

DATA PACKAGE
GENERAL CHEMISTRY

PROJECT NAME : BANKER

G ENVIRONMENTAL

8 Carriage Ln

Succasunna, NJ - 07876

Phone No: 973-294-1771

ORDER ID : Q3444

ATTENTION : Gary Landis



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q3444

Project ID : Banker

Client : G Environmental

Lab Sample Number

Q3444-01
Q3444-02
Q3444-03
Q3444-04
Q3444-05
Q3444-06

Client Sample Number

16 Banker
29 Hanover
29 Post
683 WARWICK
735 WARWICK
739 WARWICK

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: 11/3/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

G Environmental

Project Name: Banker

Project # N/A

Order ID # Q3444

Test Name: Anions Group1

A. Number of Samples and Date of Receipt:

6 Water samples were received on 10/23/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Anions Group1. This data package contains results for Anions Group1.

C. Analytical Techniques:

The analysis of Anions Group1 was based on method 300.0.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

Sample 16 Banker was diluted due to high concentrations for Chloride & Sample 29 Hanover was diluted due to high concentrations for Chloride & Sample 29 HanoverDL was diluted due to high concentrations for Chloride & Sample 29 Post was diluted due to high concentrations for Chloride & Sample 683 WARWICK was diluted due to high concentrations for Chloride & Sample 735 WARWICK was diluted due to high concentrations for Chloride & Sample 739 WARWICK was diluted due to high concentrations for Chloride.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

The Matrix Spike (739 WARWICKMS) analysis met criteria for all compounds except for Anions Group1(Chloride) due to sample matrix interference.

The Matrix Spike Duplicate (739 WARWICKMSD) analysis met criteria for all compounds except for Anions Group1(Chloride) due to sample matrix interference.

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

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q3444

MATRIX: Water

METHOD: 300.0

	NA	NO	YES
1. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
2. Matrix Spike Duplicate Recoveries Met Criteria		✓	
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
The Blank Spike met requirements for all compounds. The Matrix Spike (739 WARWICKMS) analysis met criteria for all compounds except for Anions Group1(Chloride) due to sample matrix interference. The Matrix Spike Duplicate (739 WARWICKMSD) analysis met criteria for all compounds except for Anions Group1(Chloride) due to sample matrix interference.			
3. Sample Duplicate Analysis Met QC Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
4. Digestion Holding Time Met			✓
If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

QA REVIEW

Date

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q3444

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: SOHIL JODHANI

Date: 11/03/2025

LAB CHRONICLE

OrderID:	Q3444	OrderDate:	10/23/2025 12:27:00 PM
Client:	G Environmental	Project:	Banker
Contact:	Gary Landis	Location:	J21

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3444-01	16 Banker	WATER			10/23/25 11:01			10/23/25
			Anions Group1	300.0			10/23/25 13:28	
Q3444-01DL	16 BankerDL	WATER			10/23/25 11:01			10/23/25
			Anions Group1	300.0			10/23/25 17:03	
Q3444-02	29 Hanover	WATER			10/23/25 10:36			10/23/25
			Anions Group1	300.0			10/23/25 13:49	
Q3444-02DL	29 HanoverDL	WATER			10/23/25 10:36			10/23/25
			Anions Group1	300.0			10/23/25 17:24	
Q3444-02DL 2	29 HanoverDL2	WATER			10/23/25 10:36			10/23/25
			Anions Group1	300.0			10/23/25 18:07	
Q3444-03	29 Post	WATER			10/23/25 10:39			10/23/25
			Anions Group1	300.0			10/23/25 14:10	
Q3444-03DL	29 PostDL	WATER			10/23/25 10:39			10/23/25
			Anions Group1	300.0			10/23/25 18:29	

LAB CHRONICLE

Q3444-04	683 WARWICK	WATER			10/23/25 10:19		10/23/25
			Anions Group1	300.0		10/23/25 14:32	
Q3444-04DL	683 WARWICKDL	WATER			10/23/25 10:19		10/23/25
			Anions Group1	300.0		10/23/25 18:50	
Q3444-05	735 WARWICK	WATER			10/23/25 09:43		10/23/25
			Anions Group1	300.0		10/23/25 14:54	
Q3444-05DL	735 WARWICKDL	WATER			10/23/25 09:43		10/23/25
			Anions Group1	300.0		10/23/25 19:12	
Q3444-06	739 WARWICK	WATER			10/23/25 09:27		10/23/25
			Anions Group1	300.0		10/23/25 15:15	
Q3444-06DL	739 WARWICKDL	WATER			10/23/25 09:27		10/23/25
			Anions Group1	300.0		10/23/25 19:33	



SAMPLE DATA

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- 12
- 13

Report of Analysis

Client: G Environmental
Project: Banker
Client Sample ID: 16 Banker
Lab Sample ID: Q3444-01

Date Collected: 10/23/25 11:01
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	378	OR	1	0.19	0.60	mg/L		10/23/25 13:28	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

Report of Analysis

Client: G Environmental
Project: Banker
Client Sample ID: 16 BankerDL
Lab Sample ID: Q3444-01DL

Date Collected: 10/23/25 11:01
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	266	D	100	19.0	60.0	mg/L		10/23/25 17:03	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

Report of Analysis

Client: G Environmental
Project: Banker
Client Sample ID: 29 Hanover
Lab Sample ID: Q3444-02

Date Collected: 10/23/25 10:36
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	2090	OR	1	0.19	0.60	mg/L		10/23/25 13:49	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: G Environmental
Project: Banker
Client Sample ID: 29 HanoverDL
Lab Sample ID: Q3444-02DL

Date Collected: 10/23/25 10:36
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	1360	OR	100	19.0	60.0	mg/L		10/23/25 17:24	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: G Environmental
Project: Banker
Client Sample ID: 29 HanoverDL2
Lab Sample ID: Q3444-02DL2

Date Collected: 10/23/25 10:36
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	1300	D	500	95.0	300	mg/L		10/23/25 18:07	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: G Environmental
Project: Banker
Client Sample ID: 29 Post
Lab Sample ID: Q3444-03

Date Collected: 10/23/25 10:39
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	36.2	OR	1	0.19	0.60	mg/L		10/23/25 14:10	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: G Environmental
Project: Banker
Client Sample ID: 29 PostDL
Lab Sample ID: Q3444-03DL

Date Collected: 10/23/25 10:39
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	32.0	D	10	1.90	6.00	mg/L		10/23/25 18:29	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: G Environmental
Project: Banker
Client Sample ID: 683 WARWICK
Lab Sample ID: Q3444-04

Date Collected: 10/23/25 10:19
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	426	OR	1	0.19	0.60	mg/L		10/23/25 14:32	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: G Environmental
Project: Banker
Client Sample ID: 683 WARWICKDL
Lab Sample ID: Q3444-04DL

Date Collected: 10/23/25 10:19
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	278	D	100	19.0	60.0	mg/L		10/23/25 18:50	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: G Environmental
Project: Banker
Client Sample ID: 735 WARWICK
Lab Sample ID: Q3444-05

Date Collected: 10/23/25 09:43
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	451	OR	1	0.19	0.60	mg/L		10/23/25 14:54	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: G Environmental
Project: Banker
Client Sample ID: 735 WARWICKDL
Lab Sample ID: Q3444-05DL

Date Collected: 10/23/25 09:43
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	299	D	100	19.0	60.0	mg/L		10/23/25 19:12	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: G Environmental
Project: Banker
Client Sample ID: 739 WARWICK
Lab Sample ID: Q3444-06

Date Collected: 10/23/25 09:27
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	359	OR	1	0.19	0.60	mg/L		10/23/25 15:15	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: G Environmental
Project: Banker
Client Sample ID: 739 WARWICKDL
Lab Sample ID: Q3444-06DL

Date Collected: 10/23/25 09:27
Date Received: 10/23/25
SDG No.: Q3444
Matrix: WATER
% Solid: 0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	243	D	100	19.0	60.0	mg/L		10/23/25 19:33	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

- 1
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Initial and Continuing Calibration Verification

Client: G Environmental

SDG No.: Q3444

Project: Banker

RunNo.: LB137629

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	9.8	10	98	90-110	10/09/2025
Chloride	mg/L	2.9	3	97	90-110	10/09/2025
Fluoride	mg/L	2	2	100	90-110	10/09/2025
Nitrite	mg/L	2.9	3	97	90-110	10/09/2025
Nitrate	mg/L	2.4	2.5	96	90-110	10/09/2025
Sulfate	mg/L	14.7	15	98	90-110	10/09/2025
Orthophosphate as P	mg/L	5	5	100	90-110	10/09/2025
Sample ID: CCV1						
Bromide	mg/L	10.4	10	104	90-110	10/23/2025
Chloride	mg/L	3.1	3	103	90-110	10/23/2025
Fluoride	mg/L	2.1	2	105	90-110	10/23/2025
Nitrite	mg/L	3.1	3	103	90-110	10/23/2025
Nitrate	mg/L	2.6	2.5	104	90-110	10/23/2025
Sulfate	mg/L	15.6	15	104	90-110	10/23/2025
Orthophosphate as P	mg/L	5.4	5	108	90-110	10/23/2025
Sample ID: CCV2						
Bromide	mg/L	10.5	10	105	90-110	10/23/2025
Chloride	mg/L	3.1	3	103	90-110	10/23/2025
Fluoride	mg/L	2.1	2	105	90-110	10/23/2025
Nitrite	mg/L	3.1	3	103	90-110	10/23/2025
Nitrate	mg/L	2.6	2.5	104	90-110	10/23/2025
Sulfate	mg/L	15.7	15	105	90-110	10/23/2025
Orthophosphate as P	mg/L	5.2	5	104	90-110	10/23/2025
Sample ID: CCV3						
Bromide	mg/L	10.5	10	105	90-110	10/23/2025
Chloride	mg/L	3.1	3	103	90-110	10/23/2025
Fluoride	mg/L	2	2	100	90-110	10/23/2025
Nitrite	mg/L	3.1	3	103	90-110	10/23/2025
Nitrate	mg/L	2.6	2.5	104	90-110	10/23/2025
Sulfate	mg/L	15.6	15	104	90-110	10/23/2025
Orthophosphate as P	mg/L	5	5	100	90-110	10/23/2025

Initial and Continuing Calibration Blank Summary

Client: G Environmental

SDG No.: Q3444

Project: Banker

RunNo.: LB137629

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	10/09/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	10/09/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	10/09/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	10/09/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	10/09/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	10/09/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	10/09/2025
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	10/23/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	10/23/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	10/23/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	10/23/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	10/23/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	10/23/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	10/23/2025
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	10/23/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	10/23/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	10/23/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	10/23/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	10/23/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	10/23/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	10/23/2025
Sample ID: CCB3							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	10/23/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	10/23/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	10/23/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	10/23/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	10/23/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	10/23/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	10/23/2025

Preparation Blank Summary

Client: G Environmental

SDG No.: Q3444

Project: Banker

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB137629BLW							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	10/23/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	10/23/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	10/23/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	10/23/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	10/23/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	10/23/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	10/23/2025

Matrix Spike Summary

Client:	G Environmental	SDG No.:	Q3444
Project:	Banker	Sample ID:	Q3444-06
Client ID:	739 WARWICKMS	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		0.37	U	10	1	105		10/23/2025
Chloride	mg/L	80-120	343	OR	359	OR	3	1	-533	*	10/23/2025
Fluoride	mg/L	80-120	2.20		0.17	J	2	1	102		10/23/2025
Nitrite	mg/L	80-120	3.10		0.074	U	3	1	103		10/23/2025
Nitrate	mg/L	80-120	7.10	OR	4.70		2.5	1	96		10/23/2025
Sulfate	mg/L	80-120	39.8	OR	25.2		15	1	97		10/23/2025
Orthophosphate as P	mg/L	80-120	4.70		0.34	U	5	1	94		10/23/2025

Matrix Spike Summary

Client:	G Environmental	SDG No.:	Q3444
Project:	Banker	Sample ID:	Q3444-06
Client ID:	739 WARWICKMSD	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	10.1		0.37	U	10	1	101		10/23/2025
Chloride	mg/L	80-120	343	OR	359	OR	3	1	-533	*	10/23/2025
Fluoride	mg/L	80-120	2.10		0.17	J	2	1	97		10/23/2025
Nitrite	mg/L	80-120	3.00		0.074	U	3	1	100		10/23/2025
Nitrate	mg/L	80-120	7.00	OR	4.70		2.5	1	92		10/23/2025
Sulfate	mg/L	80-120	39.3	OR	25.2		15	1	94		10/23/2025
Orthophosphate as P	mg/L	80-120	5.20		0.34	U	5	1	104		10/23/2025

Duplicate Sample Summary

Client:	G Environmental	SDG No.:	Q3444
Project:	Banker	Sample ID:	Q3444-06
Client ID:	739 WARWICKMSD	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	343	OR	343	OR	1	0		10/23/2025
Nitrate	mg/L	+/-20	7.10	OR	7.00	OR	1	1		10/23/2025
Sulfate	mg/L	+/-20	39.8	OR	39.3	OR	1	1		10/23/2025
Orthophosphate as P	mg/L	+/-20	4.70		5.20		1	10		10/23/2025
Nitrite	mg/L	+/-20	3.10		3.00		1	3		10/23/2025
Bromide	mg/L	+/-20	10.5		10.1		1	4		10/23/2025
Fluoride	mg/L	+/-20	2.20		2.10		1	5		10/23/2025

Laboratory Control Sample Summary

Client: G Environmental

SDG No.: Q3444

Project: Banker

Run No.: LB137629

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137629BSW							
Bromide	mg/L	10	10.5		105	1	90-110	10/23/2025
Chloride	mg/L	3	3.10		103	1	90-110	10/23/2025
Fluoride	mg/L	2	2.10		105	1	90-110	10/23/2025
Nitrite	mg/L	3	3.10		103	1	90-110	10/23/2025
Nitrate	mg/L	2.5	2.60		104	1	90-110	10/23/2025
Sulfate	mg/L	15	15.5		103	1	90-110	10/23/2025
Orthophosphate as P	mg/L	5	5.30		106	1	90-110	10/23/2025



RAW DATA

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Instrument IC-1			Analyst: RM		Method: 300.0 / 9056A					
Ident	Con F-	Con CL-	Con NO2	Con BR-	Con NO:	Con HPC	Con SO4	Method name	date time	Initial Analyst
STD1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-100925	10/9/2025 10:46	10 RM/IZ
STD2	0.440	0.646	0.652	2.141	0.541	1.118	3.299	IC1-100925	10/9/2025 11:08	10 RM/IZ
STD3	0.813	1.225	1.222	4.073	1.019	1.947	6.091	IC1-100925	10/9/2025 11:29	10 RM/IZ
STD4	0.993	1.497	1.496	4.994	1.249	2.669	7.507	IC1-100925	10/9/2025 11:51	10 RM/IZ
STD5	1.954	2.923	2.922	9.773	2.435	4.828	14.557	IC1-100925	10/9/2025 12:12	10 RM/IZ
STD6	3.928	5.923	5.920	19.752	4.934	9.517	29.510	IC1-100925	10/9/2025 12:34	10 RM/IZ
STD7	5.072	7.585	7.589	25.268	6.323	12.920	37.537	IC1-100925	10/9/2025 12:55	10 RM/IZ
ICV	1.970	2.918	2.942	9.842	2.398	5.003	14.702	IC1-100925	10/9/2025 13:16	10 RM/IZ
ICB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-100925	10/9/2025 13:38	10 RM/IZ
CCV	2.096	3.125	3.114	10.447	2.600	5.395	15.620	IC1-100925	10/23/2025 9:09	10 RM/IZ
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-100925	10/23/2025 9:31	10 RM/IZ
LB137629BLW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-100925	10/23/2025 9:52	10 RM/IZ
LB137629BSW	2.090	3.124	3.113	10.455	2.586	5.344	15.536	IC1-100925	10/23/2025 10:14	10 RM/IZ
Q3444-01	0.198	378.372	0.000	0.000	5.144	0.000	21.920	IC1-100925	10/23/2025 13:28	10 RM/IZ
Q3444-02	0.427	2089.434	0.000	0.423	0.115	0.000	26.105	IC1-100925	10/23/2025 13:49	10 RM/IZ
Q3444-03	0.000	36.166	0.000	0.000	0.000	0.000	0.000	IC1-100925	10/23/2025 14:10	10 RM/IZ
Q3444-04	1.078	425.698	0.000	0.000	0.000	0.000	23.418	IC1-100925	10/23/2025 14:32	10 RM/IZ
Q3444-05	0.163	451.341	0.000	0.259	7.675	0.000	25.284	IC1-100925	10/23/2025 14:54	10 RM/IZ
Q3444-06	0.169	358.895	0.000	0.230	4.656	0.000	25.199	IC1-100925	10/23/2025 15:15	10 RM/IZ
Q3444-06MS	2.208	342.676	3.092	10.485	7.070	4.671	39.766	IC1-100925	10/23/2025 15:37	10 RM/IZ
Q3444-06MSD	2.138	342.860	2.983	10.138	6.983	5.171	39.283	IC1-100925	10/23/2025 15:58	10 RM/IZ
CCV	2.078	3.127	3.125	10.465	2.600	5.215	15.651	IC1-100925	10/23/2025 16:20	10 RM/IZ
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-100925	10/23/2025 16:41	10 RM/IZ
Q3444-01DLX100	0.000	2.655	0.000	0.000	0.094	0.000	0.639	IC1-100925	10/23/2025 17:03	10 RM/IZ
Q3444-02DLX100	0.000	13.603	0.000	0.000	0.000	0.000	0.829	IC1-100925	10/23/2025 17:24	10 RM/IZ
Q3444-02DL2X500	0.000	2.597	0.000	0.000	0.000	0.000	0.000	IC1-100925	10/23/2025 18:07	10 RM/IZ
Q3444-03DLX10	0.000	3.201	0.000	0.000	0.000	0.000	0.000	IC1-100925	10/23/2025 18:29	10 RM/IZ
Q3444-04DLX100	0.000	2.777	0.000	0.000	0.000	0.000	0.630	IC1-100925	10/23/2025 18:50	10 RM/IZ
Q3444-05DLX100	0.000	2.988	0.000	0.000	0.113	0.000	0.663	IC1-100925	10/23/2025 19:12	10 RM/IZ

