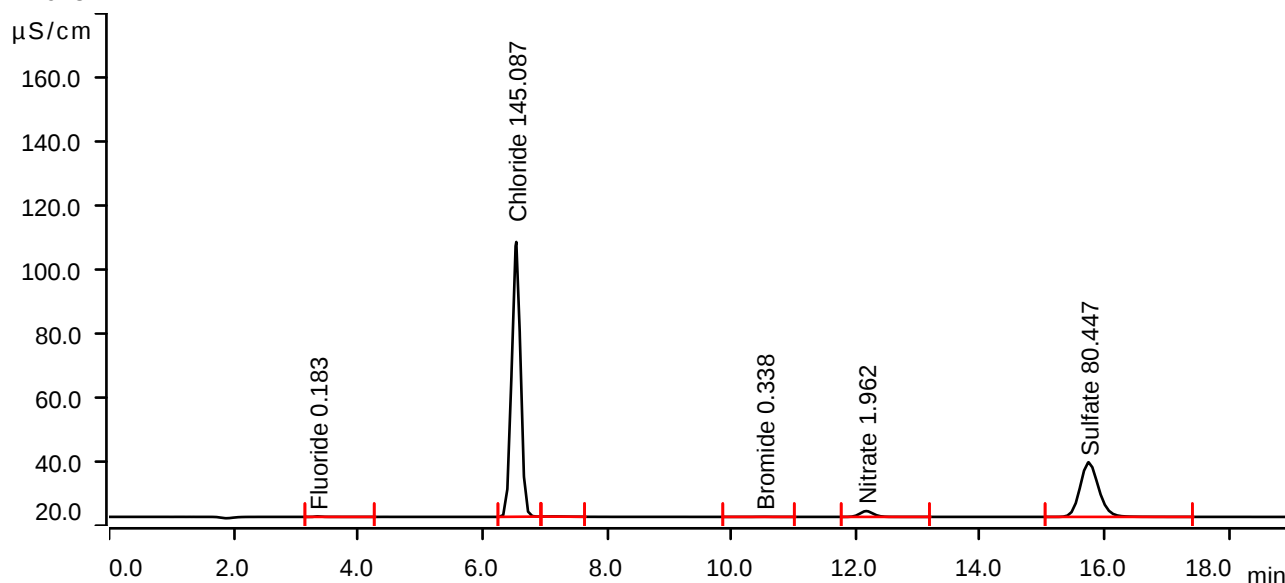
Sample data

Ident Q2202-01
Sample type Sample
Determination start 2025-06-04 12:46:30 UTC-4
Method IC1-052225
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 12.16 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	3.352	0.0227	0.158	0.183	Fluoride
2	6.545	13.9919	85.826	145.087	Chloride
3	7.117	0.0189	0.056	invalid	
4	10.527	0.0080	0.035	0.338	Bromide
5	12.168	0.4580	1.818	1.962	Nitrate
6	15.742	5.9009	17.058	80.447	Sulfate

