284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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DATA PACKAGE

GENERAL CHEMISTRY

PROJECT NAME : SCOTIA, NY - ANNUAL TESTING

EA ENGINEERING SCIENCE & TECHNOLOGY

269 W. Jefferson Street

Syracuse, NY - 13202

Phone No: 315-431-4610

ORDER ID : P4873

ATTENTION : Jim Hayward

Laboratory Certification ID # 20012

Table Of Contents for P4873

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Cover Page

Order ID : P4873

Project ID : Scotia, NY - Annual Testing

Client : EA Engineering Science & Technology

Lab Sample Number	Client Sample Number
P4873-01	FSND-RB-4-20241114
P4873-02	FSND-MW-30-20241114
P4873-03	TB-2
P4873-04	FSND-MW-19-20241114
P4873-05	FSND-MW-32-20241114
P4873-06	FSND-MW-34-20241114
P4873-07	FSND-GEP-3-20241114
P4873-08	FSND-MW-28-20241114
P4873-09	FSND-MW-29-20241114

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 : N. N. Pandya

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 11:12 am, Dec 02, 2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

EA Engineering Science & Technology
Project Name: Scotia, NY - Annual Testing
Project # N/A
Chemtech Project # P4873
Test Name: Alkalinity,TOC,Anions Group1

A. Number of Samples and Date of Receipt:
9 Water samples were received on 11/15/2024.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Alkalinity, Anions Group1, Gases, TOC and VOC-TCLVOA-10. This data package contains results for Alkalinity,TOC,Anions Group1.

C. Analytical Techniques:
The analysis of Anions Group1 was based on method 9056A, The analysis of TOC was based on method 9060A and The analysis of Alkalinity was based on method SM2320 B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.
Sample FSND-MW-30-20241114 was diluted due to high concentrations for Chloride.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.

The Matrix Spike (FSND-MW-EVAL-04D-20241113MS) analysis met criteria for all samples except for Chloride due to Matrix interference. The Matrix Spike (FSND-MW-30-20241114MS) analysis met criteria for all samples except for Chloride due to Matrix interference.

The Matrix Spike Duplicate (FSND-MW-EVAL-04D-20241113MSD) analysis met criteria for all samples except for Chloride due to matrix interference. The Matrix Spike Duplicate (FSND-MW-30-20241114MSD) analysis met criteria for all samples except for Chloride due to 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 N. N. Pandya

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 11:13 am, Dec 02, 2024

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

DATA REPORTING QUALIFIERS- INORGANIC

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

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

QA Control # A3040961

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: P4873 MATRIX: Water

METHOD: 9056A,9060A,SM2320 B

		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 samples.The Matrix Spike (FSND-MW-EVAL-04D-20241113MS) analysis met criteria for all samples except for Chloride due to Matrix interference. The Matrix Spike (FSND-MW-30-20241114MS) analysis met criteria for all samples except for Chloride due to Matrix interference. The Matrix Spike Duplicate (FSND-MW-EVAL-04D-20241113MSD) analysis met criteria for all samples except for Chloride due to matrix interference. The Matrix Spike Duplicate (FSND-MW-30-20241114MSD) analysis met criteria for all samples except for Chloride due to 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:

S. M. Jodhani

QA REVIEW

REVIEWED
By Sohil Jodhani, QA/QC Director at 10:03 am, Dec 02, 2024

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P4873

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

QA Review Signature: SOHIL JODHANI **Date:** 11/25/2024

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LAB CHRONICLE

OrderID:	P4873	**OrderDate:**	11/15/2024 10:19:00 AM
Client:	EA Engineering Science & Technology	**Project:**	Scotia, NY - Annual Testing
Contact:	Jim Hayward	**Location:**	M11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4873-01	**FSND-RB-4-20241114**	**Water**			**11/14/24 12:00**			**11/15/24**
			Alkalinity	SM2320 B			11/19/24 12:50	
			Anions Group1	9056A			11/15/24 14:22	
			TOC	9060A			11/18/24 23:27	
P4873-02	**FSND-MW-30-20241114**	**WATER**			**11/14/24 10:55**			**11/15/24**
			Alkalinity	SM2320 B			11/19/24 12:18	
			Anions Group1	9056A			11/15/24 14:43	
			TOC	9060A			11/19/24 01:14	
P4873-02DL	**FSND-MW-30-20241114DL**	**WATER**			**11/14/24 10:55**			**11/15/24**
			Anions Group1	9056A			11/15/24 15:48	

SAMPLE DATA

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Report of Analysis

Client:	EA Engineering Science & Technology	Date Collected:	11/14/24 12:00
Project:	Scotia, NY - Annual Testing	Date Received:	11/15/24
Client Sample ID:	FSND-RB-4-20241114	SDG No.:	P4873
Lab Sample ID:	P4873-01	Matrix:	Water
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	1.00	U	1	1.00	1.00	2.00	mg/L		11/19/24 12:50	SM 2320 B-11
Chloride	0.30	U	1	0.011	0.30	0.60	mg/L		11/15/24 14:22	9056A
Nitrate	0.25	U	1	0.0034	0.25	0.50	mg/L		11/15/24 14:22	9056A
Sulfate	1.50	U	1	0.032	1.50	3.00	mg/L		11/15/24 14:22	9056A
TOC	0.24	J	1	0.19	0.50	1.00	mg/L		11/18/24 23:27	9060A

Comments:

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

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Report of Analysis

Client:	EA Engineering Science & Technology	Date Collected:	11/14/24 10:55
Project:	Scotia, NY - Annual Testing	Date Received:	11/15/24
Client Sample ID:	FSND-MW-30-20241114	SDG No.:	P4873
Lab Sample ID:	P4873-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	28.4		1	1.00	1.00	2.00	mg/L		11/19/24 12:18	SM 2320 B-11
Chloride	56.5	OR	1	0.011	0.30	0.60	mg/L		11/15/24 14:43	9056A
Nitrate	0.25	U	1	0.0034	0.25	0.50	mg/L		11/15/24 14:43	9056A
Sulfate	1.20	J	1	0.032	1.50	3.00	mg/L		11/15/24 14:43	9056A
TOC	2.30		1	0.19	0.50	1.00	mg/L		11/19/24 01:14	9060A

Comments: The alkalinity to pH 4.34=28.4 mg CaCO3/L

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

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

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Report of Analysis

Client:	EA Engineering Science & Technology	Date Collected:	11/14/24 10:55
Project:	Scotia, NY - Annual Testing	Date Received:	11/15/24
Client Sample ID:	FSND-MW-30-20241114DL	SDG No.:	P4873
Lab Sample ID:	P4873-02DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	49.2	D	10	0.11	3.00	6.00	mg/L		11/15/24 15:48	9056A

Comments:

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

QC RESULT SUMMARY

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Initial and Continuing Calibration Verification

Client: EA Engineering Science & Technology **SDG No.:** P4873

Project: Scotia, NY - Annual Testing **RunNo.:** LB133464

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	10	10	100	90-110	10/16/2024
Chloride	mg/L	3	3	100	90-110	10/16/2024
Fluoride	mg/L	2	2	100	90-110	10/16/2024
Nitrite	mg/L	3	3	100	90-110	10/16/2024
Nitrate	mg/L	2.5	2.5	100	90-110	10/16/2024
Sulfate	mg/L	14.9	15	99	90-110	10/16/2024
Orthophosphate as P	mg/L	4.8	5	96	90-110	10/16/2024
Sample ID: CCV1						
Bromide	mg/L	9.7	10	97	90-110	11/14/2024
Chloride	mg/L	2.9	3	97	90-110	11/14/2024
Fluoride	mg/L	2	2	100	90-110	11/14/2024
Nitrite	mg/L	3	3	100	90-110	11/14/2024
Nitrate	mg/L	2.4	2.5	96	90-110	11/14/2024
Sulfate	mg/L	14.6	15	97	90-110	11/14/2024
Orthophosphate as P	mg/L	4.9	5	98	90-110	11/14/2024
Sample ID: CCV2						
Bromide	mg/L	10.6	10	106	90-110	11/14/2024
Chloride	mg/L	3.2	3	107	90-110	11/14/2024
Fluoride	mg/L	2.1	2	105	90-110	11/14/2024
Nitrite	mg/L	3.2	3	107	90-110	11/14/2024
Nitrate	mg/L	2.7	2.5	108	90-110	11/14/2024
Sulfate	mg/L	15.7	15	105	90-110	11/14/2024
Orthophosphate as P	mg/L	5.3	5	106	90-110	11/14/2024
Sample ID: CCV3						
Bromide	mg/L	10.6	10	106	90-110	11/14/2024
Chloride	mg/L	3.2	3	107	90-110	11/14/2024
Fluoride	mg/L	2.1	2	105	90-110	11/14/2024
Nitrite	mg/L	3.2	3	107	90-110	11/14/2024
Nitrate	mg/L	2.7	2.5	108	90-110	11/14/2024
Sulfate	mg/L	15.8	15	105	90-110	11/14/2024
Orthophosphate as P	mg/L	5.3	5	106	90-110	11/14/2024
Sample ID: CCV4						
Bromide	mg/L	10.6	10	106	90-110	11/15/2024
Chloride	mg/L	3.2	3	107	90-110	11/15/2024
Fluoride	mg/L	2.1	2	105	90-110	11/15/2024
Nitrite	mg/L	3.2	3	107	90-110	11/15/2024
Nitrate	mg/L	2.7	2.5	108	90-110	11/15/2024
Sulfate	mg/L	15.9	15	106	90-110	11/15/2024

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Initial and Continuing Calibration Verification

Client: EA Engineering Science & Technology **SDG No.:** P4873

Project: Scotia, NY - Annual Testing **RunNo.:** LB133464

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Orthophosphate as P	mg/L	5.3	5	106	90-110	11/15/2024
Sample ID: CCV5						
Bromide	mg/L	10.4	10	104	90-110	11/15/2024
Chloride	mg/L	3.1	3	103	90-110	11/15/2024
Fluoride	mg/L	2.1	2	105	90-110	11/15/2024
Nitrite	mg/L	3.1	3	103	90-110	11/15/2024
Nitrate	mg/L	2.6	2.5	104	90-110	11/15/2024
Sulfate	mg/L	15.4	15	103	90-110	11/15/2024
Orthophosphate as P	mg/L	5.2	5	104	90-110	11/15/2024
Sample ID: CCV6						
Bromide	mg/L	10.5	10	105	90-110	11/15/2024
Chloride	mg/L	3.1	3	103	90-110	11/15/2024
Fluoride	mg/L	2.1	2	105	90-110	11/15/2024
Nitrite	mg/L	3.1	3	103	90-110	11/15/2024
Nitrate	mg/L	2.6	2.5	104	90-110	11/15/2024
Sulfate	mg/L	15.5	15	103	90-110	11/15/2024
Orthophosphate as P	mg/L	5.2	5	104	90-110	11/15/2024
Sample ID: CCV7						
Bromide	mg/L	10.5	10	105	90-110	11/15/2024
Chloride	mg/L	3.1	3	103	90-110	11/15/2024
Fluoride	mg/L	2.1	2	105	90-110	11/15/2024
Nitrite	mg/L	3.1	3	103	90-110	11/15/2024
Nitrate	mg/L	2.6	2.5	104	90-110	11/15/2024
Sulfate	mg/L	15.5	15	103	90-110	11/15/2024
Orthophosphate as P	mg/L	5.2	5	104	90-110	11/15/2024

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Initial and Continuing Calibration Verification

Client:	EA Engineering Science & Technology	**SDG No.:**	P4873
Project:	Scotia, NY - Annual Testing	**RunNo.:**	LB133484

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	**ICV1**						
TOC		mg/L	10.2	10	102	90-110	09/25/2024
Sample ID:	**CCV1**						
TOC		mg/L	10.4	10	104	90-110	11/18/2024
Sample ID:	**CCV2**						
TOC		mg/L	10.7	10	107	90-110	11/18/2024
Sample ID:	**CCV3**						
TOC		mg/L	10.3	10	103	90-110	11/18/2024
Sample ID:	**CCV4**						
TOC		mg/L	10.1	10	101	90-110	11/19/2024

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Initial and Continuing Calibration Blank Summary

Client: EA Engineering Science & Technology **SDG No.:** P4873

Project: Scotia, NY - Annual Testing **RunNo.:** LB133464

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	10/16/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	10/16/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	10/16/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	10/16/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	10/16/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	10/16/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	10/16/2024
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/14/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/14/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/14/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/14/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/14/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/14/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/14/2024
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/14/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/14/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/14/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/14/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/14/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/14/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/14/2024
Sample ID: CCB3							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/14/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/14/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/14/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/14/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/14/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/14/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/14/2024
Sample ID: CCB4							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/15/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/15/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/15/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/15/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/15/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/15/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/15/2024
Sample ID: CCB5							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/15/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/15/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/15/2024

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Initial and Continuing Calibration Blank Summary

Client:	EA Engineering Science & Technology	**SDG No.:**	P4873
Project:	Scotia, NY - Annual Testing	**RunNo.:**	LB133464

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/15/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/15/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/15/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/15/2024
Sample ID: CCB6							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/15/2024
Chloride	mg/L	0.071	0.3000	J	0.011	0.6	11/15/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/15/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/15/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/15/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/15/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/15/2024
Sample ID: CCB7							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/15/2024
Chloride	mg/L	0.074	0.3000	J	0.011	0.6	11/15/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/15/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/15/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/15/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/15/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/15/2024

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Initial and Continuing Calibration Blank Summary

Client:	EA Engineering Science & Technology	**SDG No.:**	P4873
Project:	Scotia, NY - Annual Testing	**RunNo.:**	LB133484

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	ICB1							
TOC		mg/L	< 0.5000	0.5000	U	0.19	1	09/25/2024
Sample ID:	CCB1							
TOC		mg/L	0.22	0.5000	J	0.19	1	11/18/2024
Sample ID:	CCB2							
TOC		mg/L	0.29	0.5000	J	0.19	1	11/18/2024
Sample ID:	CCB3							
TOC		mg/L	0.28	0.5000	J	0.19	1	11/18/2024
Sample ID:	CCB4							
TOC		mg/L	0.19	0.5000	J	0.19	1	11/19/2024

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Preparation Blank Summary

Client: EA Engineering Science & Technology **SDG No.:** P4873

Project: Scotia, NY - Annual Testing

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB133464BLW							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/14/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/14/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/14/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/14/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/14/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/14/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/14/2024
Sample ID: LB133464BLW2							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/15/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/15/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/15/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/15/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/15/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/15/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/15/2024
Sample ID: LB133484BLW							
TOC	mg/L	0.29	0.5000	J	0.19	1	11/18/2024
Sample ID: LB133515BLW							
Alkalinity	mg/L	< 1.0000	1.0000	U	1	2	11/19/2024
Sample ID: LB133517BL							
Alkalinity	mg/L	< 1.0000	1.0000	U	1	2	11/19/2024

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Matrix Spike Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4846-05
Client ID: FSND-MW-EVAL-04D-20241113MS
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	10.2		0.034	U	10	1	102		11/14/2024
TOC	mg/L	75-125	10.3		1.20		10	1	91		11/18/2024
Chloride	mg/L	80-120	49.1	OR	47.8	OR	3	1	43	*	11/14/2024
Fluoride	mg/L	80-120	2.10		0.12	J	2	1	99		11/14/2024
Nitrite	mg/L	80-120	3.10		0.011	U	3	1	103		11/14/2024
Nitrate	mg/L	80-120	3.40		0.91		2.5	1	100		11/14/2024
Sulfate	mg/L	80-120	35.4		20.9		15	1	97		11/14/2024
Orthophosphate as P	mg/L	80-120	5.10		0.079	U	5	1	102		11/14/2024

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Matrix Spike Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4846-05
Client ID: FSND-MW-EVAL-04D-20241113MSD
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	9.80		0.034	U	10	1	98		11/14/2024
TOC	mg/L	75-125	10.3		1.20		10	1	91		11/18/2024
Chloride	mg/L	80-120	49.1	OR	47.8	OR	3	1	43	*	11/14/2024
Fluoride	mg/L	80-120	2.10		0.12	J	2	1	99		11/14/2024
Nitrite	mg/L	80-120	2.90		0.011	U	3	1	97		11/14/2024
Nitrate	mg/L	80-120	3.30		0.91		2.5	1	96		11/14/2024
Sulfate	mg/L	80-120	34.7		20.9		15	1	92		11/14/2024
Orthophosphate as P	mg/L	80-120	4.90		0.079	U	5	1	98		11/14/2024

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Matrix Spike Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4846-14
Client ID: FSND-MW-EVAL-02S-20241113MS
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
TOC	mg/L	75-125	10.9		1.30		10	1	96		11/18/2024

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Matrix Spike Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4846-14
Client ID: FSND-MW-EVAL-02S-20241113MSD
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
TOC	mg/L	75-125	11.2		1.30		10	1	99		11/18/2024

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Matrix Spike Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4873-02
Client ID: FSND-MW-30-20241114MS
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		0.034	U	10	1	101		11/15/2024
Chloride	mg/L	80-120	57.6	OR	56.5	OR	3	1	37	*	11/15/2024
Fluoride	mg/L	80-120	2.10		0.15	J	2	1	98		11/15/2024
Nitrite	mg/L	80-120	3.00		0.011	U	3	1	100		11/15/2024
Nitrate	mg/L	80-120	2.50		0.0034	U	2.5	1	100		11/15/2024
Sulfate	mg/L	80-120	15.8		1.20	J	15	1	97		11/15/2024
Orthophosphate as P	mg/L	80-120	5.10		0.079	U	5	1	102		11/15/2024

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Matrix Spike Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4873-02
Client ID: FSND-MW-30-20241114MSD
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	9.70		0.034	U	10	1	97		11/15/2024
Chloride	mg/L	80-120	57.4	OR	56.5	OR	3	1	30	*	11/15/2024
Fluoride	mg/L	80-120	2.10		0.15	J	2	1	98		11/15/2024
Nitrite	mg/L	80-120	2.90		0.011	U	3	1	97		11/15/2024
Nitrate	mg/L	80-120	2.40		0.0034	U	2.5	1	96		11/15/2024
Sulfate	mg/L	80-120	15.1		1.20	J	15	1	93		11/15/2024
Orthophosphate as P	mg/L	80-120	4.90		0.079	U	5	1	98		11/15/2024

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Duplicate Sample Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4846-01
Client ID: FSND-MW-EVAL-03D-20241113DUP
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
Alkalinity	mg/L	+/-20	193		193		1	0		11/19/2024

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Duplicate Sample Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4846-05
Client ID: FSND-MW-EVAL-04D-20241113MSD
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
Fluoride	mg/L	+/-15	2.10		2.10		1	0		11/14/2024
Chloride	mg/L	+/-15	49.1	OR	49.1	OR	1	0		11/14/2024
Sulfate	mg/L	+/-15	35.4		34.7		1	2		11/14/2024
Nitrate	mg/L	+/-15	3.40		3.30		1	3		11/14/2024
Bromide	mg/L	+/-15	10.2		9.80		1	4		11/14/2024
Orthophosphate as P	mg/L	+/-15	5.10		4.90		1	4		11/14/2024
Nitrite	mg/L	+/-15	3.10		2.90		1	7		11/14/2024
TOC	mg/L	+/-20	10.3		10.3		1	0		11/18/2024

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Duplicate Sample Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4846-14
Client ID: FSND-MW-EVAL-02S-20241113MSD
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
TOC	mg/L	+/-20	10.9		11.2		1	3		11/18/2024

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Duplicate Sample Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4873-01
Client ID: FSND-RB-4-20241114DUP
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
Alkalinity	mg/L	+/-20	1.00	U	1.00	U	1	0		11/19/2024

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Duplicate Sample Summary

Client: EA Engineering Science & Technology
SDG No.: P4873
Project: Scotia, NY - Annual Testing
Sample ID: P4873-02
Client ID: FSND-MW-30-20241114MSD
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
Fluoride	mg/L	+/-15	2.10		2.10		1	0		11/15/2024
Chloride	mg/L	+/-15	57.6	OR	57.4	OR	1	0		11/15/2024
Nitrite	mg/L	+/-15	3.00		2.90		1	3		11/15/2024
Bromide	mg/L	+/-15	10.1		9.70		1	4		11/15/2024
Nitrate	mg/L	+/-15	2.50		2.40		1	4		11/15/2024
Orthophosphate as P	mg/L	+/-15	5.10		4.90		1	4		11/15/2024
Sulfate	mg/L	+/-15	15.8		15.1		1	5		11/15/2024

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Laboratory Control Sample Summary

Client:	EA Engineering Science & Technology	**SDG No.:**	P4873
Project:	Scotia, NY - Annual Testing	**Run No.:**	LB133464

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB133464BSW								
Bromide	mg/L	10	10.4		104	1	90-110	11/14/2024
Chloride	mg/L	3	3.10		103	1	90-110	11/14/2024
Fluoride	mg/L	2	2.10		105	1	90-110	11/14/2024
Nitrite	mg/L	3	3.10		103	1	90-110	11/14/2024
Nitrate	mg/L	2.5	2.60		104	1	90-110	11/14/2024
Sulfate	mg/L	15	15.4		103	1	90-110	11/14/2024
Orthophosphate as P	mg/L	5	5.20		104	1	90-110	11/14/2024

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Laboratory Control Sample Summary

Client:	EA Engineering Science & Technology	**SDG No.:**	P4873
Project:	Scotia, NY - Annual Testing	**Run No.:**	LB133464

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB133464BSW2								
Bromide	mg/L	10	10.4		104	1	90-110	11/15/2024
Chloride	mg/L	3	3.10		103	1	90-110	11/15/2024
Fluoride	mg/L	2	2.10		105	1	90-110	11/15/2024
Nitrite	mg/L	3	3.10		103	1	90-110	11/15/2024
Nitrate	mg/L	2.5	2.60		104	1	90-110	11/15/2024
Sulfate	mg/L	15	15.4		103	1	90-110	11/15/2024
Orthophosphate as P	mg/L	5	5.20		104	1	90-110	11/15/2024

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Laboratory Control Sample Summary

Client:	EA Engineering Science & Technology	**SDG No.:**	P4873
Project:	Scotia, NY - Annual Testing	**Run No.:**	LB133484

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB133484BSW								
TOC	mg/L	10	10.2		102	1	90-110	11/18/2024

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Laboratory Control Sample Summary

Client:	EA Engineering Science & Technology	**SDG No.:**	P4873
Project:	Scotia, NY - Annual Testing	**Run No.:**	LB133515

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB133515BSW								
Alkalinity	mg/L	50	43.6		87	1	80-120	11/19/2024

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Laboratory Control Sample Summary

Client:	EA Engineering Science & Technology	**SDG No.:**	P4873
Project:	Scotia, NY - Annual Testing	**Run No.:**	LB133517

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB133517BS								
Alkalinity	mg/L	50	52.6		105	1	80-120	11/19/2024

RAW DATA

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

Ident	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO4	Con SO4	Method name	date time	wt/Fir	Analyst
STD1	0	0	0	0	0	0	0	IC1-101624	10/16/2024 10:55	10	NF/IZ
STD2	0.424	0.632	0.639	2.106	0.535	1.072	3.276	IC1-101624	10/16/2024 11:17	10	NF/IZ
STD3	0.796	1.206	1.205	4.013	1	2	6.052	IC1-101624	10/16/2024 11:38	10	NF/IZ
STD4	1.032	1.537	1.531	5.116	1.277	2.557	7.662	IC1-101624	10/16/2024 11:59	10	NF/IZ
STD5	1.966	2.927	2.921	9.77	2.439	4.871	14.51	IC1-101624	10/16/2024 12:21	10	NF/IZ
STD6	3.88	5.901	5.91	19.683	4.912	9.831	29.286	IC1-101624	10/16/2024 12:42	10	NF/IZ
STD7	5.102	7.598	7.593	25.312	6.337	12.67	37.714	IC1-101624	10/16/2024 13:04	10	NF/IZ
ICV	1.966	2.997	3	9.969	2.497	4.753	14.85	IC1-101624	10/16/2024 13:37	10	NF/IZ
ICB	0	0	0	0	0	0	0	IC1-101624	10/16/2024 13:59	10	NF/IZ
CCV	1.963	2.926	2.959	9.651	2.435	4.943	14.593	IC1-101624	11/14/2024 13:27	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-101624	11/14/2024 13:49	10	NF/IZ
LB133464BLW	0	0	0	0	0	0	0	IC1-101624	11/14/2024 14:10	10	NF/IZ
LB133464BSW	2.076	3.098	3.105	10.385	2.616	5.163	15.411	IC1-101624	11/14/2024 14:32	10	NF/IZ
P4846-01	0.119	46.038	0	0	0.14	0	12.228	IC1-101624	11/14/2024 14:53	10	NF/IZ
P4846-02	0.127	39.544	0	0	1.882	0	24.406	IC1-101624	11/14/2024 15:14	10	NF/IZ
P4846-03	0.129	39.731	0	0	1.884	0	24.746	IC1-101624	11/14/2024 15:36	10	NF/IZ
P4846-04	0.126	47.239	0	0	0.921	0	20.792	IC1-101624	11/14/2024 15:58	10	NF/IZ
P4846-05	0.121	47.767	0	0	0.91	0	20.926	IC1-101624	11/14/2024 16:19	10	NF/IZ
P4846-06MS	2.136	49.057	3.053	10.229	3.402	5.072	35.422	IC1-101624	11/14/2024 16:41	10	NF/IZ
P4846-07MSD	2.06	49.06	2.928	9.81	3.295	4.878	34.745	IC1-101624	11/14/2024 17:02	10	NF/IZ
P4846-08	0.092	25.215	0	0	0.103	0	18.444	IC1-101624	11/14/2024 17:24	10	NF/IZ
CCV	2.12	3.158	3.153	10.584	2.661	5.314	15.742	IC1-101624	11/14/2024 17:45	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-101624	11/14/2024 18:07	10	NF/IZ
P4846-10	0	0.091	0	0	0	0	0	IC1-101624	11/14/2024 18:28	10	NF/IZ
P4846-11	0.132	41.277	0	0	0	0	15.504	IC1-101624	11/14/2024 18:50	10	NF/IZ
P4846-12	0.151	41.019	0	0	1.958	0	19.816	IC1-101624	11/14/2024 19:11	10	NF/IZ
P4846-13	0.116	69.101	0	0	0.336	0	15.176	IC1-101624	11/14/2024 19:33	10	NF/IZ
P4846-14	0.135	80.643	0	0	1.061	0	32.606	IC1-101624	11/14/2024 19:54	10	NF/IZ
P4846-15	0.137	79.329	0	0	1.069	0	32.374	IC1-101624	11/14/2024 20:16	10	NF/IZ

P4846-16	0.134	42.36	0	0	0	0	13.79	IC1-101624	11/14/2024 20:37	10	NF/IZ
P4846-17	0.127	57.049	0	0	1.7	0	19.993	IC1-101624	11/14/2024 20:59	10	NF/IZ
P4846-01DLX10	0	3.982	0	0	0	0	1.61	IC1-101624	11/14/2024 21:20	10	NF/IZ
P4846-02DLX10	0	3.505	0	0	0.251	0	2.771	IC1-101624	11/14/2024 21:42	10	NF/IZ
CCV	2.137	3.171	3.164	10.623	2.671	5.33	15.849	IC1-101624	11/14/2024 22:03	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-101624	11/14/2024 22:25	10	NF/IZ
P4846-03DLX10	0	3.516	0	0	0.25	0	2.798	IC1-101624	11/14/2024 22:46	10	NF/IZ
P4846-04DLX10	0	4.101	0	0	0.157	0	2.456	IC1-101624	11/14/2024 23:08	10	NF/IZ
P4846-05DLX10	0	4.154	0	0	0.151	0	2.463	IC1-101624	11/14/2024 23:29	10	NF/IZ
P4846-08DLX10	0	2.368	0	0	0	0	2.256	IC1-101624	11/15/2024 0:12	10	NF/IZ
CCV	2.107	3.176	3.169	10.638	2.676	5.313	15.873	IC1-101624	11/15/2024 0:55	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-101624	11/15/2024 1:17	10	NF/IZ
CCV	2.078	3.106	3.115	10.424	2.608	5.174	15.377	IC1-101624	11/15/2024 9:42	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-101624	11/15/2024 10:04	10	NF/IZ
LB133464BLW2	0	0	0	0	0	0	0	IC1-101624	11/15/2024 10:25	10	NF/IZ
LB133464BSW2	2.096	3.106	3.124	10.418	2.616	5.176	15.421	IC1-101624	11/15/2024 10:47	10	NF/IZ
P4846-11DLX10	0	3.663	0	0	0	0	1.935	IC1-101624	11/15/2024 11:08	10	NF/IZ
P4846-12DLX10	0	3.648	0	0	0.258	0	2.338	IC1-101624	11/15/2024 11:30	10	NF/IZ
P4846-13DLX20	0	2.86	0	0	0	0	1.154	IC1-101624	11/15/2024 11:51	10	NF/IZ
P4846-14DLX20	0	3.244	0	0	0.112	0	1.962	IC1-101624	11/15/2024 12:13	10	NF/IZ
P4846-15DLX20	0	2.943	0	0	0.11	0	1.819	IC1-101624	11/15/2024 12:34	10	NF/IZ
P4846-16DLX10	0	3.732	0	0	0	0	1.775	IC1-101624	11/15/2024 12:56	10	NF/IZ
P4846-17DLX10	0	4.881	0	0	0.227	0	2.37	IC1-101624	11/15/2024 13:17	10	NF/IZ
CCV	2.063	3.122	3.136	10.48	2.628	5.247	15.504	IC1-101624	11/15/2024 13:39	10	NF/IZ
CCB	0	0.071	0	0	0	0	0	IC1-101624	11/15/2024 14:00	10	NF/IZ
P4873-01	0	0	0	0	0	0	0	IC1-101624	11/15/2024 14:22	10	NF/IZ
P4873-02	0.146	56.521	0	0	0	0	1.175	IC1-101624	11/15/2024 14:43	10	NF/IZ
P4873-02MS	2.147	57.554	3.044	10.131	2.543	5.1	15.752	IC1-101624	11/15/2024 15:05	10	NF/IZ
P4873-02MSD	2.066	57.423	2.92	9.714	2.432	4.898	15.112	IC1-101624	11/15/2024 15:26	10	NF/IZ
P4373-02DLX10	0.047	4.915	0	0	0	0	0.513	IC1-101624	11/15/2024 15:48	10	NF/IZ
CCV	2.107	3.13	3.14	10.491	2.628	5.216	15.537	IC1-101624	11/15/2024 16:09	10	NF/IZ
CCB	0	0.074	0	0	0	0	0	IC1-101624	11/15/2024 16:31	10	NF/IZ

Clear table

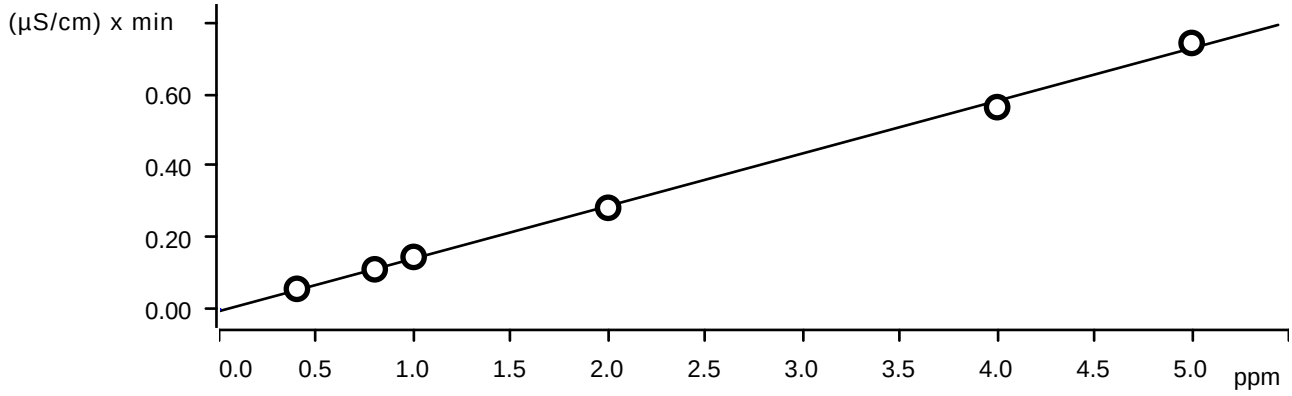
Instrument ID: IC-2 Analyst : IZ Method: 300.0 / 9056A

ident	concentration F-	concentration CL-	concentration NO2	concentration BR-	concentration NO3	concentration HPO4	concentration SO4	file name	date time	Initial wt/ Final	Analyst
STD1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-101624	10/16/2024 10:55	10	NF/IZ
STD2	0.424	0.632	0.639	2.106	0.535	1.072	3.276	IC1-101624	10/16/2024 11:17	10	NF/IZ
STD3	0.796	1.206	1.205	4.013	1.000	2.000	6.052	IC1-101624	10/16/2024 11:38	10	NF/IZ
STD4	1.032	1.537	1.531	5.116	1.277	2.557	7.662	IC1-101624	10/16/2024 11:59	10	NF/IZ
STD5	1.966	2.927	2.921	9.77	2.439	4.871	14.51	IC1-101624	10/16/2024 12:21	10	NF/IZ
STD6	3.88	5.901	5.91	19.683	4.912	9.831	29.286	IC1-101624	10/16/2024 12:42	10	NF/IZ
STD7	5.102	7.598	7.593	25.312	6.337	12.67	37.714	IC1-101624	10/16/2024 13:04	10	NF/IZ