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Q3444-06DLX100	0.000	2.433	0.000	0.000	0.086	0.000	0.674 IC1-100925	10/23/2025 19:33	10 RM/IZ
CCV	2.044	3.127	3.110	10.484	2.604	4.996	15.602 IC1-100925	10/23/2025 19:55	10 RM/IZ
CCB	0.000	0.000	0.000	0.000	0.074	0.000	0.000 IC1-100925	10/23/2025 20:16	10 RM/IZ

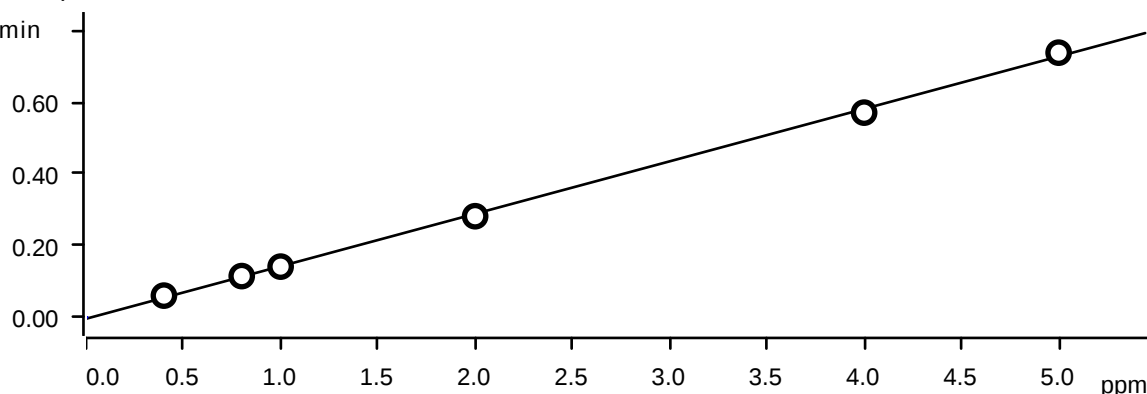
Clear table

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	date time	Initial wt/ Final	Analyst
STD1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000 IC1-100925	10/9/2025 10:46	10	RM/IZ
STD2	0.4400	0.6460	0.6520	2.1410	0.5410	1.1180	3.2990	IC1-100925	10/9/2025 11:08	10	RM/IZ
STD3	0.8130	1.2250	1.2220	4.0730	1.0190	1.9470	6.0910	IC1-100925	10/9/2025 11:29	10	RM/IZ
STD4	0.9930	1.4970	1.4960	4.9940	1.2490	2.6690	7.5070	IC1-100925	10/9/2025 11:51	10	RM/IZ
STD5	1.9540	2.9230	2.9220	9.7730	2.4350	4.8280	14.5570	IC1-100925	10/9/2025 12:12	10	RM/IZ
STD6	3.9280	5.9230	5.9200	19.7520	4.9340	9.5170	29.5100	IC1-100925	10/9/2025 12:34	10	RM/IZ
STD7	5.0720	7.5850	7.5890	25.2680	6.3230	12.9200	37.5370	IC1-100925	10/9/2025 12:55	10	RM/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	10.0000	7.6667	8.6667	7.0500	8.2000	11.8000	9.9667				
STD2	1.6250	2.0833	1.8333	1.8250	1.9000	-2.6500	1.5167				
STD3	-0.7000	-0.2000	-0.2667	-0.1200	-0.0800	6.7600	0.0933				
STD4	-2.3000	-2.5667	-2.6000	-2.2700	-2.6000	-3.4400	-2.9533				
STD5	-1.8000	-1.2833	-1.3333	-1.2400	-1.3200	-4.8300	-1.6333				
STD6	1.4400	1.1333	1.1867	1.0720	1.1680	3.3600	1.4514				

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Fluoride (Anions)

(μS/cm) x min

Function: $A = -3.86859E-3 + 0.0146255 \times Q$

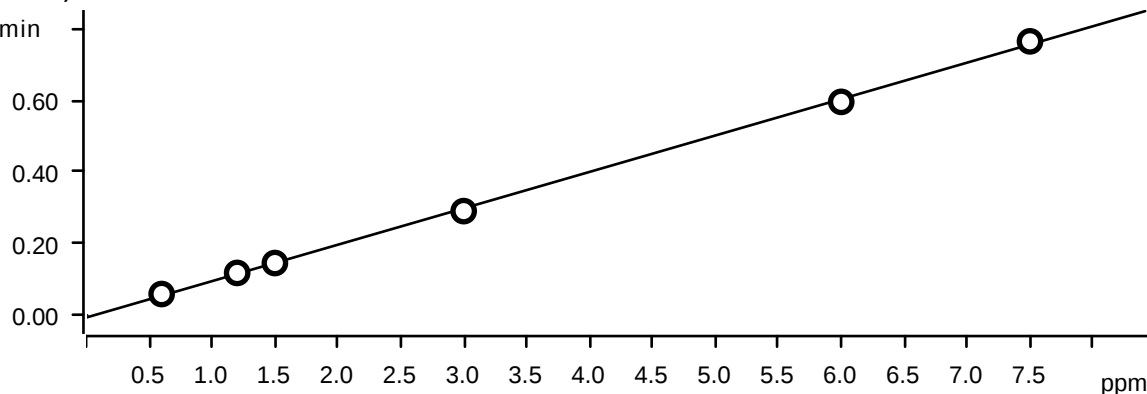
Relative standard deviation 2.744994 %

Correlation coefficient 0.999599

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	2025-10-09 10:46:54 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.061	STD2	2025-10-09 11:08:18 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.115	STD3	2025-10-09 11:29:42 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.141	STD4	2025-10-09 11:51:08 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.282	STD5	2025-10-09 12:12:34 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.571	STD6	2025-10-09 12:34:00 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.738	STD7	2025-10-09 12:55:27 UTC-4	used

Chloride (Anions)

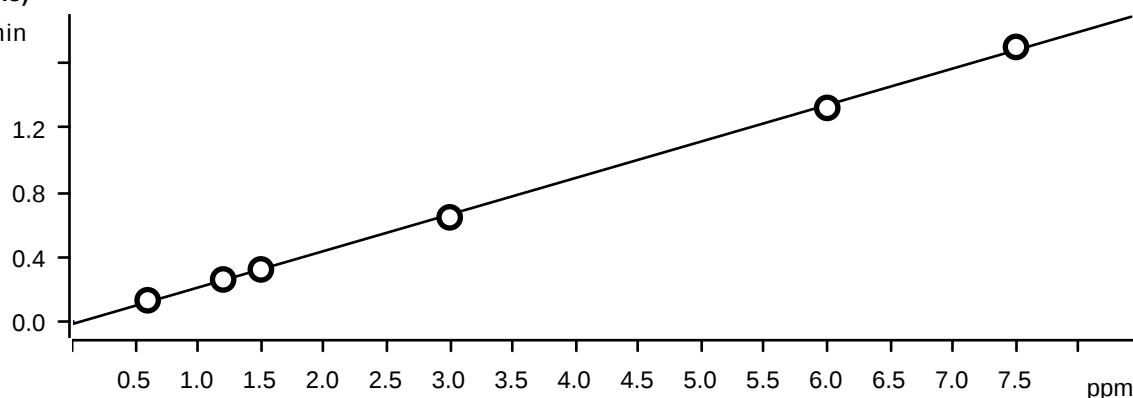
(μS/cm) x min

Function: $A = -5.87555E-3 + 0.0101528 \times Q$

Relative standard deviation 2.276543 %

Correlation coefficient 0.999727

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	2025-10-09 10:46:54 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-10-09 11:08:18 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.119	STD3	2025-10-09 11:29:42 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-10-09 11:51:08 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.291	STD5	2025-10-09 12:12:34 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.596	STD6	2025-10-09 12:34:00 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.764	STD7	2025-10-09 12:55:27 UTC-4	used

Nitrite (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0165604 + 0.0226258 \times Q$

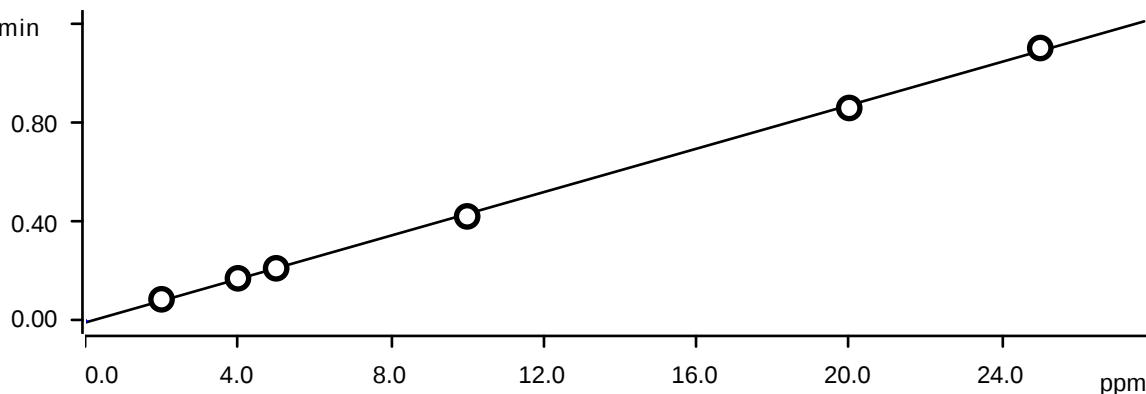
Relative standard deviation 2.379226 %

Correlation coefficient 0.999705

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	2025-10-09 10:46:54 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.131	STD2	2025-10-09 11:08:18 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.260	STD3	2025-10-09 11:29:42 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.322	STD4	2025-10-09 11:51:08 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.645	STD5	2025-10-09 12:12:34 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.323	STD6	2025-10-09 12:34:00 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.700	STD7	2025-10-09 12:55:27 UTC-4	used

Bromide (Anions)

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



Function: $A = -6.89623E-3 + 4.37562E-3 \times Q$

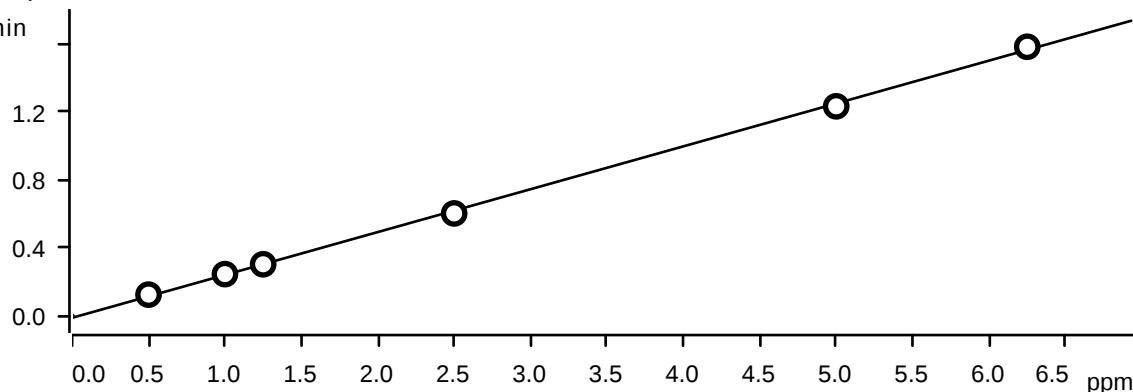
Relative standard deviation: 2.114692 %

Correlation coefficient: 0.999763

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	2025-10-09 10:46:54 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-10-09 11:08:18 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.171	STD3	2025-10-09 11:29:42 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.212	STD4	2025-10-09 11:51:08 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.421	STD5	2025-10-09 12:12:34 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.857	STD6	2025-10-09 12:34:00 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.099	STD7	2025-10-09 12:55:27 UTC-4	used

Nitrate (Anions)

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

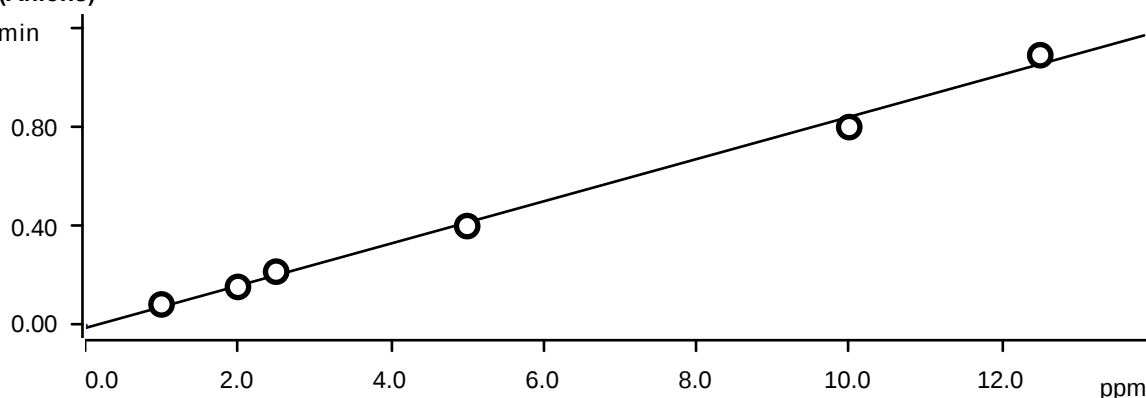


Function: $A = -0.0141807 + 0.0252306 \times Q$

Relative standard deviation: 2.346972 %

Correlation coefficient 0.999712

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	2025-10-09 10:46:54 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.122	STD2	2025-10-09 11:08:18 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-10-09 11:29:42 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.301	STD4	2025-10-09 11:51:08 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.600	STD5	2025-10-09 12:12:34 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.231	STD6	2025-10-09 12:34:00 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.581	STD7	2025-10-09 12:55:27 UTC-4	used

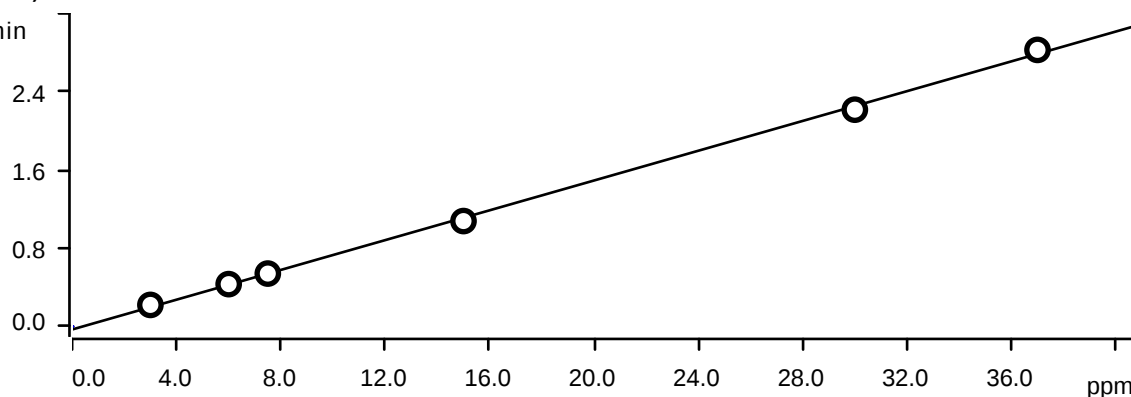
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0117521 + 8.50315E-3 \times Q$