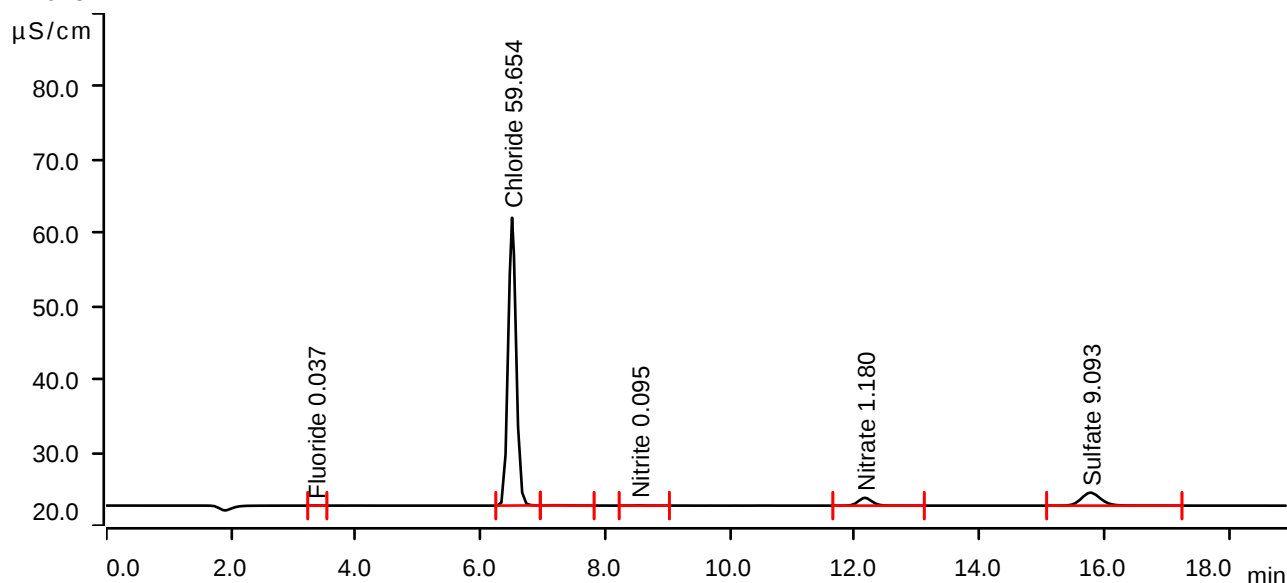
Sample data

Ident Q2202-05
Sample type Sample
Determination start 2025-06-04 13:08:03 UTC-4
Method IC1-052225
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	3.357	0.0024	0.020	0.037	Fluoride
2	6.505	5.7503	39.327	59.654	Chloride
3	7.183	0.0105	0.029	invalid	
4	8.543	0.0057	0.028	0.095	Nitrite
5	12.162	0.2711	1.067	1.180	Nitrate
6	15.778	0.6401	1.774	9.093	Sulfate