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

ident	Relative Error F-	Relative Error CL-	Relative Error NO2	Relative Error BR-	Relative Error NO3	Relative Error HPO4	Relative Error SO4
STD1							
STD2	6.0000	5.3333	6.5000	5.3000	7.0000	7.2000	9.2000
STD3	-0.5000	0.5000	0.4167	0.3250	0.0000	0.0000	0.8667
STD4	3.2000	2.4667	2.0667	2.3200	2.1600	2.2800	2.1600
STD5	-1.7000	-2.4333	-2.6333	-2.3000	-2.4400	-2.5800	-3.2667
STD6	-3.0000	-1.6500	-1.5000	-1.5850	-1.7600	-1.6900	-2.3800
STD7	2.0400	1.3067	1.2400	1.2480	1.3920	1.3600	1.9297

Fluoride (Anions)



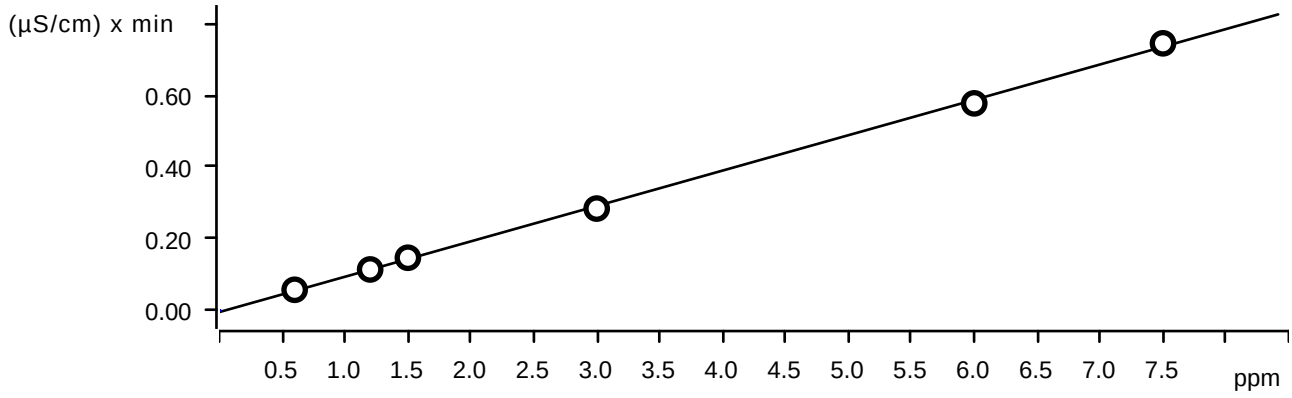
Function: . . . . . *A = - 5.06114E-3 + 0.0146570× Q*

Relative standard deviation . . . . . *3.824450 %*

Correlation coefficient *0.999229*

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	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.057	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.112	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.146	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.283	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.564	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.743	STD7	2024-10-16 13:04:15 UTC-4	used

Chloride (Anions)



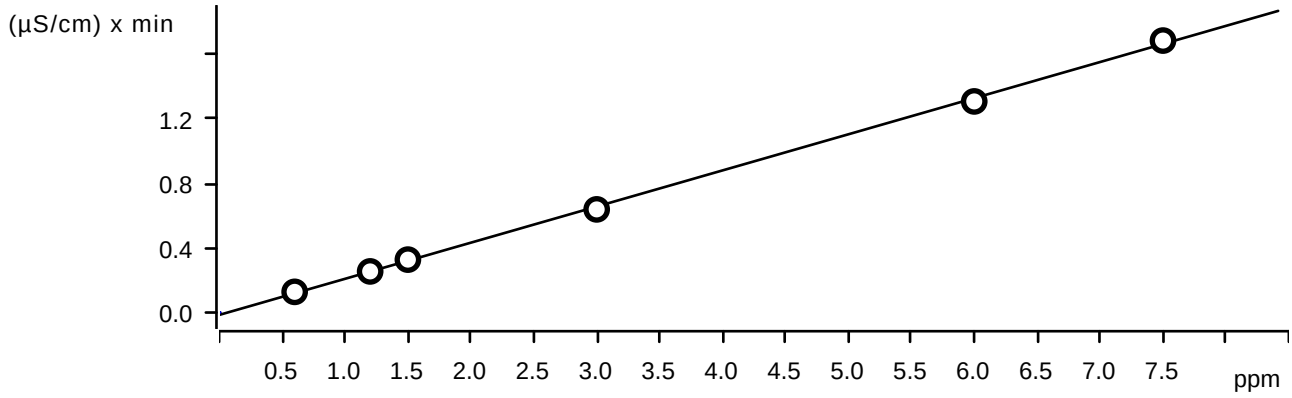
Function: . . . . . *A = - 4.66155E-3 + 9.86442E-3× Q*

Relative standard deviation . . . . . *2.532075 %*

Correlation coefficient *0.999661*

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	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.058	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.114	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.147	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.284	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.577	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.745	STD7	2024-10-16 13:04:15 UTC-4	used

Nitrite (Anions)



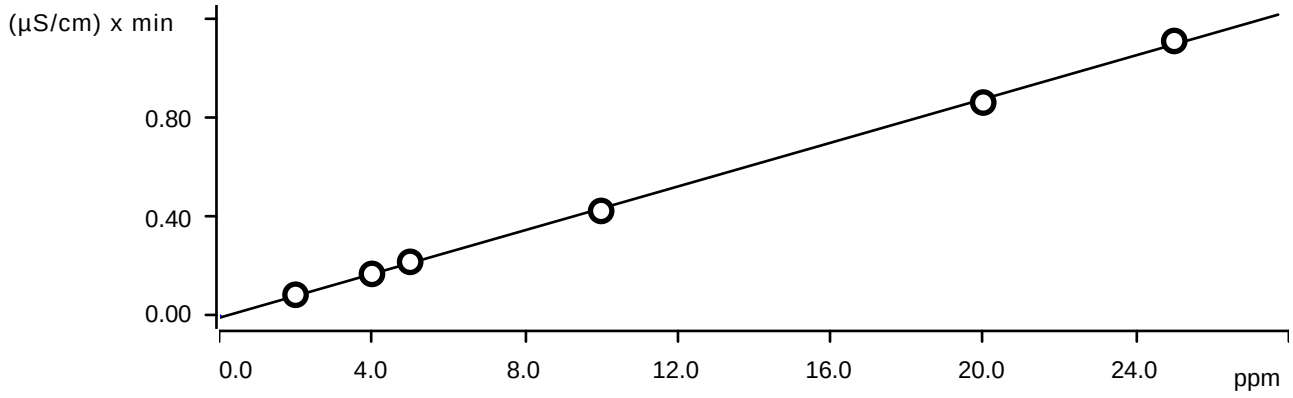
Function: . . . . . *A = - 0.0158639 + 0.0223869× Q*

Relative standard deviation . . . . . *2.476730 %*

Correlation coefficient *0.999680*

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	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.127	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.254	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.327	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.638	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.307	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.684	STD7	2024-10-16 13:04:15 UTC-4	used

Bromide (Anions)



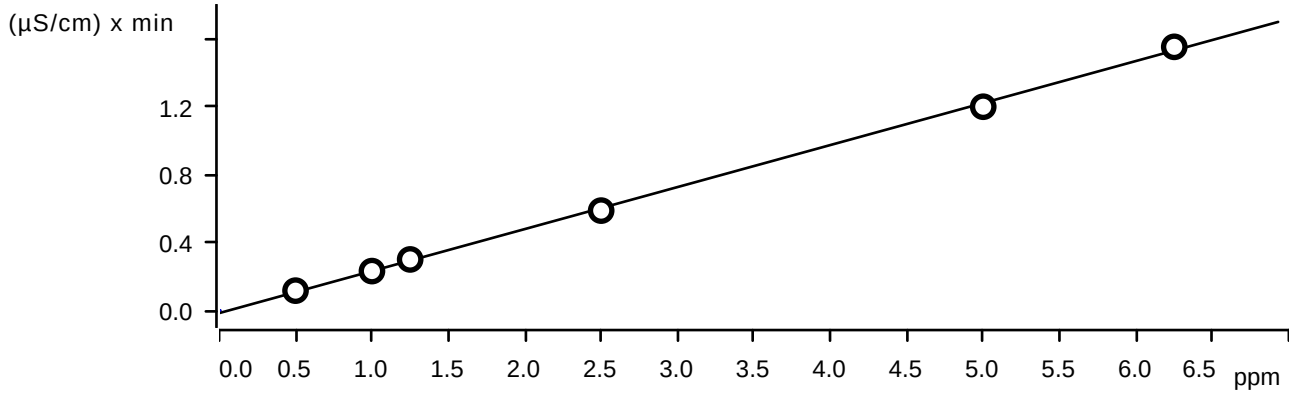
Function: . . . . . *A = - 7.83486E-3 + 4.40426E-3× Q*

Relative standard deviation . . . . . *2.425045 %*

Correlation coefficient *0.999690*

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	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.085	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.217	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.422	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.859	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.107	STD7	2024-10-16 13:04:15 UTC-4	used

Nitrate (Anions)



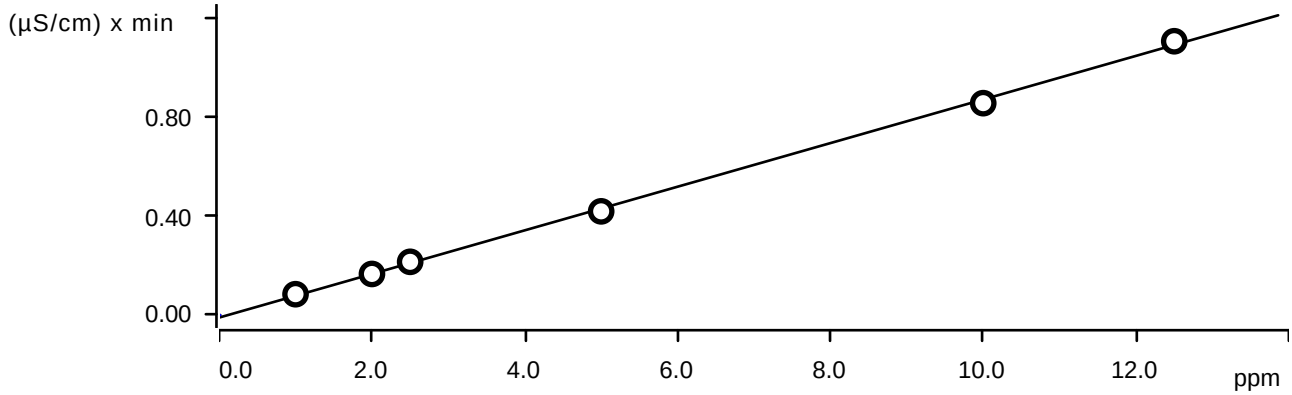
Function: . . . . . *A = - 0.0159932 + 0.0247327× Q*

Relative standard deviation . . . . . *2.693966 %*

Correlation coefficient *0.999623*

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	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.116	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.231	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.300	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.587	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.199	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.551	STD7	2024-10-16 13:04:15 UTC-4	used

Phosphate (Anions)



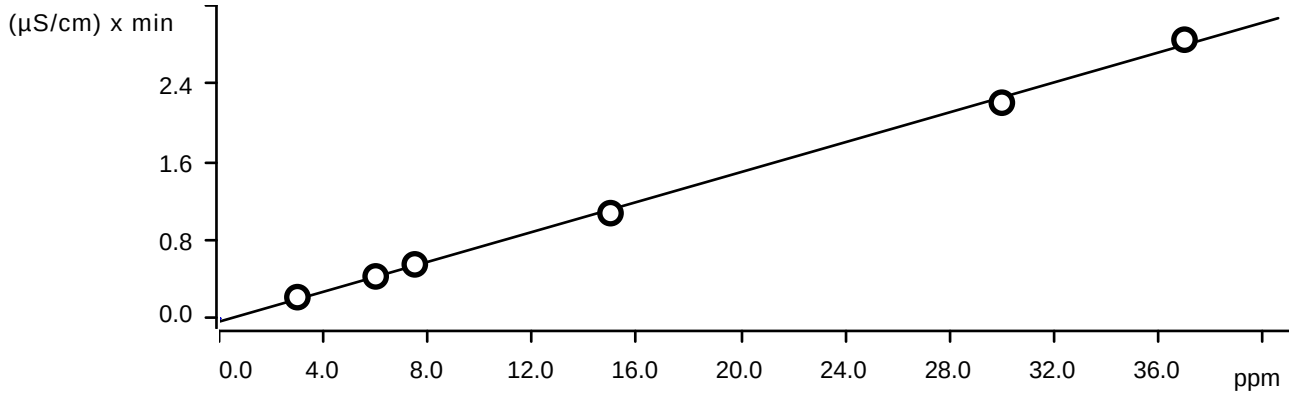
Function: . . . . . *A = - 9.96170E-3 + 8.78405E-3× Q*

Relative standard deviation . . . . . *2.667639 %*

Correlation coefficient *0.999628*

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	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.084	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.166	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.215	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.418	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.854	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.103	STD7	2024-10-16 13:04:15 UTC-4	used

Sulfate (Anions)



Function: . . . . . *A = - 0.0322401 + 7.64234E-3× Q*

Relative standard deviation . . . . . *3.651427 %*

Correlation coefficient *0.999303*

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	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.430	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.553	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.077	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.206	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.850	STD7	2024-10-16 13:04:15 UTC-4	used

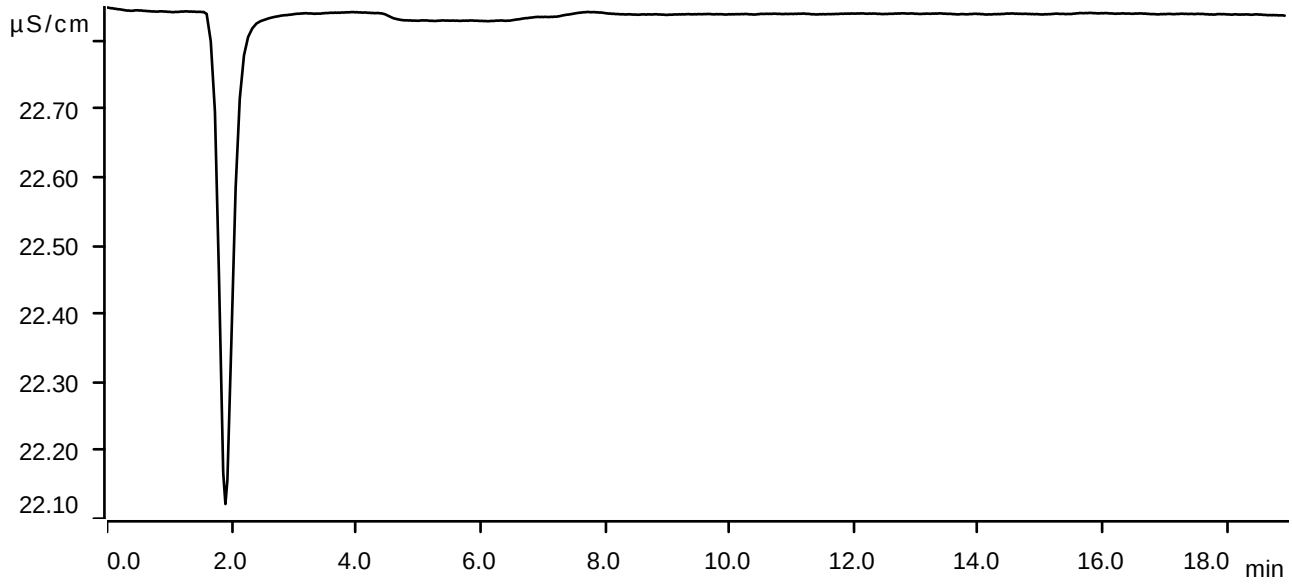
Sample data

Ident	STD1
Sample type	Standard 1
Determination start	2024-10-16 10:55:46 UTC-4
Method	IC1-101624
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	12.33	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



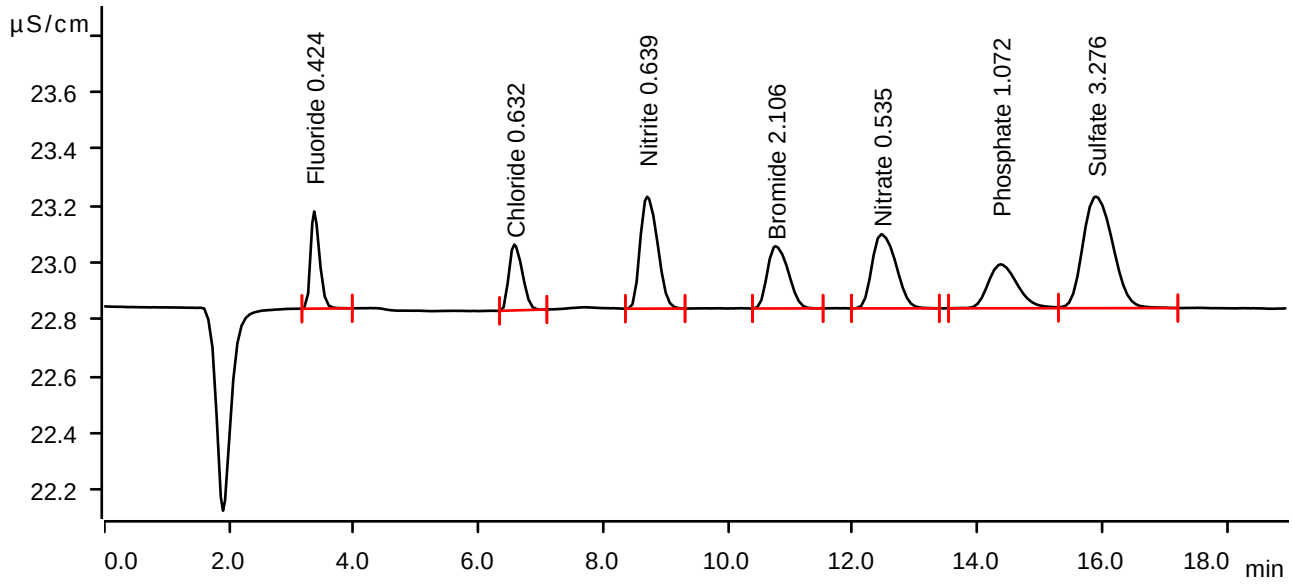
Sample data

Ident	STD2
Sample type	Standard 2
Determination start	2024-10-16 11:17:08 UTC-4
Method	IC1-101624
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	12.56	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.365	0.0571	0.341	0.424	Fluoride
2	6.573	0.0576	0.231	0.632	Chloride
3	8.703	0.1273	0.393	0.639	Nitrite
4	10.758	0.0849	0.219	2.106	Bromide
5	12.458	0.1163	0.261	0.535	Nitrate
6	14.368	0.0842	0.154	1.072	Phosphate
7	15.893	0.2181	0.392	3.276	Sulfate

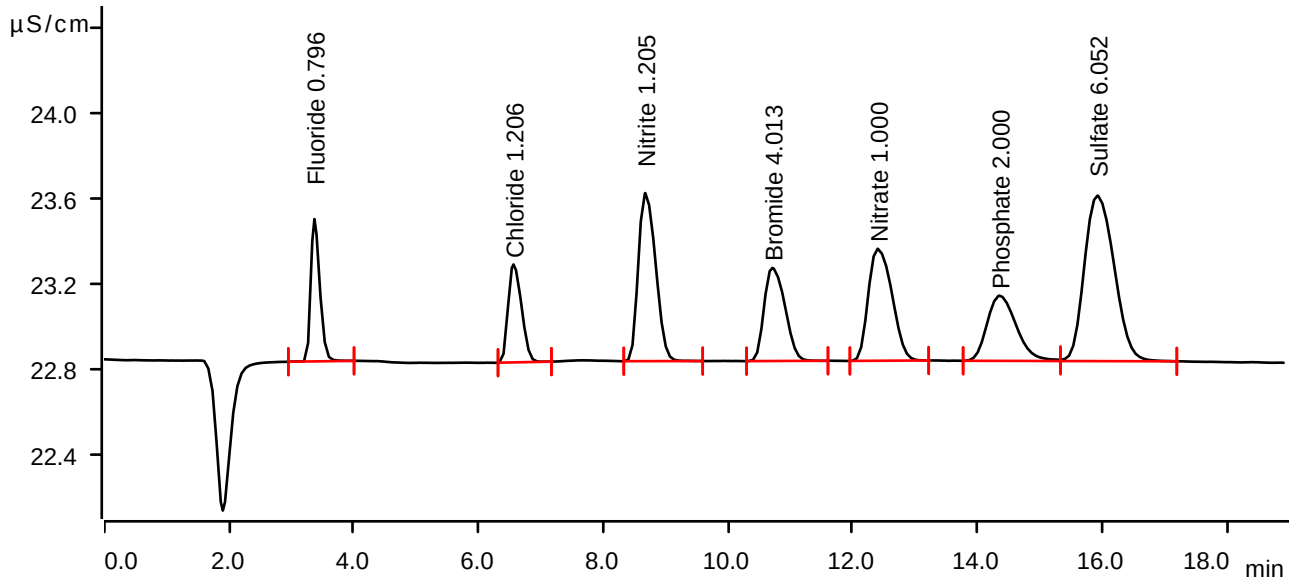
Sample data

Ident	STD3
Sample type	Standard 3
Determination start	2024-10-16 11:38:32 UTC-4
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.368	0.1116	0.667	0.796	Fluoride
2	6.560	0.1143	0.459	1.206	Chloride
3	8.673	0.2538	0.788	1.205	Nitrite
4	10.712	0.1689	0.436	4.013	Bromide
5	12.398	0.2314	0.525	1.000	Nitrate
6	14.353	0.1657	0.305	2.000	Phosphate
7	15.922	0.4302	0.775	6.052	Sulfate

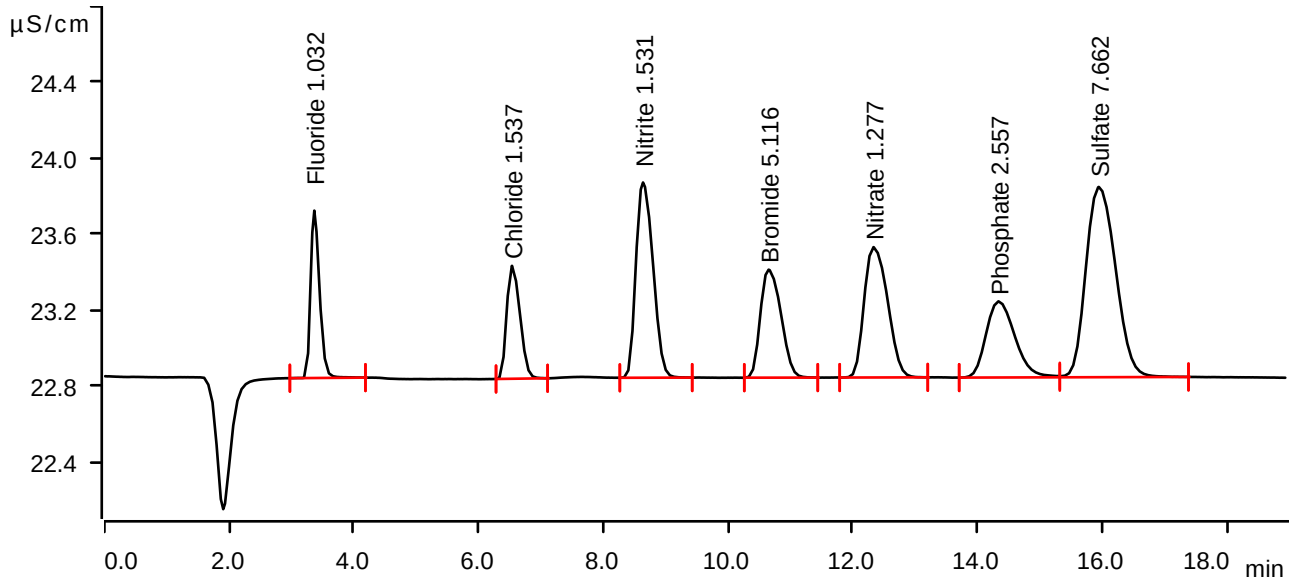
Sample data

Ident	STD4
Sample type	Standard 4
Determination start	2024-10-16 11:59:57 UTC-4
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.367	0.1462	0.882	1.032	Fluoride
2	6.537	0.1469	0.595	1.537	Chloride
3	8.637	0.3270	1.029	1.531	Nitrite
4	10.650	0.2175	0.569	5.116	Bromide
5	12.332	0.2999	0.687	1.277	Nitrate
6	14.337	0.2147	0.401	2.557	Phosphate
7	15.945	0.5533	1.003	7.662	Sulfate

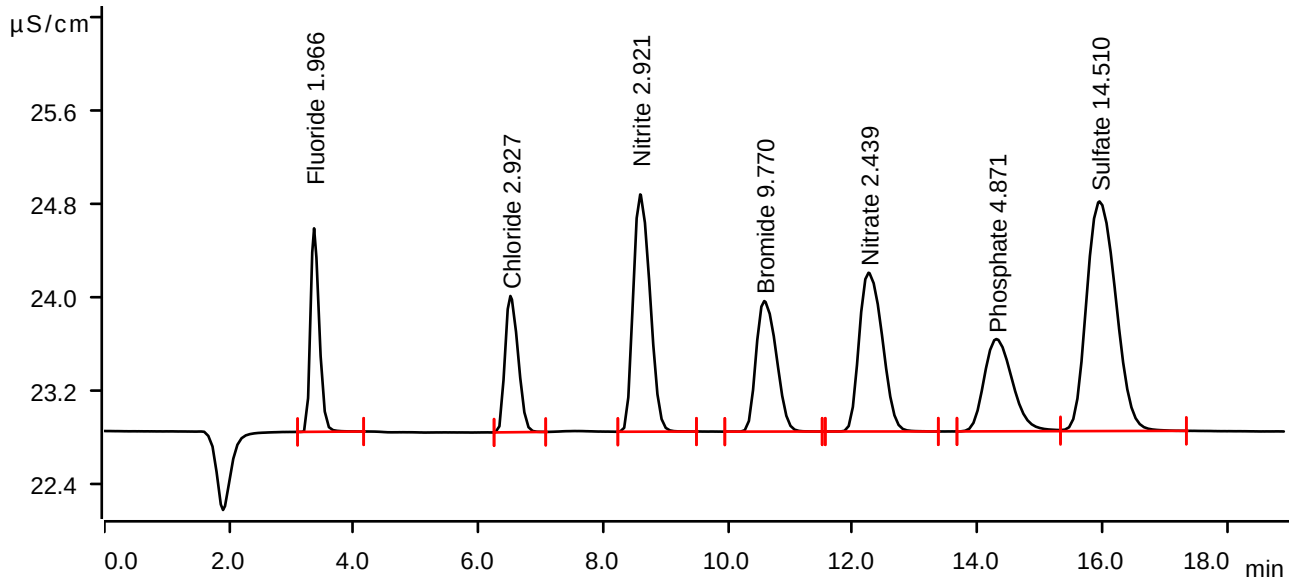
Sample data

Ident	STD5
Sample type	Standard 5
Determination start	2024-10-16 12:21:22 UTC-4
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.363	0.2831	1.748	1.966	Fluoride
2	6.510	0.2841	1.170	2.927	Chloride
3	8.592	0.6381	2.038	2.921	Nitrite
4	10.580	0.4225	1.121	9.770	Bromide
5	12.252	0.5873	1.364	2.439	Nitrate
6	14.302	0.4179	0.793	4.871	Phosphate
7	15.955	1.0767	1.972	14.510	Sulfate

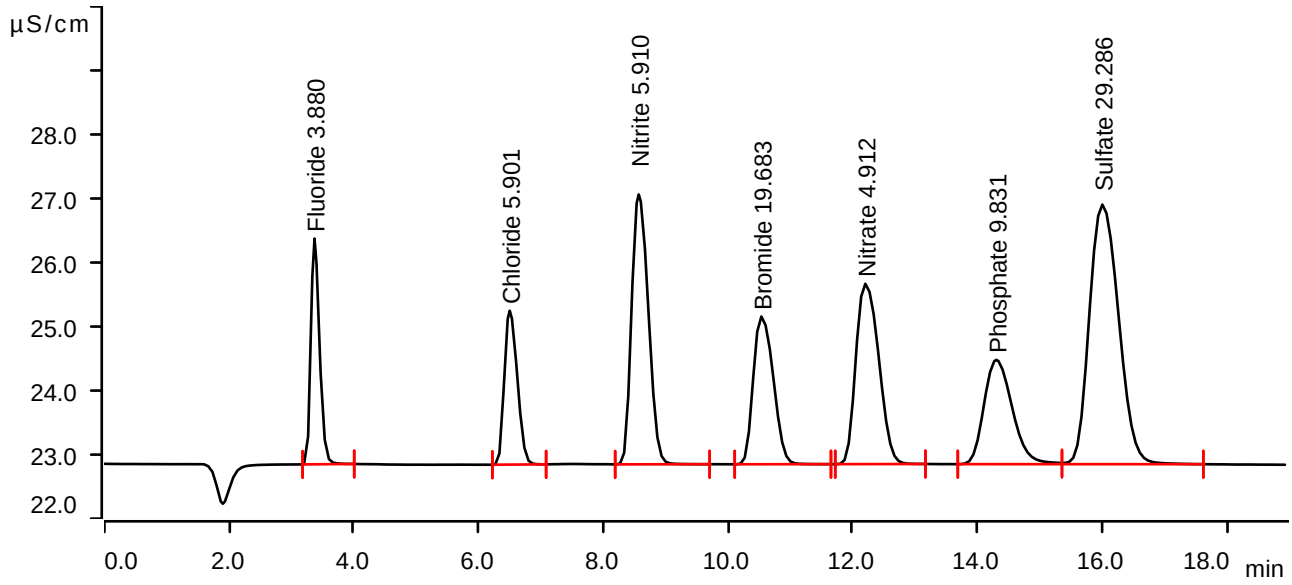
Sample data

Ident	STD6
Sample type	Standard 6
Determination start	2024-10-16 12:42:48 UTC-4
Method	IC1-101624
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	3.370	0.5637	3.525	3.880	Fluoride
2	6.500	0.5774	2.404	5.901	Chloride
3	8.568	1.3072	4.215	5.910	Nitrite
4	10.535	0.8590	2.306	19.683	Bromide
5	12.202	1.1988	2.815	4.912	Nitrate
6	14.302	0.8536	1.629	9.831	Phosphate
7	16.002	2.2059	4.054	29.286	Sulfate

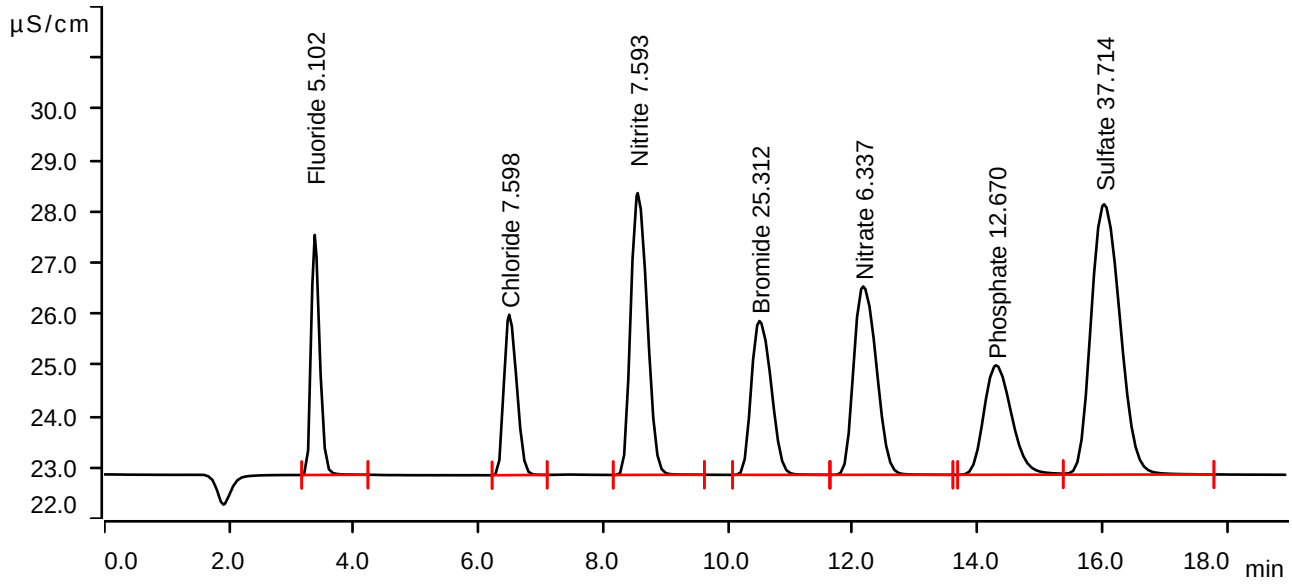
Sample data

Ident	STD7
Sample type	Standard 7
Determination start	2024-10-16 13:04:15 UTC-4
Method	IC1-101624
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	12.73	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	3.373	0.7427	4.687	5.102	Fluoride
2	6.492	0.7448	3.132	7.598	Chloride
3	8.552	1.6841	5.502	7.593	Nitrite
4	10.503	1.1070	3.003	25.312	Bromide
5	12.167	1.5512	3.678	6.337	Nitrate
6	14.297	1.1030	2.137	12.670	Phosphate
7	16.028	2.8500	5.280	37.714	Sulfate