Relative standard deviation 6.489714 %

Correlation coefficient 0.997825

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	2025-10-09 10:46:54 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.083	STD2	2025-10-09 11:08:18 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.154	STD3	2025-10-09 11:29:42 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.215	STD4	2025-10-09 11:51:08 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.399	STD5	2025-10-09 12:12:34 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.798	STD6	2025-10-09 12:34:00 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.087	STD7	2025-10-09 12:55:27 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0307148 + 7.61403E-3 \times Q$

Relative standard deviation 2.830893 %

Correlation coefficient 0.999580

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	2025-10-09 10:46:54 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.220	STD2	2025-10-09 11:08:18 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.433	STD3	2025-10-09 11:29:42 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.541	STD4	2025-10-09 11:51:08 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.078	STD5	2025-10-09 12:12:34 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.216	STD6	2025-10-09 12:34:00 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.827	STD7	2025-10-09 12:55:27 UTC-4	used

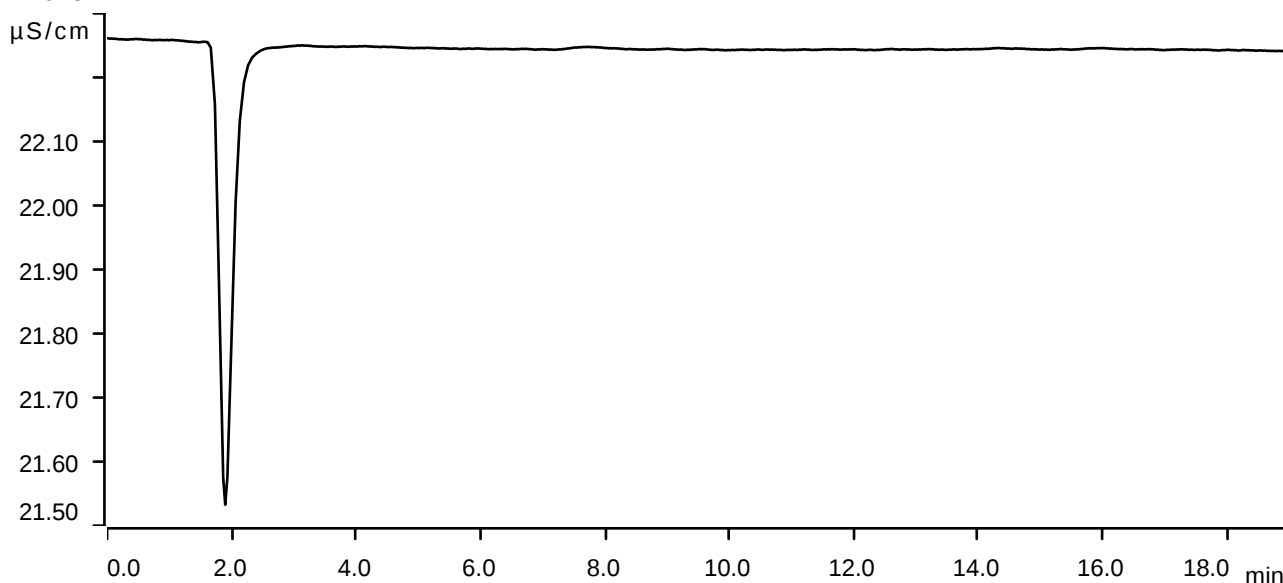
Sample data

Ident STD1
Sample type Standard 1
Determination start 2025-10-09 10:46:54 UTC-4
Method IC1-100925
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 13.57 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



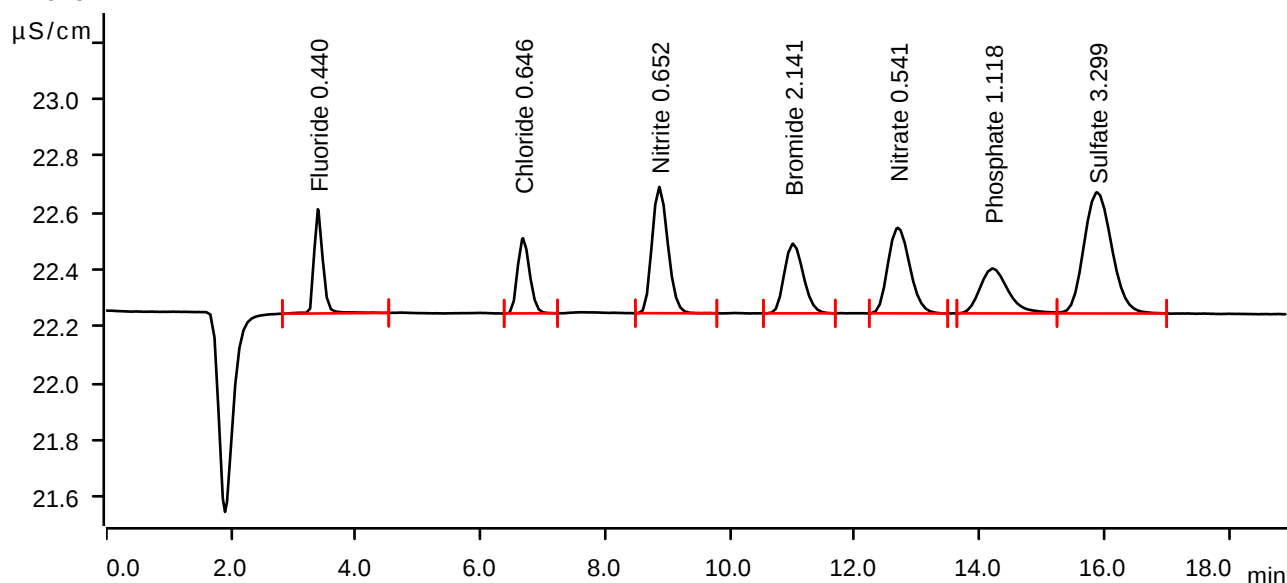
Sample data

Ident STD2
Sample type Standard 2
Determination start 2025-10-09 11:08:18 UTC-4
Method IC1-100925
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 13.34 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	3.392	0.0605	0.366	0.440	Fluoride
2	6.680	0.0597	0.264	0.646	Chloride
3	8.865	0.1310	0.444	0.652	Nitrite
4	11.008	0.0868	0.245	2.141	Bromide
5	12.692	0.1222	0.301	0.541	Nitrate
6	14.212	0.0833	0.158	1.118	Phosphate
7	15.883	0.2204	0.426	3.299	Sulfate

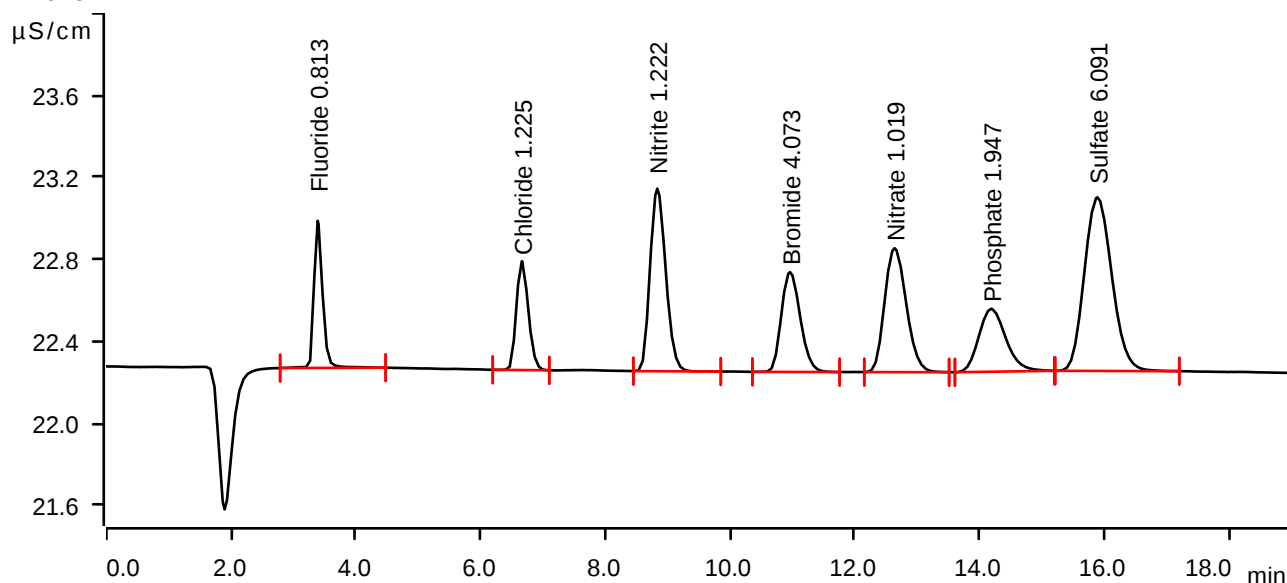
Sample data

Ident STD3
Sample type Standard 3
Determination start 2025-10-09 11:29:42 UTC-4
Method IC1-100925
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 13.63 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	3.388	0.1150	0.718	0.813	Fluoride
2	6.662	0.1185	0.531	1.225	Chloride
3	8.833	0.2598	0.891	1.222	Nitrite
4	10.962	0.1713	0.487	4.073	Bromide
5	12.637	0.2429	0.605	1.019	Nitrate
6	14.187	0.1538	0.307	1.947	Phosphate
7	15.888	0.4330	0.848	6.091	Sulfate

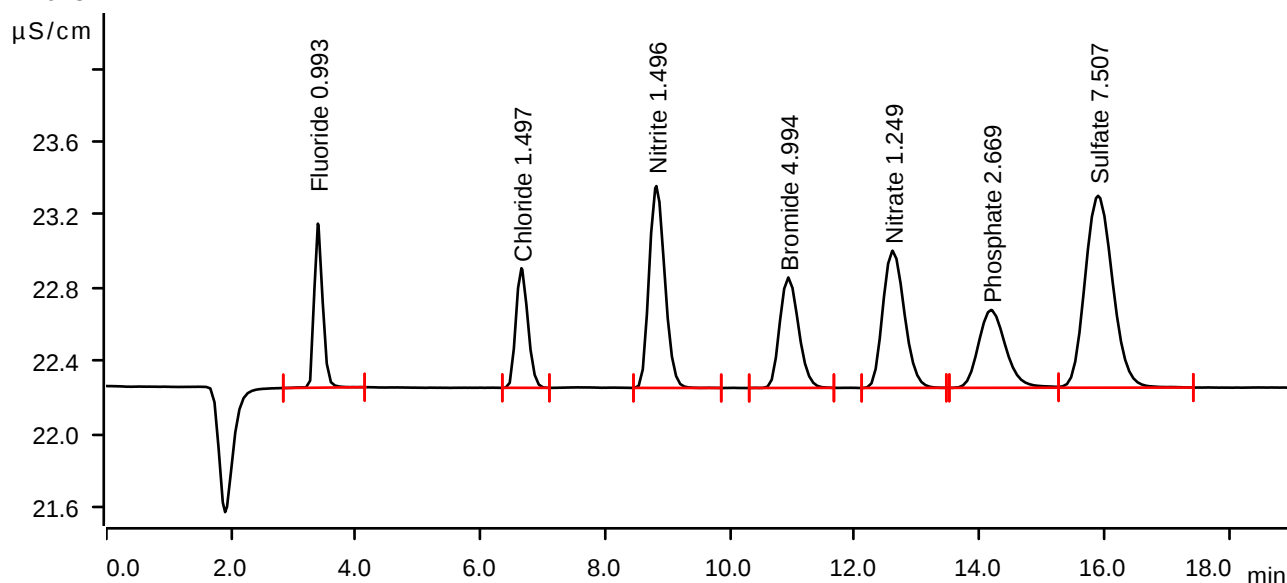
Sample data

Ident STD4
Sample type Standard 4
Determination start 2025-10-09 11:51:08 UTC-4
Method IC1-100925
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 13.34 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	3.392	0.1414	0.897	0.993	Fluoride
2	6.655	0.1461	0.654	1.497	Chloride
3	8.818	0.3220	1.103	1.496	Nitrite
4	10.933	0.2116	0.604	4.994	Bromide
5	12.607	0.3009	0.750	1.249	Nitrate
6	14.185	0.2152	0.426	2.669	Phosphate
7	15.900	0.5409	1.049	7.507	Sulfate

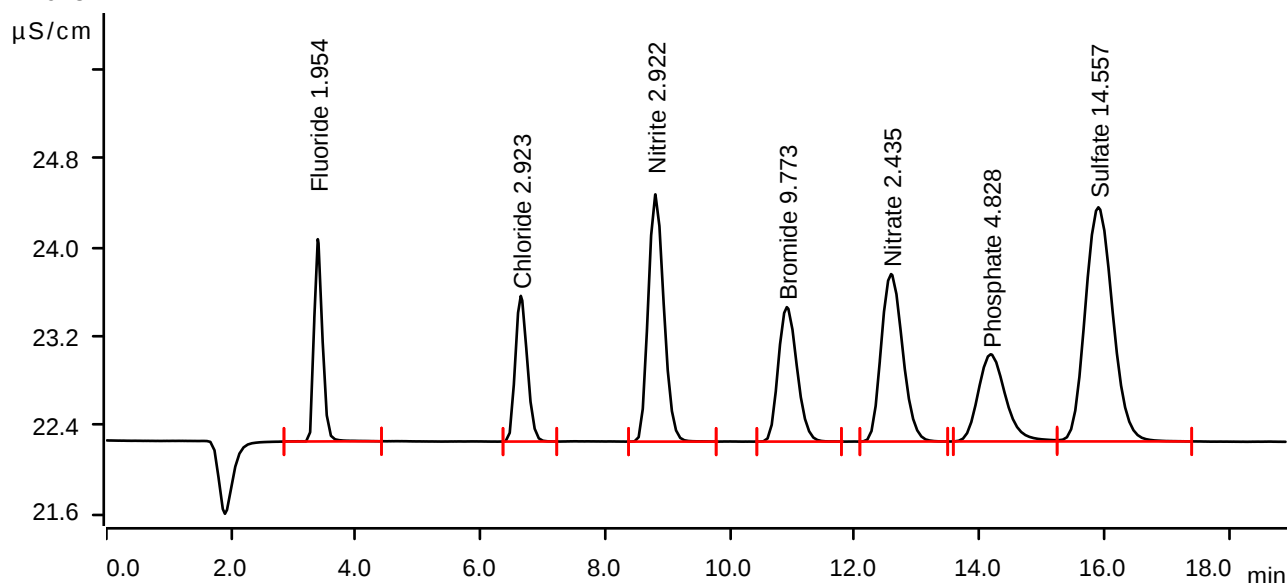
Sample data

Ident STD5
Sample type Standard 5
Determination start 2025-10-09 12:12:34 UTC-4
Method IC1-100925
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 13.06 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	3.390	0.2819	1.816	1.954	Fluoride
2	6.645	0.2909	1.308	2.923	Chloride
3	8.803	0.6446	2.221	2.922	Nitrite
4	10.910	0.4207	1.208	9.773	Bromide
5	12.582	0.6001	1.504	2.435	Nitrate
6	14.178	0.3988	0.783	4.828	Phosphate
7	15.905	1.0776	2.103	14.557	Sulfate