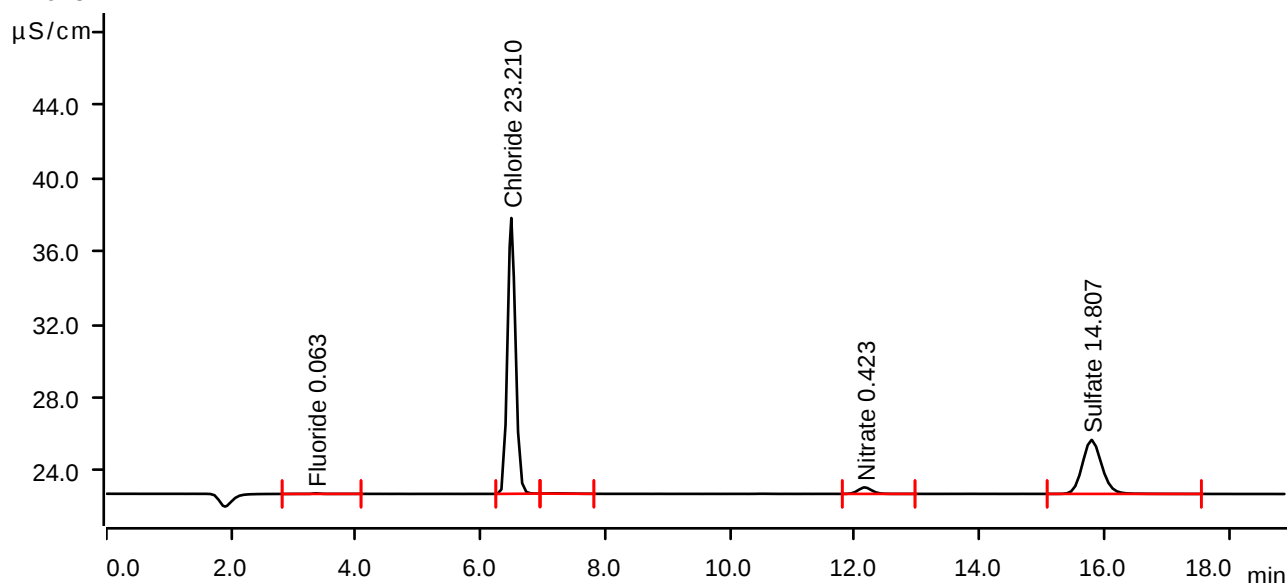
Sample data

Ident Q2202-01DLX5
Sample type Sample
Determination start 2025-06-04 13:29:36 UTC-4
Method IC1-052225
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	3.358	0.0060	0.033	0.063	Fluoride
2	6.493	2.2347	15.075	23.210	Chloride
3	7.227	0.0071	0.019	invalid	
4	12.158	0.0903	0.354	0.423	Nitrate
5	15.795	1.0613	2.949	14.807	Sulfate

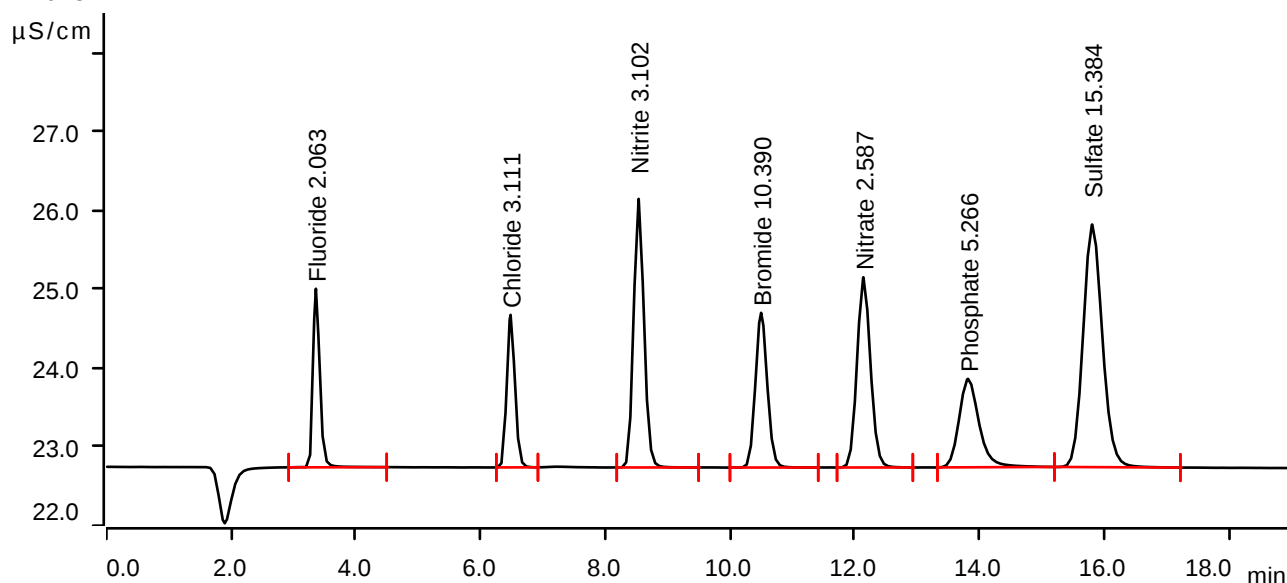
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-06-04 13:51:08 UTC-4
Method IC1-052225
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