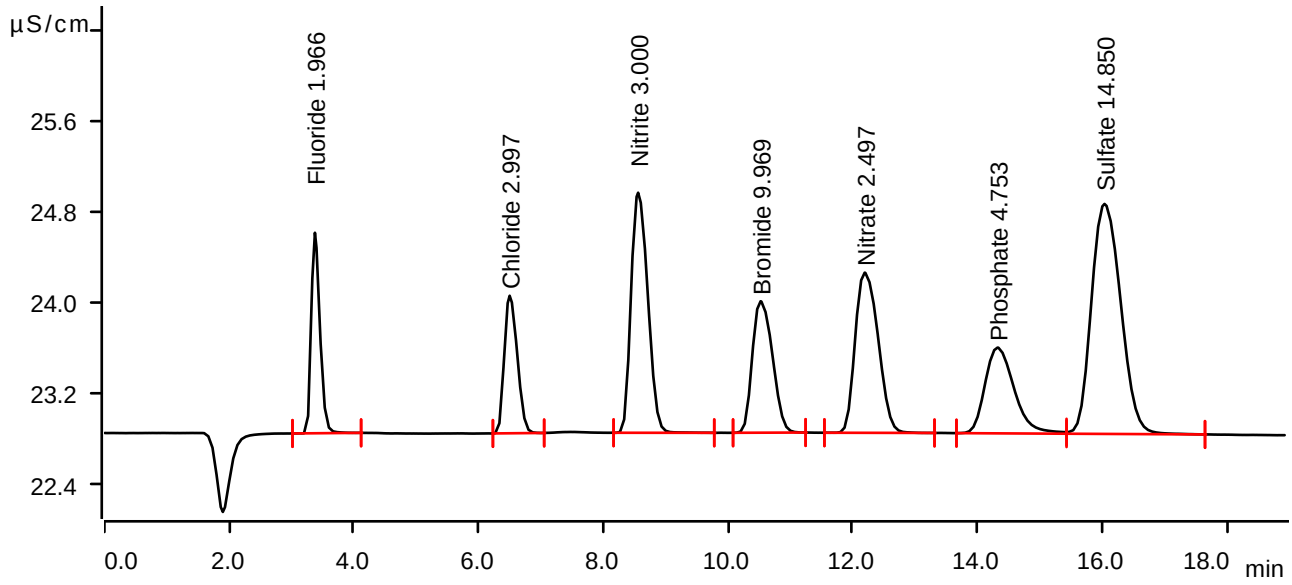
Sample data

Ident	ICV
Sample type	Check standard 1
Determination start	2024-10-16 13:37:49 UTC-4
Method	IC1-101624
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	3.377	0.2830	1.762	1.966	Fluoride
2	6.498	0.2910	1.209	2.997	Chloride
3	8.558	0.6557	2.109	3.000	Nitrite
4	10.522	0.4312	1.155	9.969	Bromide
5	12.190	0.6017	1.407	2.497	Nitrate
6	14.320	0.4076	0.753	4.753	Phosphate
7	16.035	1.1027	2.020	14.850	Sulfate

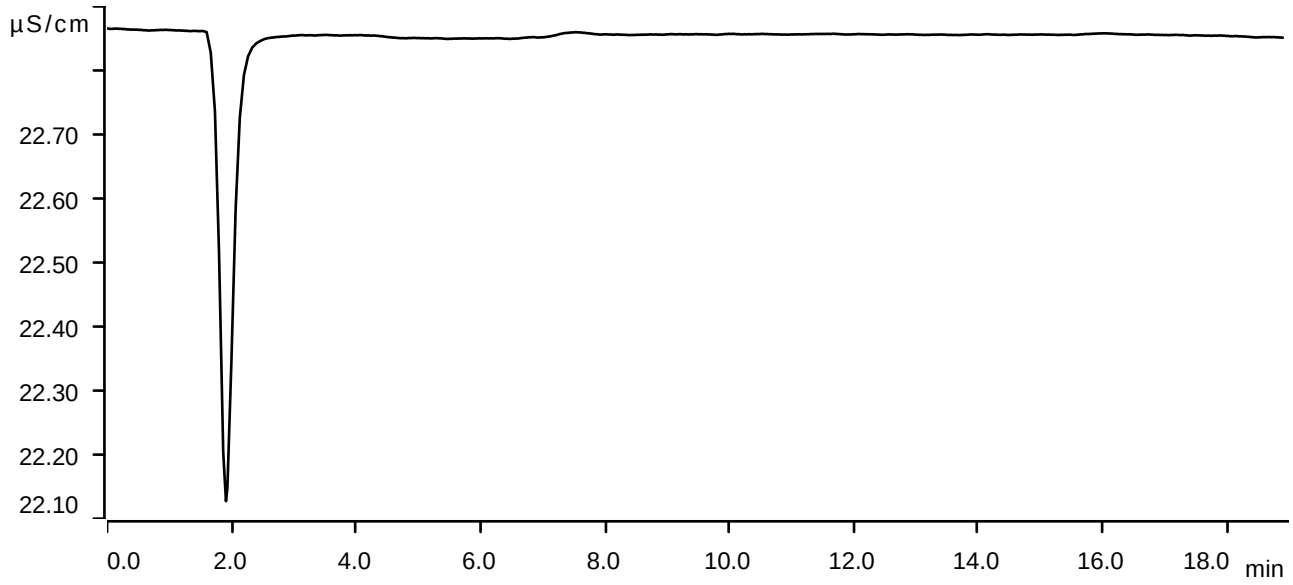
Sample data

Ident	ICB
Sample type	Sample
Determination start	2024-10-16 13:59:18 UTC-4
Method	IC1-101624
Operator	

Anions

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

Anions



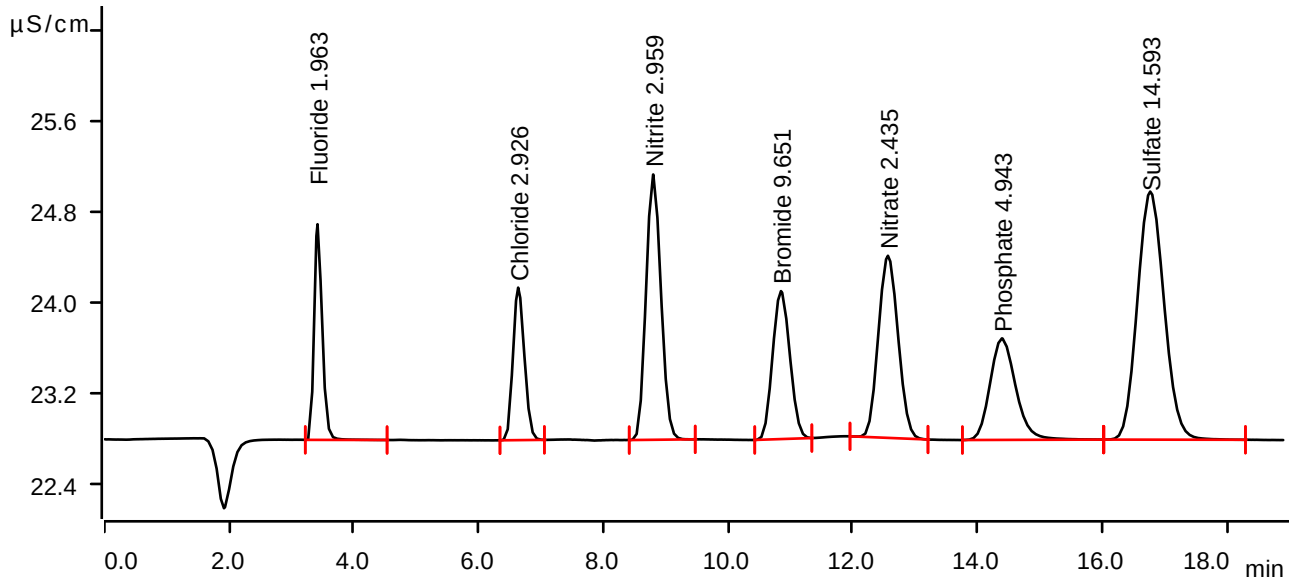
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-11-14 13:27:34 UTC-5
Method	IC1-101624
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	0.2827	1.894	1.963	Fluoride
2	6.635	0.2840	1.340	2.926	Chloride
3	8.798	0.6465	2.331	2.959	Nitrite
4	10.848	0.4172	1.300	9.651	Bromide
5	12.563	0.5863	1.600	2.435	Nitrate
6	14.390	0.4243	0.892	4.943	Phosphate
7	16.768	1.0830	2.180	14.593	Sulfate

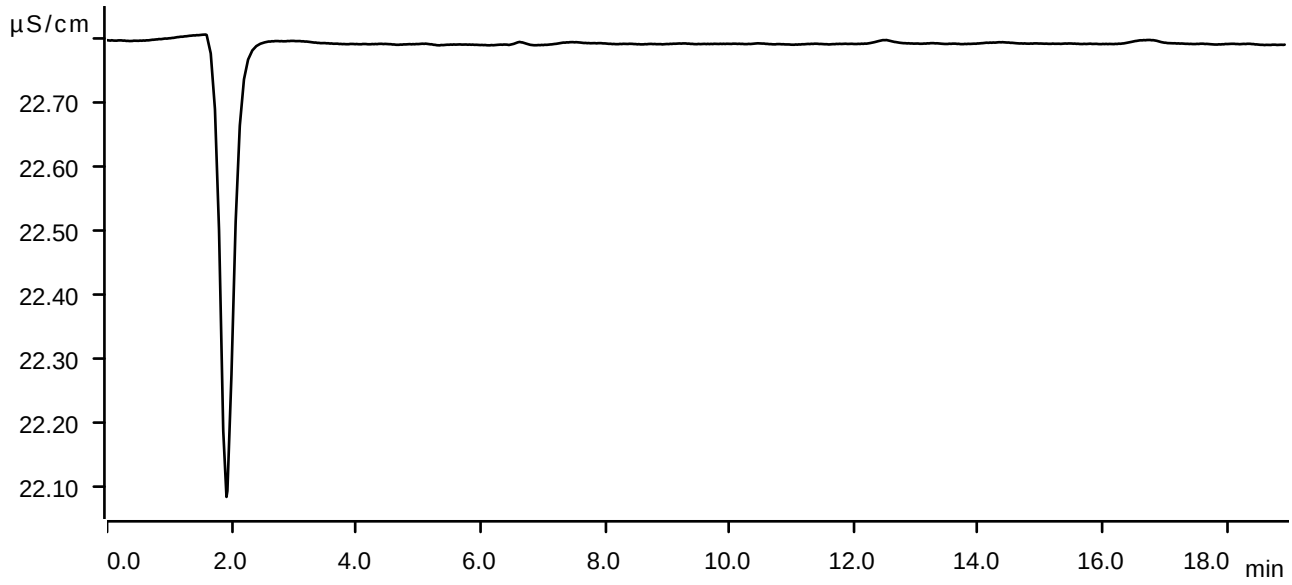
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-11-14 13:49:04 UTC-5
Method	IC1-101624
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



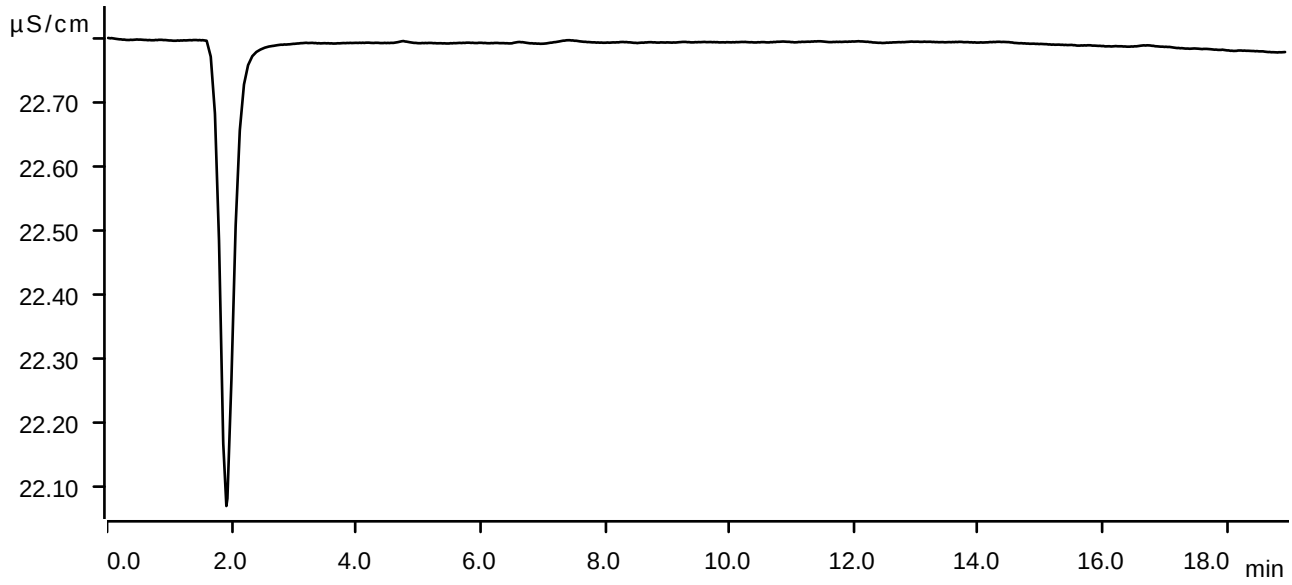
Sample data

Ident	LB133464BLW
Sample type	Sample
Determination start	2024-11-14 14:10:35 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



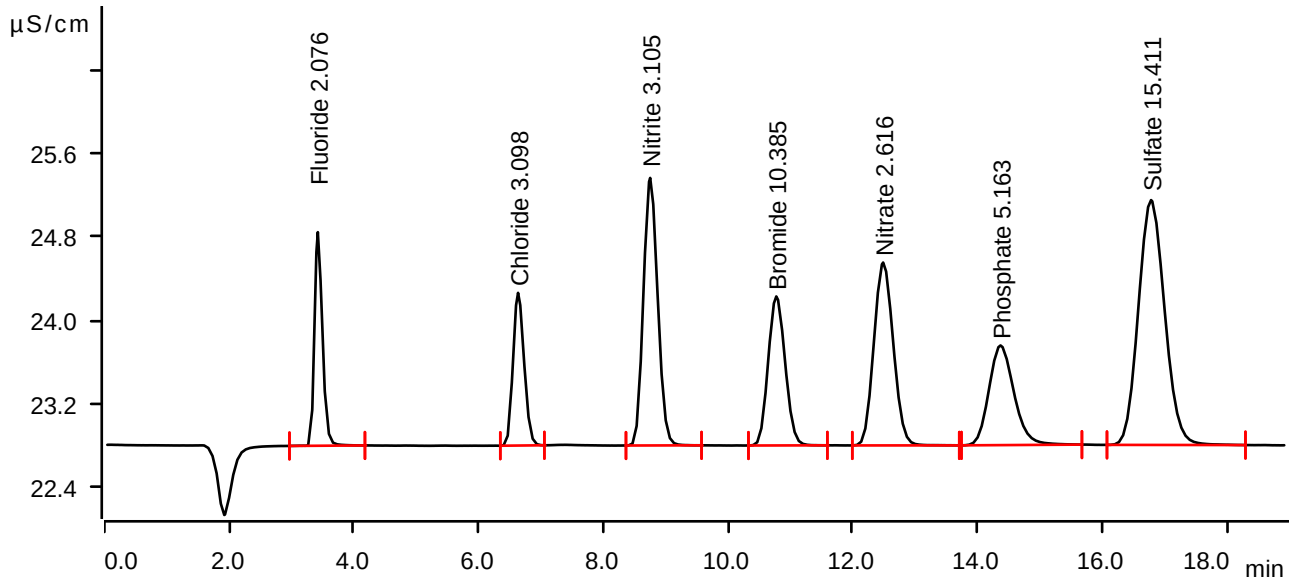
Sample data

Ident	LB133464BSW
Sample type	Check standard 1
Determination start	2024-11-14 14:32:06 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.77	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.423	0.2992	2.043	2.076	Fluoride
2	6.633	0.3010	1.461	3.098	Chloride
3	8.752	0.6793	2.559	3.105	Nitrite
4	10.773	0.4495	1.425	10.385	Bromide
5	12.487	0.6311	1.749	2.616	Nitrate
6	14.368	0.4435	0.954	5.163	Phosphate
7	16.782	1.1455	2.343	15.411	Sulfate

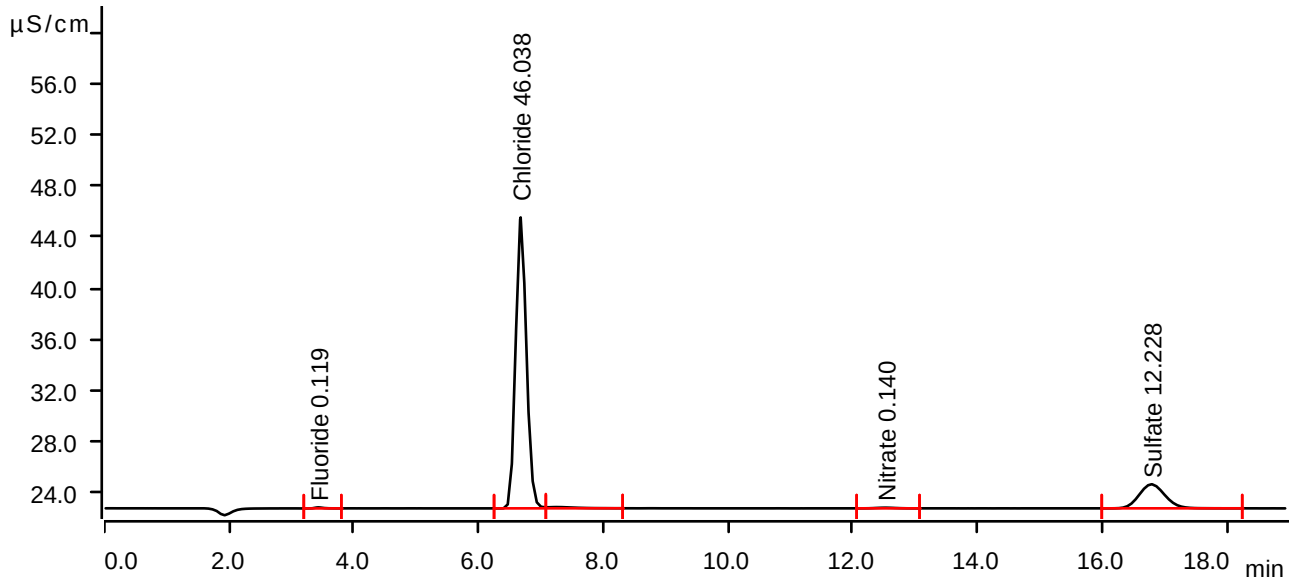
Sample data

Ident	P4846-01
Sample type	Sample
Determination start	2024-11-14 14:53:24 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.77	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.430	0.0123	0.080	0.119	Fluoride
2	6.675	4.5367	22.720	46.038	Chloride
3	7.248	0.0501	0.098	invalid	
4	12.525	0.0186	0.052	0.140	Nitrate
5	16.788	0.9022	1.878	12.228	Sulfate

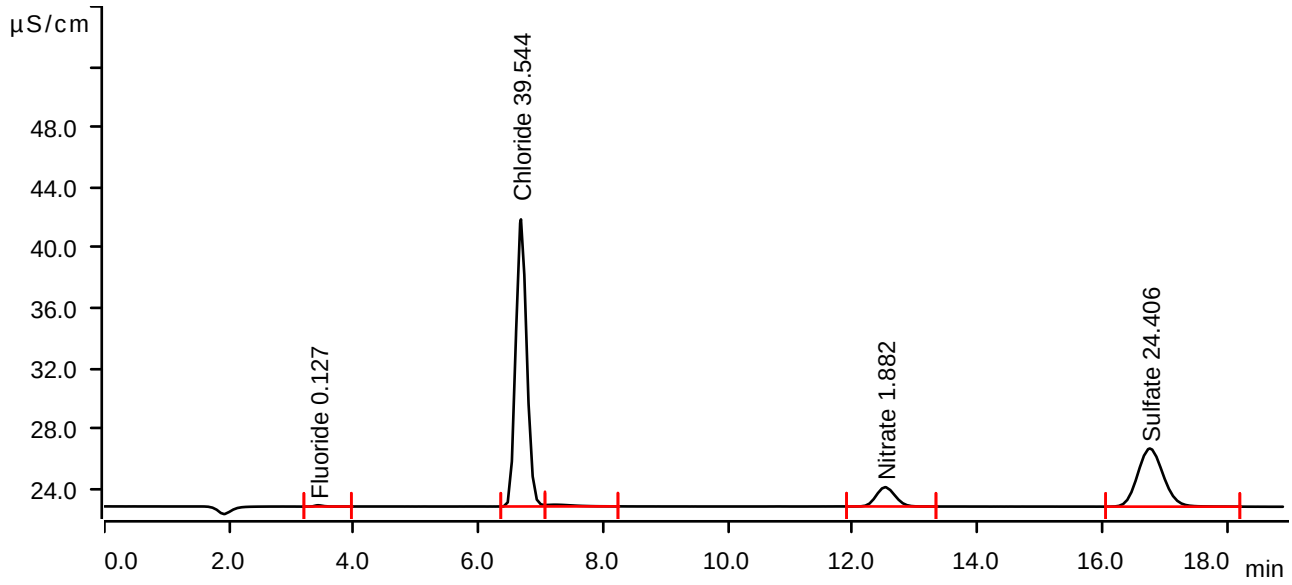
Sample data

Ident	P4846-02
Sample type	Sample
Determination start	2024-11-14 15:14:56 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.427	0.0136	0.087	0.127	Fluoride
2	6.680	3.8961	19.059	39.544	Chloride
3	7.225	0.0574	0.115	invalid	
4	12.518	0.4494	1.279	1.882	Nitrate
5	16.762	1.8329	3.861	24.406	Sulfate

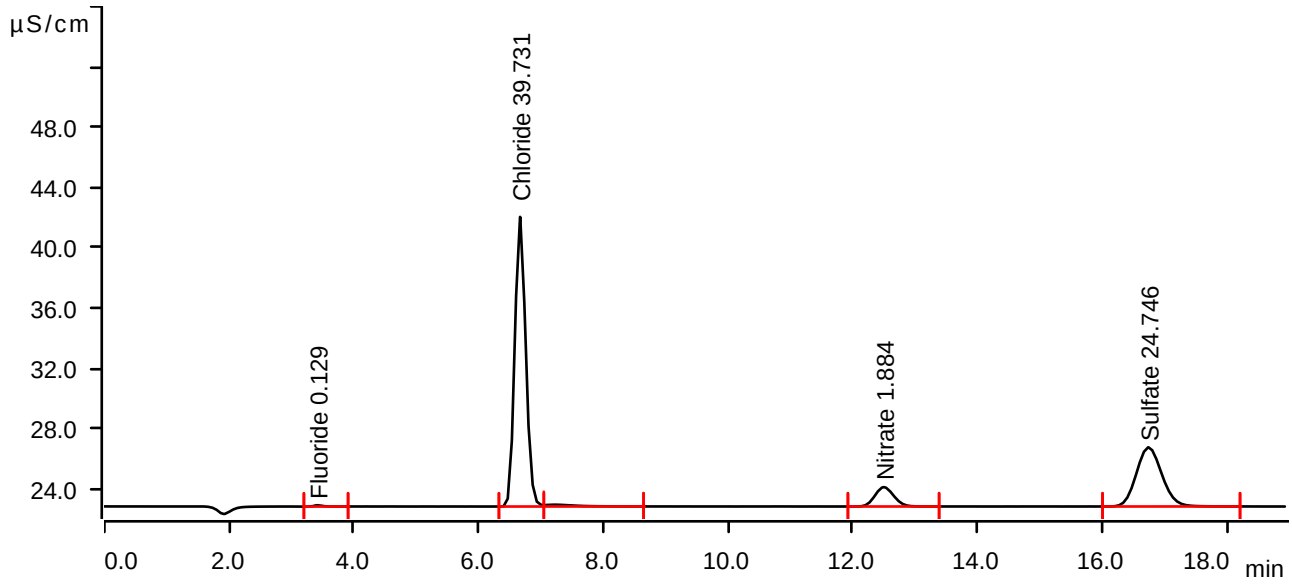
Sample data

Ident	P4846-03
Sample type	Sample
Determination start	2024-11-14 15:36:30 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.415	0.0138	0.089	0.129	Fluoride
2	6.665	3.9146	19.226	39.731	Chloride
3	7.218	0.0647	0.119	invalid	
4	12.497	0.4501	1.286	1.884	Nitrate
5	16.740	1.8589	3.927	24.746	Sulfate

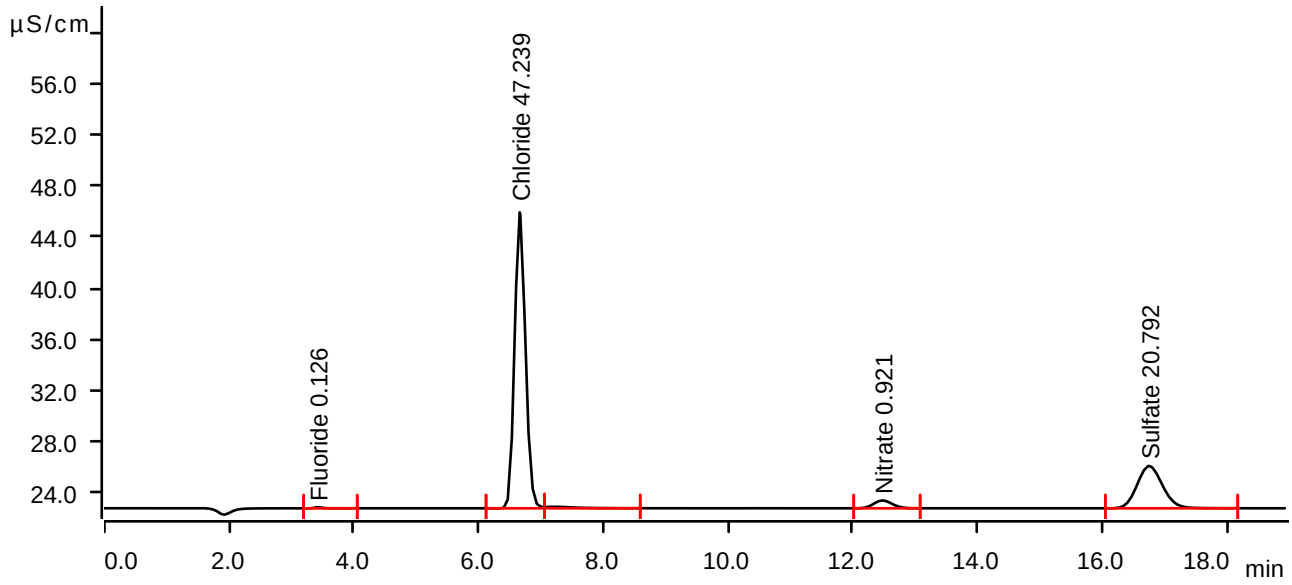
Sample data

Ident	P4846-04
Sample type	Sample
Determination start	2024-11-14 15:58:04 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.77	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.418	0.0134	0.085	0.126	Fluoride
2	6.660	4.6551	23.108	47.239	Chloride
3	7.213	0.0613	0.116	invalid	
4	12.477	0.2118	0.611	0.921	Nitrate
5	16.752	1.5568	3.305	20.792	Sulfate

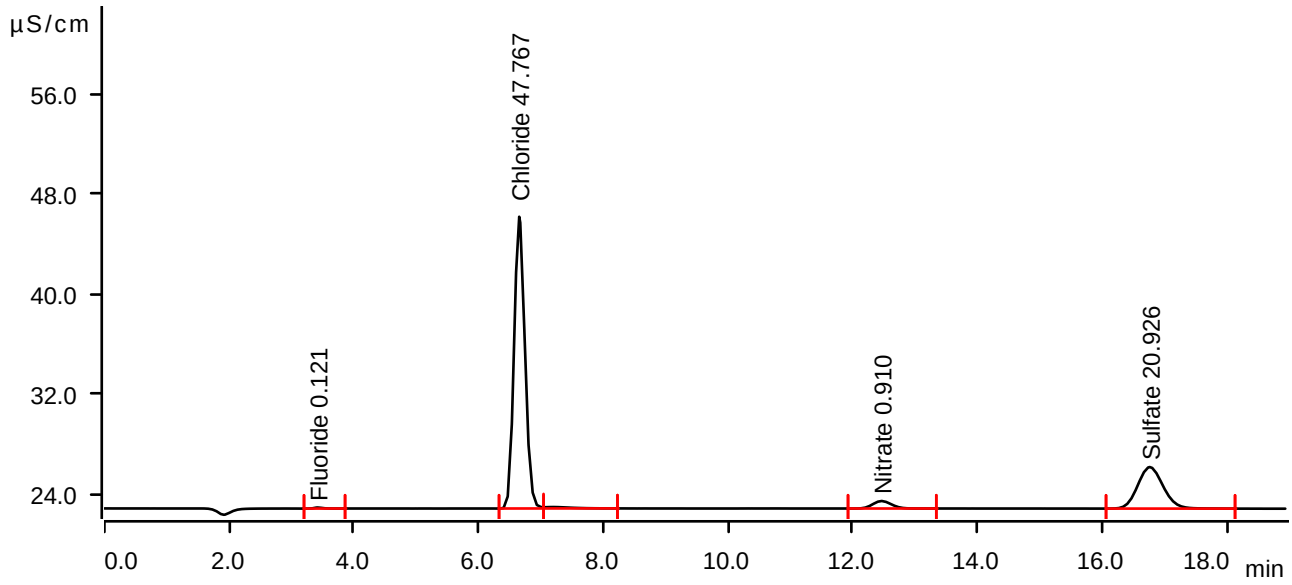
Sample data

Ident	P4846-05
Sample type	Sample
Determination start	2024-11-14 16:19:39 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.71	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.420	0.0127	0.083	0.121	Fluoride
2	6.652	4.7073	23.354	47.767	Chloride
3	7.202	0.0560	0.114	invalid	
4	12.462	0.2091	0.600	0.910	Nitrate
5	16.760	1.5670	3.326	20.926	Sulfate

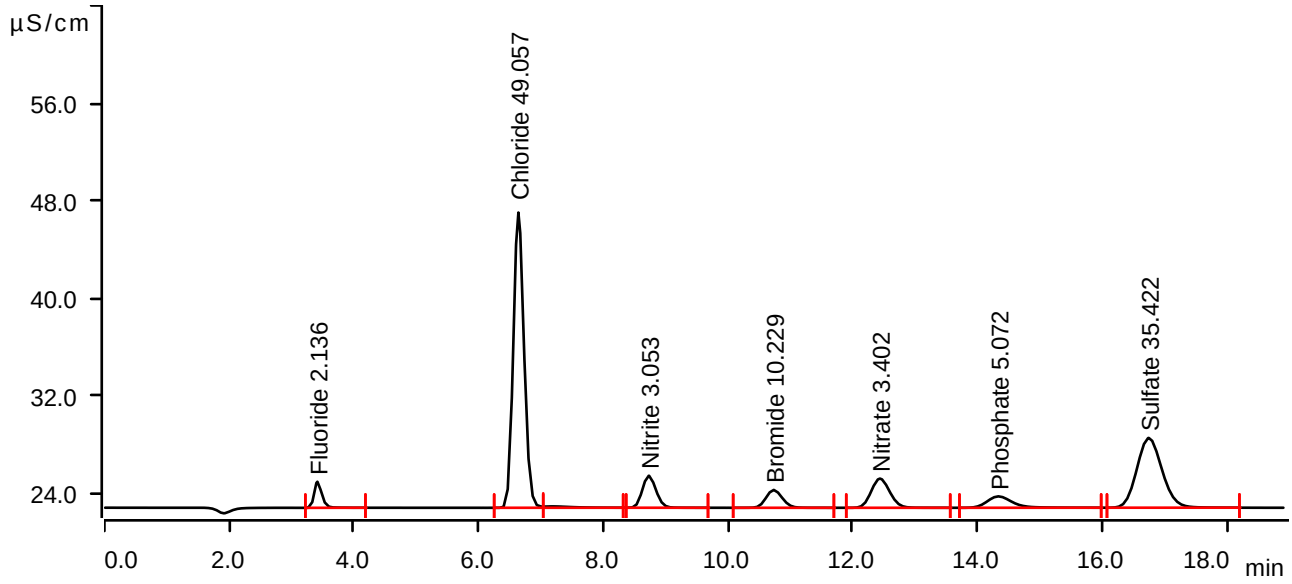
Sample data

Ident	P4846-06MS	
Sample type	Sample	
Determination start	2024-11-14 16:41:13 UTC-5	
Method	IC1-101624	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.71	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.417	0.3080	2.137	2.136	Fluoride
2	6.638	4.8345	24.208	49.057	Chloride
3	7.182	0.0554	0.110	invalid	
4	8.728	0.6675	2.622	3.053	Nitrite
5	10.732	0.4427	1.461	10.229	Bromide
6	12.435	0.8254	2.394	3.402	Nitrate
7	14.335	0.4356	0.934	5.072	Phosphate
8	16.745	2.6748	5.722	35.422	Sulfate