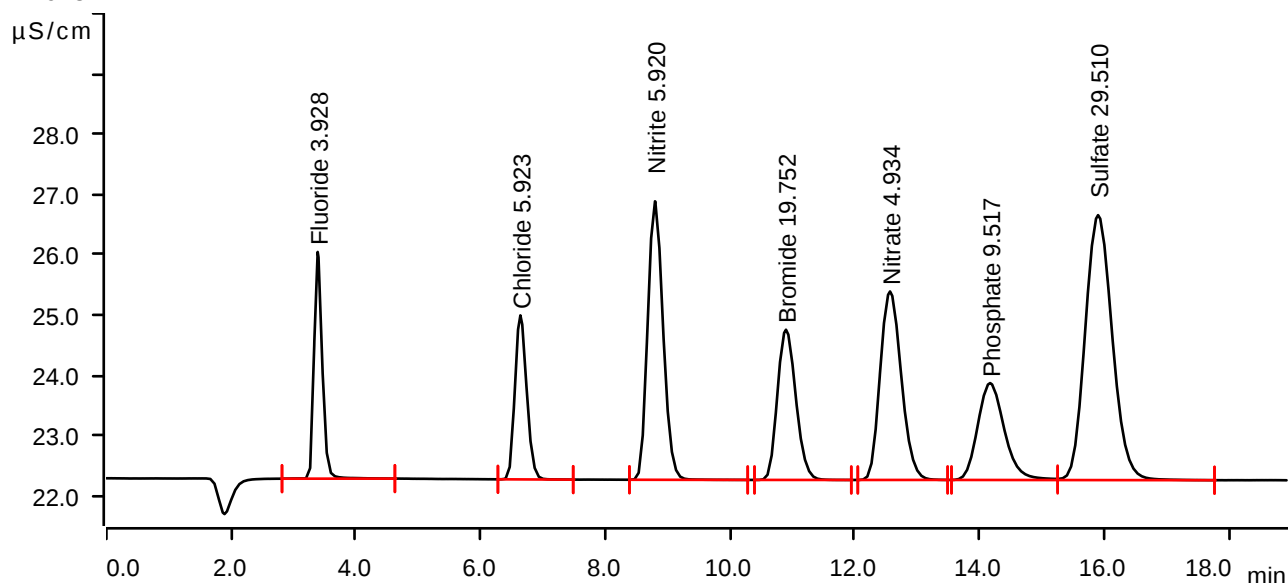
Sample data

Ident STD6
Sample type Standard 6
Determination start 2025-10-09 12:34:00 UTC-4
Method IC1-100925
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 13.06 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	3.388	0.5707	3.761	3.928	Fluoride
2	6.638	0.5955	2.722	5.923	Chloride
3	8.797	1.3228	4.622	5.920	Nitrite
4	10.897	0.8574	2.493	19.752	Bromide
5	12.565	1.2307	3.128	4.934	Nitrate
6	14.170	0.7975	1.608	9.517	Phosphate
7	15.900	2.2162	4.397	29.510	Sulfate

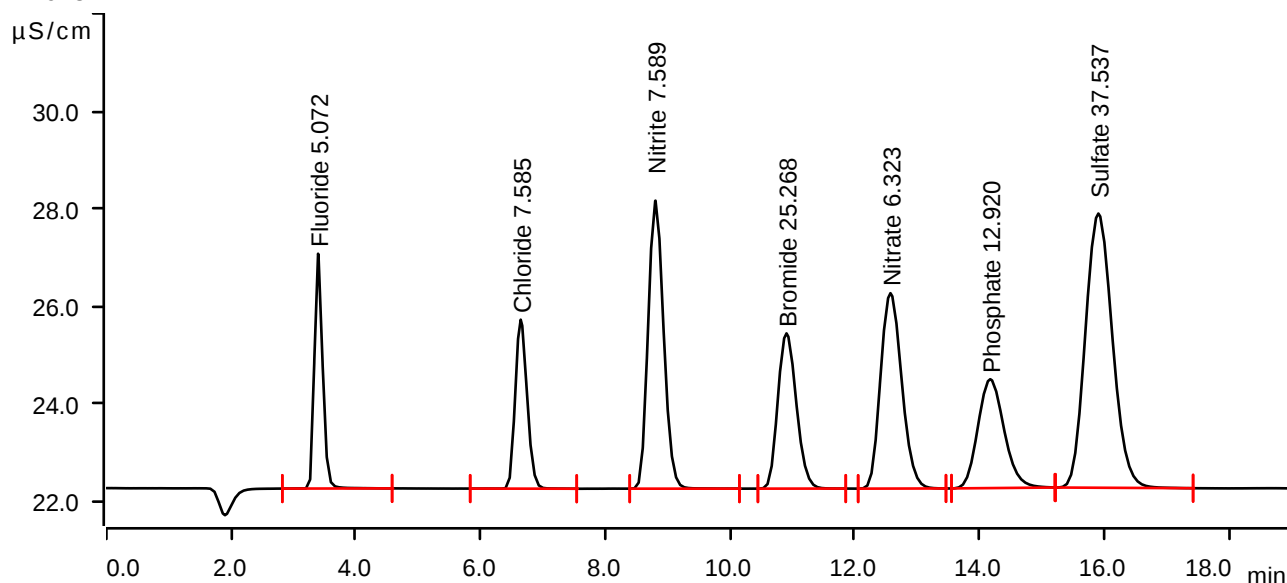
Sample data

Ident STD7
Sample type Standard 7
Determination start 2025-10-09 12:55:27 UTC-4
Method IC1-100925
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 13.01 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	3.395	0.7379	4.813	5.072	Fluoride
2	6.643	0.7642	3.464	7.585	Chloride
3	8.805	1.7004	5.904	7.589	Nitrite
4	10.905	1.0987	3.182	25.268	Bromide
5	12.572	1.5811	4.005	6.323	Nitrate
6	14.172	1.0869	2.232	12.920	Phosphate
7	15.905	2.8273	5.621	37.537	Sulfate

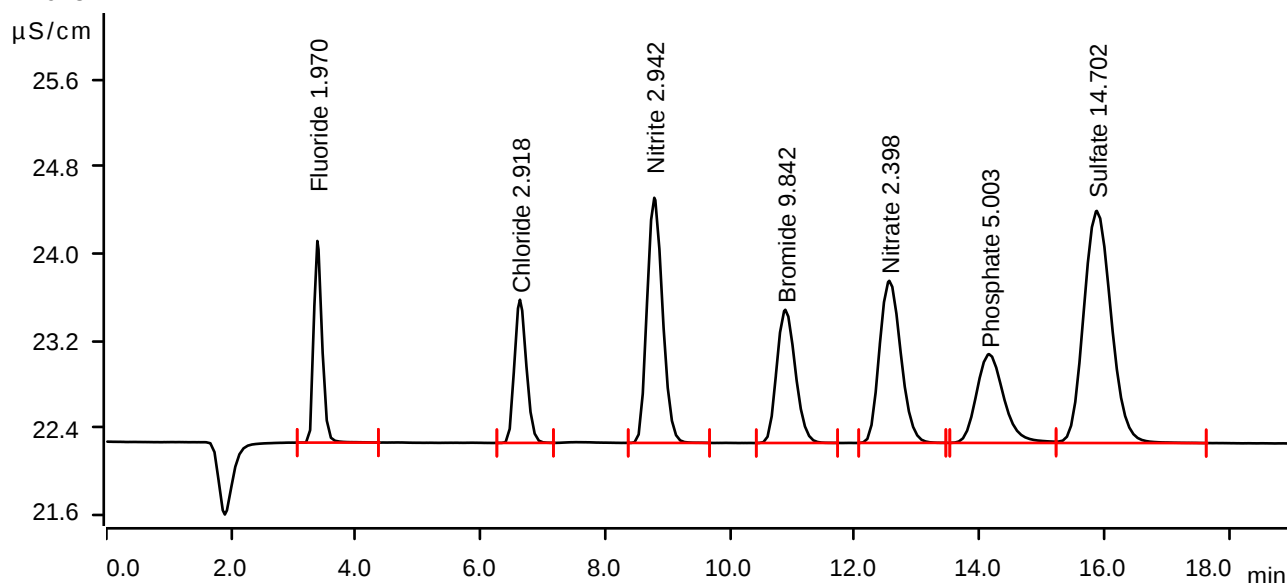
Sample data

Ident ICV
Sample type Check standard 1
Determination start 2025-10-09 13:16:55 UTC-4
Method IC1-100925
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 13.23 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	3.383	0.2843	1.850	1.970	Fluoride
2	6.632	0.2904	1.314	2.918	Chloride
3	8.785	0.6491	2.249	2.942	Nitrite
4	10.887	0.4238	1.222	9.842	Bromide
5	12.553	0.5909	1.487	2.398	Nitrate
6	14.152	0.4137	0.815	5.003	Phosphate
7	15.880	1.0887	2.130	14.702	Sulfate

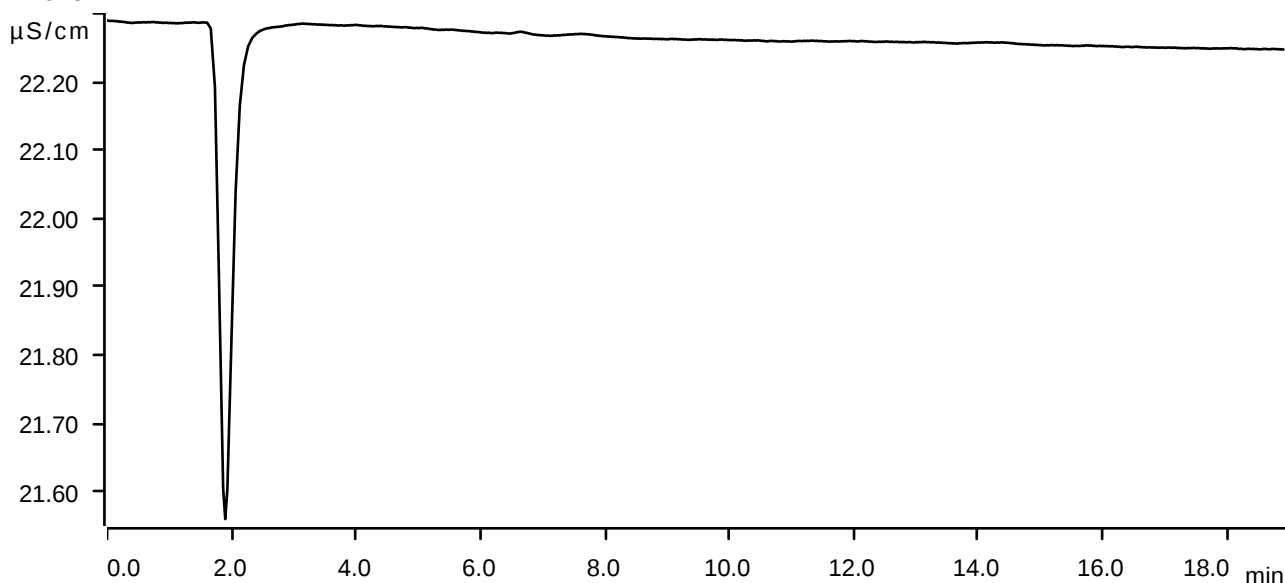
Sample data

Ident ICB
Sample type Sample
Determination start 2025-10-09 13:38:24 UTC-4
Method IC1-100925
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 13.12 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



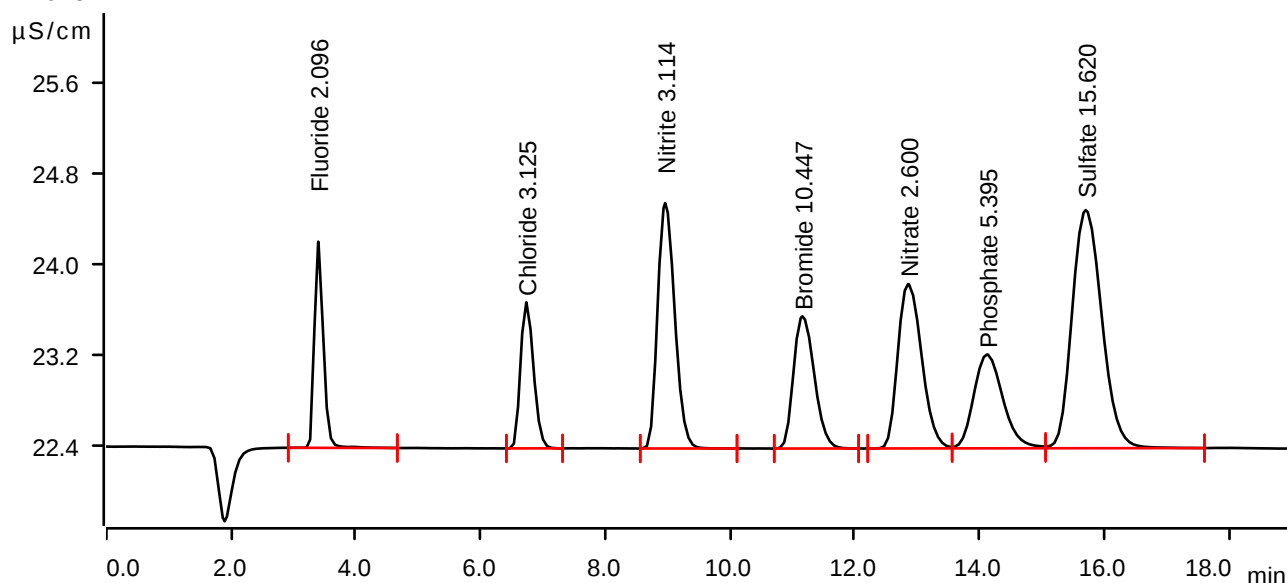
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-10-23 09:09:54 UTC-4
Method IC1-100925
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 14.02 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	3.397	0.3027	1.811	2.096	Fluoride
2	6.733	0.3114	1.284	3.125	Chloride
3	8.960	0.6879	2.156	3.114	Nitrite
4	11.160	0.4502	1.161	10.447	Bromide
5	12.853	0.6418	1.444	2.600	Nitrate
6	14.122	0.4470	0.825	5.395	Phosphate
7	15.702	1.1586	2.092	15.620	Sulfate

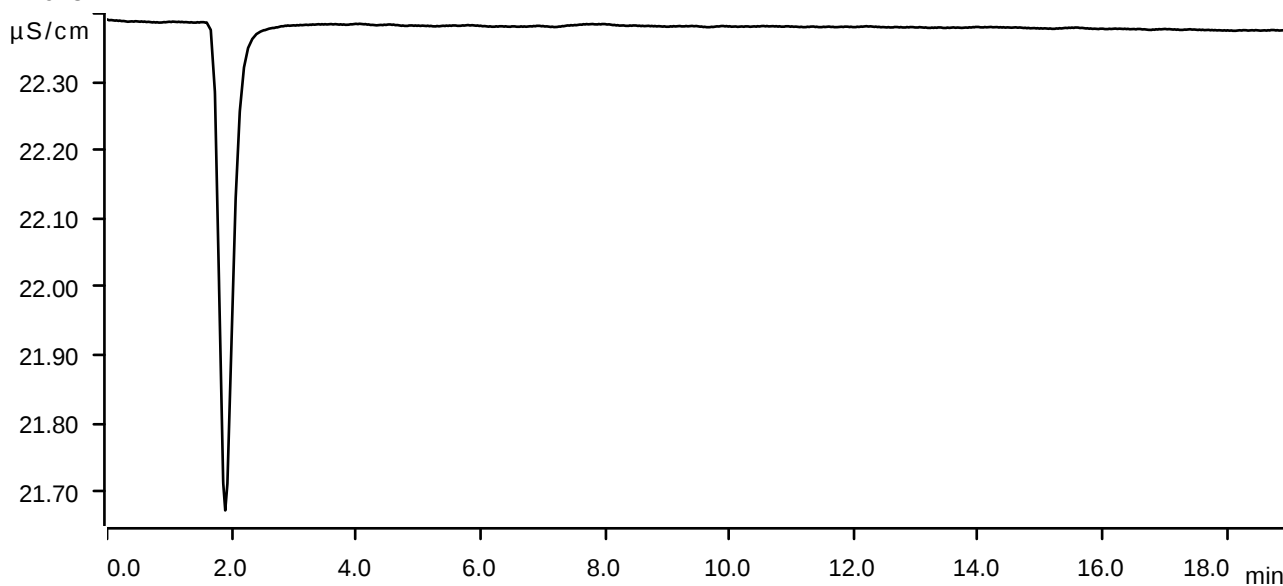
Sample data

Ident CCB
Sample type Sample
Determination start 2025-10-23 09:31:25 UTC-4
Method IC1-100925
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 13.74 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