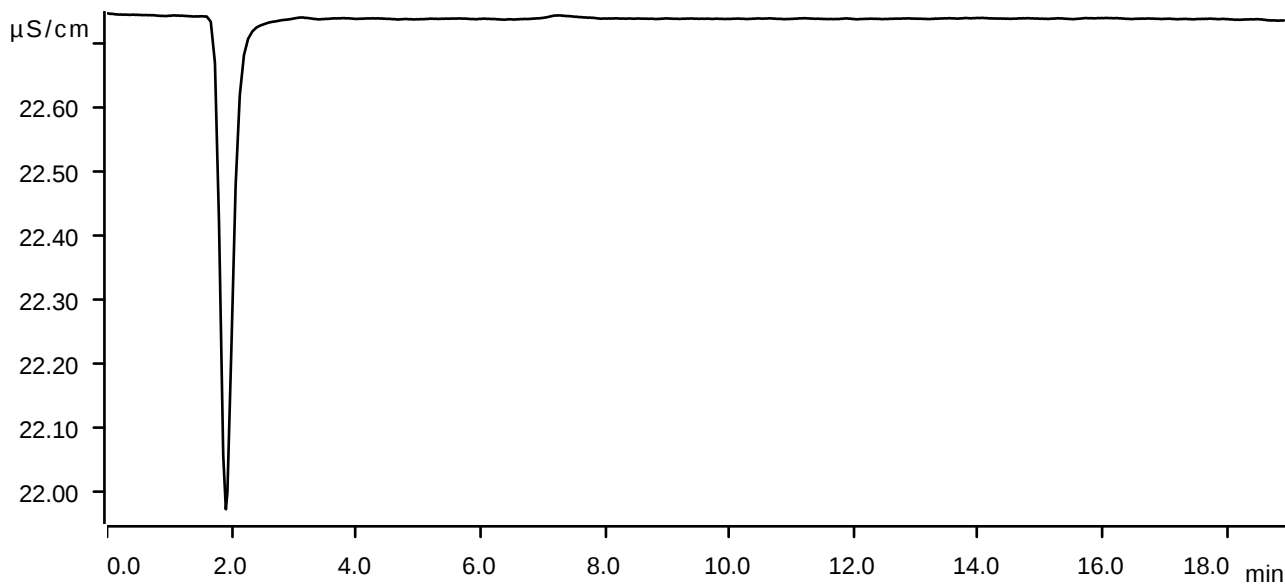
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.360	0.2850	2.266	2.063	Fluoride
2	6.482	0.2958	1.935	3.111	Chloride
3	8.533	0.6610	3.408	3.102	Nitrite
4	10.498	0.4334	1.963	10.390	Bromide
5	12.138	0.6076	2.414	2.587	Nitrate
6	13.815	0.4191	1.123	5.266	Phosphate
7	15.807	1.1039	3.079	15.384	Sulfate

Sample data

Ident CCB
Sample type Sample
Determination start 2025-06-04 14:12:38 UTC-4
Method IC1-052225
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

TOTAL Dissolved Solids - SM2540C

Run Number: LB136008

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 06/05/2025

BalanceID: WC SC-6

Filter ID: 17416528

EMPTY DISH	TEMP IN:	104 °C	06/04/2025	11:00	EMPTY DISH	TEMP OUT:	104 °C	06/04/2025	12:00	OvenID:	WC OVEN-1	Thermo ID:	WET IVEN-1
	TEMP1 IN:	104 °C	06/04/2025	12:30		TEMP1 OUT:	104 °C	06/04/2025	13:30	OvenID1:	WC OVEN-1	Thermo ID1:	WET OVEN#1
	TEMP2 IN:	104 °C	06/04/2025	17:00		TEMP2 OUT:	103 °C	06/05/2025	08:00	OvenID2:	WC OVEN-2	Thermo ID2:	WET OVEN#2
	TEMP3 IN:	180 °C	06/05/2025	08:02		TEMP3 OUT:	180 °C	06/05/2025	10:00	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	LB136008BL	LB136008BL	859.6331	859.6331	100	859.6331	859.6331	859.6331	0.0000	0
2	LB136008BS	LB136008BS	101.2537	101.2537	100	101.2632	101.2632	101.2632	0.0095	95
3	Q2189-01	MW-7-20250602	106.1427	106.1427	100	106.2312	106.2312	106.2312	0.0885	885
4	Q2189-02	MW-8-20250602	110.2189	110.2189	100	110.2751	110.2751	110.2751	0.0562	562
5	Q2189-02DUP	MW-8-20250602DUP	142.7895	142.7895	100	142.8438	142.8438	142.8438	0.0543	543
6	Q2196-01	TOWER-1	143.5640	143.5640	100	143.7939	143.7939	143.7939	0.2299	2299
7	Q2196-02	TOWER-2	90.3206	90.3206	100	90.3865	90.3865	90.3865	0.0659	659
8	Q2202-01	MW-9-20250603	152.7714	152.7714	100	152.8063	152.8063	152.8063	0.0349	349
9	Q2202-05	MW-1A-20250603	151.2345	151.2345	100	151.2398	151.2398	151.2398	0.0053	53