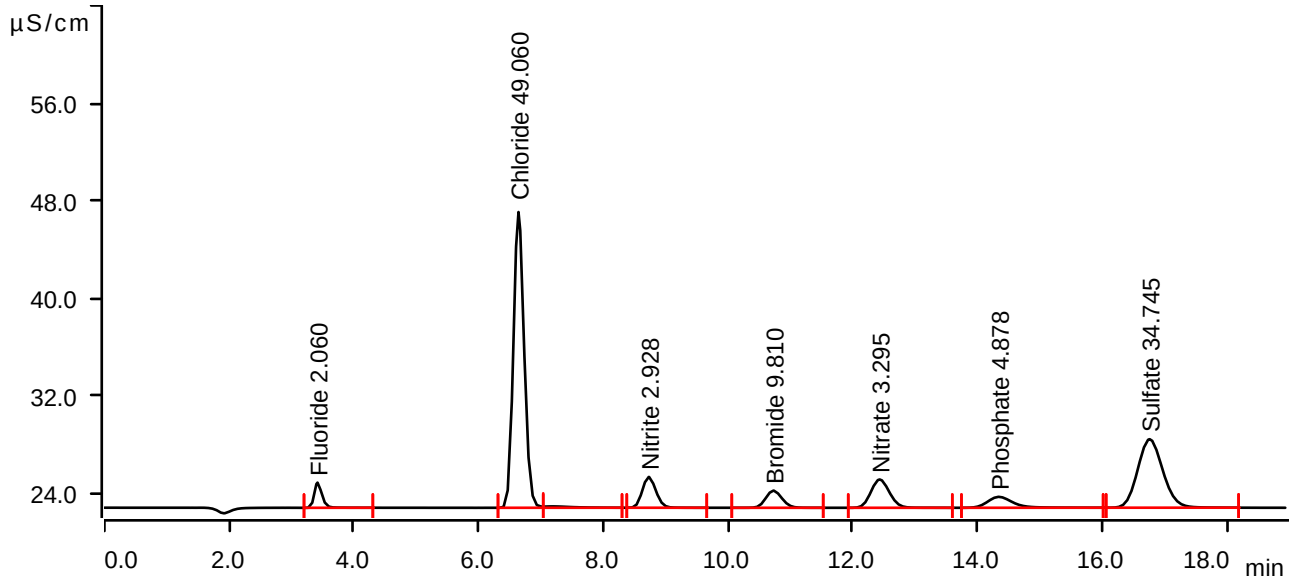
Sample data

Ident	P4846-07MSD	
Sample type	Sample	
Determination start	2024-11-14 17:02:47 UTC-5	
Method	IC1-101624	
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	0.2969	2.065	2.060	Fluoride
2	6.640	4.8348	24.251	49.060	Chloride
3	7.200	0.0556	0.110	invalid	
4	8.728	0.6397	2.525	2.928	Nitrite
5	10.727	0.4242	1.406	9.810	Bromide
6	12.430	0.7991	2.324	3.295	Nitrate
7	14.340	0.4185	0.896	4.878	Phosphate
8	16.758	2.6231	5.621	34.745	Sulfate

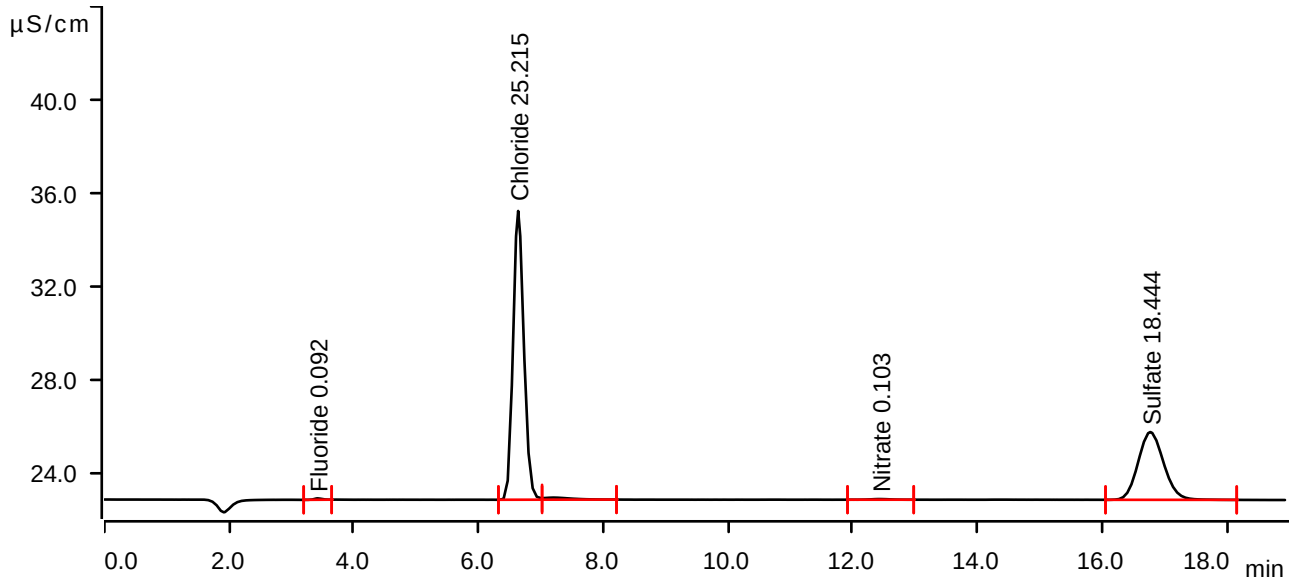
Sample data

Ident	P4846-08
Sample type	Sample
Determination start	2024-11-14 17:24:20 UTC-5
Method	IC1-101624
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	3.420	0.0085	0.059	0.092	Fluoride
2	6.635	2.4827	12.402	25.215	Chloride
3	7.198	0.0441	0.089	invalid	
4	12.438	0.0096	0.028	0.103	Nitrate
5	16.770	1.3773	2.912	18.444	Sulfate

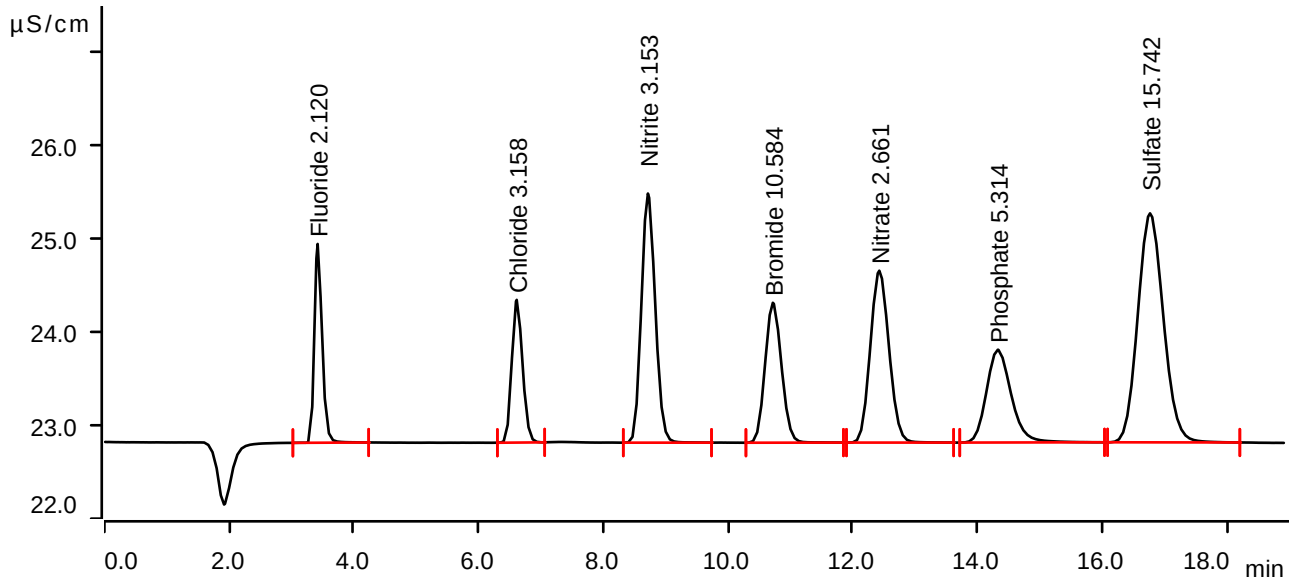
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-11-14 17:45:53 UTC-5
Method	IC1-101624
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	3.420	0.3056	2.135	2.120	Fluoride
2	6.612	0.3068	1.532	3.158	Chloride
3	8.715	0.6899	2.675	3.153	Nitrite
4	10.718	0.4583	1.502	10.584	Bromide
5	12.425	0.6422	1.846	2.661	Nitrate
6	14.325	0.4568	0.996	5.314	Phosphate
7	16.765	1.1708	2.459	15.742	Sulfate

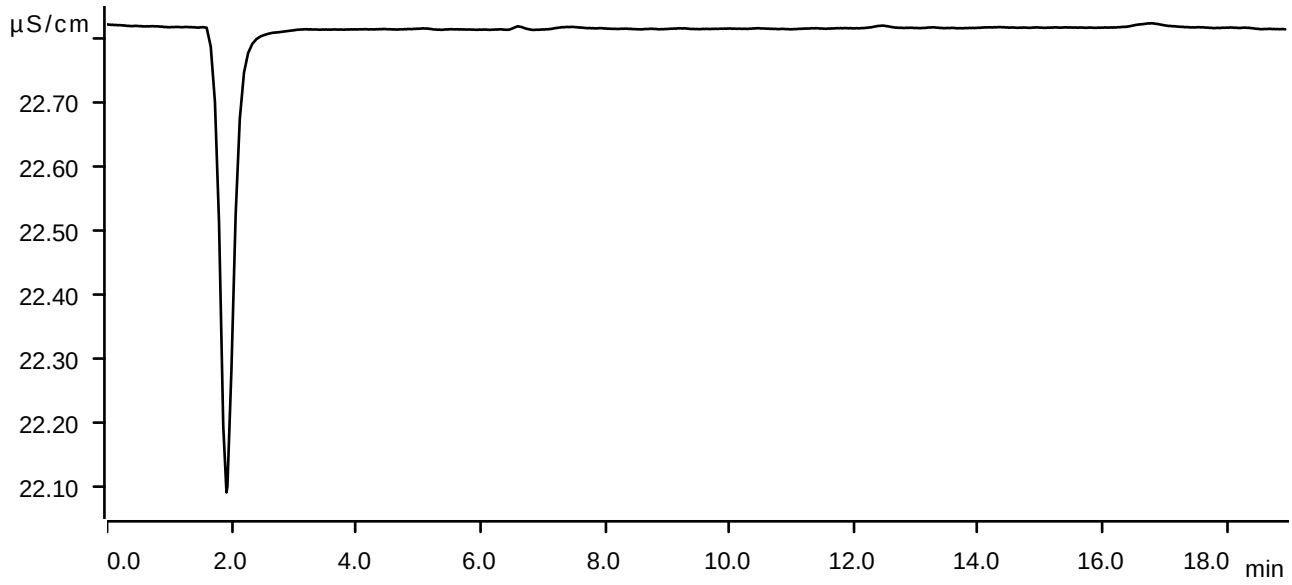
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-11-14 18:07:22 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.71	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



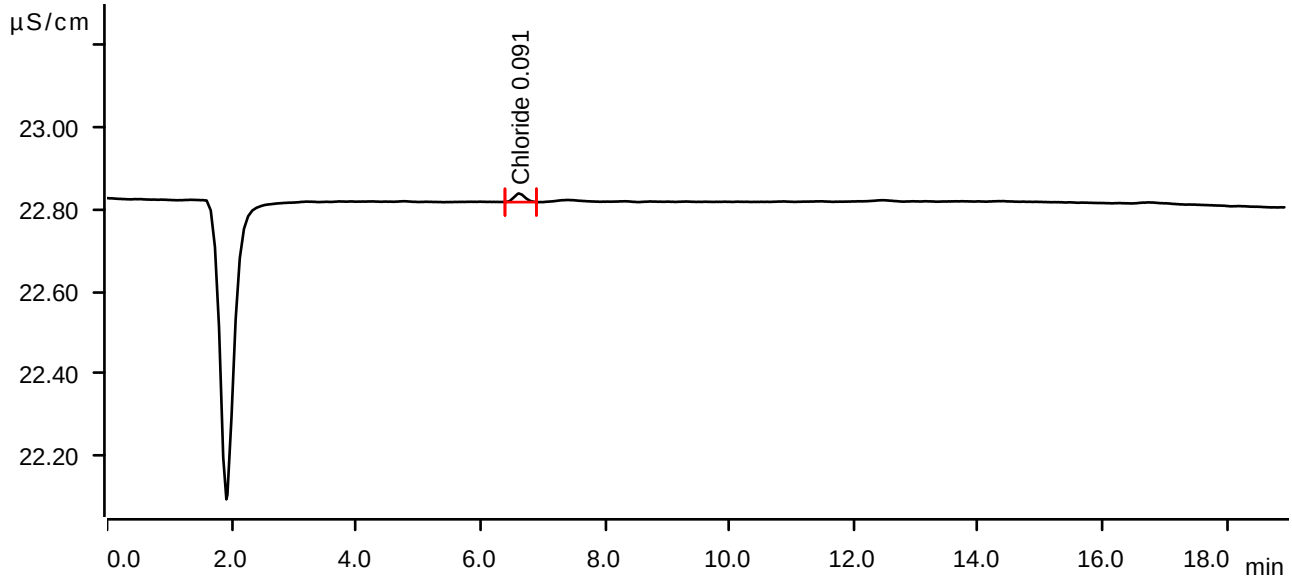
Sample data

Ident	P4846-10
Sample type	Sample
Determination start	2024-11-14 18:28:53 UTC-5
Method	IC1-101624
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	6.617	0.0043	0.021	0.091	Chloride

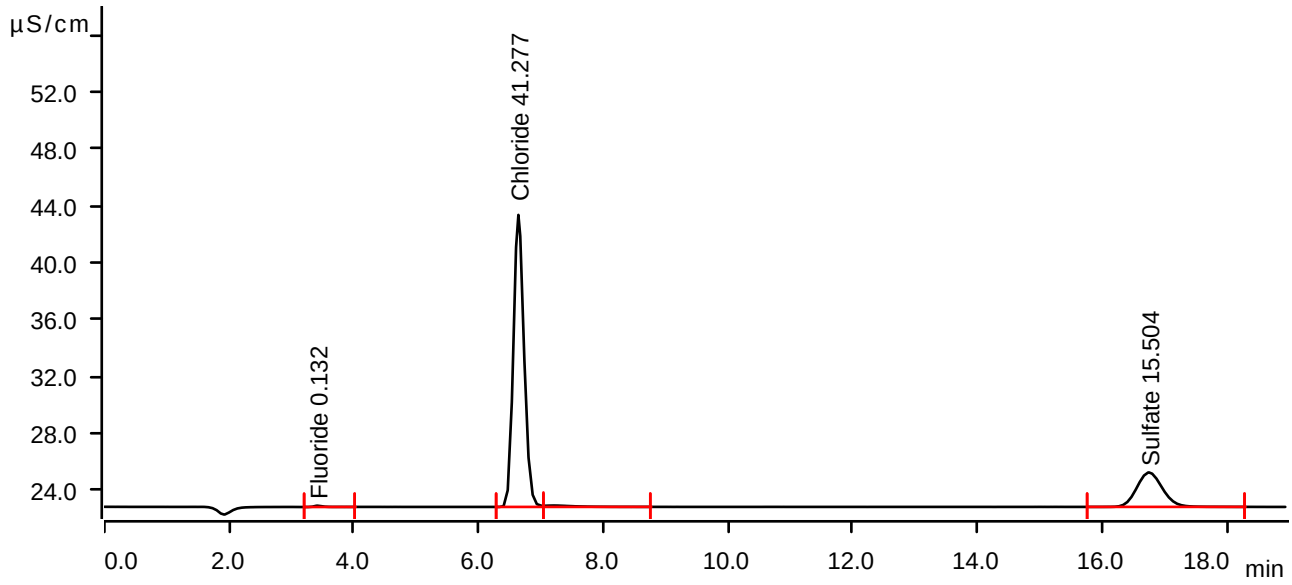
Sample data

Ident	P4846-11
Sample type	Sample
Determination start	2024-11-14 18:50:24 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.71	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.417	0.0144	0.090	0.132	Fluoride
2	6.638	4.0671	20.527	41.277	Chloride
3	7.207	0.0518	0.096	invalid	
4	16.748	1.1526	2.422	15.504	Sulfate

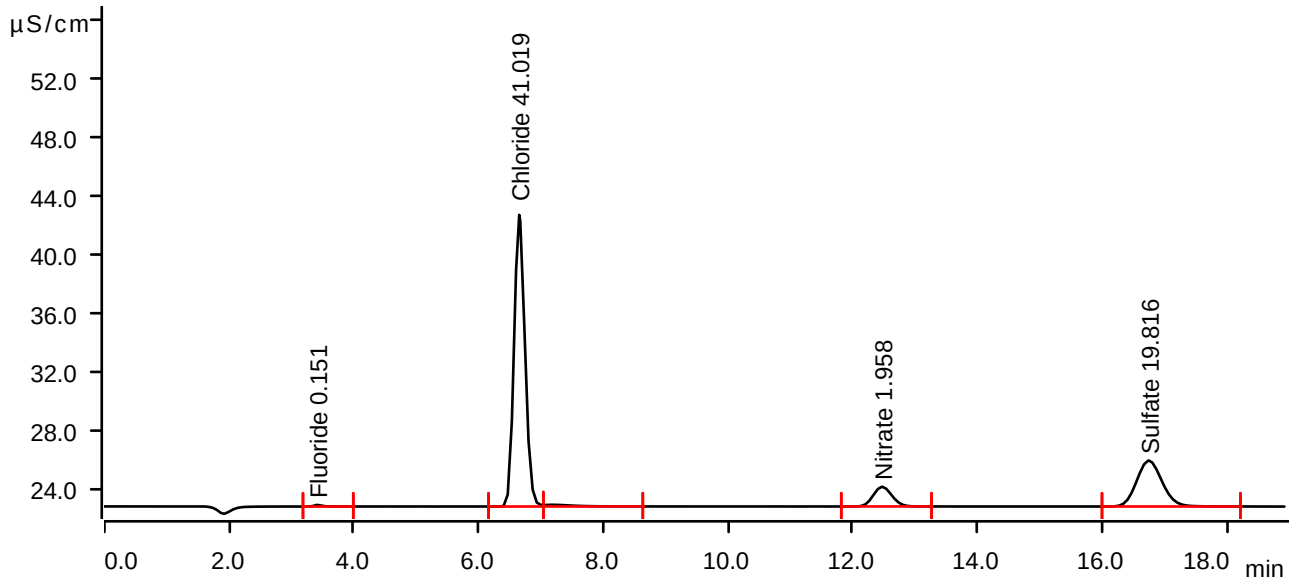
Sample data

Ident	P4846-12
Sample type	Sample
Determination start	2024-11-14 19:11:47 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.77	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.413	0.0171	0.111	0.151	Fluoride
2	6.652	4.0417	19.929	41.019	Chloride
3	7.192	0.0617	0.117	invalid	
4	12.470	0.4683	1.350	1.958	Nitrate
5	16.745	1.4822	3.140	19.816	Sulfate

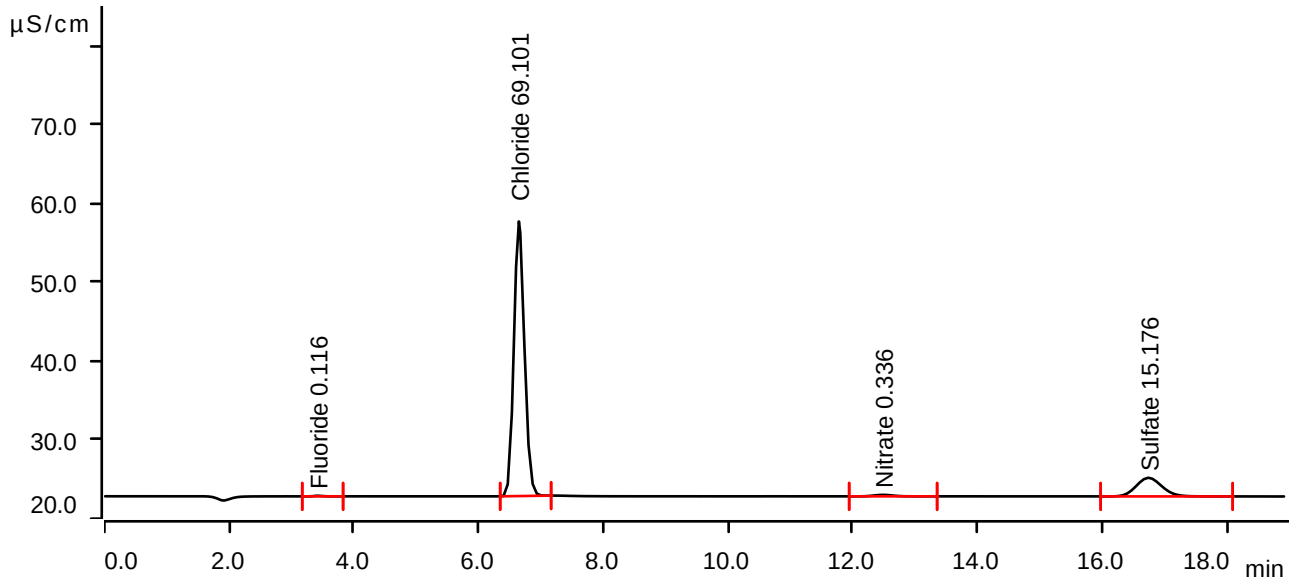
Sample data

Ident	P4846-13
Sample type	Sample
Determination start	2024-11-14 19:33:18 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.77	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.415	0.0120	0.079	0.116	Fluoride
2	6.647	6.8117	34.851	69.101	Chloride
3	12.480	0.0671	0.189	0.336	Nitrate
4	16.740	1.1275	2.361	15.176	Sulfate

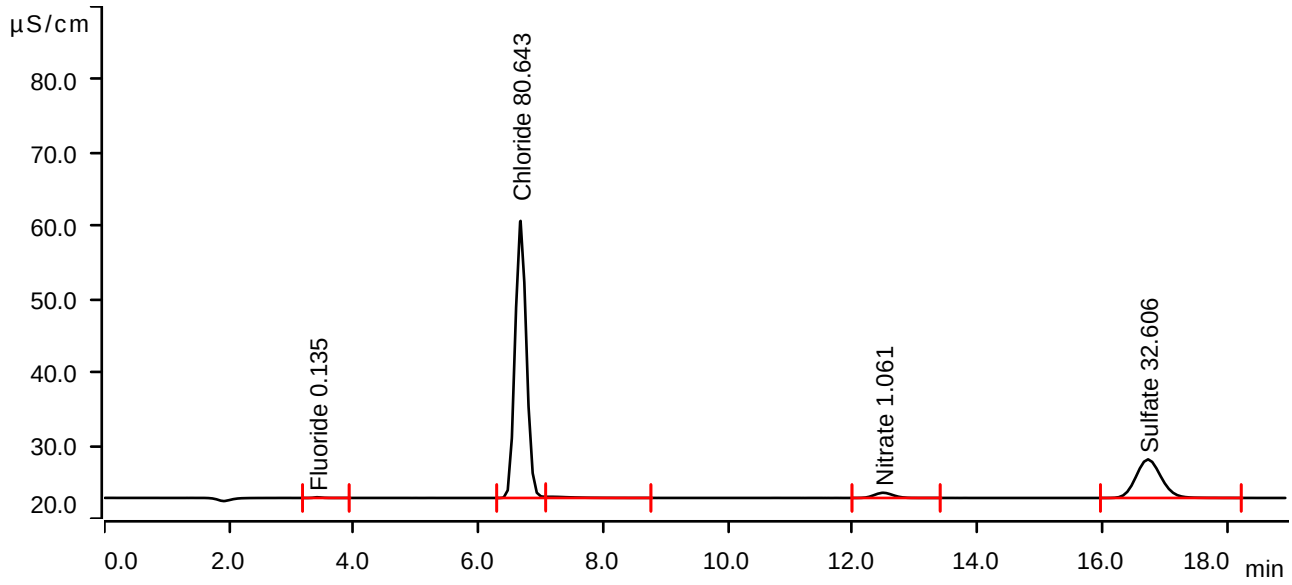
Sample data

Ident	P4846-14
Sample type	Sample
Determination start	2024-11-14 19:54:47 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.413	0.0148	0.097	0.135	Fluoride
2	6.673	7.9503	37.864	80.643	Chloride
3	7.167	0.0770	0.159	invalid	
4	12.487	0.2464	0.709	1.061	Nitrate
5	16.732	2.4596	5.271	32.606	Sulfate

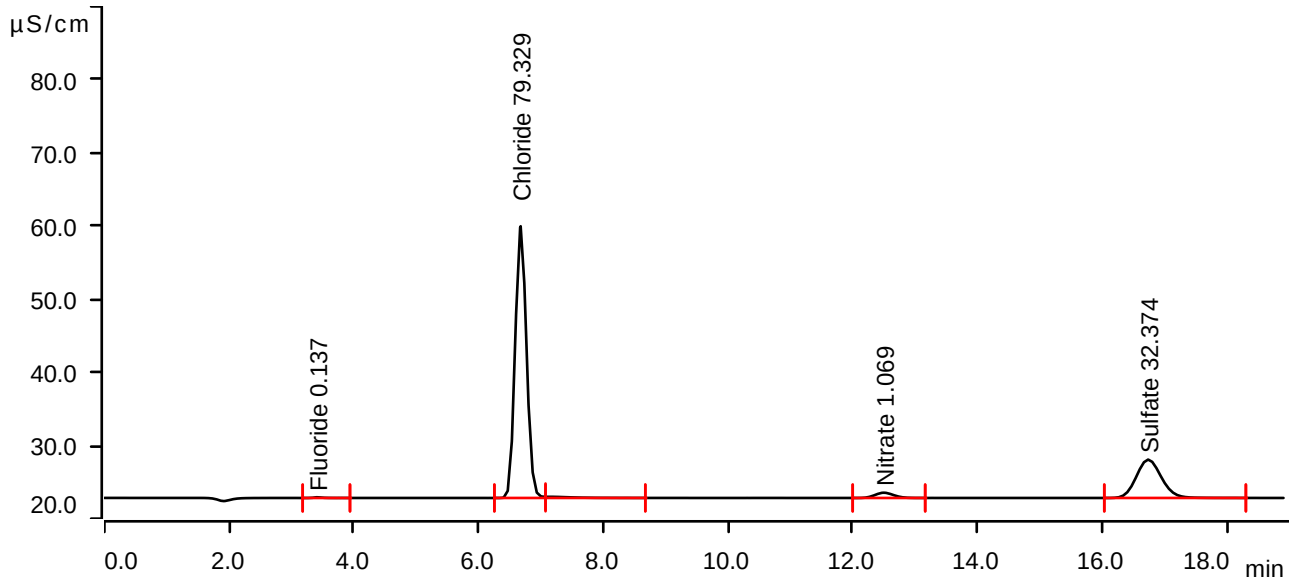
Sample data

Ident	P4846-15
Sample type	Sample
Determination start	2024-11-14 20:16:15 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.412	0.0151	0.098	0.137	Fluoride
2	6.675	7.8207	37.138	79.329	Chloride
3	7.172	0.0766	0.156	invalid	
4	12.497	0.2485	0.719	1.069	Nitrate
5	16.735	2.4419	5.244	32.374	Sulfate

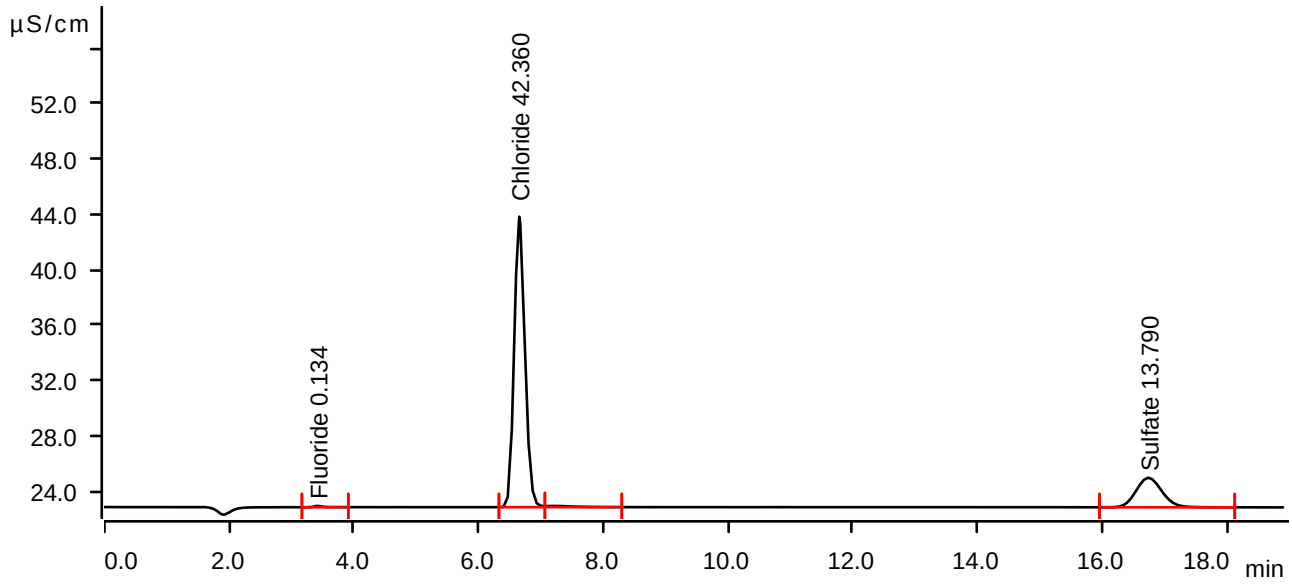
Sample data

Ident	P4846-16
Sample type	Sample
Determination start	2024-11-14 20:37:42 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.418	0.0145	0.094	0.134	Fluoride
2	6.652	4.1739	20.985	42.360	Chloride
3	7.207	0.0433	0.088	invalid	
4	16.738	1.0216	2.135	13.790	Sulfate

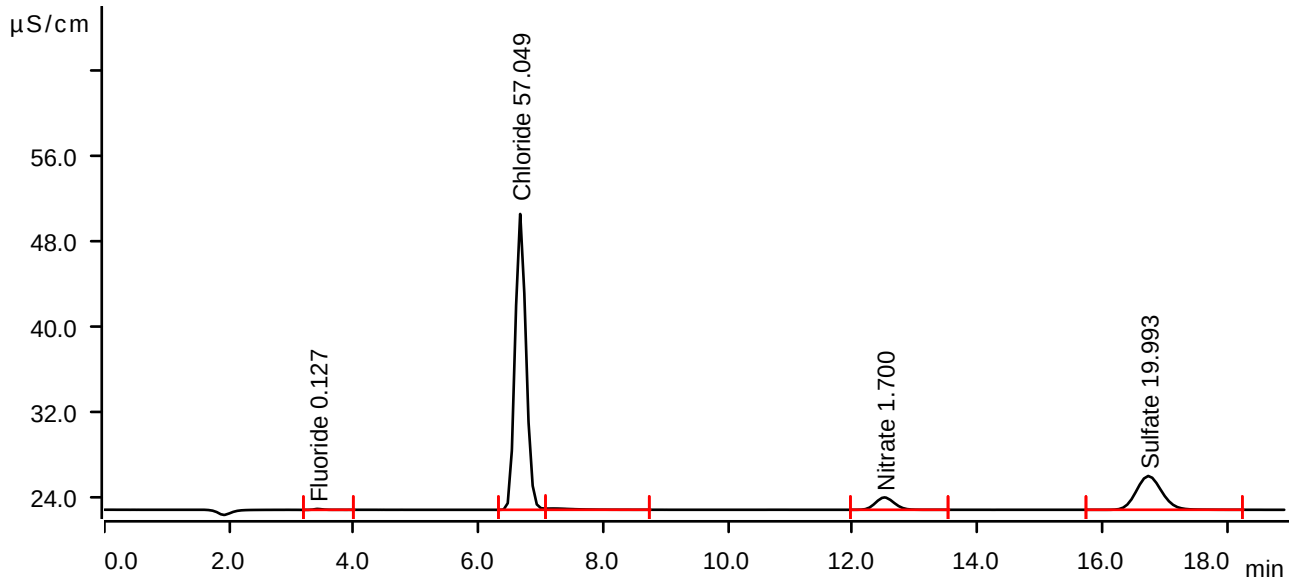
Sample data

Ident	P4846-17
Sample type	Sample
Determination start	2024-11-14 20:59:09 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.417	0.0136	0.087	0.127	Fluoride
2	6.668	5.6229	27.724	57.049	Chloride
3	7.195	0.0621	0.122	invalid	
4	12.507	0.4044	1.158	1.700	Nitrate
5	16.738	1.4957	3.164	19.993	Sulfate