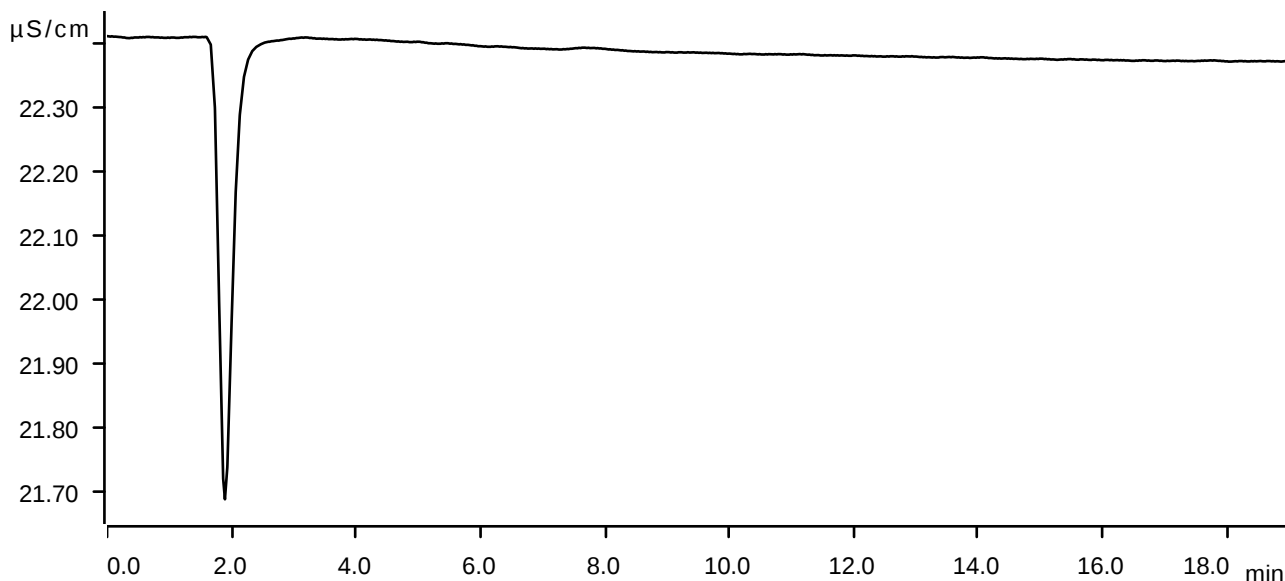
Sample data

Ident LB137629BLW
Sample type Sample
Determination start 2025-10-23 09:52:56 UTC-4
Method IC1-100925
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 13.63 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



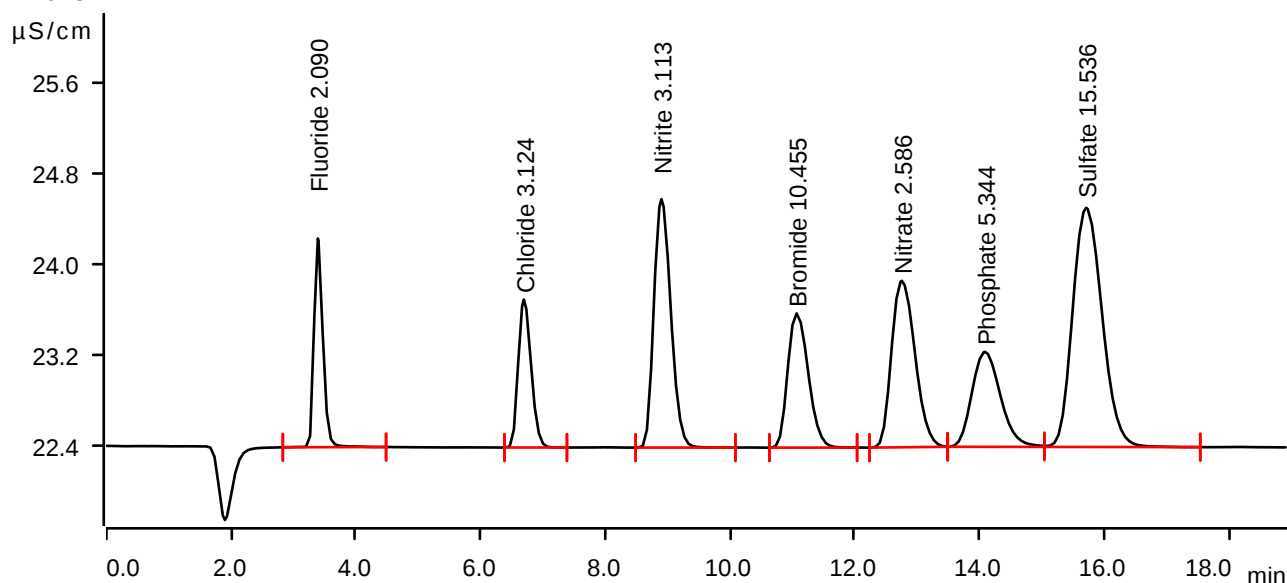
Sample data

Ident LB137629BSW
Sample type Check standard 1
Determination start 2025-10-23 10:14:27 UTC-4
Method IC1-100925
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 13.57 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	3.392	0.3018	1.834	2.090	Fluoride
2	6.695	0.3113	1.300	3.124	Chloride
3	8.900	0.6877	2.182	3.113	Nitrite
4	11.067	0.4506	1.179	10.455	Bromide
5	12.753	0.6383	1.462	2.586	Nitrate
6	14.087	0.4427	0.834	5.344	Phosphate
7	15.710	1.1522	2.101	15.536	Sulfate

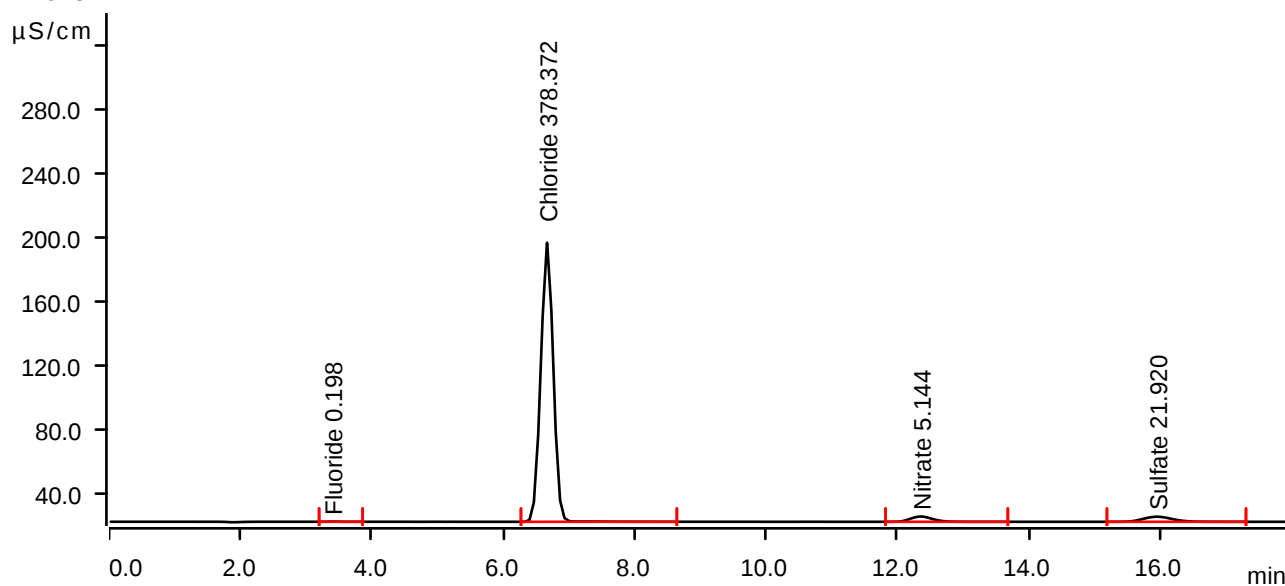
Sample data

Ident Q3444-01
Sample type Sample
Determination start 2025-10-23 13:28:47 UTC-4
Method IC1-100925
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 18.0 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	3.402	0.0252	0.159	0.198	Fluoride
2	6.670	38.4096	174.346	378.372	Chloride
3	12.357	1.2836	3.300	5.144	Nitrate
4	15.957	1.6383	3.181	21.920	Sulfate

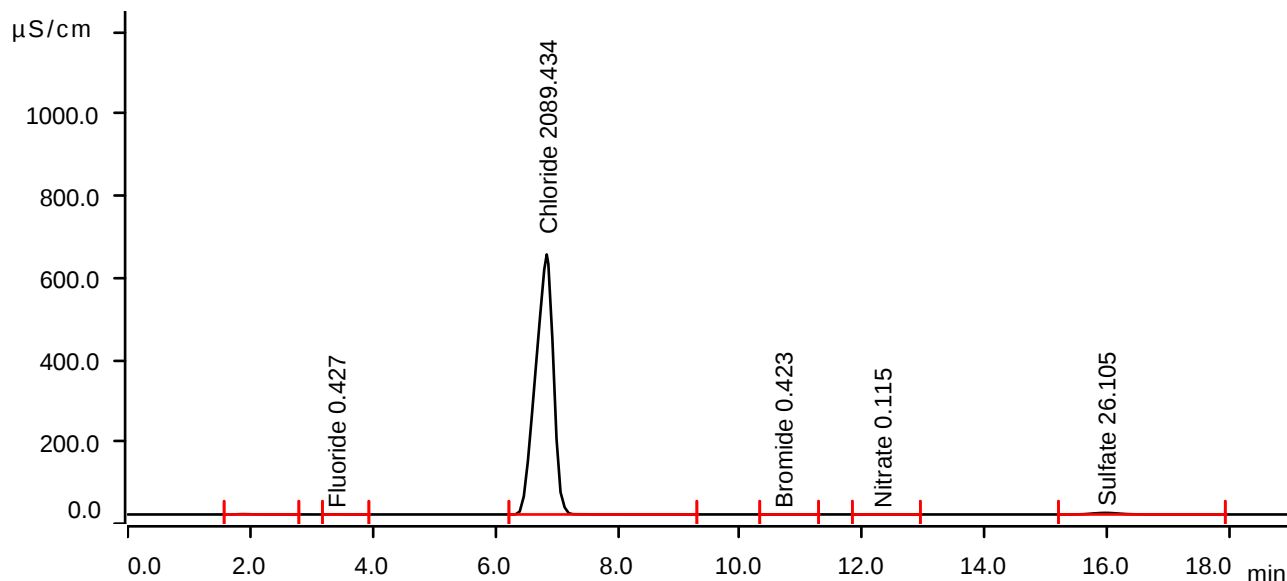
Sample data

Ident Q3444-02
Sample type Sample
Determination start 2025-10-23 13:49:25 UTC-4
Method IC1-100925
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 12.27 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	1.887	0.2101	0.764	invalid	
2	3.393	0.0585	0.364	0.427	Fluoride
3	6.842	212.1304	634.540	2089.434	Chloride
4	10.667	0.0116	0.033	0.423	Bromide
5	12.307	0.0147	0.037	0.115	Nitrate
6	15.965	1.9570	3.796	26.105	Sulfate

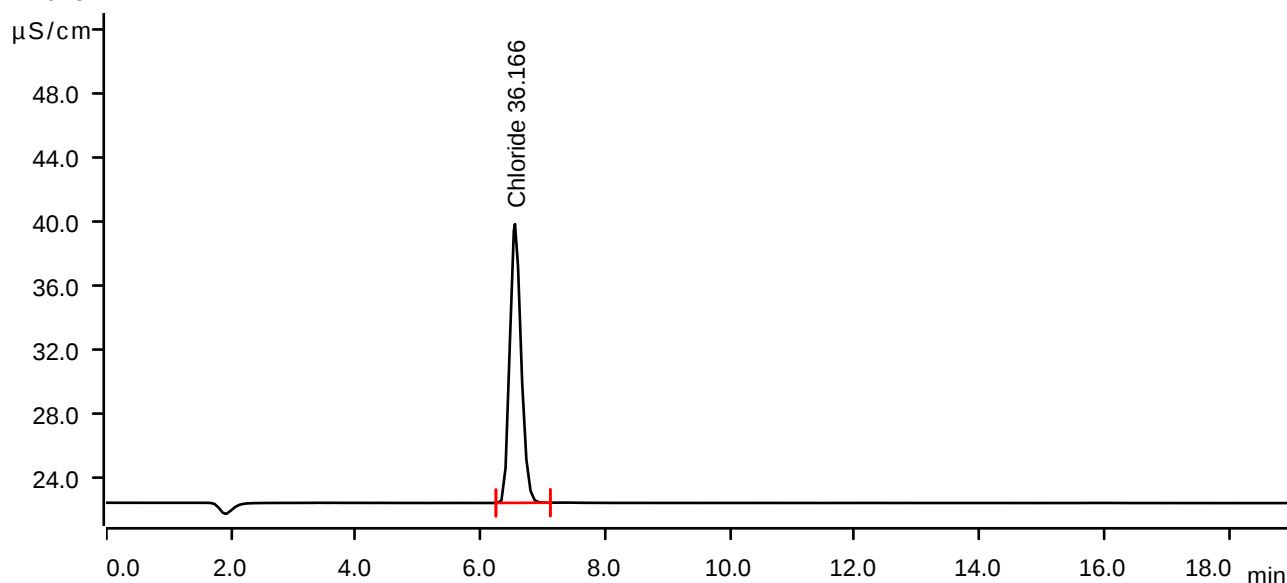
Sample data

Ident Q3444-03
Sample type Sample
Determination start 2025-10-23 14:10:59 UTC-4
Method IC1-100925
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	Area	Height	Concentration	Component name
	min	($\mu\text{S/cm}$) x min	$\mu\text{S/cm}$	ppm	
1	6.552	3.6659	17.417	36.166	Chloride

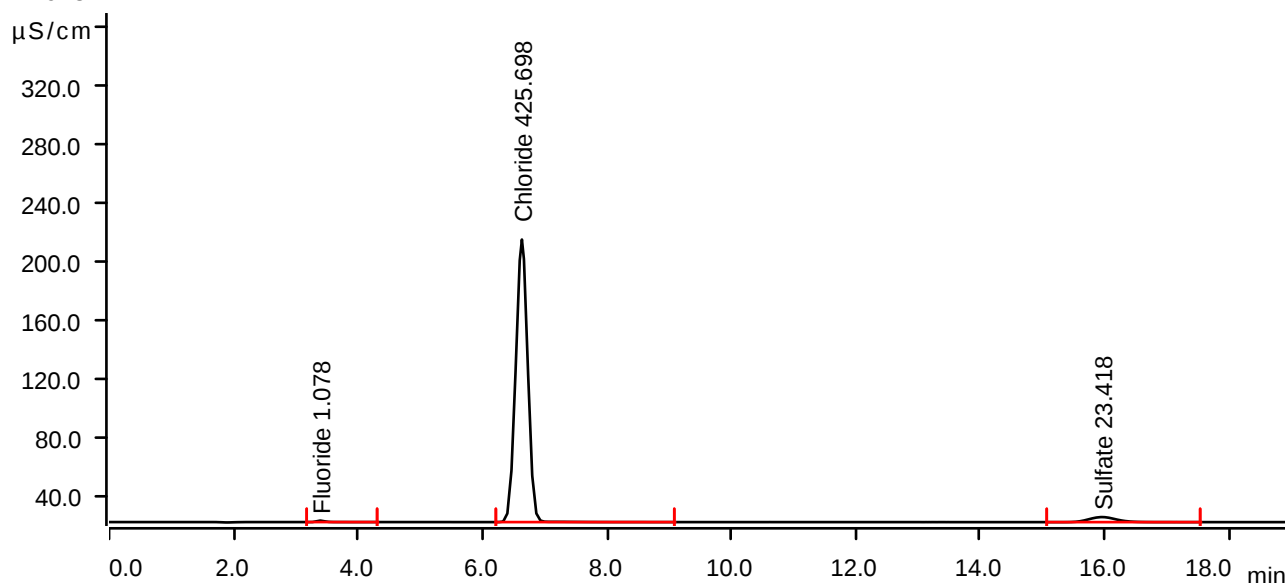
Sample data

Ident Q3444-04
Sample type Sample
Determination start 2025-10-23 14:32:33 UTC-4
Method IC1-100925
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 12.27 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	3.393	0.1538	0.981	1.078	Fluoride
2	6.635	43.2145	193.072	425.698	Chloride
3	15.957	1.7524	3.449	23.418	Sulfate