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)

$$\text{Weight (g)} = C - B$$

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

WORKLIST(Hardcopy Internal Chain)

136008

WorkList Name : rds q2202

WorkList ID : 189929

Department : Wet-Chemistry

Date : 06-04-2025 12:04:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2189-01	D MW-7-20250602	Water	TDS	Cool 4 deg C	PARS02	L31	06/02/2025	SM2540 C
Q2189-02	D MW-8-20250602	Water	TDS	Cool 4 deg C	PARS02	L31	06/02/2025	SM2540 C
Q2196-01	C TOWER-1	Water	TDS	Cool 4 deg C	PSEG04	N13	06/03/2025	SM2540 C
Q2196-02	C TOWER-2	Water	TDS	Cool 4 deg C	PSEG04	N13	06/03/2025	SM2540 C
Q2202-01	P MW-9-20250603	Water	TDS	Cool 4 deg C	PARS02	N31	06/03/2025	SM2540 C
Q2202-05	P MW-1A-20250603	Water	TDS	Cool 4 deg C	PARS02	N31	06/03/2025	SM2540 C

Date/Time 06/04/25 13:10

Raw Sample Received by: sf (we)

Raw Sample Relinquished by: [Signature]

Date/Time 06/04/25

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135991

Review By	rubina	Review On	6/5/2025 5:38:06 PM
Supervise By	Iwona	Supervise On	6/6/2025 9:40:25 AM
SubDirectory	LB135991	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP113186,WP113187,WP113188,WP113189,WP113190,WP113191,WP113192		
ICV Standard	WP113193		
CCV Standard	WP113333,WP113357		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113332,WP113358		
Chk Standard	WP113194,WP113195		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	STD1	STD1	CAL1	05/22/25 11:09	All standards, samples, and	NF/IZ	OK
2	STD2	STD2	CAL2	05/22/25 11:30	QC are filtered through	NF/IZ	OK
3	STD3	STD3	CAL3	05/22/25 11:52	0.45um, filter lot W3160	NF/IZ	OK
4	STD4	STD4	CAL4	05/22/25 12:13		NF/IZ	OK
5	STD5	STD5	CAL5	05/22/25 12:35		NF/IZ	OK
6	STD6	STD6	CAL6	05/22/25 12:56		NF/IZ	OK
7	STD7	STD7	CAL7	05/22/25 13:17		NF/IZ	OK
8	ICV1	ICV1	ICV	05/22/25 13:39		NF/IZ	OK
9	ICB1	ICB1	ICB	05/22/25 14:22		NF/IZ	OK
10	CCV1	CCV1	CCV	06/03/25 14:34		NF/IZ	OK
11	CCB1	CCB1	CCB	06/03/25 14:55		NF/IZ	OK
12	LB135991BLW	LB135991BLW	MB	06/03/25 15:17		NF/IZ	OK
13	LB135991BSW	LB135991BSW	LCS	06/03/25 15:38		NF/IZ	OK
14	Q2189-01	MW-7-20250602	SAM	06/03/25 16:00	SO2-4 is high	NF/IZ	Dilution
15	Q2189-01MS	MW-7-20250602MS	MS	06/03/25 16:21	9.5ml of sample, 0.5mL W3092	NF/IZ	OK
16	Q2189-01MSD	MW-7-20250602MSD	MSD	06/03/25 16:43	9.5ml of sample, 0.5mL W3092	NF/IZ	OK
17	Q2189-02	MW-8-20250602	SAM	06/03/25 17:05		NF/IZ	OK
18	CCV2	CCV2	CCV	06/03/25 17:26		NF/IZ	OK