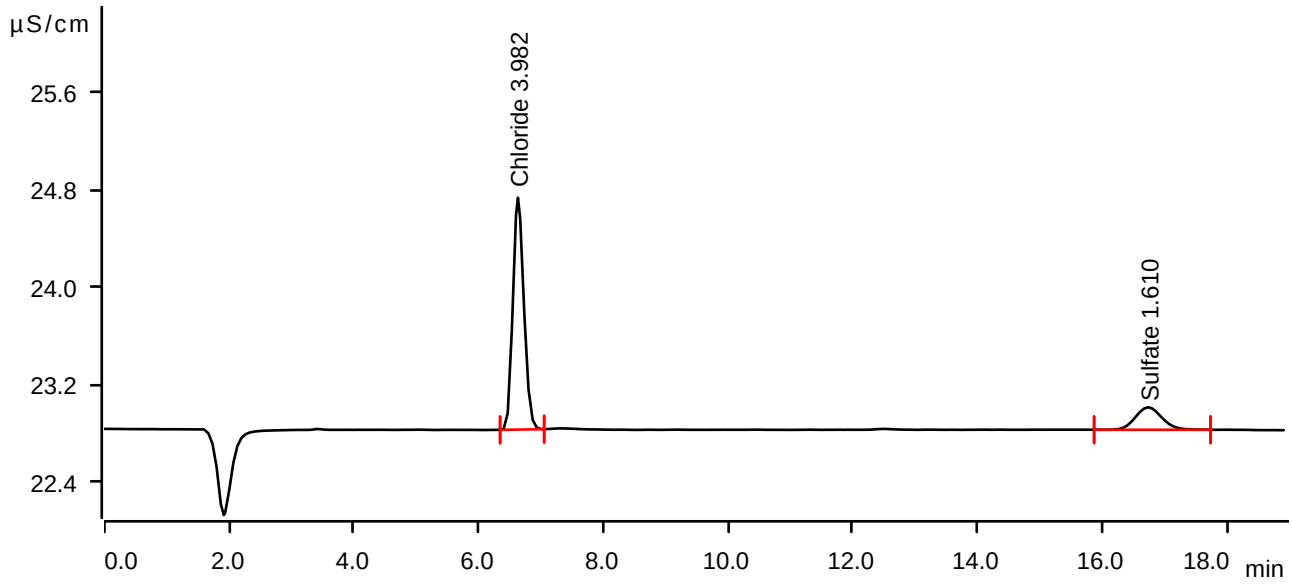
Sample data

Ident	P4846-01DLX10
Sample type	Sample
Determination start	2024-11-14 21:20:35 UTC-5
Method	IC1-101624
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	6.632	0.3882	1.902	3.982	Chloride
2	16.740	0.0908	0.184	1.610	Sulfate

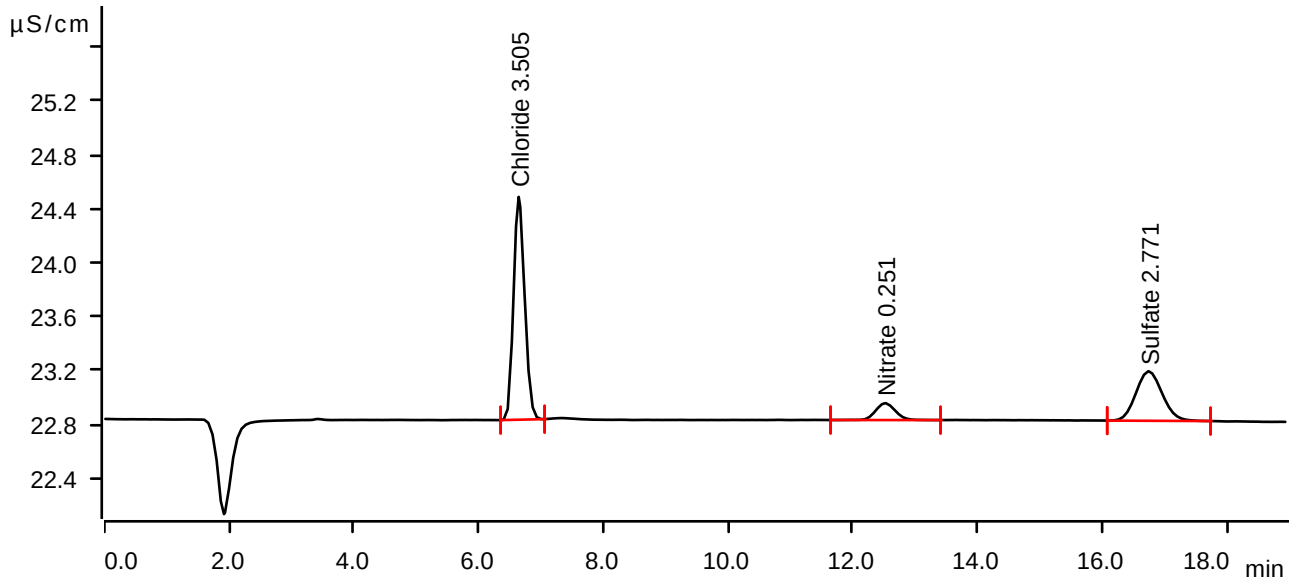
Sample data

Ident	P4846-02DLX10
Sample type	Sample
Determination start	2024-11-14 21:42:08 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.643	0.3411	1.653	3.505	Chloride
2	12.520	0.0460	0.125	0.251	Nitrate
3	16.745	0.1795	0.367	2.771	Sulfate

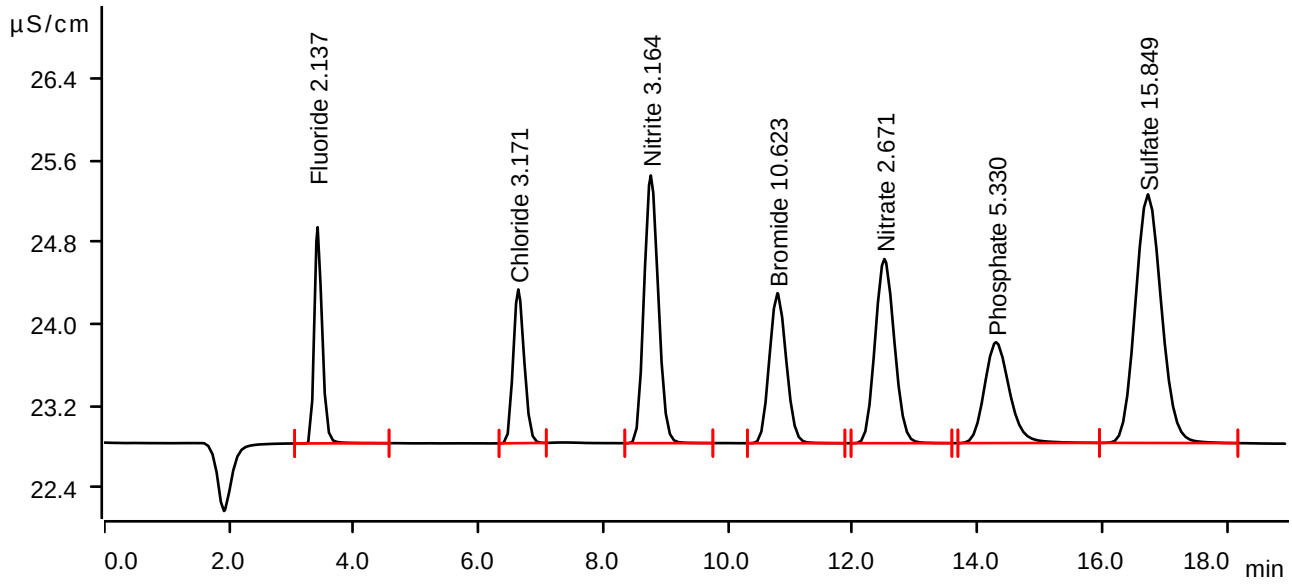
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-11-14 22:03:41 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.420	0.3081	2.110	2.137	Fluoride
2	6.637	0.3082	1.501	3.171	Chloride
3	8.762	0.6925	2.614	3.164	Nitrite
4	10.792	0.4600	1.464	10.623	Bromide
5	12.507	0.6447	1.798	2.671	Nitrate
6	14.297	0.4583	0.984	5.330	Phosphate
7	16.730	1.1790	2.426	15.849	Sulfate

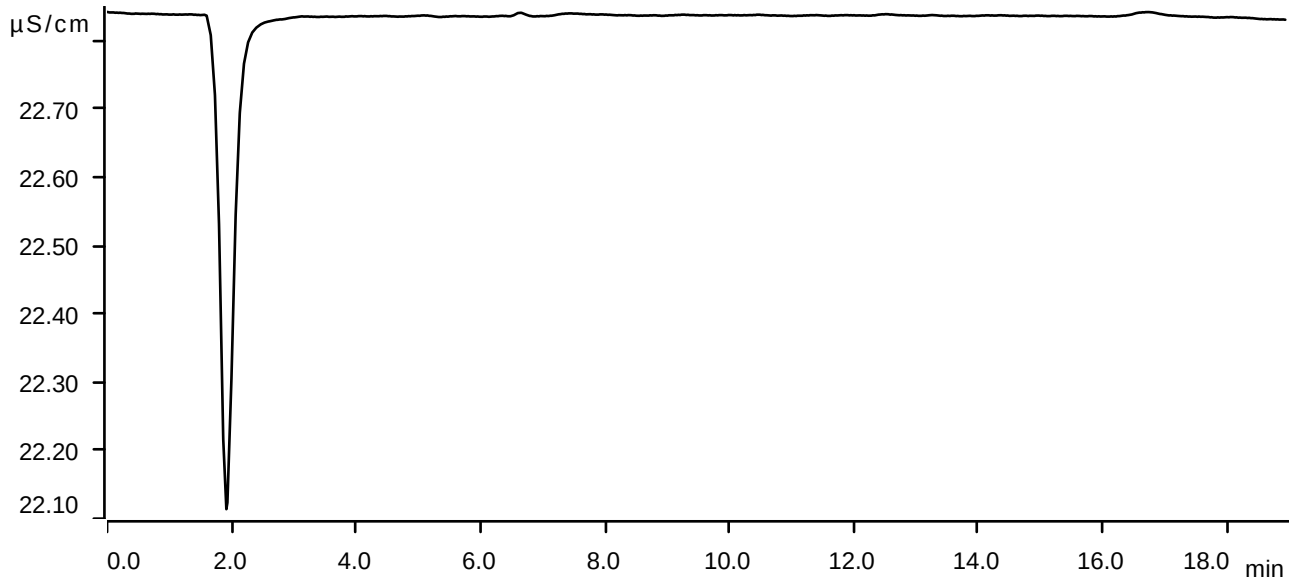
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-11-14 22:25:11 UTC-5
Method	IC1-101624
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



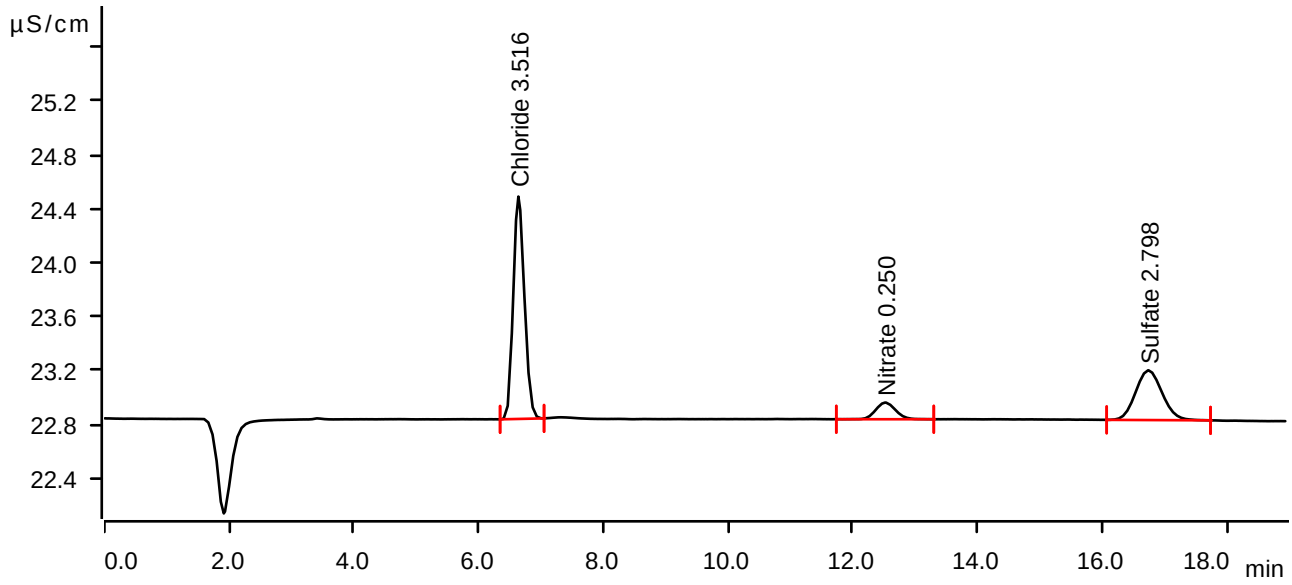
Sample data

Ident	P4846-03DLX10
Sample type	Sample
Determination start	2024-11-14 22:46:41 UTC-5
Method	IC1-101624
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	6.638	0.3422	1.650	3.516	Chloride
2	12.517	0.0458	0.124	0.250	Nitrate
3	16.740	0.1816	0.369	2.798	Sulfate

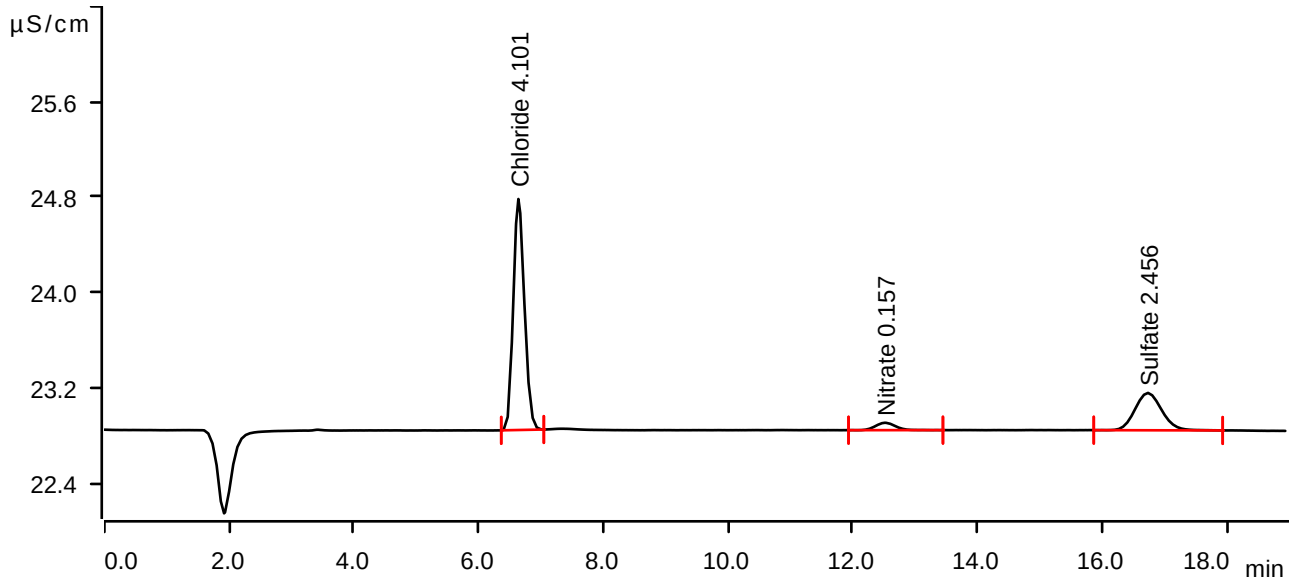
Sample data

Ident	P4846-04DLX10
Sample type	Sample
Determination start	2024-11-14 23:08:15 UTC-5
Method	IC1-101624
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	6.638	0.3999	1.939	4.101	Chloride
2	12.517	0.0229	0.062	0.157	Nitrate
3	16.732	0.1555	0.313	2.456	Sulfate

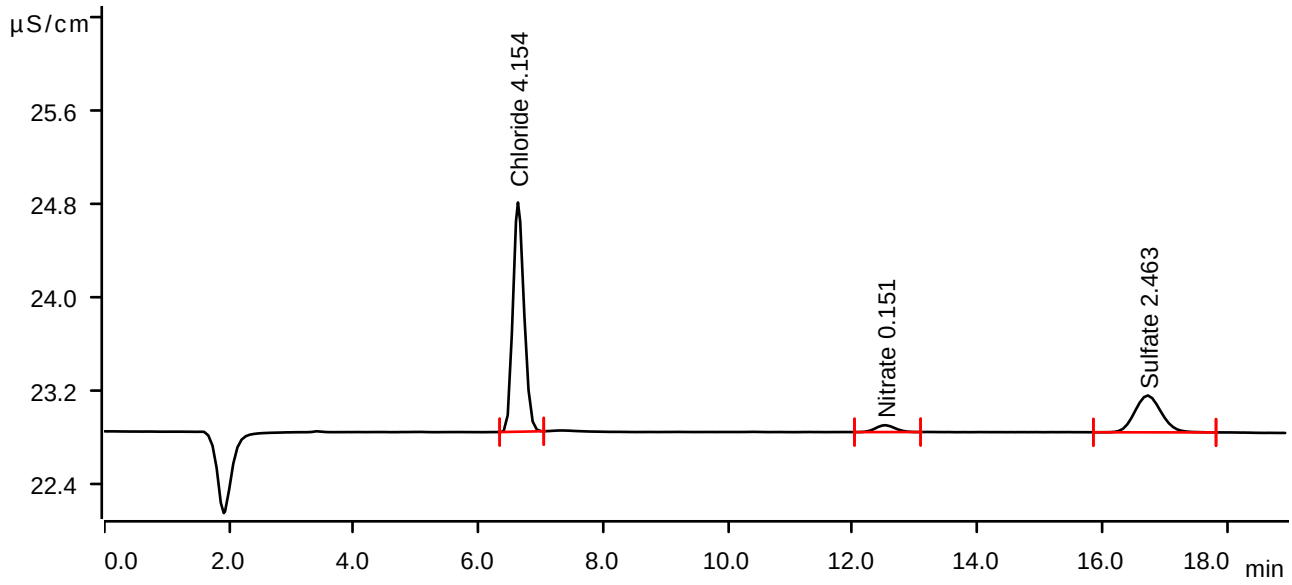
Sample data

Ident	P4846-05DLX10
Sample type	Sample
Determination start	2024-11-14 23:29:50 UTC-5
Method	IC1-101624
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	6.632	0.4051	1.969	4.154	Chloride
2	12.517	0.0213	0.059	0.151	Nitrate
3	16.728	0.1560	0.316	2.463	Sulfate

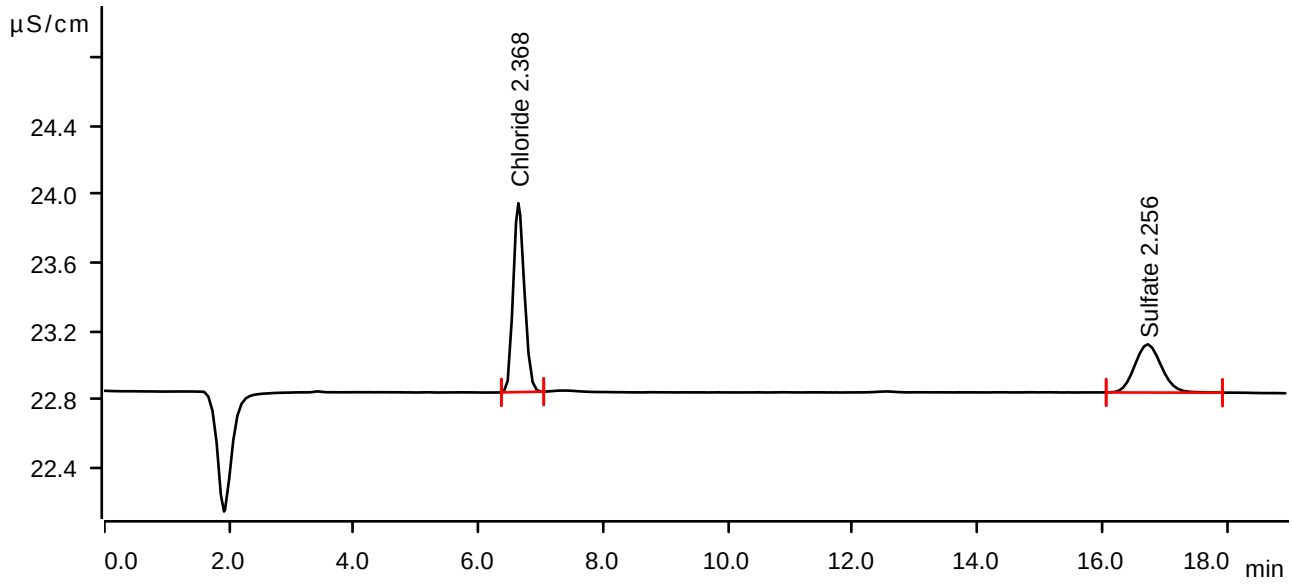
Sample data

Ident	P4846-08DLX10
Sample type	Sample
Determination start	2024-11-15 00:12:46 UTC-5
Method	IC1-101624
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	6.638	0.2289	1.106	2.368	Chloride
2	16.728	0.1402	0.282	2.256	Sulfate

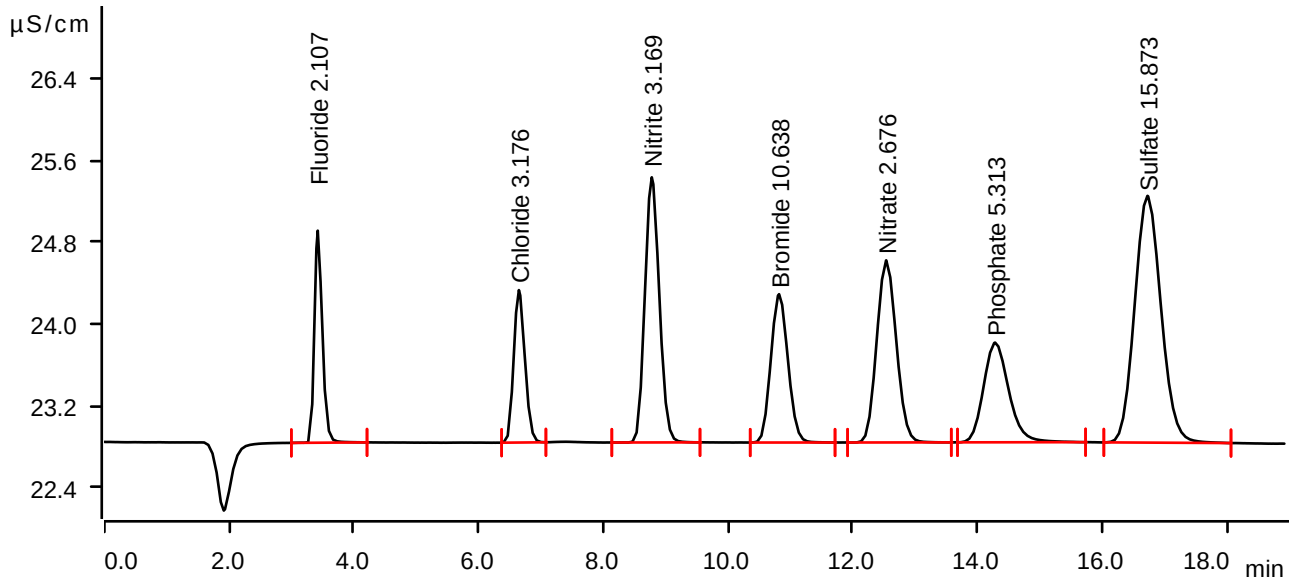
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-11-15 00:55:52 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.422	0.3038	2.070	2.107	Fluoride
2	6.647	0.3087	1.488	3.176	Chloride
3	8.777	0.6936	2.588	3.169	Nitrite
4	10.818	0.4607	1.448	10.638	Bromide
5	12.537	0.6459	1.777	2.676	Nitrate
6	14.282	0.4567	0.973	5.313	Phosphate
7	16.723	1.1808	2.409	15.873	Sulfate

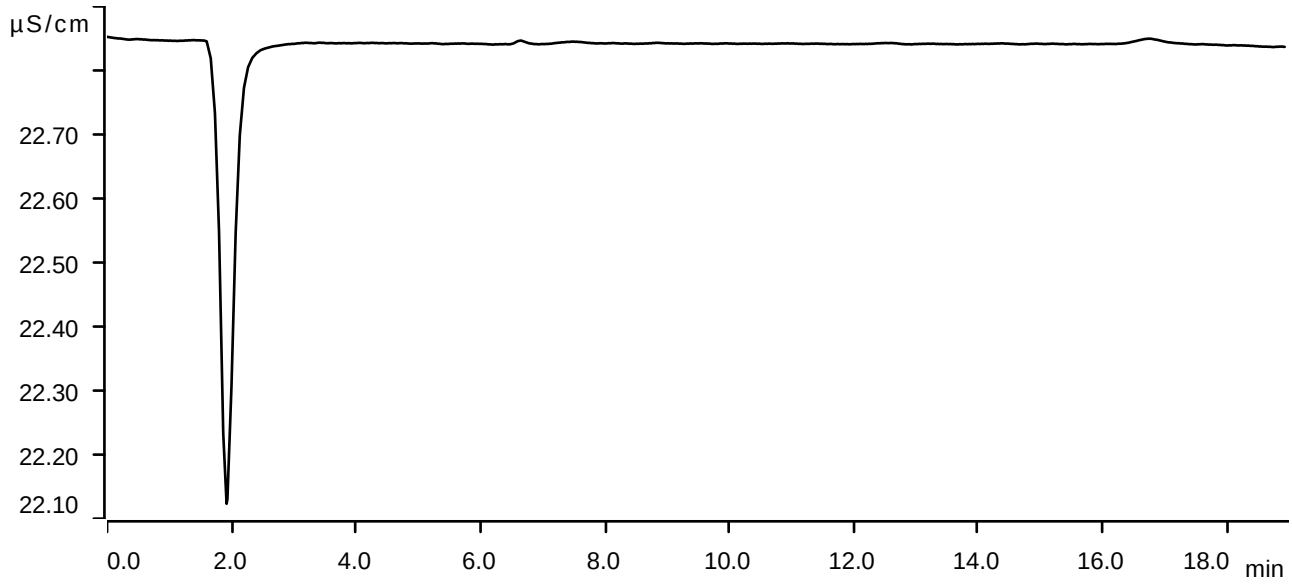
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-11-15 01:17:22 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



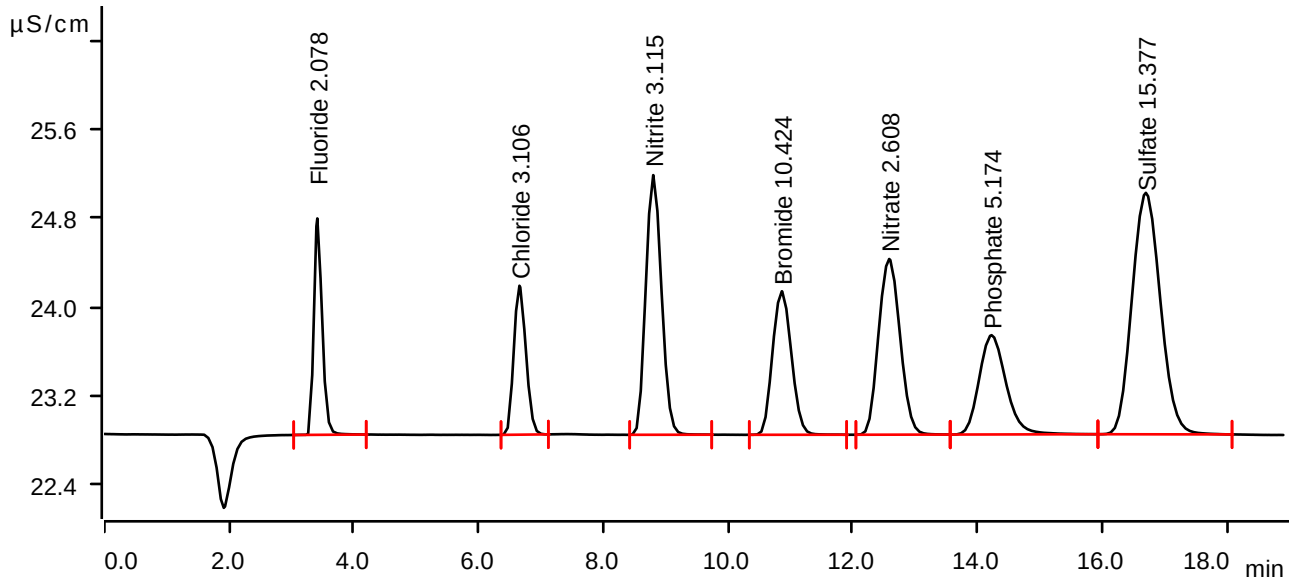
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-11-15 09:42:34 UTC-5
Method	IC1-101624
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	3.415	0.2995	1.943	2.078	Fluoride
2	6.655	0.3017	1.338	3.106	Chloride
3	8.802	0.6814	2.332	3.115	Nitrite
4	10.862	0.4513	1.289	10.424	Bromide
5	12.583	0.6291	1.578	2.608	Nitrate
6	14.225	0.4445	0.891	5.174	Phosphate
7	16.698	1.1429	2.169	15.377	Sulfate

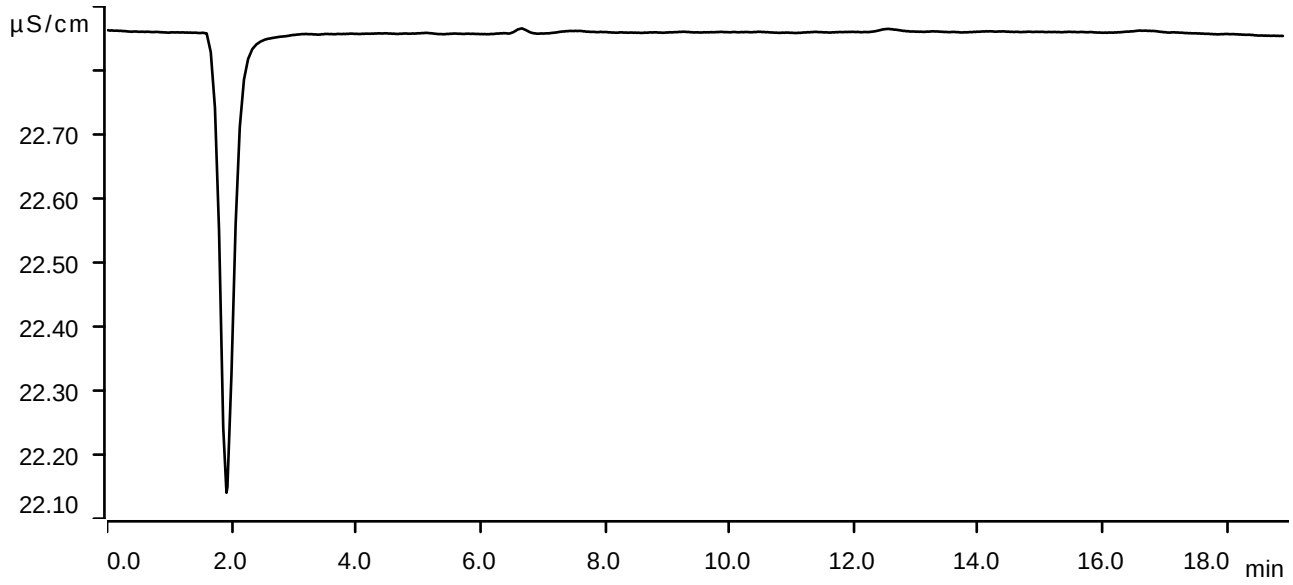
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-11-15 10:04:04 UTC-5
Method	IC1-101624
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



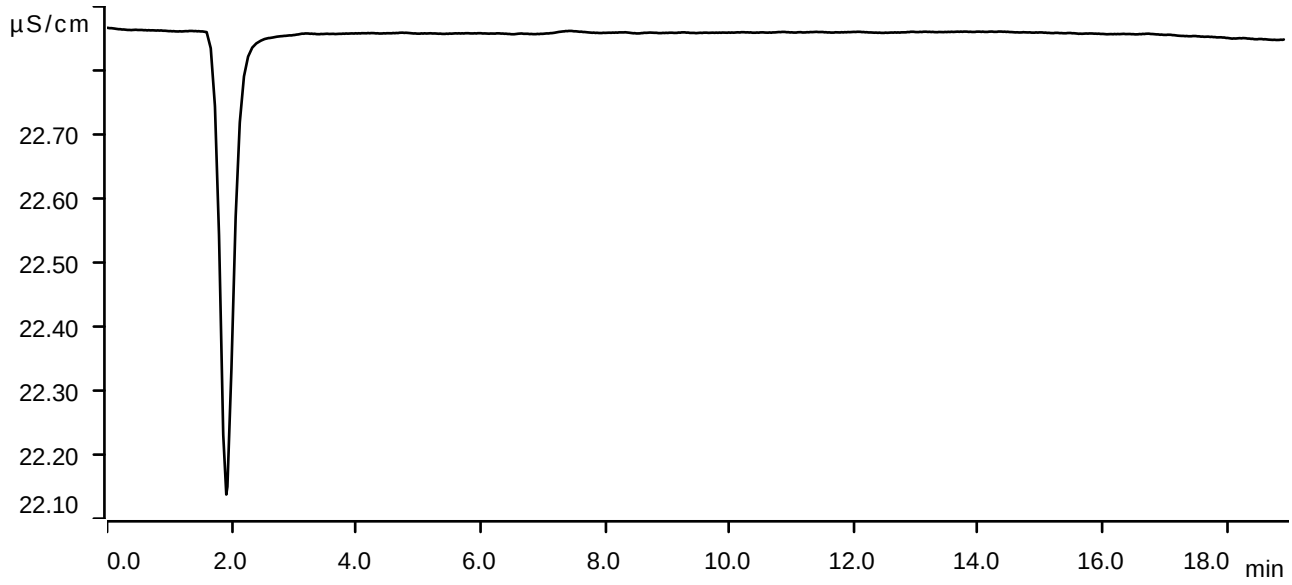
Sample data

Ident	LB133464BLW2
Sample type	Sample
Determination start	2024-11-15 10:25:35 UTC-5
Method	IC1-101624
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