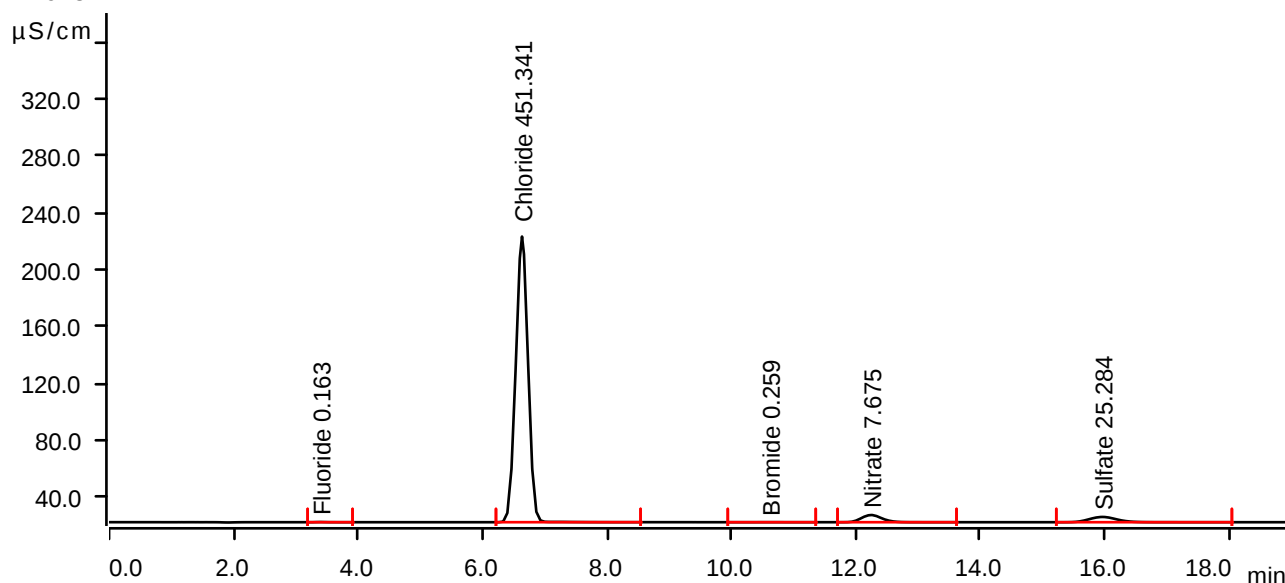
Sample data

Ident Q3444-05
Sample type Sample
Determination start 2025-10-23 14:54:08 UTC-4
Method IC1-100925
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	3.397	0.0200	0.124	0.163	Fluoride
2	6.637	45.8180	200.758	451.341	Chloride
3	10.618	0.0044	0.011	0.259	Bromide
4	12.248	1.9223	5.046	7.675	Nitrate
5	15.963	1.8944	3.700	25.284	Sulfate

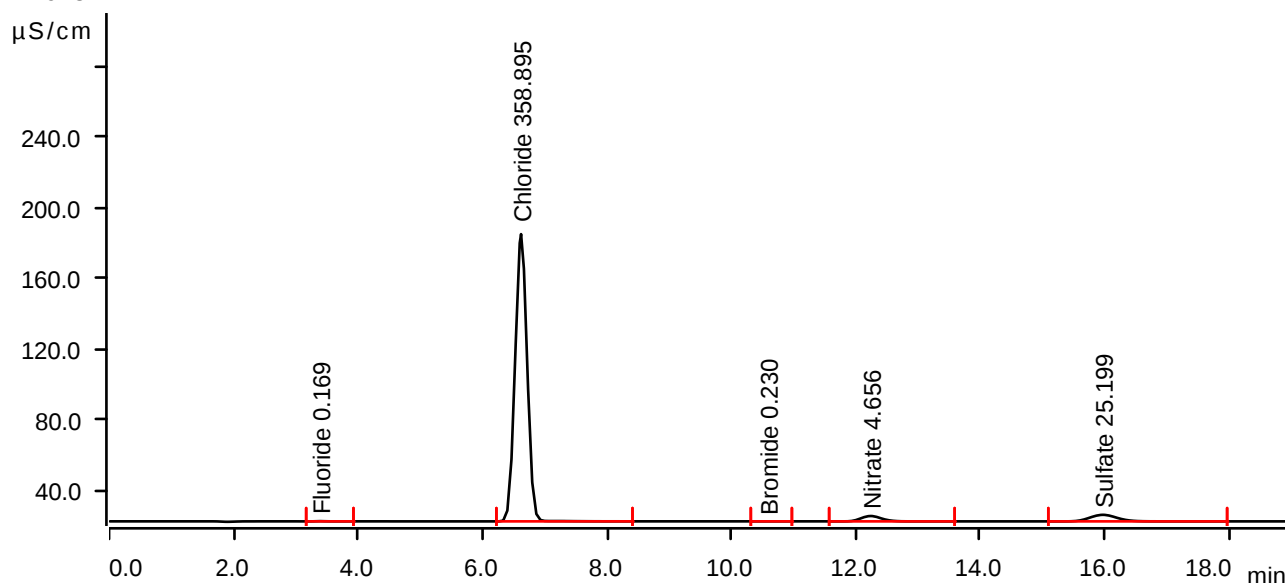
Sample data

Ident Q3444-06
Sample type Sample
Determination start 2025-10-23 15:15:42 UTC-4
Method IC1-100925
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	3.393	0.0208	0.128	0.169	Fluoride
2	6.622	36.4321	162.627	358.895	Chloride
3	10.588	0.0032	0.010	0.230	Bromide
4	12.242	1.1606	3.036	4.656	Nitrate
5	15.972	1.8879	3.708	25.199	Sulfate

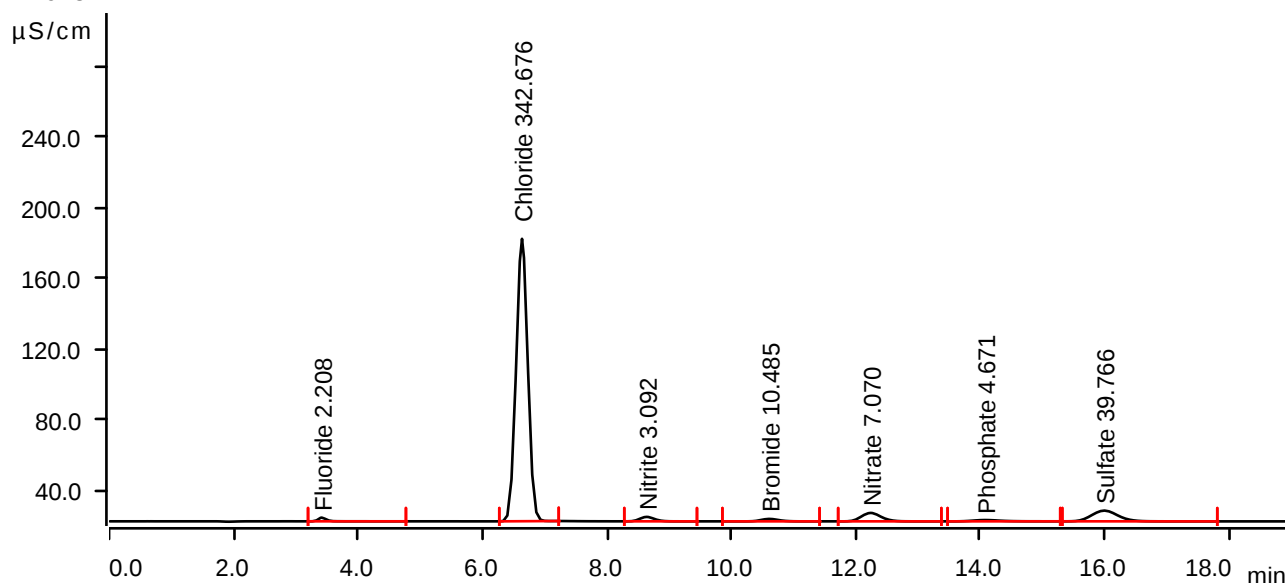
Sample data

Ident Q3444-06MS
Sample type Sample
Determination start 2025-10-23 15:37:16 UTC-4
Method IC1-100925
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	3.418	0.3191	2.093	2.208	Fluoride
2	6.637	34.7854	159.880	342.676	Chloride
3	8.640	0.6831	2.517	3.092	Nitrite
4	10.612	0.4519	1.380	10.485	Bromide
5	12.240	1.7696	4.775	7.070	Nitrate
6	14.080	0.3855	0.744	4.671	Phosphate
7	15.993	2.9971	6.077	39.766	Sulfate

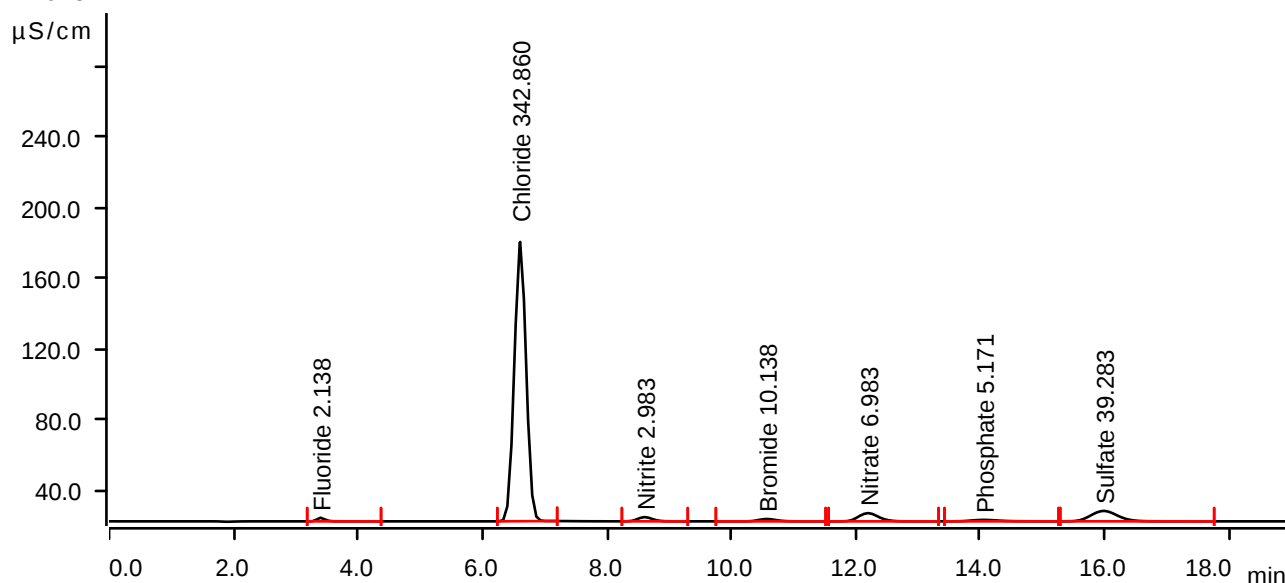
Sample data

Ident Q3444-06MSD
Sample type Sample
Determination start 2025-10-23 15:58:49 UTC-4
Method IC1-100925
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 12.05 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	3.398	0.3089	2.021	2.138	Fluoride
2	6.607	34.8041	158.103	342.860	Chloride
3	8.607	0.6583	2.390	2.983	Nitrite
4	10.572	0.4367	1.314	10.138	Bromide
5	12.198	1.7477	4.652	6.983	Nitrate
6	14.057	0.4279	0.826	5.171	Phosphate
7	15.985	2.9603	5.896	39.283	Sulfate

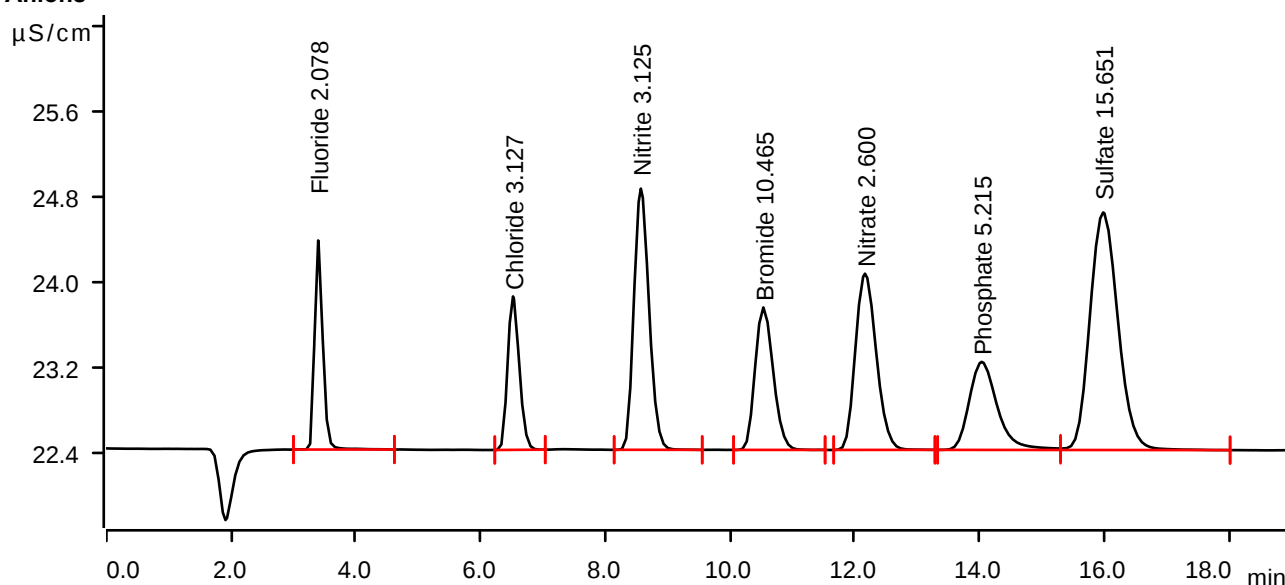
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-10-23 16:20:16 UTC-4
Method IC1-100925
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	3.397	0.3000	1.959	2.078	Fluoride
2	6.520	0.3116	1.438	3.127	Chloride
3	8.570	0.6905	2.448	3.125	Nitrite
4	10.535	0.4510	1.334	10.465	Bromide
5	12.163	0.6418	1.652	2.600	Nitrate
6	14.033	0.4317	0.825	5.215	Phosphate
7	15.982	1.1610	2.227	15.651	Sulfate

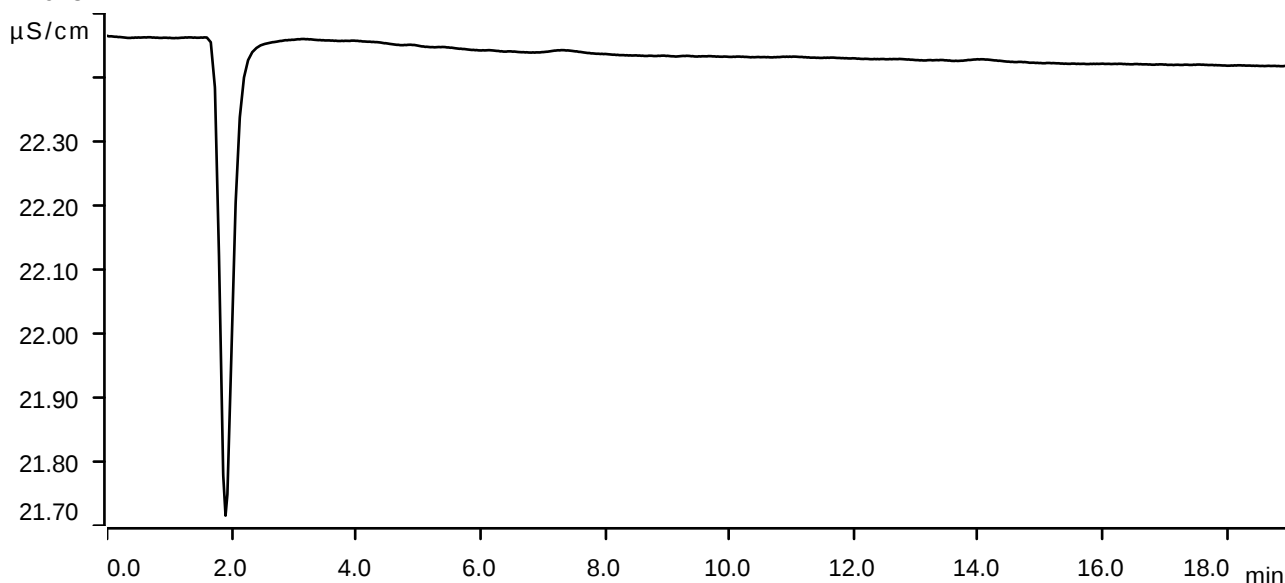
Sample data

Ident CCB
Sample type Sample
Determination start 2025-10-23 16:41:46 UTC-4
Method IC1-100925
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 12.05 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