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135991

Review By	rubina	Review On	6/5/2025 5:38:06 PM
Supervise By	Iwona	Supervise On	6/6/2025 9:40:25 AM
SubDirectory	LB135991	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP113186,WP113187,WP113188,WP113189,WP113190,WP113191,WP113192		
ICV Standard	WP113193		
CCV Standard	WP113333,WP113357		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113332,WP113358		
Chk Standard	WP113194,WP113195		

19	CCB2	CCB2	CCB	06/03/25 17:48		NF/IZ	OK
20	CCV3	CCV3	CCV	06/04/25 10:15		NF/IZ	OK
21	CCB3	CCB3	CCB	06/04/25 10:37		NF/IZ	OK
22	LB135991BLW2	LB135991BLW2	MB	06/04/25 10:58		NF/IZ	OK
23	LB135991BSW2	LB135991BSW2	LCS	06/04/25 11:20		NF/IZ	OK
24	Q2189-01DL	MW-7-20250602DL	SAM	06/04/25 11:41	5X FOR SO2-4	NF/IZ	Confirms
25	Q2202-01	MW-9-20250603	SAM	06/04/25 12:46	SO2-4 is high	NF/IZ	Dilution
26	Q2202-05	MW-1A-20250603	SAM	06/04/25 13:08		NF/IZ	OK
27	Q2202-01DL	MW-9-20250603DL	SAM	06/04/25 13:29	5X FOR SO2-4	NF/IZ	Confirms
28	CCV4	CCV4	CCV	06/04/25 13:51		NF/IZ	OK
29	CCB4	CCB4	CCB	06/04/25 14:12		NF/IZ	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB136008

Review By	jignesh	Review On	6/5/2025 12:12:28 PM
Supervise By	Iwona	Supervise On	6/5/2025 1:03:01 PM
SubDirectory	LB136008	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	LB136008BL	LB136008BL	MB	06/04/25 12:30		jignesh	OK
2	LB136008BS	LB136008BS	LCS	06/04/25 12:30		jignesh	OK
3	Q2189-01	MW-7-20250602	SAM	06/04/25 12:30		jignesh	OK
4	Q2189-02	MW-8-20250602	SAM	06/04/25 12:30		jignesh	OK
5	Q2189-02DUP	MW-8-20250602DUP	DUP	06/04/25 12:30		jignesh	OK
6	Q2196-01	TOWERS-1	SAM	06/04/25 12:30		jignesh	OK
7	Q2196-02	TOWERS-2	SAM	06/04/25 12:30		jignesh	OK
8	Q2202-01	MW-9-20250603	SAM	06/04/25 12:30		jignesh	OK
9	Q2202-05	MW-1A-20250603	SAM	06/04/25 12:30		jignesh	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2202

Test : Sulfate,TDS

Prepbatch ID :

Sequence ID/Qc Batch ID: LB135991, LB136008,

Standard ID :

WP112796, WP113186, WP113187, WP113188, WP113189, WP113190, WP113191, WP113192, WP113193, WP113194, WP113195, WP113332, WP113333, WP113357, WP113358,

Chemical ID :