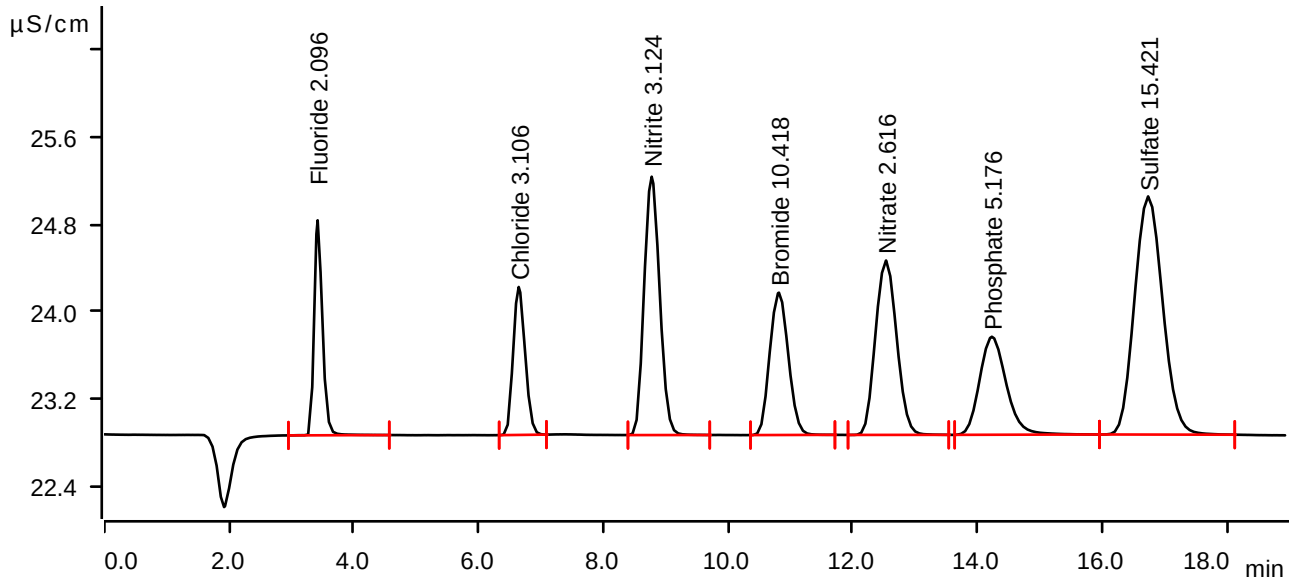
Sample data

Ident	LB133464BSW2
Sample type	Check standard 1
Determination start	2024-11-15 10:47:06 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.420	0.3021	1.973	2.096	Fluoride
2	6.643	0.3017	1.358	3.106	Chloride
3	8.775	0.6834	2.371	3.124	Nitrite
4	10.815	0.4510	1.307	10.418	Bromide
5	12.532	0.6311	1.600	2.616	Nitrate
6	14.230	0.4447	0.899	5.176	Phosphate
7	16.735	1.1463	2.185	15.421	Sulfate

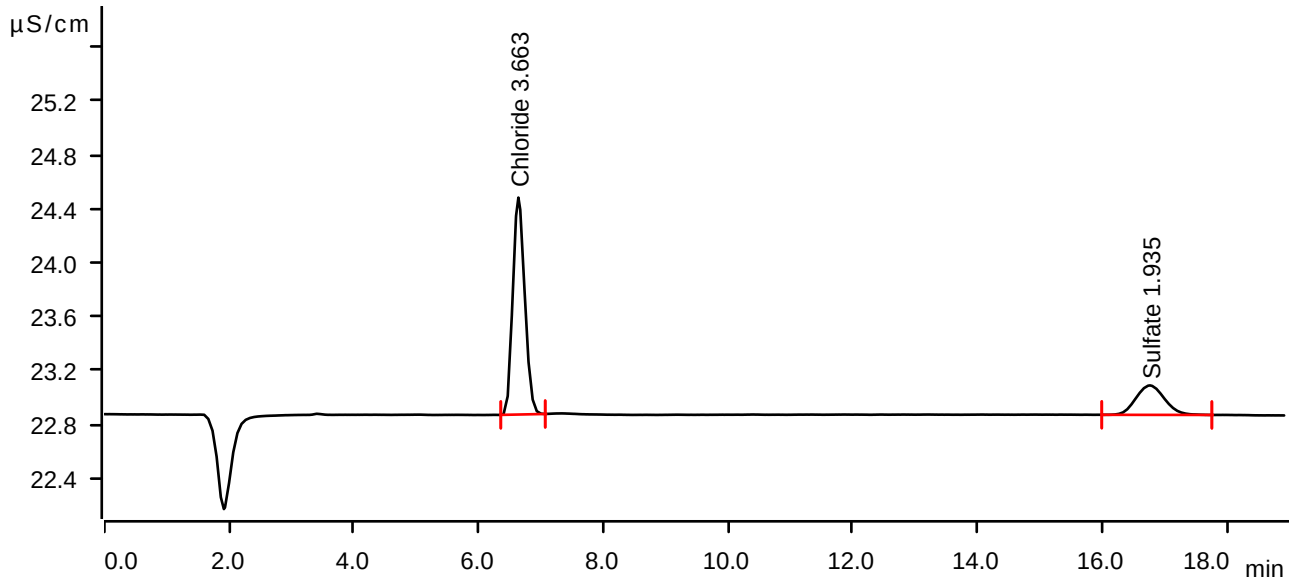
Sample data

Ident	P4846-11DLX10
Sample type	Sample
Determination start	2024-11-15 11:08:41 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.77	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.638	0.3567	1.609	3.663	Chloride
2	16.765	0.1156	0.218	1.935	Sulfate

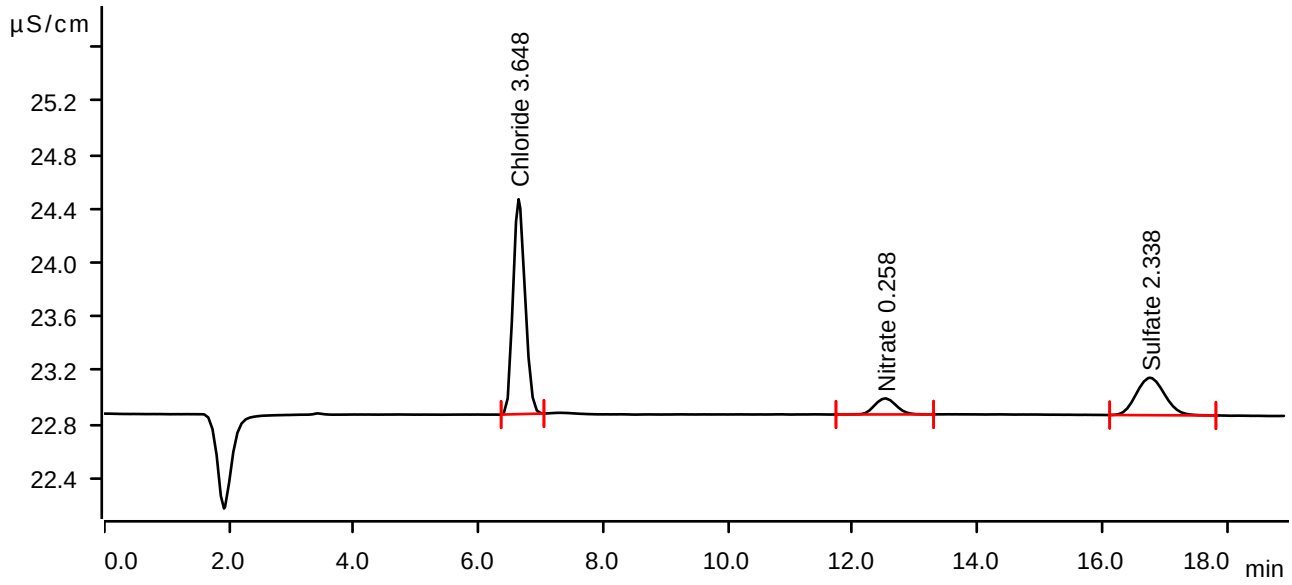
Sample data

Ident	P4846-12DLX10
Sample type	Sample
Determination start	2024-11-15 11:30:13 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.642	0.3552	1.595	3.648	Chloride
2	12.518	0.0479	0.119	0.258	Nitrate
3	16.763	0.1464	0.278	2.338	Sulfate

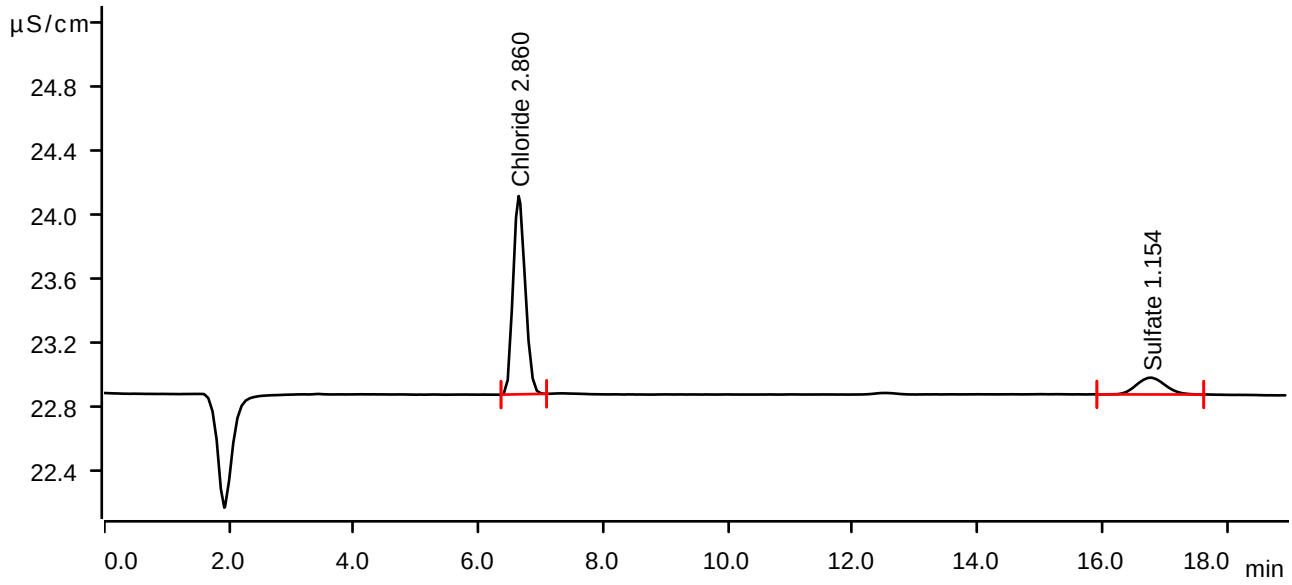
Sample data

Ident	P4846-13DLX20
Sample type	Sample
Determination start	2024-11-15 11:51:47 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.77	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.643	0.2775	1.239	2.860	Chloride
2	16.785	0.0560	0.105	1.154	Sulfate

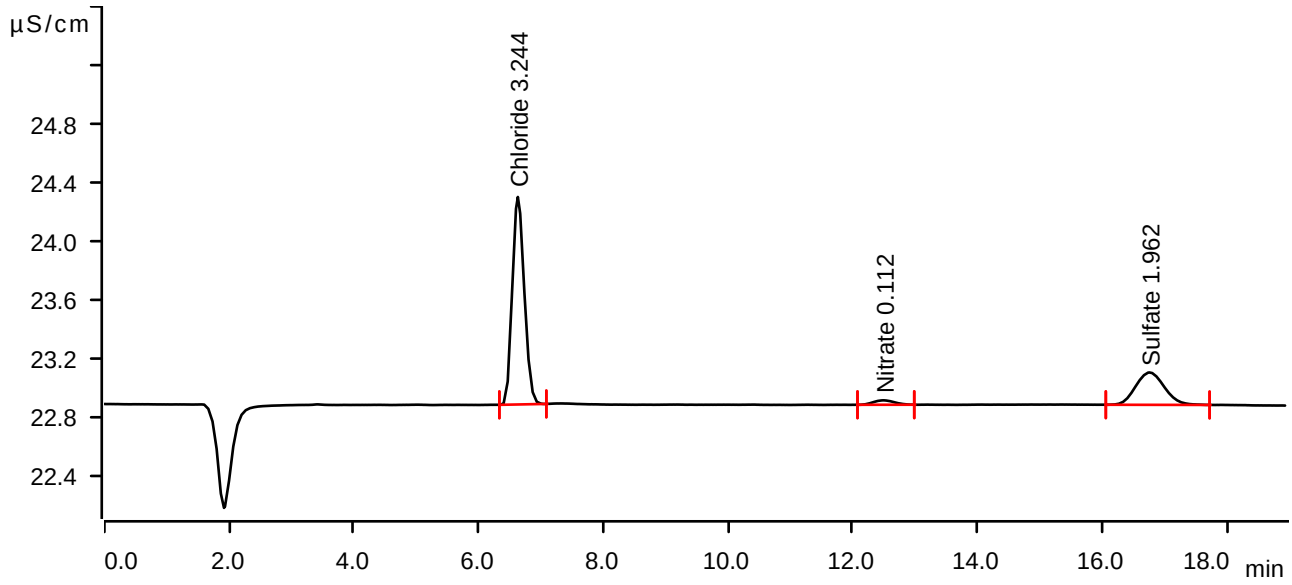
Sample data

Ident	P4846-14DLX20
Sample type	Sample
Determination start	2024-11-15 12:13:12 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.77	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.630	0.3154	1.418	3.244	Chloride
2	12.498	0.0118	0.030	0.112	Nitrate
3	16.755	0.1177	0.221	1.962	Sulfate

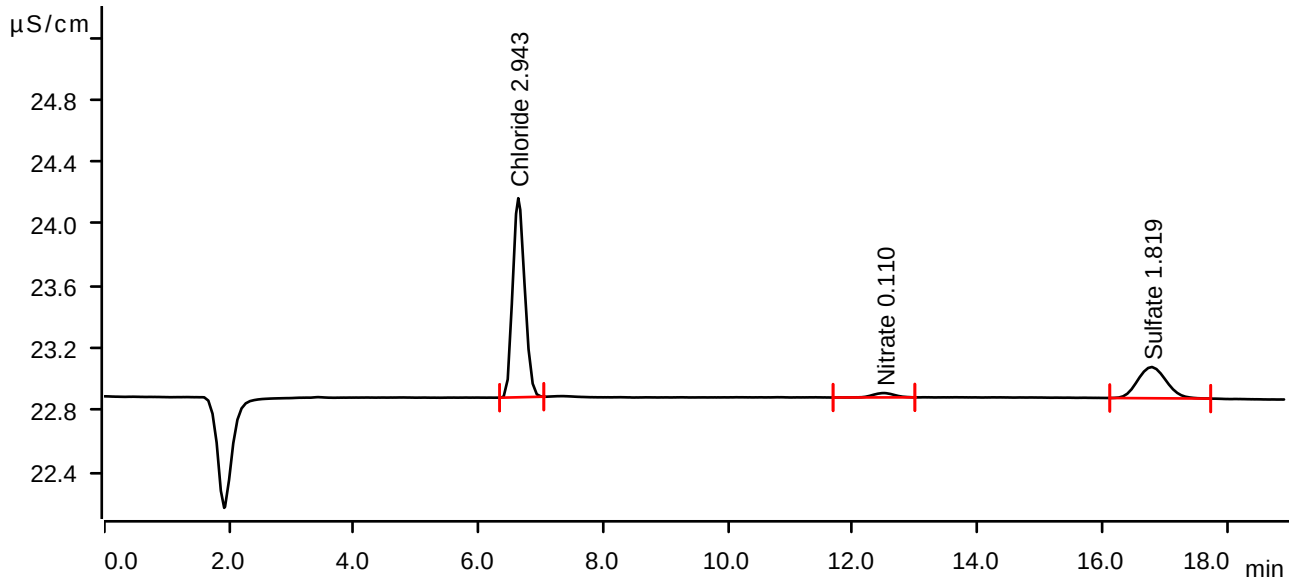
Sample data

Ident	P4846-15DLX20
Sample type	Sample
Determination start	2024-11-15 12:34:47 UTC-5
Method	IC1-101624
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	6.637	0.2857	1.283	2.943	Chloride
2	12.507	0.0113	0.028	0.110	Nitrate
3	16.792	0.1068	0.201	1.819	Sulfate

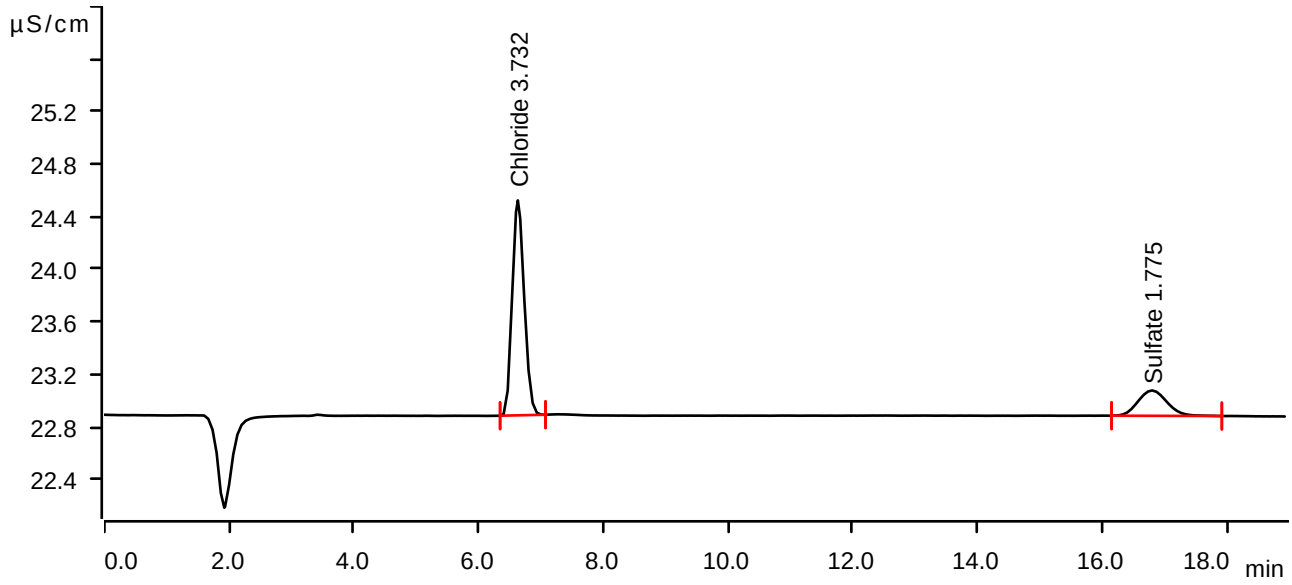
Sample data

Ident	P4846-16DLX10
Sample type	Sample
Determination start	2024-11-15 12:56:21 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.71	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.630	0.3635	1.637	3.732	Chloride
2	16.795	0.1034	0.193	1.775	Sulfate

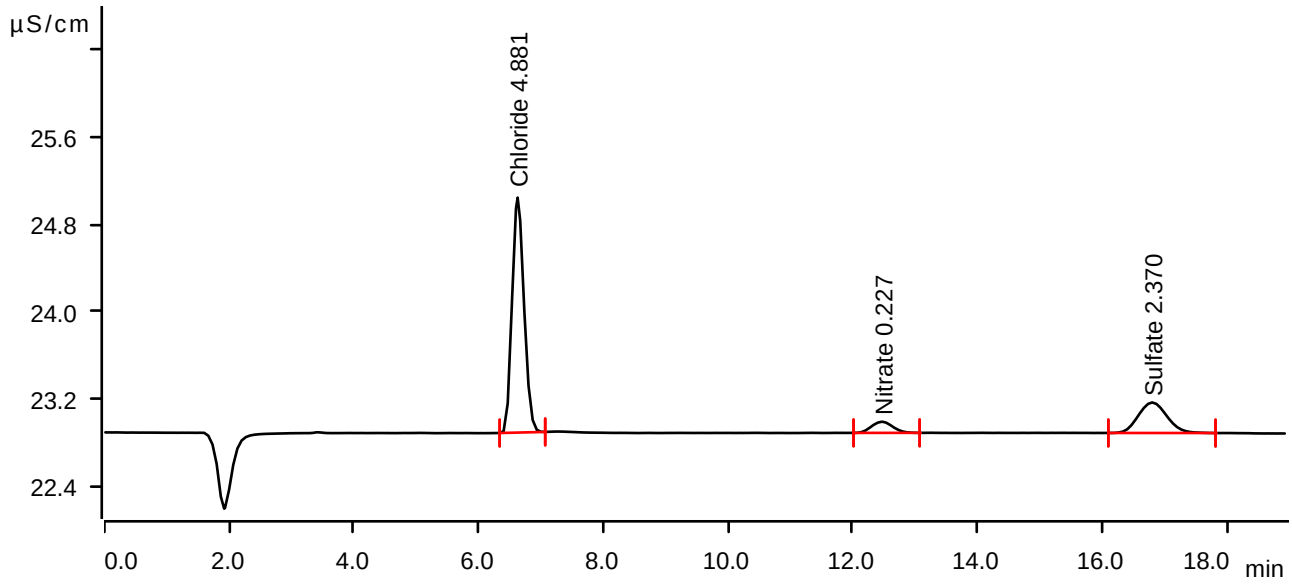
Sample data

Ident	P4846-17DLX10
Sample type	Sample
Determination start	2024-11-15 13:17:54 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.627	0.4769	2.156	4.881	Chloride
2	12.477	0.0402	0.102	0.227	Nitrate
3	16.797	0.1489	0.280	2.370	Sulfate

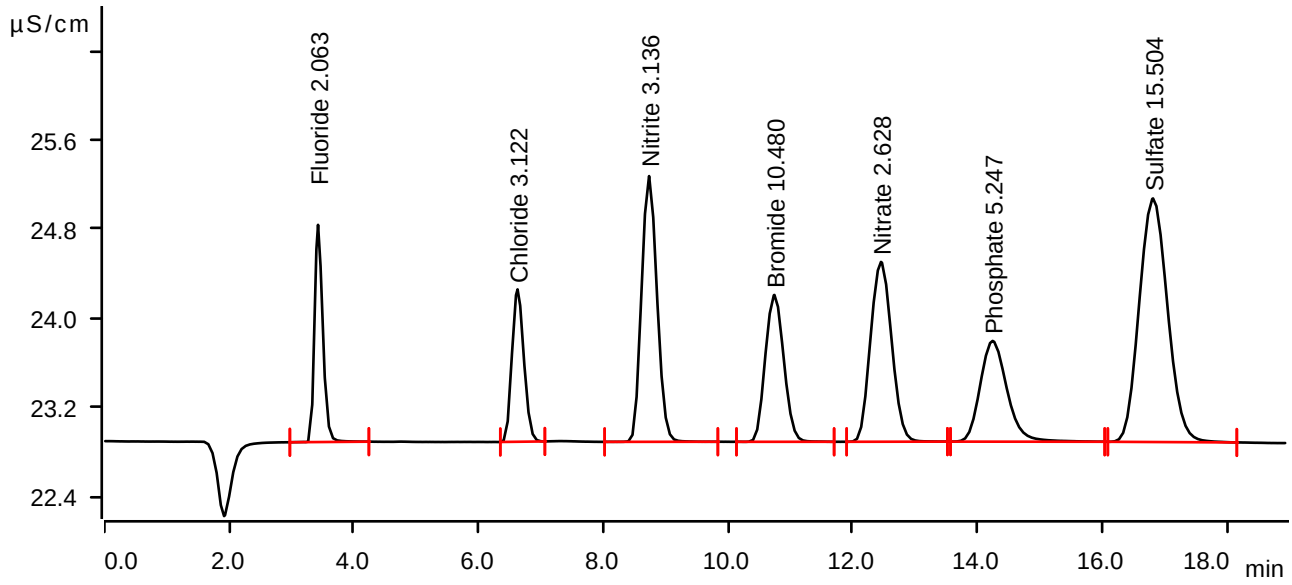
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-11-15 13:39:27 UTC-5
Method	IC1-101624
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	3.427	0.2973	1.951	2.063	Fluoride
2	6.625	0.3033	1.369	3.122	Chloride
3	8.733	0.6862	2.386	3.136	Nitrite
4	10.743	0.4537	1.319	10.480	Bromide
5	12.452	0.6341	1.615	2.628	Nitrate
6	14.242	0.4509	0.905	5.247	Phosphate
7	16.813	1.1526	2.188	15.504	Sulfate

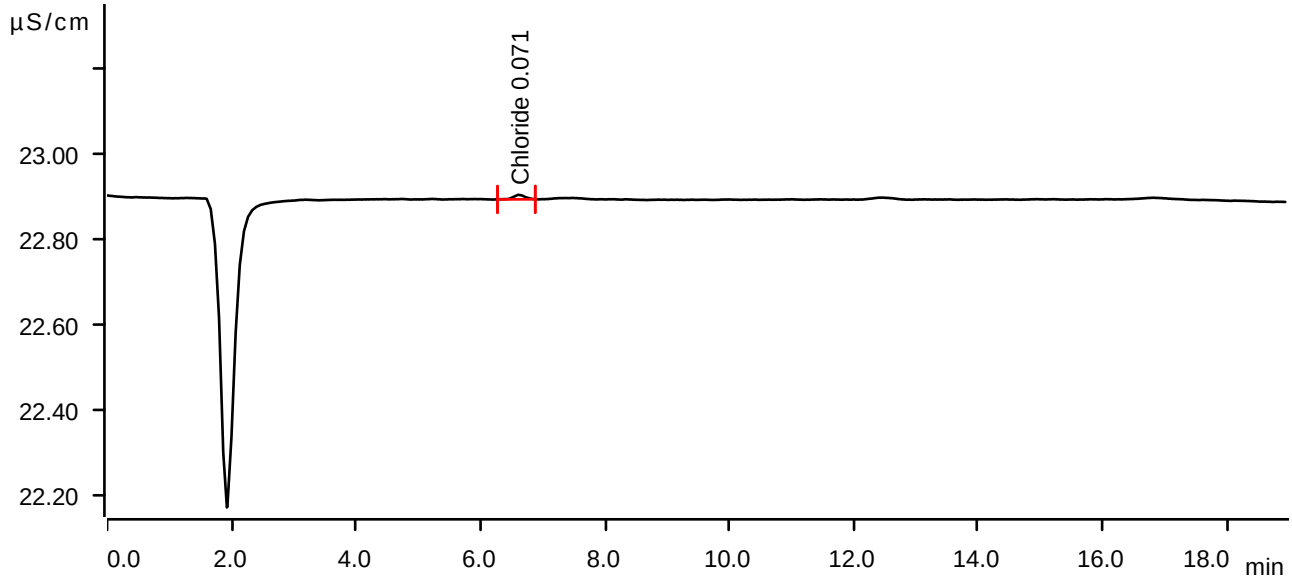
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-11-15 14:00:57 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.615	0.0023	0.011	0.071	Chloride

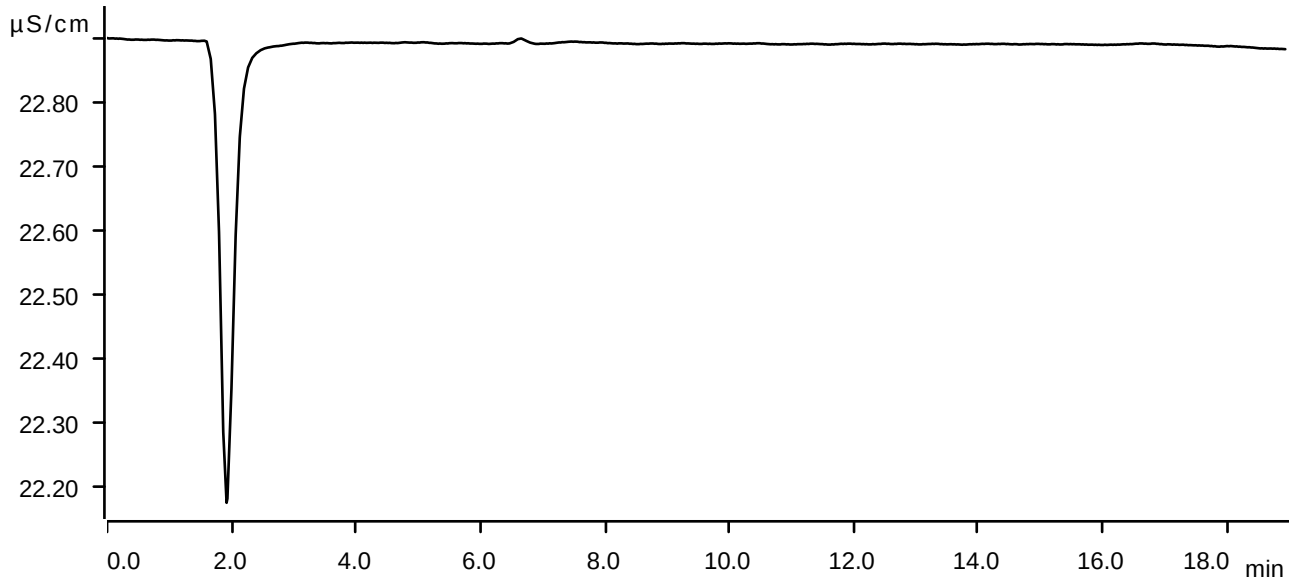
Sample data

Ident	P4873-01	
Sample type	Sample	
Determination start	2024-11-15 14:22:27 UTC-5	
Method	IC1-101624	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.77	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



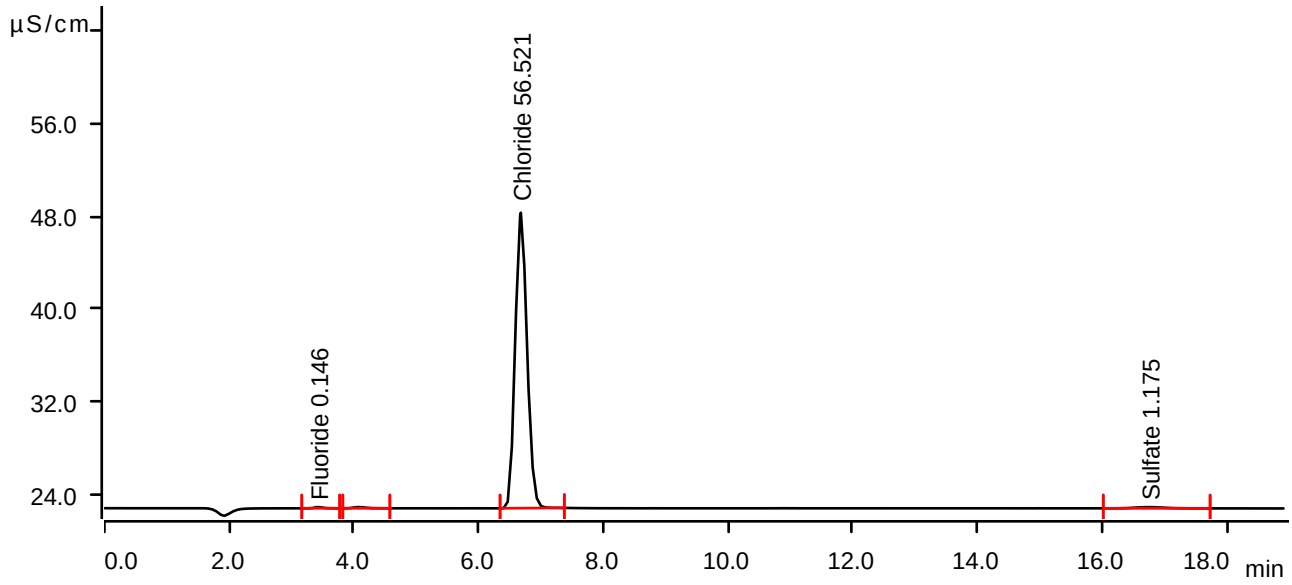
Sample data

Ident	P4873-02
Sample type	Sample
Determination start	2024-11-15 14:43:59 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.427	0.0164	0.104	0.146	Fluoride
2	4.073	0.0241	0.104	invalid	
3	6.678	5.5708	25.382	56.521	Chloride
4	16.753	0.0576	0.104	1.175	Sulfate