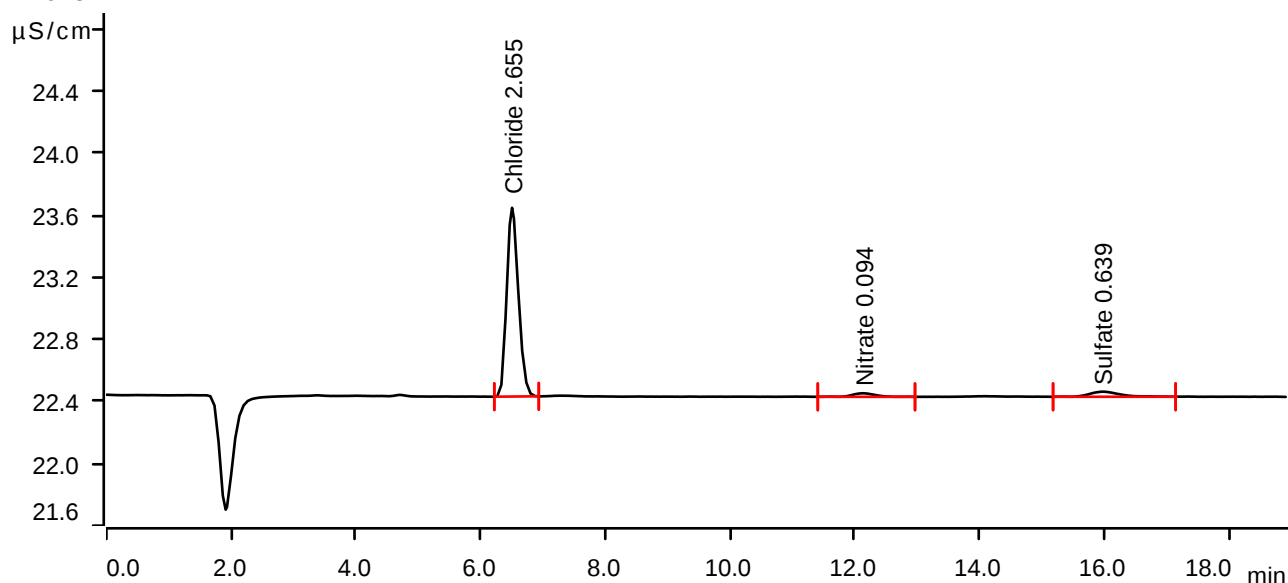
Sample data

Ident Q3444-01DLX100
Sample type Sample
Determination start 2025-10-23 17:03:17 UTC-4
Method IC1-100925
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	6.505	0.2636	1.216	2.655	Chloride
2	12.132	0.0095	0.023	0.094	Nitrate
3	15.960	0.0179	0.033	0.639	Sulfate

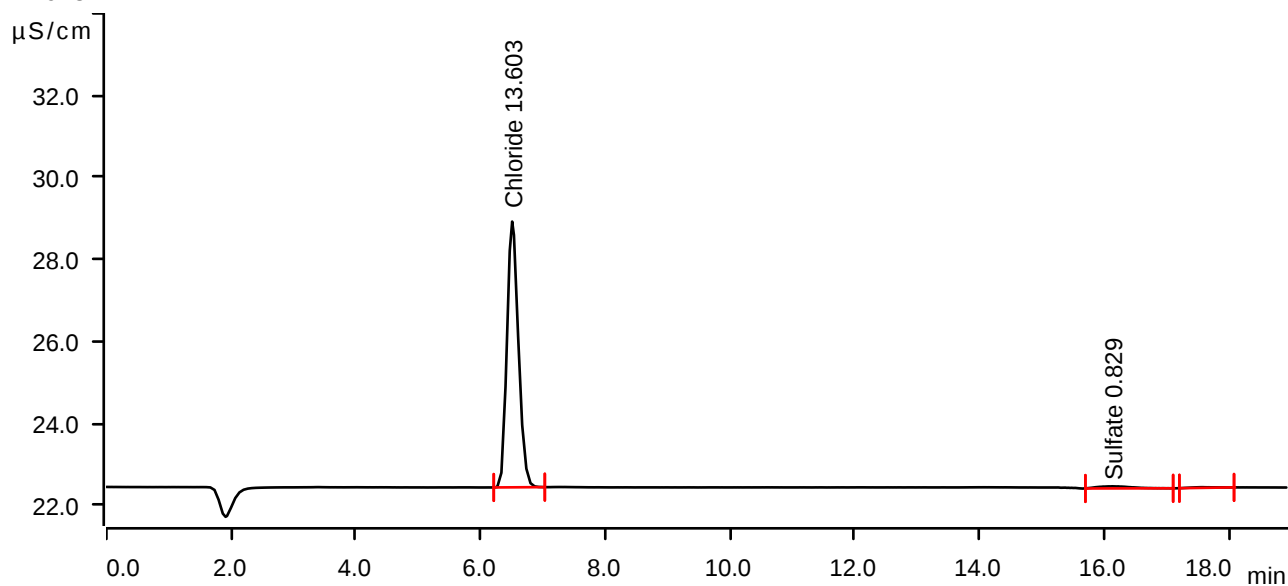
Sample data

Ident Q3444-02DLX100
Sample type Sample
Determination start 2025-10-23 17:24:48 UTC-4
Method IC1-100925
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	6.507	1.3752	6.485	13.603	Chloride
2	16.128	0.0324	0.051	0.829	Sulfate
3	17.573	0.0072	0.016	invalid	

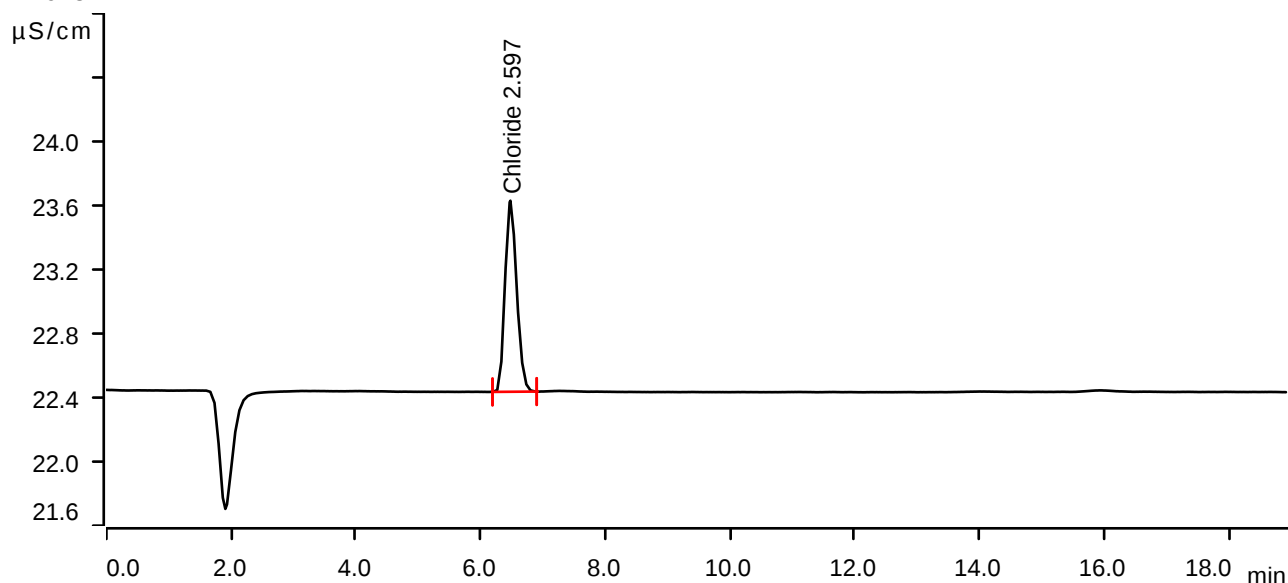
Sample data

Ident Q3444-02DL2X500
Sample type Sample
Determination start 2025-10-23 18:07:48 UTC-4
Method IC1-100925
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	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	6.478	0.2578	1.194	2.597	Chloride

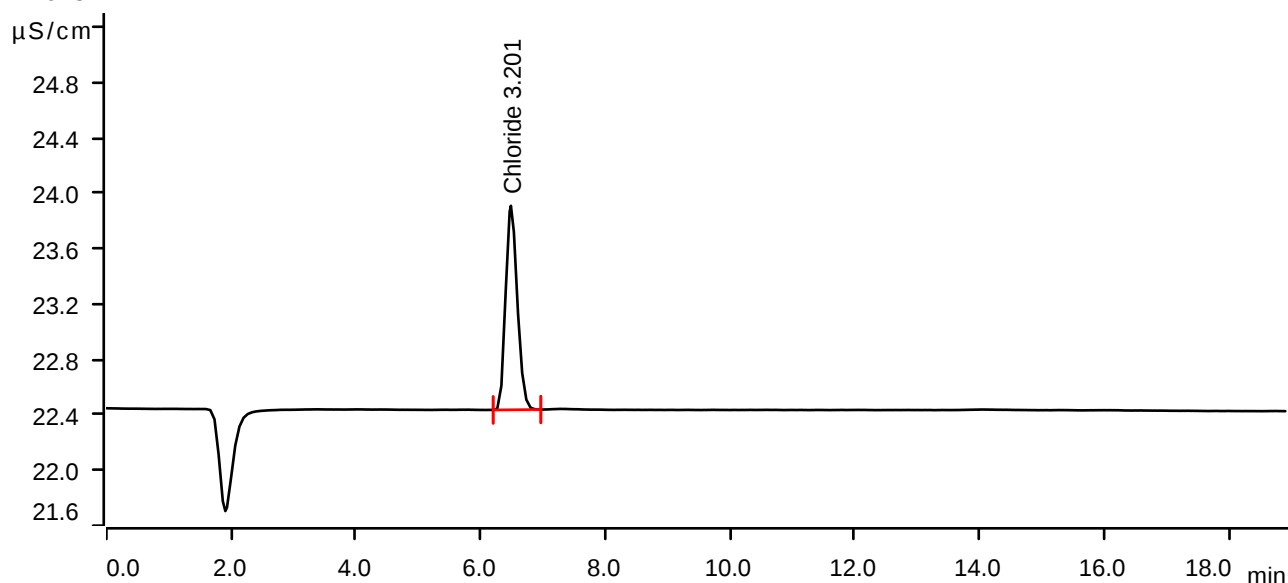
Sample data

Ident Q3444-03DLX10
Sample type Sample
Determination start 2025-10-23 18:29:17 UTC-4
Method IC1-100925
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	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	6.487	0.3191	1.474	3.201	Chloride

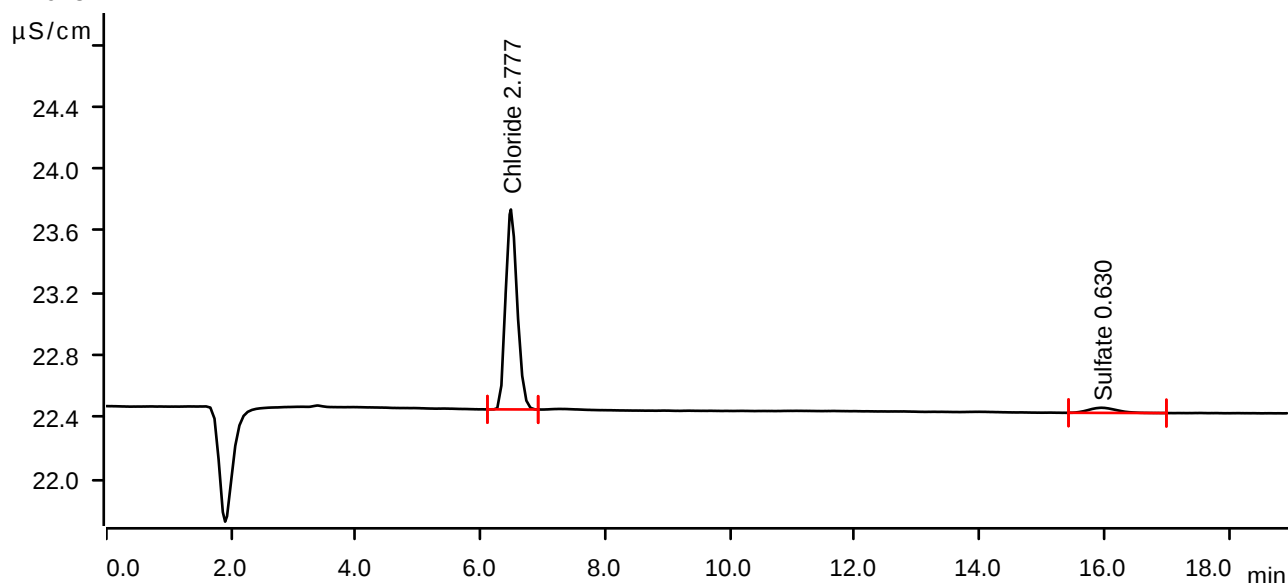
Sample data

Ident Q3444-04DLX100
Sample type Sample
Determination start 2025-10-23 18:50:45 UTC-4
Method IC1-100925
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	6.487	0.2760	1.288	2.777	Chloride
2	15.957	0.0172	0.033	0.630	Sulfate

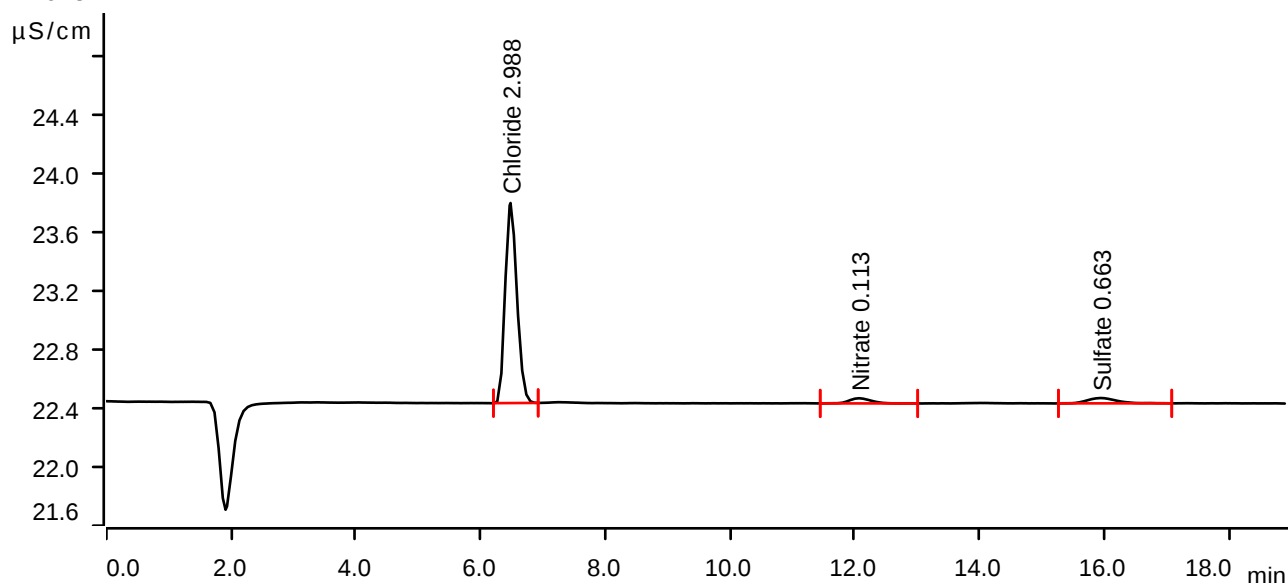
Sample data

Ident Q3444-05DLX100
Sample type Sample
Determination start 2025-10-23 19:12:12 UTC-4
Method IC1-100925
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	6.480	0.2975	1.367	2.988	Chloride
2	12.070	0.0144	0.035	0.113	Nitrate
3	15.943	0.0198	0.036	0.663	Sulfate

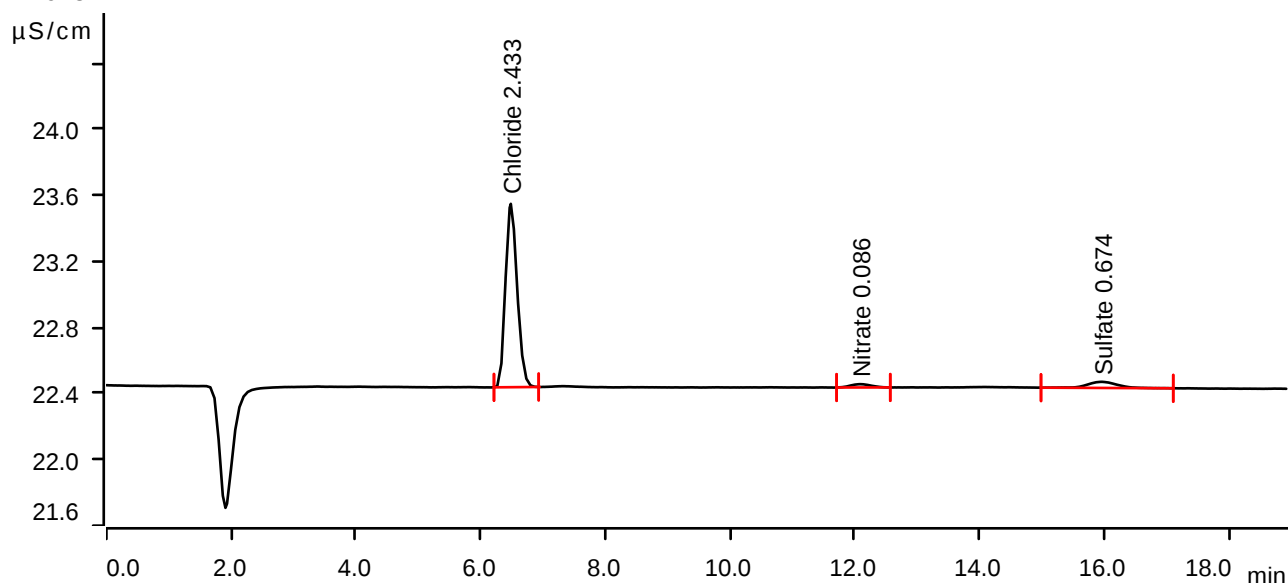
Sample data

Ident Q3444-06DLX100
Sample type Sample
Determination start 2025-10-23 19:33:39 UTC-4
Method IC1-100925
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	6.485	0.2411	1.110	2.433	Chloride
2	12.087	0.0076	0.020	0.086	Nitrate
3	15.965	0.0206	0.037	0.674	Sulfate