M6041, W2647, W3112, W3163, W3180, W3197,



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4035	IC ELUENT CONCENTRATE FOR IC-1	WP112796	04/22/2025	10/22/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS)	None	Jignesh Parikh 04/22/2025
<u>FROM</u> 2.10000gram of W2647 + 84.75000gram of W3163 + 913.15000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2487	Anions 300/9056 calibration standard 1	WP113186	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 05/22/2025
<u>FROM</u> 10.00000ml of W3112 = Final Quantity: 10.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
24	Anions 300/9056 calibration standard 2	WP113187	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3	Jignesh Parikh
(WC) FROM 0.20000ml of W3180 + 9.80000ml of W3112 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
25	Anions 300/9056 calibration standard 3	WP113188	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/22/2025
<u>FROM</u> 0.40000ml of W3180 + 9.60000ml of W3112 = Final Quantity: 10.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
26	Anions 300/9056 calibration standard 4	WP113189	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/22/2025
FROM 0.50000ml of W3180 + 9.50000ml of W3112 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3680	Anions 300/9056 calibration standard 5-CCV	WP113190	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/22/2025
FROM 5.00000ml of W3180 + 95.00000ml of W3112 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3679	Anions 300/9056 calibration standard 6	WP113191	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3	Jignesh Parikh
(WC) <u>FROM</u> 2.00000ml of W3180 + 8.00000ml of W3112 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3681	Anions 300/9056 calibration standard 7	WP113192	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 05/22/2025
<u>FROM</u> 2.50000ml of W3180 + 7.50000ml of W3112 = Final Quantity: 10.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3233	Anions 300/9056 ICV-LCS std	WP113193	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/22/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4036	IC ELUENT FOR IC-1	WP113194	05/22/2025	06/22/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 05/22/2025

FROM 1980.00000ml of W3112 + 20.00000ml of WP112796 = Final Quantity: 2000.000 ml

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4037	IC H2SO4 FOR IC-1	WP113195	05/22/2025	06/22/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 05/22/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3233	Anions 300/9056 ICV-LCS std	WP113332	06/03/2025	06/04/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 06/04/2025

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



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3680	Anions 300/9056 calibration standard 5-CCV	WP113333	06/03/2025	06/04/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych 06/04/2025
<u>FROM</u> 45.00000ml of W3112 + 5.00000ml of W3180 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3680	Anions 300/9056 calibration standard 5-CCV	WP113357	06/04/2025	06/05/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/05/2025
<u>FROM</u> 45.00000ml of W3112 + 5.00000ml of W3180 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3233	Anions 300/9056 ICV-LCS std	WP113358	06/04/2025	06/05/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/05/2025
<u>FROM</u> 45.00000ml of W3112 + 5.00000ml of W3197 = Final Quantity: 50.000 ml								

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	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 #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / lwona	07/03/2024 / lwona	W3112

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 / lwona	12/10/2024 / lwona	W3163

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 / lwona	01/27/2025 / lwona	W3180

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 / lwona	04/08/2025 / lwona	W3197

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

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

avantor™



M 6041-4b
MS

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 ₂ SO 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 SO ₂)	≤ 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

 **avantorsm**

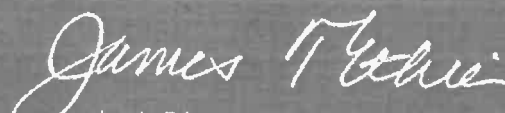


Material No.: 9673-33
Batch No.: 23D2462010

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


Jamie Ethier
Vice President Global Quality



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	Additional Information
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	Analysis may have been rounded to significant digits in specification limits Product meets analytical specifications of the grades listed.



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).



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, NNO ₃ -	25.00 ± 0.10 µg/mL
Nitrite as N, NNO ₂ -	30.00 ± 0.10 µg/mL	o-Phosphate as P, PPO ₄	50.00 ± 0.18 µg/mL
Sulfate, SO ₄	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	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:

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

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:

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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2(u_{char i}^2)]^{1/2}$ 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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

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



Ident	Instrument IC-1				Analyst: NF		Method: 300.0 / 9056A		Initial Analyst		
	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO4	Con SO4				
STD1	0	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

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Parsons
ADDRESS: 301 Plainfield Rd
CITY Syracuse STATE: NY ZIP: 13212
ATTENTION: Stephen Liberatore
PHONE: 315-418-8767 FAX: NA

CLIENT PROJECT INFORMATION

PROJECT NAME: Con Ed Atlantic Ave
PROJECT NO.: 453957-01000 LOCATION: Brooklyn, NY
PROJECT MANAGER: Stephen Liberatore
e-mail: Stephen.Liberatore@parsons.com
PHONE: 315-418-8767 FAX: NA

CLIENT BILLING INFORMATION

BILL TO: Parsons PO#:
ADDRESS: 301 Plainfield Rd
CITY Syracuse STATE: NY ZIP: 13212
ATTENTION: Stephen Liberatore PHONE: 315-418-8767

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) Standard DAYS*
HARDCOPY (DATA PACKAGE): ↓ 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) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other
☐ EDD FORMAT

VOCs+TICS
SVOCs+TICS
Sulfate
TDS
1 2 3 4 5 6 7 8 9

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		A	E	E	E						
1.	MW-9-20250603	W		X	6/3/25	1400	4	X		X	X						
2.	MW-11-20250603	W		X	6/3/25	0940	2	X									
3.	MW-12-20250603	W		X	6/3/25	1245	3	X	X								
4.	MW-13D-20250603	W		X	6/3/25	1120	2	X									
5.	MW-1A-20250603	W		X	6/3/25	1526	4	X		X	X						
6.	TB-20250603	W		X	6/3/25	—	2	X									
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. <u>Ym M</u>	DATE/TIME: <u>1710</u> <u>6/3/25</u>	RECEIVED BY: <u>[Signature]</u> <u>6-3-25</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>41</u> °C Comments: <u>Please CC Kirsten.valentini@parsons.com</u>
RELINQUISHED BY SAMPLER: 2. <u>[Signature]</u>	DATE/TIME: <u></u>	RECEIVED BY: <u></u>	
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: <u>1902</u> <u>6-3-25</u>	RECEIVED BY: <u></u>	

Page of CLIENT: ☐ Hand Delivered ☐ Other Shipment Complete ☐ YES ☐ NO

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2202	PARS02	Order Date : 6/4/2025 11:59:00 AM	Project Mgr :
Client Name : PARSONS Engineering of I		Project Name : Con Ed Non MGP – Atlanti	Report Type : NYS ASPB level 2
Client Contact : Stephen Liberatore		Receive DateTime : 6/3/2025 7:02:00 PM	EDD Type : Excel NY
Invoice Name : PARSONS Engineering of I		Purchase Order :	Hard Copy Date :
Invoice Contact : Stephen Liberatore			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2202-01	MW-9-20250603	Water	06/03/2025	14:00					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q2202-02	MW-11-20250603	Water	06/03/2025	09:40					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q2202-03	MW-12-20250603	Water	06/03/2025	12:45					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q2202-04	MW-130-20250603	Water	06/03/2025	11:20					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q2202-05	MW-1A-20250603	Water	06/03/2025	15:20					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q2202-06	TB-20250603	Water	06/03/2025	00:00					
					VOCMS Group1		8260-Low	10 Bus. Days	

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2202 PARS02	Order Date : 6/4/2025 11:59:00 AM	Project Mgr :
Client Name : PARSONS Engineering of I	Project Name : Con Ed Non MGP – Atlanti	Report Type : NYS ASP-B level 2
Client Contact : Stephen Liberatore	Receive DateTime : 6/3/2025 7:02:00 PM	EDD Type : Excel NY
Invoice Name : PARSONS Engineering of I	Purchase Order :	Hard Copy Date :
Invoice Contact : Stephen Liberatore		Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
--------	-----------	--------	----------------	----------------	------	------------	--------	----------	--------------

Relinquished By :



Date / Time : 6/4/25 1225

Received By :



Date / Time :

06/04/25 12:25 0814

Storage Area : VOA Refridgerator Room