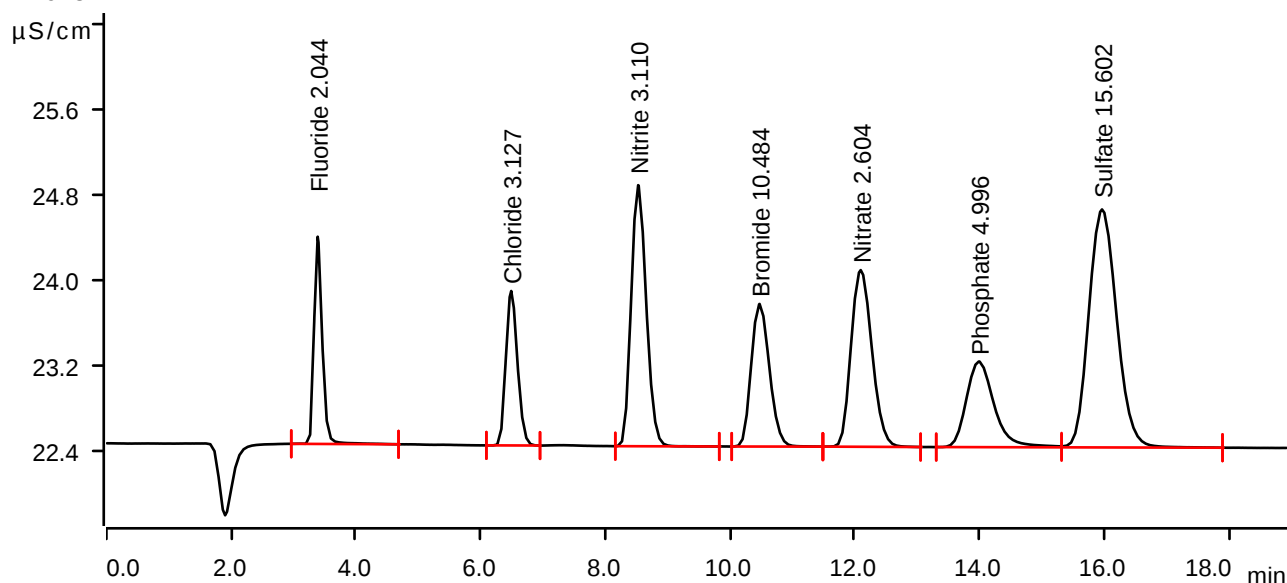
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-10-23 19:55:05 UTC-4
Method IC1-100925
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	3.388	0.2951	1.942	2.044	Fluoride
2	6.492	0.3116	1.447	3.127	Chloride
3	8.527	0.6871	2.447	3.110	Nitrite
4	10.473	0.4519	1.336	10.484	Bromide
5	12.095	0.6428	1.656	2.604	Nitrate
6	13.988	0.4131	0.803	4.996	Phosphate
7	15.963	1.1572	2.230	15.602	Sulfate

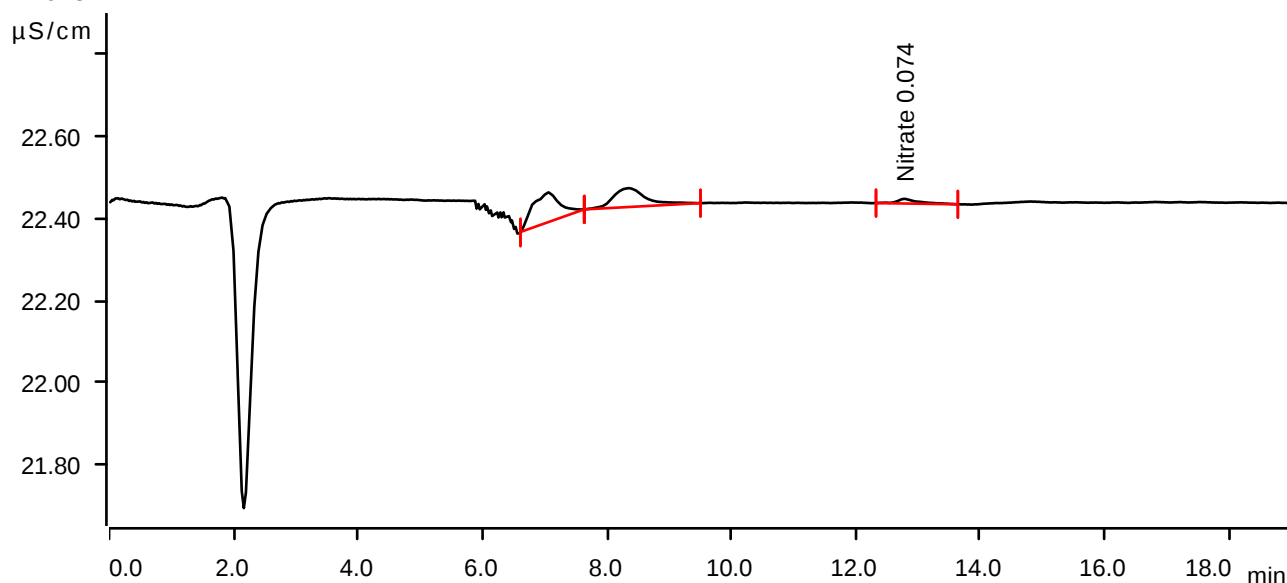
Sample data

Ident CCB
Sample type Sample
Determination start 2025-10-23 20:16:35 UTC-4
Method IC1-100925
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 10.14 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	7.060	0.0374	0.072	invalid	
2	8.365	0.0282	0.046	invalid	
3	12.772	0.0046	0.011	0.074	Nitrate

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Anions-102325

WorkList ID : 192644

Department : Wet-Chemistry

Date : 10-23-2025 13:18:53

LB137629

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3444-01	16 Banker	Water	Anions Group1	Cool 4 deg C	GENV01	J21	10/23/2025	300.0
Q3444-02	29 Hanover	Water	Anions Group1	Cool 4 deg C	GENV01	J21	10/23/2025	300.0
Q3444-03	29 Post	Water	Anions Group1	Cool 4 deg C	GENV01	J21	10/23/2025	300.0
Q3444-04	683 WARWICK	Water	Anions Group1	Cool 4 deg C	GENV01	J21	10/23/2025	300.0
Q3444-05	735 WARWICK	Water	Anions Group1	Cool 4 deg C	GENV01	J21	10/23/2025	300.0
Q3444-06	739 WARWICK	Water	Anions Group1	Cool 4 deg C	GENV01	J21	10/23/2025	300.0

Date/Time 10/23/25 13:10
Raw Sample Received by: 12(507)
Raw Sample Relinquished by: 200007

Date/Time 10/23/25 15:10
Raw Sample Received by: 200007
Raw Sample Relinquished by: 12(507)

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137629

Review By	rubina	Review On	10/27/2025 11:34:15 AM
Supervise By	Iwona	Supervise On	10/27/2025 11:47:11 AM
SubDirectory	LB137629	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP115135,WP115136,WP115137,WP115138,WP115139,WP115140,WP115141		
ICV Standard	WP115142		
CCV Standard	WP115302		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP115303		
Chk Standard	WP115144,WP115345		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	STD1	STD1	CAL1	10/09/25 10:46	All standards, samples, and	RM/IZ	OK
2	STD2	STD2	CAL2	10/09/25 11:08	QC are filtered through	RM/IZ	OK
3	STD3	STD3	CAL3	10/09/25 11:29	0.45um, filter lot W3160	RM/IZ	OK
4	STD4	STD4	CAL4	10/09/25 11:51		RM/IZ	OK
5	STD5	STD5	CAL5	10/09/25 12:12		RM/IZ	OK
6	STD6	STD6	CAL6	10/09/25 12:34		RM/IZ	OK
7	STD7	STD7	CAL7	10/09/25 12:55		RM/IZ	OK
8	ICV1	ICV1	ICV	10/09/25 13:16		RM/IZ	OK
9	ICB1	ICB1	ICB	10/09/25 13:38		RM/IZ	OK
10	CCV1	CCV1	CCV	10/23/25 09:09		RM/IZ	OK
11	CCB1	CCB1	CCB	10/23/25 09:31		RM/IZ	OK
12	LB137629BLW	LB137629BLW	MB	10/23/25 09:52		RM/IZ	OK
13	LB137629BSW	LB137629BSW	LCS	10/23/25 10:14		RM/IZ	OK
14	Q3444-01	16 Banker	SAM	10/23/25 13:28	Cl is High, Need Dilution	RM/IZ	Dilution
15	Q3444-02	29 Hanover	SAM	10/23/25 13:49	Cl is High, Need Dilution	RM/IZ	Dilution
16	Q3444-03	29 Post	SAM	10/23/25 14:10	Cl is High, Need Dilution	RM/IZ	Dilution
17	Q3444-04	683 WARWICK	SAM	10/23/25 14:32	Cl is High, Need Dilution	RM/IZ	Dilution
18	Q3444-05	735 WARWICK	SAM	10/23/25 14:54	Cl is High, Need Dilution	RM/IZ	Dilution

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137629

Review By	rubina	Review On	10/27/2025 11:34:15 AM
Supervise By	Iwona	Supervise On	10/27/2025 11:47:11 AM
SubDirectory	LB137629	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP115135,WP115136,WP115137,WP115138,WP115139,WP115140,WP115141		
ICV Standard	WP115142		
CCV Standard	WP115302		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP115303		
Chk Standard	WP115144,WP115345		

19	Q3444-06	739 WARWICK	SAM	10/23/25 15:15	Cl is High, Need Dilution	RM/IZ	Dilution
20	Q3444-06MS	739 WARWICKMS	MS	10/23/25 15:37	9.5ml of sample, 0.5mL W3096	RM/IZ	OK
21	Q3444-06MSD	739 WARWICKMSD	MSD	10/23/25 15:58	9.5ml of sample, 0.5mL W3096	RM/IZ	OK
22	CCV2	CCV2	CCV	10/23/25 16:20		RM/IZ	OK
23	CCB2	CCB2	CCB	10/23/25 16:41		RM/IZ	OK
24	Q3444-01DL	16 BankerDL	SAM	10/23/25 17:03	100X For Cl	RM/IZ	Confirms
25	Q3444-02DL	29 HanoverDL	SAM	10/23/25 17:24	100X For Cl, Still High	RM/IZ	Dilution
26	Q3444-02DL2	29 HanoverDL2	SAM	10/23/25 18:07	500X For Cl	RM/IZ	Confirms
27	Q3444-03DL	29 PostDL	SAM	10/23/25 18:29	10X For Cl	RM/IZ	Confirms
28	Q3444-04DL	683 WARWICKDL	SAM	10/23/25 18:50	100X For Cl	RM/IZ	Confirms
29	Q3444-05DL	735 WARWICKDL	SAM	10/23/25 19:12	100X For Cl	RM/IZ	Confirms
30	Q3444-06DL	739 WARWICKDL	SAM	10/23/25 19:33	100X For Cl	RM/IZ	Confirms
31	CCV3	CCV3	CCV	10/23/25 19:55		RM/IZ	OK
32	CCB3	CCB3	CCB	10/23/25 20:16		RM/IZ	OK

Prep Standard - Chemical Standard Summary

Order ID : Q3444

Test : Anions Group1

Prepbatch ID :

Sequence ID/Qc Batch ID: LB137629,

Standard ID :

WP115135,WP115136,WP115137,WP115138,WP115139,WP115140,WP115141,WP115142,WP115144,WP115302,WP115303,WP115344,WP115345,

Chemical ID :

M6186,W2647,W3112,W3163,W3180,W3197,

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>
2487	Anions 300/9056 calibration standard 1	WP115135	10/09/2025	10/10/2025	Iwona Zarych	None	None	Jignesh Parikh 10/27/2025
FROM 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	WP115136	10/09/2025	10/10/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 10/27/2025
FROM 0.20000ml of W3180 + 9.80000ml 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>
25	Anions 300/9056 calibration standard 3	WP115137	10/09/2025	10/10/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/27/2025
FROM 0.40000ml of W3180 + 9.60000ml 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>
26	Anions 300/9056 calibration standard 4	WP115138	10/09/2025	10/10/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/27/2025
FROM 0.50000ml of W3180 + 9.50000ml 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>
3680	Anions 300/9056 calibration standard 5-CCV	WP115139	10/09/2025	10/10/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/27/2025
FROM 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>
3679	Anions 300/9056 calibration standard 6	WP115140	10/09/2025	10/10/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/27/2025
FROM 2.00000ml of W3180 + 8.00000ml 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>
3681	Anions 300/9056 calibration standard 7	WP115141	10/09/2025	10/10/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/27/2025
FROM 2.50000ml of W3180 + 7.50000ml 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>
3233	Anions 300/9056 ICV-LCS std	WP115142	10/09/2025	10/10/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 10/27/2025
FROM 45.00000ml of W3112 + 5.00000ml of W3197 = Final Quantity: 50.000 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	WP115144	10/09/2025	11/09/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 10/27/2025

FROM 5.60000ml of M6186 + 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>
3680	Anions 300/9056 calibration standard 5-CCV	WP115302	10/23/2025	10/24/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 10/27/2025

FROM 45.00000ml of W3112 + 5.00000ml of W3180 = Final Quantity: 50.000 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	WP115303	10/23/2025	10/24/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 10/27/2025

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>
4035	IC ELUENT CONCENTRATE FOR IC-1	WP115344	10/23/2025	04/23/2026	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 10/28/2025

FROM 2.10000gram of W2647 + 84.75000gram of W3163 + 913.15000ml of W3112 = Final Quantity: 1000.000 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>
4036	IC ELUENT FOR IC-1	WP115345	10/23/2025	11/23/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 10/28/2025
FROM 1980.00000ml of W3112 + 20.00000ml of WP115344 = Final Quantity: 2000.000 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	07/12/2026	08/13/2025 / Sagar	08/06/2025 / Sagar	M6186

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

James Ethier
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™



M6186

Recieve Date :- 08/06/25

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**

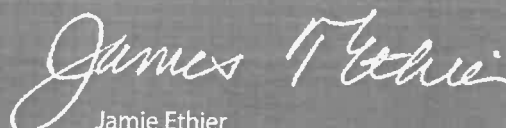


Material No.: 9673-33
Batch No.: 23D2462010

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

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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](https://www.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

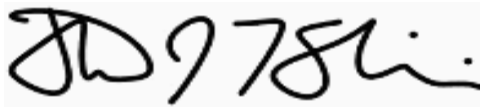
Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Thomas Kozikowski
Stock VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





SHIPPING DOCUMENTS

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CLIENT INFORMATION

COMPANY: G Environmental
ADDRESS: 8 Carriage
CITY: Summerville STATE: NJ ZIP:
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Banker
PROJECT NO.: LOCATION: NJ
PROJECT MANAGER: GL
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: G Environmental PO#:
ADDRESS: 8 Carriage
CITY: Summerville STATE: NJ ZIP:
ATTENTION: PHONE:
ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) 5 day 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 excel, pdf, hard

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	16 Banker	DW		X	10/23	25/10/1	2			X		X					
2.	29 Hanover	DW		X	↑	1036	2			X		X					
3.	29 Post	DW		X	↑	1039	2			X		X					
4.	683 WARWICK	DW		X	↓	1019	2			X		X					
5.	735 WARWICK	DW		X	↓	0943	2			X		X					
6.	739 WARWICK	DW		X	10/23	0927	2			X		X					
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>1.9°C</u>
1. <u>[Signature]</u>		1. <u>[Signature]</u> 10/23/25	Comments: <u>onice Banker</u>
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
2.		2.	
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
3.		3.	

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

Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312