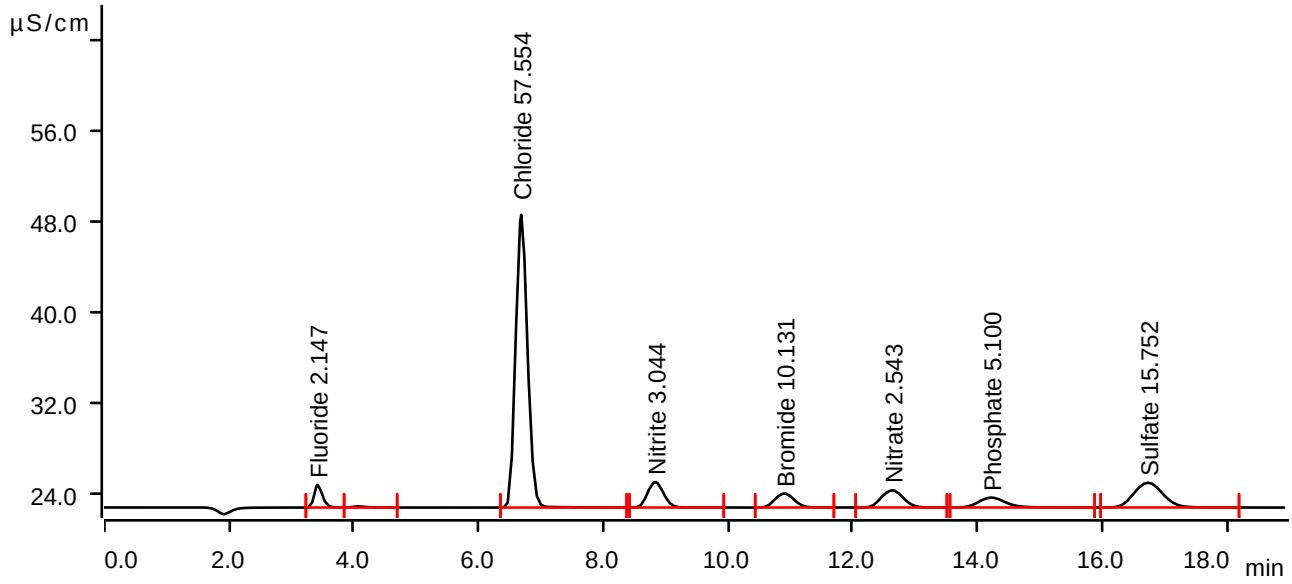
Sample data

Ident	P4873-02MS	
Sample type	Sample	
Determination start	2024-11-15 15:05:30 UTC-5	
Method	IC1-101624	
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	3.420	0.3096	2.003	2.147	Fluoride
2	4.068	0.0250	0.103	invalid	
3	6.685	5.6727	25.719	57.554	Chloride
4	8.835	0.6657	2.241	3.044	Nitrite
5	10.905	0.4384	1.231	10.131	Bromide
6	12.635	0.6130	1.507	2.543	Nitrate
7	14.220	0.4381	0.870	5.100	Phosphate
8	16.735	1.1715	2.181	15.752	Sulfate

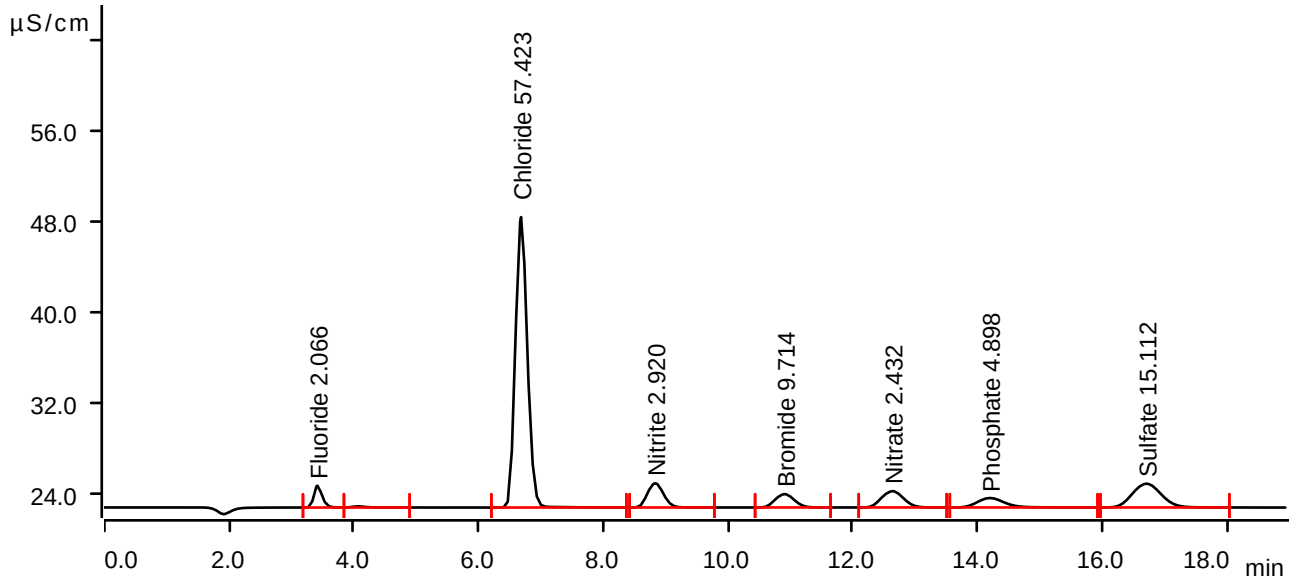
Sample data

Ident	P4873-02MSD
Sample type	Sample
Determination start	2024-11-15 15:26:54 UTC-5
Method	IC1-101624
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	3.417	0.2977	1.920	2.066	Fluoride
2	4.063	0.0253	0.103	invalid	
3	6.682	5.6598	25.514	57.423	Chloride
4	8.833	0.6378	2.136	2.920	Nitrite
5	10.908	0.4200	1.173	9.714	Bromide
6	12.638	0.5855	1.432	2.432	Nitrate
7	14.198	0.4202	0.831	4.898	Phosphate
8	16.708	1.1227	2.089	15.112	Sulfate

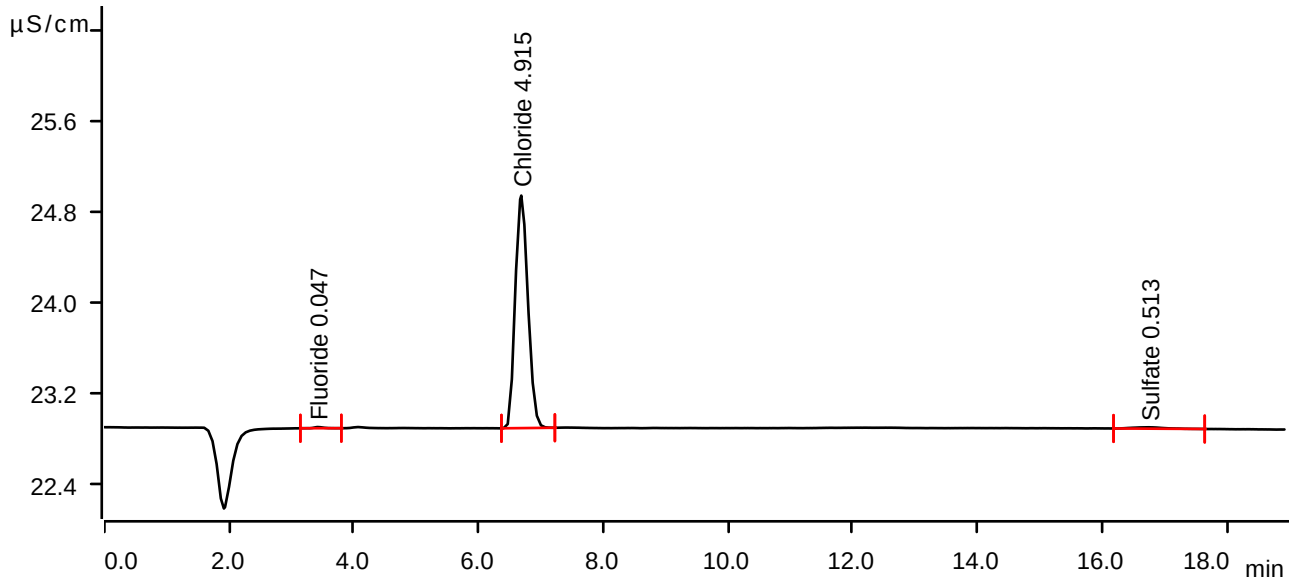
Sample data

Ident	P4373-02DLX10
Sample type	Sample
Determination start	2024-11-15 15:48:24 UTC-5
Method	IC1-101624
Operator	

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.420	0.0019	0.010	0.047	Fluoride
2	6.685	0.4802	2.043	4.915	Chloride
3	16.722	0.0070	0.012	0.513	Sulfate

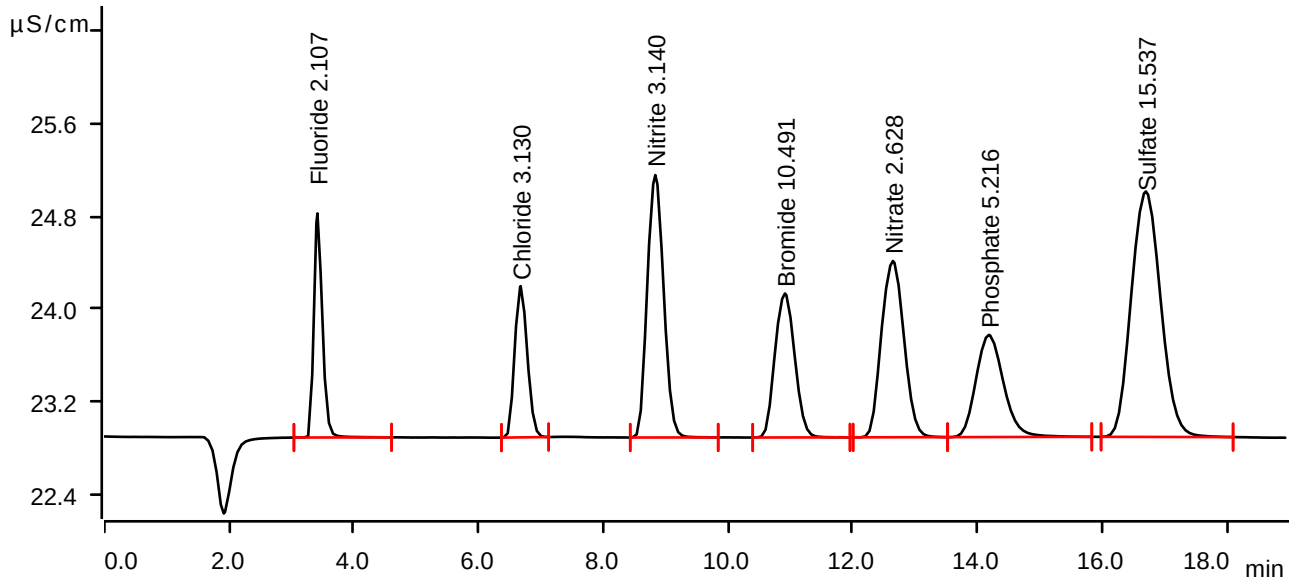
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-11-15 16:09:50 UTC-5
Method	IC1-101624
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	3.417	0.3038	1.924	2.107	Fluoride
2	6.675	0.3041	1.299	3.130	Chloride
3	8.833	0.6871	2.254	3.140	Nitrite
4	10.912	0.4542	1.237	10.491	Bromide
5	12.643	0.6341	1.514	2.628	Nitrate
6	14.183	0.4482	0.878	5.216	Phosphate
7	16.698	1.1551	2.109	15.537	Sulfate

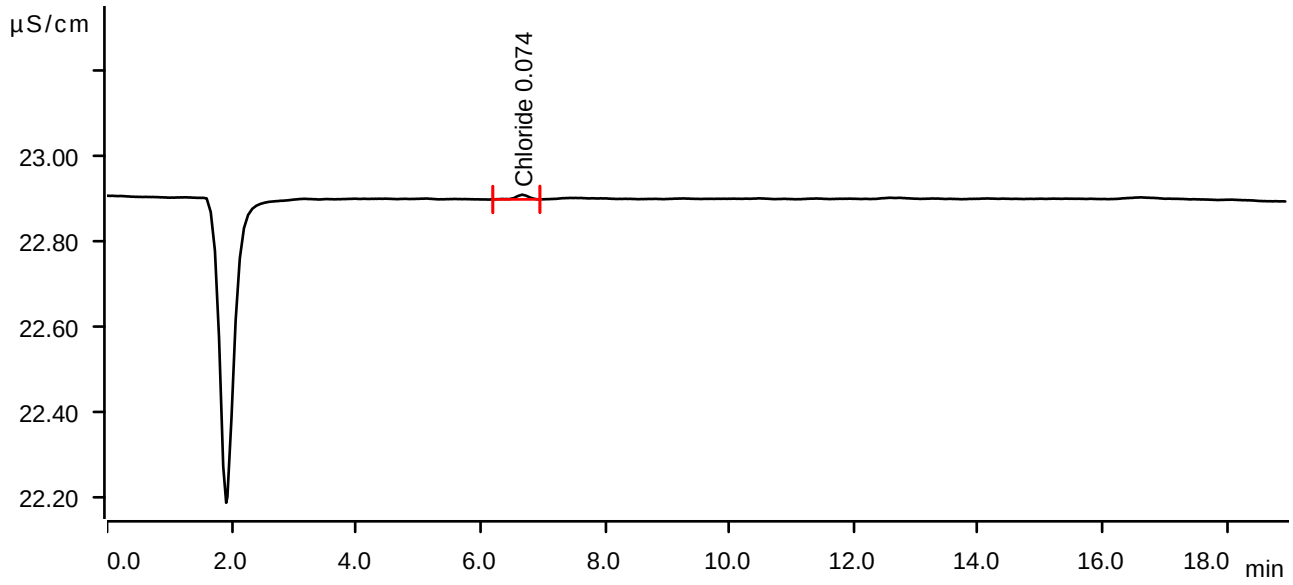
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-11-15 16:31:20 UTC-5
Method	IC1-101624
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	6.672	0.0026	0.011	0.074	Chloride

LB133464

WORKLIST(Hardcopy Internal Chain)

WorkList Name : ANIONS W-11142024 **WorkList ID :** 185445 **Department :** Wet-Chemistry **Date :** 11-14-2024 13:29:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4846-01	FSND-MW-EVAL-03D-2024111:	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-02	FSND-MW-EVAL-03S-2024111:	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-03	FSND-FD-3-20241113	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-04	FSND-MW-EVAL-04S-2024111:	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-05	FSND-MW-EVAL-04D-2024111:	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-06	P4846-05MS	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-07	P4846-05MSD	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-08	FSND-MW-26-20241113	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-10	FSND-RB-3-20241113	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-11	FSND-MW-24-20241113	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-12	FSWD-MW-15-20241113	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-13	FSND-MW-EVAL-02D-2024111:	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-14	FSND-MW-EVAL-02S-2024111:	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-15	FSND-FD-4-20241113	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-16	FSND-MW-EVAL-01D-2024111:	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A
P4846-17	FSND-MW-EVAL-01S-2021113	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/13/2024	9056A

Date/Time 11.14.2024, 13:45
Raw Sample Received by: NF(WC)
Raw Sample Relinquished by: [signature]

Date/Time 11.14.2024, 17:40
Raw Sample Received by: [signature]
Raw Sample Relinquished by: NF(WC)

LB133464

WORKLIST(Hardcopy Internal Chain)

WorkList Name : ANIONS-11152024 **WorkList ID :** 185477 **Department :** Wet-Chemistry **Date :** 11-15-2024 11:44:11

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4873-01	FSND-RB-4-20241114	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/14/2024	9056A
P4873-02	FSND-MW-30-20241114	Water	Anions Group1	Cool 4 deg C	EAEN05	M11	11/14/2024	9056A

Date/Time 11.15.2024, 13:30
Raw Sample Received by: NF(WC)
Raw Sample Relinquished by: [signature]

Date/Time 11.15.2024, 15:30
Raw Sample Received by: [signature]
Raw Sample Relinquished by: NF(WC)

Sample Results Report Print Date/Time: 2024/11/19 14:51:21

Sample ID	Result	Std. Dev.	RSD	Mode	ALT
CCV1	10.3902	0.2737	2.63	TOC	
CCB1	0.2215	0.1024	46.23	TOC	
LB133484BLW	0.2927	0.0515	17.59	TOC	
LB133484BSW.....	10.2376...	0.1225..	1.20...	TOC	..
P4846-01	1.1535	0.1691	14.66	TOC	
P4846-02	1.2227	0.2908	23.79	TOC	
P4846-03.....	1.0501...	0.1733..	16.50...	TOC	..
P4846-04	1.4269	0.2062	14.45	TOC	
P4846-05	1.2336	0.2255	18.28	TOC	
P4846-06MS.....	10.2505...	0.2506..	2.44...	TOC	..
P4846-07MSD	10.3472	0.1914	1.85	TOC	
P4846-08	2.3384	0.1781	7.62	TOC	
CCV2.....	10.6505...	0.2154..	2.02...	TOC	..
CCB2	0.2884	0.0261	9.05	TOC	
P4846-10	0.4397	0.0911	20.73	TOC	
P4846-11.....	0.9780...	0.1268..	12.97...	TOC	..
P4846-12	1.1345	0.1993	17.57	TOC	
P4846-13	1.0297	0.1664	16.16	TOC	
P4846-14.....	1.3267...	0.3075..	23.18...	TOC	..
P4846-14MS	10.8608	0.1032	0.95	TOC	
P4846-14MSD	11.1682	0.1825	1.63	TOC	
P4846-15.....	1.3058...	0.2538..	19.44...	TOC	..
P4846-16	1.6316	0.1739	10.66	TOC	
P4846-17	1.2754	0.2209	17.32	TOC	
CCV3.....	10.2741...	0.1133..	1.10...	TOC	..
CCB3	0.2777	0.0486	17.50	TOC	
P4873-01	0.2430	0.0316	13.00	TOC	
P4873-02.....	2.3474...	0.1097..	4.67...	TOC	..
CCV4	10.0943	0.0473	0.47	TOC	
CCB4	0.1933	0.0281	14.55	TOC	
.....		..			

Sample Results Report Print Date/Time: 2024/11/19 14:51:21

Method ID	Sample Type	Vial	Timestamp	Message
TOC 0 - 20 ppmC	Sample	11	2024/11/18 11:50	
TOC 0 - 20 ppmC	Sample	12	2024/11/18 12:13	Low Sample Detected
TOC 0 - 20 ppmC	Sample	13	2024/11/18 12:37	Low Sample Detected
TOC 0 - 20 ppmC	...Sample	.. 14..	2024/11/18 13:04	..
TOC 0 - 20 ppmC	Sample	15	2024/11/18 13:31	
TOC 0 - 20 ppmC	Sample	16	2024/11/18 13:55	
TOC 0 - 20 ppmC	...Sample	.. 17..	2024/11/18 14:20	..
TOC 0 - 20 ppmC	Sample	18	2024/11/18 14:45	
TOC 0 - 20 ppmC	Sample	19	2024/11/18 15:10	
TOC 0 - 20 ppmC	...Sample	.. 20..	2024/11/18 15:36	..
TOC 0 - 20 ppmC	Sample	20	2024/11/18 16:02	
TOC 0 - 20 ppmC	Sample	21	2024/11/18 16:28	
TOC 0 - 20 ppmC	...Sample	.. 11..	2024/11/18 16:54	..
TOC 0 - 20 ppmC	Sample	12	2024/11/18 17:18	Low Sample Detected
TOC 0 - 20 ppmC	Sample	22	2024/11/18 17:41	
TOC 0 - 20 ppmC	...Sample	.. 23..	2024/11/18 18:05	..
TOC 0 - 20 ppmC	Sample	24	2024/11/18 18:30	
TOC 0 - 20 ppmC	Sample	25	2024/11/18 18:54	
TOC 0 - 20 ppmC	...Sample	.. 26..	2024/11/18 19:18	..
TOC 0 - 20 ppmC	Sample	27	2024/11/18 19:44	
TOC 0 - 20 ppmC	Sample	27	2024/11/18 20:10	
TOC 0 - 20 ppmC	...Sample	.. 28..	2024/11/18 20:34	..
TOC 0 - 20 ppmC	Sample	29	2024/11/18 20:59	
TOC 0 - 20 ppmC	Sample	30	2024/11/18 21:24	
TOC 0 - 20 ppmC	...Sample	.. 31..	2024/11/18 22:17	..
TOC 0 - 20 ppmC	Sample	12	2024/11/18 22:41	Low Sample Detected
TOC 0 - 20 ppmC	Sample	32	2024/11/18 23:27	
TOC 0 - 20 ppmC	...Sample	.. 33..	2024/11/19 01:14	..
TOC 0 - 20 ppmC	Sample	31	2024/11/19 02:08	
TOC 0 - 20 ppmC	Sample	34	2024/11/19 02:55	Low Sample Detected
...	...	.. ..	..	..

Detailed Analysis Report Print Date/Time: 2024/11/19 14:52:08

Sample ID: CCV1 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181124
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 11:50
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.5740	5.2870	358957	-2.199	-2.000	179
2	10.5100	5.2550	356785	-2.115	-1.916	166
3	10.4938	5.2469	356234	-2.124	-1.926	164
4	9.9830	4.9915	338894	-2.123	-1.927	160

<<<Statistics>>> Mean: 10.3902 Std Dev: 0.2737 RSD: 2.63

Sample ID: CCB1 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181124
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 12:13
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1135	0.0568	3853	-2.264	-2.217	120
2	0.1756	0.0878	5962	-2.278	-2.174	120
3	0.3525	0.1763	11968	-2.294	-2.090	120
4	0.2442	0.1221	8291	-2.238	-2.054	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.2215 Std Dev: 0.1024 RSD: 46.23

Sample ID: LB133484BLW Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181124
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 12:37
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.3081	0.1540	10459	-2.227	-1.956	120
2	0.2898	0.1449	9837	-2.210	-1.920	120
3	0.2247	0.1123	7628	-2.151	-1.912	120
4	0.3482	0.1741	11819	-2.179	-1.910	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.2927 Std Dev: 0.0515 RSD: 17.59

Sample ID: LB133484BSW Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181124
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 13:04
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.0643	5.0322	341656	-2.137	-1.938	170
2	10.2384	5.1192	347564	-2.104	-1.905	170
3	10.3156	5.1578	350185	-2.079	-1.881	169
4	10.3319	5.1659	350737	-2.063	-1.863	166

<<<Statistics>>> Mean: 10.2376 Std Dev: 0.1225 RSD: 1.20

Sample ID: P4846-01 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 13:31
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.3933	0.6967	47299	-2.085	-1.887	140
2	1.1115	0.5558	37734	-2.072	-1.873	141
3	1.1132	0.5566	37790	-2.034	-1.836	143
4	0.9958	0.4979	33803	-1.961	-1.764	141

<<<Statistics>>> Mean: 1.1535 Std Dev: 0.1691 RSD: 14.66

Sample ID: P4846-02 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 13:55
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.6040	0.8020	54452	-1.930	-1.730	138
2	1.2464	0.6232	42310	-1.914	-1.715	143
3	1.1338	0.5669	38488	-1.867	-1.668	137
4	0.9066	0.4533	30776	-1.889	-1.696	133

<<<Statistics>>> Mean: 1.2227 Std Dev: 0.2908 RSD: 23.79

Sample ID: P4846-03 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 14:20
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.2896	0.6448	43777	-2.138	-1.940	138
2	1.0531	0.5265	35749	-2.173	-1.978	139
3	0.8882	0.4441	30150	-2.172	-1.973	139
4	0.9695	0.4848	32912	-2.226	-2.028	138

<<<Statistics>>> Mean: 1.0501 Std Dev: 0.1733 RSD: 16.50

Sample ID: P4846-04 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 14:45
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.7271	0.8636	58632	-2.403	-2.205	127
2	1.3920	0.6960	47254	-2.438	-2.240	143
3	1.3173	0.6586	44718	-2.429	-2.232	141
4	1.2714	0.6357	43161	-2.434	-2.235	141

<<<Statistics>>> Mean: 1.4269 Std Dev: 0.2062 RSD: 14.45

Sample ID: P4846-05 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 15:10

Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.5671	0.7835	53198	-2.499	-2.301	140
2	1.1678	0.5839	39644	-2.508	-2.311	142
3	1.0758	0.5379	36522	-2.533	-2.334	141
4	1.1237	0.5618	38145	-2.543	-2.344	141

<<<Statistics>>> Mean: 1.2336 Std Dev: 0.2255 RSD: 18.28

Sample ID: P4846-06MS Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 15:36
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.4840	5.2420	355900	-2.549	-2.351	154
2	10.3877	5.1939	352633	-2.533	-2.334	155
3	10.2172	5.1086	346844	-2.516	-2.316	157
4	9.9129	4.9564	336514	-2.555	-2.358	146

<<<Statistics>>> Mean: 10.2505 Std Dev: 0.2506 RSD: 2.44

Sample ID: P4846-07MSD Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve:
TOC WATER 0-20PPM Timestamp: 2024/11/18 16:02
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.6261	5.3130	360724	-2.624	-2.425	159
2	10.2357	5.1179	347474	-2.553	-2.354	152
3	10.3170	5.1585	350233	-2.544	-2.345	156
4	10.2101	5.1050	346603	-2.574	-2.375	158

<<<Statistics>>> Mean: 10.3472 Std Dev: 0.1914 RSD: 1.85

Sample ID: P4846-08 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 16:28
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.6019	1.3009	88326	-2.656	-2.460	149
2	2.2925	1.1462	77824	-2.642	-2.443	147
3	2.2315	1.1158	75754	-2.633	-2.435	137
4	2.2279	1.1139	75630	-2.741	-2.543	146

<<<Statistics>>> Mean: 2.3384 Std Dev: 0.1781 RSD: 7.62

Sample ID: CCV2 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 16:54
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning	Ending	Integration

				Baseline	Baseline	Time
1	10.8403	5.4202	367998	-2.662	-2.463	172
2	10.6169	5.3085	360414	-2.578	-2.379	157
3	10.3605	5.1802	351708	-2.575	-2.376	161
4	10.7842	5.3921	366094	-2.598	-2.398	163

<<<Statistics>>> Mean: 10.6505 Std Dev: 0.2154 RSD: 2.02

Sample ID: CCB2 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 17:18
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.2653	0.1326	9006	-2.675	-2.596	120
2	0.2668	0.1334	9058	-2.664	-2.556	120
3	0.3062	0.1531	10395	-2.655	-2.569	120
4	0.3154	0.1577	10708	-2.670	-2.599	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.2884 Std Dev: 0.0261 RSD: 9.05

Sample ID: P4846-10 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 17:41
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.3652	0.1826	12397	-2.648	-2.452	98
2	0.3600	0.1800	12222	-2.630	-2.432	102
3	0.5407	0.2704	18356	-2.633	-2.434	113
4	0.4927	0.2464	16727	-2.623	-2.424	112

<<<Statistics>>> Mean: 0.4397 Std Dev: 0.0911 RSD: 20.73

Sample ID: P4846-11 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 18:05
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.1675	0.5837	39632	-2.614	-2.416	133
2	0.9228	0.4614	31325	-2.617	-2.418	134
3	0.8990	0.4495	30518	-2.610	-2.411	134
4	0.9227	0.4614	31324	-2.620	-2.423	135

<<<Statistics>>> Mean: 0.9780 Std Dev: 0.1268 RSD: 12.97

Sample ID: P4846-12 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 18:30
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.4118	0.7059	47927	-2.659	-2.461	134
2	1.1475	0.5737	38954	-2.676	-2.477	132

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
3	0.9886	0.4943	33559	-2.660	-2.461	135
4	0.9901	0.4951	33612	-2.669	-2.471	130

<<<Statistics>>> Mean: 1.1345 Std Dev: 0.1993 RSD: 17.57

Sample ID: P4846-13
Method: TOC 0 - 20 ppmC
Cal. Curve: TOC WATER 0-20PPM
Operator ID: NF IZ
Mode: TOC
Filename: 11181307
Timestamp: 2024/11/18 18:54
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.2632	0.6316	42882	-2.658	-2.460	138
2	1.0350	0.5175	35135	-2.638	-2.438	127
3	0.9098	0.4549	30886	-2.599	-2.401	130
4	0.9108	0.4554	30918	-2.608	-2.411	124

<<<Statistics>>> Mean: 1.0297 Std Dev: 0.1664 RSD: 16.16

Sample ID: P4846-14
Method: TOC 0 - 20 ppmC
Cal. Curve: TOC WATER 0-20PPM
Operator ID: NF IZ
Mode: TOC
Filename: 11181307
Timestamp: 2024/11/18 19:18
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.7689	0.8844	60049	-2.627	-2.429	126
2	1.2394	0.6197	42073	-2.606	-2.406	127
3	1.2429	0.6215	42194	-2.607	-2.410	128
4	1.0555	0.5278	35832	-2.580	-2.385	126

<<<Statistics>>> Mean: 1.3267 Std Dev: 0.3075 RSD: 23.18

Sample ID: P4846-14MS
Method: TOC 0 - 20 ppmC
Cal. Curve: TOC WATER 0-20PPM
Operator ID: NF IZ
Mode: TOC
Filename: 11181307
Timestamp: 2024/11/18 19:44
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.9392	5.4696	371356	-2.609	-2.412	144
2	10.7090	5.3545	363539	-2.556	-2.357	144
3	10.9024	5.4512	370106	-2.569	-2.369	150
4	10.8925	5.4463	369770	-2.553	-2.354	148

<<<Statistics>>> Mean: 10.8608 Std Dev: 0.1032 RSD: 0.95

Sample ID: P4846-14MSD
Method: TOC 0 - 20 ppmC
Cal. Curve: TOC WATER 0-20PPM
Operator ID: NF IZ
Mode: TOC
Filename: 11181307
Timestamp: 2024/11/18 20:10
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	11.4408	5.7204	388381	-2.695		
	-2.495	157				
2	11.0777	5.5388	376056	-2.616	-2.417	154
3	11.0575	5.5288	375371	-2.614	-2.418	156
4	11.0967	5.5484	376702	-2.609	-2.409	153

<<<Statistics>>> Mean: 11.1682 Std Dev: 0.1825 RSD: 1.63

Sample ID: P4846-15 | Mode: TOC
Method: TOC 0 - 20 ppmC | Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM | Timestamp: 2024/11/18 20:34
Operator ID: NF IZ | Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.6852	0.8426	57207	-2.670	-2.471	136
2	1.2012	0.6006	40779	-2.667	-2.472	132
3	1.1504	0.5752	39053	-2.692	-2.494	136
4	1.1864	0.5932	40276	-2.703	-2.504	138

<<<Statistics>>> Mean: 1.3058 Std Dev: 0.2538 RSD: 19.44

Sample ID: P4846-16 | Mode: TOC
Method: TOC 0 - 20 ppmC | Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM | Timestamp: 2024/11/18 20:59
Operator ID: NF IZ | Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.8833	0.9417	63934	-2.742	-2.545	143
2	1.5953	0.7976	54155	-2.710	-2.515	141
3	1.5617	0.7809	53016	-2.717	-2.517	141
4	1.4862	0.7431	50452	-2.690	-2.491	143

<<<Statistics>>> Mean: 1.6316 Std Dev: 0.1739 RSD: 10.66

Sample ID: P4846-17 | Mode: TOC
Method: TOC 0 - 20 ppmC | Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM | Timestamp: 2024/11/18 21:24
Operator ID: NF IZ | Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.5915	0.7957	54026	-2.662	-2.465	137
2	1.2633	0.6316	42885	-2.687	-2.489	138
3	1.1308	0.5654	38388	-2.689	-2.489	137
4	1.1159	0.5580	37882	-2.703	-2.504	137

<<<Statistics>>> Mean: 1.2754 Std Dev: 0.2209 RSD: 17.32

Sample ID: CCV3 | Mode: TOC
Method: TOC 0 - 20 ppmC | Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM | Timestamp: 2024/11/18 22:17
Operator ID: NF IZ | Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.3423	5.1712	351093	-2.768	-2.570	168
2	10.3934	5.1967	352825	-2.711	-2.513	161
3	10.2127	5.1064	346693	-2.730	-2.532	163
4	10.1481	5.0741	344500	-2.733	-2.535	161

<<<Statistics>>> Mean: 10.2741 Std Dev: 0.1133 RSD: 1.10

Sample ID: CCB3 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 22:41
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.2142	0.1071	7271	-2.829	-2.730	120
2	0.2807	0.1404	9529	-2.849	-2.721	120
3	0.3326	0.1663	11289	-2.858	-2.715	120
4	0.2834	0.1417	9621	-2.857	-2.718	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.2777 Std Dev: 0.0486 RSD: 17.50

Sample ID: P4873-01 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/18 23:27
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.2833	0.1417	9618	-2.906	-2.706	96
2	0.2087	0.1043	7084	-2.867	-2.668	93
3	0.2306	0.1153	7828	-2.836	-2.636	94
4	0.2495	0.1248	8471	-2.853	-2.653	95

<<<Statistics>>> Mean: 0.2430 Std Dev: 0.0316 RSD: 13.00

Sample ID: P4873-02 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/19 01:14
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.4994	1.2497	84849	-2.938	-2.740	146
2	2.2388	1.1194	75999	-2.912	-2.715	141
3	2.3367	1.1683	79323	-2.953	-2.757	142
4	2.3147	1.1574	78578	-2.931	-2.733	140

<<<Statistics>>> Mean: 2.3474 Std Dev: 0.1097 RSD: 4.67

Sample ID: CCV4 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/19 02:08
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.0865	5.0432	342407	-2.981	-2.782	173
2	10.0862	5.0431	342397	-2.914	-2.715	165
3	10.0454	5.0227	341012	-2.929	-2.730	164
4	10.1590	5.0795	344868	-2.938	-2.741	167

<<<Statistics>>> Mean: 10.0943 Std Dev: 0.0473 RSD: 0.47

Sample ID: CCB4 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 11181307
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/11/19 02:55

Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1526	0.0763	5181	-3.041	-2.984	120
2	0.1976	0.0988	6708	-3.050	-2.984	120
3	0.2076	0.1038	7047	-3.069	-2.979	120
4	0.2155	0.1077	7315	-3.048	-2.952	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.1933 Std Dev: 0.0281 RSD: 14.55

Sample Results Report Print Date/Time: 2024/10/17 10:38:53

Sample ID	Result	Std. Dev.	RSD	Mode	ALT
0.0PPM	3350	1590	47.47	TOC	
0.5PPM	25944	1031	3.97	TOC	
1.0PPM	45348	1939	4.27	TOC	
2.0PPM.....	78757...	1236..	1.57...	TOC	..
5.0PPM	189582	6966	3.67	TOC	
10.0PPM	356566	4394	1.23	TOC	
20.0PPM.....	684846...	13524..	1.97...	TOC	..
ICV1	10.1602	0.1106	1.09	TOC	
ICB1	0.1685	0.0421	25.01	TOC	
IC-20.....	0.1694...	0.0547..	32.30...	TOC	..
IC-R	0.1653	0.0346	20.94	TOC	

Sample Results Report Print Date/Time: 2024/10/17 10:38:53

Method ID	Sample Type	Vial	Timestamp	Message
TOC 0 - 20 ppmC	TOC Standard	1	2024/09/25 11:13	Low Sample Detected
TOC 0 - 20 ppmC	TOC Standard	2	2024/09/25 12:02	
TOC 0 - 20 ppmC	TOC Standard	3	2024/09/25 12:52	
TOC 0 - 20 ppmC	...TOC Standard ..	4..	2024/09/25 13:18 ..	
TOC 0 - 20 ppmC	TOC Standard	5	2024/09/25 13:45	
TOC 0 - 20 ppmC	TOC Standard	6	2024/09/25 14:12	
TOC 0 - 20 ppmC	...TOC Standard ..	7..	2024/09/25 14:40 ..	
TOC 0 - 20 ppmC	Sample	14	2024/09/25 15:07	
TOC 0 - 20 ppmC	Sample	12	2024/09/25 15:31	Low Sample Detected
TOC 0 - 20 ppmC	...Sample ..	13..	2024/09/25 15:54	..Low Sample Detected
TOC 0 - 20 ppmC	Sample	8	2024/09/25 16:18	Low Sample Detected

Detailed Analysis Report Print Date/Time: 2024/09/27 10:57:10

Sample ID: 0.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 11:13
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			3916	-2.644	-2.613	120
2			5339	-2.654	-2.615	120
3			1929	-2.655	-2.674	120
4			2215	-2.660	-2.636	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 3350 Std Dev: 1590 RSD: 47.47

Sample ID: 0.5PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 12:02
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			25019	-2.849	-2.652	147
2			26723	-2.855	-2.656	150
3			25092	-2.861	-2.663	153
4			26944	-2.879	-2.682	148

<<<Statistics>>> Mean: 25944 Std Dev: 1031 RSD: 3.97

Sample ID: 1.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 12:52
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			44529	-2.979	-2.784	155
2			43245	-2.995	-2.795	152
3			47787	-3.003	-2.807	157
4			45829	-2.984	-2.785	153

<<<Statistics>>> Mean: 45348 Std Dev: 1939 RSD: 4.27

Sample ID: 2.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 13:18
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			77003	-3.022	-2.827	154
2			79901	-3.020	-2.821	158
3			79145	-2.986	-2.786	160
4			78978	-2.987	-2.787	156

<<<Statistics>>> Mean: 78757 Std Dev: 1236 RSD: 1.57

Sample ID: 5.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 13:45
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			198547	-3.011	-2.812	170
2			190541	-2.994	-2.797	163
3			187362	-2.998	-2.798	165
4			181877	-2.957	-2.758	165

<<<Statistics>>> Mean: 189582 Std Dev: 6966 RSD: 3.67

Sample ID: 10.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 14:12
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			353287	-3.003	-2.806	174
2			362185	-2.970	-2.770	171
3			357930	-2.931	-2.731	174
4			352861	-2.910	-2.711	169

<<<Statistics>>> Mean: 356566 Std Dev: 4394 RSD: 1.23

Sample ID: 20.0PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 14:40
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			665638	-2.929	-2.730	183
2			686130	-2.882	-2.683	191
3			690849	-2.884	-2.685	185
4			696765	-2.868	-2.670	184

<<<Statistics>>> Mean: 684846 Std Dev: 13524 RSD: 1.97

Sample ID: ICV1 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 15:07
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.0524	5.0262	341249	-2.955	-2.756	169
2	10.1120	5.0560	343275	-2.928	-2.729	169
3	10.1652	5.0826	345080	-2.920	-2.725	171
4	10.3110	5.1555	350027	-2.903	-2.706	169

<<<Statistics>>> Mean: 10.1602 Std Dev: 0.1106 RSD: 1.09

Sample ID: ICB1 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 15:31
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1868	0.0934	6340	-3.005	-2.908	120
2	0.1290	0.0645	4379	-2.978	-2.916	120
3	0.2191	0.1096	7439	-2.995	-2.919	120
4	0.1390	0.0695	4718	-2.969	-2.868	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.1685 Std Dev: 0.0421 RSD: 25.01

Sample ID: IC-20 Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 15:54
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1108	0.0554	3761	-2.957	-2.925	120
2	0.1349	0.0675	4580	-2.975	-2.943	120
3	0.2197	0.1099	7459	-2.964	-2.878	120
4	0.2121	0.1061	7202	-2.937	-2.906	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.1694 Std Dev: 0.0547 RSD: 32.30

Sample ID: IC-R Mode: TOC
Method:
TOC 0 - 20 ppmC Filename: 09251050
Cal. Curve: TOC WATER 0-20PPM Timestamp: 2024/09/25 16:18
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1389	0.0694	4715	-2.914	-2.867	120
2	0.1870	0.0935	6348	-2.915	-2.867	120
3	0.2024	0.1012	6871	-2.908	-2.827	120
4	0.1329	0.0665	4512	-2.881	-2.840	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.1653 Std Dev: 0.0346 RSD: 20.94

LB133484

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TOC W-11182024 **WorkList ID :** 185524 **Department :** Wet-Chemistry **Date :** 11-18-2024 11:06:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4846-01	FSND-MW-EVAL-03D-2024111:	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-02	FSND-MW-EVAL-03S-2024111:	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-03	FSND-FD-3-20241113	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-04	FSND-MW-EVAL-04S-2024111:	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-05	FSND-MW-EVAL-04D-2024111:	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-06	P4846-05MS	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-07	P4846-05MSD	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-08	FSND-MW-26-20241113	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-10	FSND-RB-3-20241113	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-11	FSND-MW-24-20241113	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-12	FSWD-MW-15-20241113	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-13	FSND-MW-EVAL-02D-2024111:	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-14	FSND-MW-EVAL-02S-2024111:	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-15	FSND-FD-4-20241113	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-16	FSND-MW-EVAL-01D-2024111:	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4846-17	FSND-MW-EVAL-01S-2021113	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/13/2024	9060A
P4873-01	FSND-RB-4-20241114	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/14/2024	9060A
P4873-02	FSND-MW-30-20241114	Water	TOC	Conc H2SO4 to pH < 2	EAEN05	M11	11/14/2024	9060A

Date/Time 11·18·2024 , 12:00

Raw Sample Received by: NF(WC)

Raw Sample Relinquished by: [illegible] (WC)

Date/Time 11·18·2024 17:00

Raw Sample Received by: [illegible] (WC)

Raw Sample Relinquished by: NF(WC)

Calibration Report Print Date/Time: 2024/09/25 14:41:00

Cal. Curve ID: TOC WATER 0-20PPM
Created: 2024/09/25 14:40
Calibration Factor (m): 6.789e+04
Y Intercept (b): 11061
r-squared: 0.99944

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
0.0PPM	3350	0.000	-0.114	–	2024/09/25 11:13
0.5PPM	25944	0.250	0.219	-12.4	2024/09/25 12:02
1.0PPM	45348	0.500	0.505	1.0	2024/09/25 12:52
2.0PPM	78757	1.000	0.997	-0.3	2024/09/25 13:18
5.0PPM	189582	2.500	2.629	5.2	2024/09/25 13:45
10.0PPM	356566	5.000	5.089	1.8	2024/09/25 14:12
20.0PPM	684846	10.000	9.924	-0.8	2024/09/25 14:40

AC

12
9/25/24

TitriSoft Report

Ident	Amount	DateTime	Alkalinity	Final pH (sample)	Initial pH (sample)	slope	offset
LB133515BLW	100	~~19/11/2024~~ 10:15	0.00	3.89	3.92	102.8	6.98
LB133515BSW	100	19/11/2024 10:20	43.56	4.34	8.62	102.8	6.98
P4846-01	50	19/11/2024 10:28	192.80	4.41	7.27	102.8	6.98
P4846-01DUP	50	19/11/2024 10:36	192.76	4.42	7.26	102.8	6.98
P4846-02	50	19/11/2024 10:44	241.64	4.45	7.40	102.8	6.98
P4846-03	50	19/11/2024 10:52	241.24	4.50	7.37	102.8	6.98
P4846-04	50	19/11/2024 11:00	230.48	4.38	7.40	102.8	6.98
P4846-05	50	19/11/2024 11:08	224.48	4.46	7.37	102.8	6.98
P4846-08	50	19/11/2024 11:15	197.26	4.40	7.45	102.8	6.98
P4846-10	50	19/11/2024 11:20	2.00	4.38	5.50	102.8	6.98
P4846-11	50	19/11/2024 11:26	190.82	4.42	7.44	102.8	6.98
P4846-12	50	19/11/2024 11:34	245.64	4.48	7.36	102.8	6.98
P4846-13	50	19/11/2024 11:40	153.68	4.41	7.53	102.8	6.98
P4846-14	50	19/11/2024 11:46	284.62	4.42	7.16	102.8	6.98
P4846-15	50	19/11/2024 11:54	287.54	4.43	7.11	102.8	6.98
P4846-16	50	19/11/2024 12:00	172.48	4.42	7.24	102.8	6.98
P4846-17	50	19/11/2024 12:08	237.62	4.46	7.19	102.8	6.98
P4873-01	50	19/11/2024 12:12	2.00	4.43	5.10	102.8	6.98
P4873-02	50	~~19/11/2024~~ 12:18	28.42	4.34	7.17	102.8	6.98

11/19/2024

11/19/24
NF

Date: 11/19/24 12:45:15 PM

Page: 1

Analytical Summary Report

Analysis Method: SM2320 B
Parameter: Alkalinity
Run Number: LB133517
Constant: 50,000

Reviewed By: Niha
Supervisor Review By: Iwona
Normality: 0.02
pH Meter ID: WC pH Meter-1

Reagent/Standard	Lot/Log #
alkalinity LCSW 50 ppm	WP110766
SULFURIC ACID, 0.02N, 4L	W3150

Seq	LabID	ClientID	TV (mg/L)	DL	Sample Vol (mL)	Initial pH	pH(4.3-4.7)	Final pH	0.02N H2SO4				Alkalinity	Anal Date	Anal Time
									A	B	C	D			
									Initial(ml)	ml at pH(4.3-4.7)	Final(ml)	Diff(ml)			
1	LB133517BL	LB133517BL		1	100	5.04	4.50	4.20	0	0.08	0.16	0.00	0.00	11/19/2024	12:30
2	LB133517BS	LB133517BS	50	1	100	9.82	4.60	4.30	0	5.40	5.54	5.26	52.60	11/19/2024	12:37
3	P4846-10	FSND-RB-3-20241		1	100	5.52	4.52	4.22	0	0.12	0.20	0.04	0.40	11/19/2024	12:44
4	P4873-01	FSND-RB-4-20241		1	100	5.13	4.67	4.37	0	0.10	0.16	0.04	0.40	11/19/2024	12:50
5	P4873-01DUP	FSND-RB-4-20241		1	100	5.14	4.61	4.31	0	0.12	0.18	0.06	0.60	11/19/2024	12:57

D = 2(B-A)-(C-A)

Alkalinity = (D * Normality * Constant) / Sample Volume(ml)

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Instrument ID: IC-2

Daily Analysis Runlog For Sequence/QCBatch ID # LB133464

Review By	Niha	Review On	11/20/2024 1:30:48 PM
Supervise By	Iwona	Supervise On	11/20/2024 1:41:10 PM
SubDirectory	LB133464	Test	Anions

STD. NAME	STD REF.#
ICAL Standard	WP110250,WP110251,WP110252,WP110253,WP110254,WP110255,WP110256,WP110257
ICV Standard	WP110258
CCV Standard	WP110712,WP110718
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110713,WP110719
Chk Standard	WP110260,WP110261

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	STD1	STD1	CAL1	10/16/24 10:55	All standards, samples, and	NF/IZ	OK
2	STD2	STD2	CAL2	10/16/24 11:17	QC are filtered through	NF/IZ	OK
3	STD3	STD3	CAL3	10/16/24 11:38	0.45um, filter lot W2865	NF/IZ	OK
4	STD4	STD4	CAL4	10/16/24 11:59		NF/IZ	OK
5	STD5	STD5	CAL5	10/16/24 12:21		NF/IZ	OK
6	STD6	STD6	CAL6	10/16/24 12:42		NF/IZ	OK
7	STD7	STD7	CAL7	10/16/24 13:04		NF/IZ	OK
8	ICV1	ICV1	ICV	10/16/24 13:37		NF/IZ	OK
9	ICB1	ICB1	ICB	10/16/24 13:59		NF/IZ	OK
10	CCV1	CCV1	CCV	11/14/24 13:27		NF/IZ	OK
11	CCB1	CCB1	CCB	11/14/24 13:49		NF/IZ	OK
12	LB133464BLW	LB133464BLW	MB	11/14/24 14:10		NF/IZ	OK
13	LB133464BSW	LB133464BSW	LCS	11/14/24 14:32		NF/IZ	OK
14	P4846-01	FSND-MW-EVAL-03D	SAM	11/14/24 14:53	Cl high	NF/IZ	Dilution
15	P4846-02	FSND-MW-EVAL-03S	SAM	11/14/24 15:14	Cl high	NF/IZ	Dilution
16	P4846-03	FSND-FD-3-20241113	SAM	11/14/24 15:36	Cl high	NF/IZ	Dilution
17	P4846-04	FSND-MW-EVAL-04S	SAM	11/14/24 15:58	Cl high	NF/IZ	Dilution
18	P4846-05	FSND-MW-EVAL-04D	SAM	11/14/24 16:19	Cl high	NF/IZ	Dilution

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Instrument ID: IC-2

Daily Analysis Runlog For Sequence/QCBatch ID # LB133464

Review By	Niha	Review On	11/20/2024 1:30:48 PM
Supervise By	Iwona	Supervise On	11/20/2024 1:41:10 PM
SubDirectory	LB133464	Test	Anions

STD. NAME	STD REF.#
ICAL Standard	WP110250,WP110251,WP110252,WP110253,WP110254,WP110255,WP110256,WP110257
ICV Standard	WP110258
CCV Standard	WP110712,WP110718
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110713,WP110719
Chk Standard	WP110260,WP110261

19	P4846-06	FSND-MW-EVAL-04D	MS	11/14/24 16:41	9.5ml of sample, 0.5mL W3091	NF/IZ	OK
20	P4846-07	FSND-MW-EVAL-04D	MSD	11/14/24 17:02	9.5ml of sample, 0.5mL W3091	NF/IZ	OK
21	P4846-08	FSND-MW-26-202411	SAM	11/14/24 17:24	Cl high	NF/IZ	Dilution
22	CCV2	CCV2	CCV	11/14/24 17:45		NF/IZ	OK
23	CCB2	CCB2	CCB	11/14/24 18:07		NF/IZ	OK
24	P4846-10	FSND-RB-3-20241113	SAM	11/14/24 18:28		NF/IZ	OK
25	P4846-11	FSND-MW-24-202411	SAM	11/14/24 18:50	Cl high	NF/IZ	Dilution
26	P4846-12	FSND-MW-15-202411	SAM	11/14/24 19:11	Cl high	NF/IZ	Dilution
27	P4846-13	FSND-MW-EVAL-02D	SAM	11/14/24 19:33	Cl high	NF/IZ	Dilution
28	P4846-14	FSND-MW-EVAL-02S	SAM	11/14/24 19:54	Cl high	NF/IZ	Dilution
29	P4846-15	FSND-FD-4-20241113	SAM	11/14/24 20:16	Cl high	NF/IZ	Dilution
30	P4846-16	FSND-MW-EVAL-01D	SAM	11/14/24 20:37	Cl high	NF/IZ	Dilution
31	P4846-17	FSND-MW-EVAL-01S	SAM	11/14/24 20:59	Cl high	NF/IZ	Dilution
32	P4846-01DL	FSND-MW-EVAL-03D	SAM	11/14/24 21:20	10X for Cl	NF/IZ	Confirms
33	P4846-02DL	FSND-MW-EVAL-03S	SAM	11/14/24 21:42	10X for Cl	NF/IZ	Confirms
34	CCV3	CCV3	CCV	11/14/24 22:03		NF/IZ	OK
35	CCB3	CCB3	CCB	11/14/24 22:25		NF/IZ	OK
36	P4846-03DL	FSND-FD-3-20241113	SAM	11/14/24 22:46	10X for Cl	NF/IZ	Confirms
37	P4846-04DL	FSND-MW-EVAL-04S	SAM	11/14/24 23:08	10X for Cl	NF/IZ	Confirms

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Instrument ID: IC-2

Daily Analysis Runlog For Sequence/QCBatch ID # LB133464

Review By	Niha	Review On	11/20/2024 1:30:48 PM
Supervise By	Iwona	Supervise On	11/20/2024 1:41:10 PM
SubDirectory	LB133464	Test	Anions

STD. NAME	STD REF.#
ICAL Standard	WP110250,WP110251,WP110252,WP110253,WP110254,WP110255,WP110256,WP110257
ICV Standard	WP110258
CCV Standard	WP110712,WP110718
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110713,WP110719
Chk Standard	WP110260,WP110261

38	P4846-05DL	FSND-MW-EVAL-04D	SAM	11/14/24 23:29	10X for Cl	NF/IZ	Confirms
39	P4846-08DL	FSND-MW-26-202411	SAM	11/15/24 00:12	10X for Cl	NF/IZ	Confirms
40	CCV4	CCV4	CCV	11/15/24 00:55		NF/IZ	OK
41	CCB4	CCB4	CCB	11/15/24 01:17		NF/IZ	OK
42	CCV5	CCV5	CCV	11/15/24 09:42		NF/IZ	OK
43	CCB5	CCB5	CCB	11/15/24 10:04		NF/IZ	OK
44	LB133464BLW2	LB133464BLW2	MB	11/15/24 10:25		NF/IZ	OK
45	LB133464BSW2	LB133464BSW2	LCS	11/15/24 10:47		NF/IZ	OK
46	P4846-11DL	FSND-MW-24-202411	SAM	11/15/24 11:08	10X for Cl	NF/IZ	Confirms
47	P4846-12DL	FSND-MW-15-202411	SAM	11/15/24 11:30	10X for Cl	NF/IZ	Confirms
48	P4846-13DL	FSND-MW-EVAL-02D	SAM	11/15/24 11:51	20X for Cl	NF/IZ	Confirms
49	P4846-14DL	FSND-MW-EVAL-02S	SAM	11/15/24 12:13	20X for Cl	NF/IZ	Confirms
50	P4846-15DL	FSND-FD-4-20241113	SAM	11/15/24 12:34	20X for Cl	NF/IZ	Confirms
51	P4846-16DL	FSND-MW-EVAL-01D	SAM	11/15/24 12:56	10X for Cl	NF/IZ	Confirms
52	P4846-17DL	FSND-MW-EVAL-01S	SAM	11/15/24 13:17	10X for Cl	NF/IZ	Confirms
53	CCV6	CCV6	CCV	11/15/24 13:39		NF/IZ	OK
54	CCB6	CCB6	CCB	11/15/24 14:00		NF/IZ	OK
55	P4873-01	FSND-RB-4-20241114	SAM	11/15/24 14:22		NF/IZ	OK
56	P4873-02	FSND-MW-30-202411	SAM	11/15/24 14:43	Cl high	NF/IZ	Dilution

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Instrument ID: IC-2

Daily Analysis Runlog For Sequence/QCBatch ID # LB133464

Review By	Niha	Review On	11/20/2024 1:30:48 PM
Supervise By	Iwona	Supervise On	11/20/2024 1:41:10 PM
SubDirectory	LB133464	Test	Anions

STD. NAME	STD REF.#
ICAL Standard	WP110250,WP110251,WP110252,WP110253,WP110254,WP110255,WP110256,WP110257
ICV Standard	WP110258
CCV Standard	WP110712,WP110718
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110713,WP110719
Chk Standard	WP110260,WP110261

57	P4873-02MS	FSND-MW-30-202411	MS	11/15/24 15:05	9.5ml of sample, 0.5mL W3091	NF/IZ	OK
58	P4873-02MSD	FSND-MW-30-202411	MSD	11/15/24 15:26	9.5ml of sample, 0.5mL W3091	NF/IZ	OK
59	P4873-02DL	FSND-MW-30-202411	SAM	11/15/24 15:48	10X for Cl	NF/IZ	Confirms
60	CCV7	CCV7	CCV	11/15/24 16:09		NF/IZ	OK
61	CCB7	CCB7	CCB	11/15/24 16:31		NF/IZ	OK

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Instrument ID: TOC

Daily Analysis Runlog For Sequence/QCBatch ID # LB133484

Review By	Niha	Review On	11/20/2024 1:48:12 PM
Supervise By	Iwona	Supervise On	11/20/2024 2:04:13 PM
SubDirectory	LB133484	Test	TOC

STD. NAME	STD REF.#
ICAL Standard	WP109852,WP109853,WP109854,WP109855,WP109856,WP109857
ICV Standard	WP109859
CCV Standard	WP110672
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110673
Chk Standard	WP109953,WP109860,WP109865

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	09/25/24 11:13		NF IZ	OK
2	0.5PPM	0.5PPM	CAL2	09/25/24 12:02		NF IZ	OK
3	1.0PPM	1.0PPM	CAL3	09/25/24 12:52		NF IZ	OK
4	2.0PPM	2.0PPM	CAL4	09/25/24 13:18		NF IZ	OK
5	5.0PPM	5.0PPM	CAL5	09/25/24 13:45		NF IZ	OK
6	10.0PPM	10.0PPM	CAL6	09/25/24 14:12		NF IZ	OK
7	20.0PPM	20.0PPM	CAL7	09/25/24 14:40		NF IZ	OK
8	ICV1	ICV1	ICV	09/25/24 15:07		NF IZ	OK
9	ICB1	ICB1	ICB	09/25/24 15:31		NF IZ	OK
10	IC-20	IC-20	SAM	09/25/24 15:54		NF IZ	OK
11	IC-R	IC-R	SAM	09/25/24 16:18		NF IZ	OK
12	CCV1	CCV1	CCV	11/18/24 11:50		NF IZ	OK
13	CCB1	CCB1	CCB	11/18/24 12:13		NF IZ	OK
14	LB133484BLW	LB133484BLW	MB	11/18/24 12:37		NF IZ	OK
15	LB133484BSW	LB133484BSW	LCS	11/18/24 13:04		NF IZ	OK
16	P4846-01	FSND-MW-EVAL-03D	SAM	11/18/24 13:31		NF IZ	OK
17	P4846-02	FSND-MW-EVAL-03S	SAM	11/18/24 13:55		NF IZ	OK
18	P4846-03	FSND-FD-3-20241113	SAM	11/18/24 14:20		NF IZ	OK

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Instrument ID: TOC

Daily Analysis Runlog For Sequence/QCBatch ID # LB133484

Review By	Niha	Review On	11/20/2024 1:48:12 PM
Supervise By	Iwona	Supervise On	11/20/2024 2:04:13 PM
SubDirectory	LB133484	Test	TOC

STD. NAME	STD REF.#
ICAL Standard	WP109852,WP109853,WP109854,WP109855,WP109856,WP109857
ICV Standard	WP109859
CCV Standard	WP110672
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110673
Chk Standard	WP109953,WP109860,WP109865

19	P4846-04	FSND-MW-EVAL-04S	SAM	11/18/24 14:45		NF IZ	OK
20	P4846-05	FSND-MW-EVAL-04D	SAM	11/18/24 15:10		NF IZ	OK
21	P4846-06	FSND-MW-EVAL-04D	MS	11/18/24 15:36		NF IZ	OK
22	P4846-07	FSND-MW-EVAL-04D	MSD	11/18/24 16:02		NF IZ	OK
23	P4846-08	FSND-MW-26-202411	SAM	11/18/24 16:28		NF IZ	OK
24	CCV2	CCV2	CCV	11/18/24 16:54		NF IZ	OK
25	CCB2	CCB2	CCB	11/18/24 17:18		NF IZ	OK
26	P4846-10	FSND-RB-3-20241113	SAM	11/18/24 17:41		NF IZ	OK
27	P4846-11	FSND-MW-24-202411	SAM	11/18/24 18:05		NF IZ	OK
28	P4846-12	FSND-MW-15-202411	SAM	11/18/24 18:30		NF IZ	OK
29	P4846-13	FSND-MW-EVAL-02D	SAM	11/18/24 18:54		NF IZ	OK
30	P4846-14	FSND-MW-EVAL-02S	SAM	11/18/24 19:18		NF IZ	OK
31	P4846-14MS	FSND-MW-EVAL-02S	MS	11/18/24 19:44	2.0ml WP110670 +38.0ml Sample	NF IZ	OK
32	P4846-14MSD	FSND-MW-EVAL-02S	MSD	11/18/24 20:10	2.0ml WP110670 +38.0ml Sample	NF IZ	OK
33	P4846-15	FSND-FD-4-20241113	SAM	11/18/24 20:34		NF IZ	OK
34	P4846-16	FSND-MW-EVAL-01D	SAM	11/18/24 20:59		NF IZ	OK
35	P4846-17	FSND-MW-EVAL-01S	SAM	11/18/24 21:24		NF IZ	OK
36	CCV3	CCV3	CCV	11/18/24 22:17		NF IZ	OK
37	CCB3	CCB3	CCB	11/18/24 22:41		NF IZ	OK

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Instrument ID: TOC

Daily Analysis Runlog For Sequence/QCBatch ID # LB133484

Review By	Niha	Review On	11/20/2024 1:48:12 PM
Supervise By	Iwona	Supervise On	11/20/2024 2:04:13 PM
SubDirectory	LB133484	Test	TOC

STD. NAME	STD REF.#
ICAL Standard	WP109852,WP109853,WP109854,WP109855,WP109856,WP109857
ICV Standard	WP109859
CCV Standard	WP110672
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110673
Chk Standard	WP109953,WP109860,WP109865

38	P4873-01	FSND-RB-4-20241114	SAM	11/18/24 23:27		NF IZ	OK
39	P4873-02	FSND-MW-30-202411	SAM	11/19/24 01:14		NF IZ	OK
40	CCV4	CCV4	CCV	11/19/24 02:08		NF IZ	OK
41	CCB4	CCB4	CCB	11/19/24 02:55		NF IZ	OK

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Instrument ID: TITRATOR

Daily Analysis Runlog For Sequence/QCBatch ID # LB133515

Review By	Niha	Review On	11/20/2024 1:51:50 PM
Supervise By	Iwona	Supervise On	11/20/2024 2:07:27 PM
SubDirectory	LB133515	Test	Alkalinity

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110766
Chk Standard	W3150,W3071,W3107

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB133515BLW	LB133515BLW	MB	11/19/24 10:15	pH=3.89	Niha	OK
2	LB133515BSW	LB133515BSW	LCS	11/19/24 10:20	pH=4.34	Niha	OK
3	P4846-01	FSND-MW-EVAL-03D	SAM	11/19/24 10:28	pH=4.41	Niha	OK
4	P4846-01DUP	FSND-MW-EVAL-03D	DUP	11/19/24 10:36	pH=4.42	Niha	OK
5	P4846-02	FSND-MW-EVAL-03S	SAM	11/19/24 10:44	pH=4.45	Niha	OK
6	P4846-03	FSND-FD-3-20241113	SAM	11/19/24 10:52	pH=4.50	Niha	OK
7	P4846-04	FSND-MW-EVAL-04S	SAM	11/19/24 11:00	pH=4.38	Niha	OK
8	P4846-05	FSND-MW-EVAL-04D	SAM	11/19/24 11:08	pH=4.46	Niha	OK
9	P4846-08	FSND-MW-26-202411	SAM	11/19/24 11:15	pH=4.40	Niha	OK
10	P4846-10	FSND-RB-3-20241113	SAM	11/19/24 11:20	pH=4.38	Niha	Not Ok
11	P4846-11	FSND-MW-24-202411	SAM	11/19/24 11:26	pH=4.42	Niha	OK
12	P4846-12	FSND-MW-15-202411	SAM	11/19/24 11:34	pH=4.48	Niha	OK
13	P4846-13	FSND-MW-EVAL-02D	SAM	11/19/24 11:40	pH=4.41	Niha	OK
14	P4846-14	FSND-MW-EVAL-02S	SAM	11/19/24 11:46	pH=4.42	Niha	OK
15	P4846-15	FSND-FD-4-20241113	SAM	11/19/24 11:54	pH=4.43	Niha	OK
16	P4846-16	FSND-MW-EVAL-01D	SAM	11/19/24 12:00	pH=4.42	Niha	OK
17	P4846-17	FSND-MW-EVAL-01S	SAM	11/19/24 12:08	pH=4.46	Niha	OK
18	P4873-01	FSND-RB-4-20241114	SAM	11/19/24 12:12	pH=4.43	Niha	Not Ok

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Instrument ID: TITRATOR

Daily Analysis Runlog For Sequence/QCBatch ID # LB133515

Review By	Niha	Review On	11/20/2024 1:51:50 PM
Supervise By	Iwona	Supervise On	11/20/2024 2:07:27 PM
SubDirectory	LB133515	Test	Alkalinity

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110766
Chk Standard	W3150,W3071,W3107

19	P4873-02	FSND-MW-30-202411	SAM	11/19/24 12:18	pH=4.34	Niha	OK

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Instrument ID: TITRATOR

Daily Analysis Runlog For Sequence/QCBatch ID # LB133517

Review By	Niha	Review On	11/19/2024 3:48:52 PM
Supervise By	Iwona	Supervise On	11/19/2024 3:49:18 PM
SubDirectory	LB133517	Test	Alkalinity

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP110766,W3150

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB133517BL	LB133517BL	MB	11/19/24 12:30		Niha	OK
2	LB133517BS	LB133517BS	LCS	11/19/24 12:37		Niha	OK
3	P4846-10	FSND-RB-3-20241113	SAM	11/19/24 12:44		Niha	OK
4	P4873-01	FSND-RB-4-20241114	SAM	11/19/24 12:50		Niha	OK
5	P4873-01DUP	FSND-RB-4-20241114	DUP	11/19/24 12:57		Niha	OK

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Prep Standard - Chemical Standard Summary

Order ID : P4873

Test : Alkalinity,Anions Group1,TOC

Prepbatch ID :

Sequence ID/Qc Batch ID: LB133464,LB133484,LB133515,LB133517,

Standard ID :
WP108534,WP109217,WP109218,WP109850,WP109851,WP109852,WP109853,WP109854,WP109855,WP109856,WP109857,WP109859,WP109860,WP109861,WP109862,WP109863,WP109864,WP109865,WP109953,WP 110250,WP 110251,WP110252,WP110253,WP110254,WP110255,WP110256,WP110257,WP110258,WP110259,WP110260,WP110261,WP110670,WP110671,WP110672,WP110673,WP110712,WP110713,WP110718,WP110719,WP110765,WP110766
,

Chemical ID :
M5501,M6041,W1993,W2606,W2647,W2784,W2800,W2860,W2862,W3016,W3017,W3018,W3020,W3022,W3058,W3062,W3063,W3071,W3107,W3111,W3112,W3150,

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3886	Inorganic carbon stock solution, 1000ppm	WP108534	06/24/2024	10/24/2024	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 06/26/2024

FROM 3.49700gram of W2647 + 4.41220gram of W2862 + 993.00000ml of W2606 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2050	TOC STOCK STD, 4000PPM	WP109217	08/07/2024	01/18/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCSC-5)	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 08/16/2024

FROM 5.00000ml of W2860 + 8.51200gram of W3111 + 990.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2051	TOC STOCK STD-SS, 4000PPM	WP109218	08/07/2024	02/07/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCSC-5)	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 08/16/2024

FROM 5.00000ml of W2860 + 8.51200gram of W2784 + 990.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3888	TOC Water Intermediate std-200ppm	WP109850	09/24/2024	10/01/2024	Niha Farheen Shaik	None	None	Mohan Bera 09/24/2024

FROM 95.00000ml of W3112 + 5.00000ml of WP109217 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3889	TOC Water Intermediate std SS-200ppm	WP109851	09/24/2024	10/01/2024	Niha Farheen Shaik	None	None	Mohan Bera 09/24/2024

FROM 95.00000ml of W3112 + 5.00000ml of WP109218 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
304	TOC CAL 0.00ppm	WP109852	09/24/2024	10/01/2024	Niha Farheen Shaik	None	None	Mohan Bera 09/24/2024

FROM 100.00000ml of W3112 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
305	TOC CAL 0.5ppm	WP109853	09/24/2024	10/01/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 09/24/2024

FROM 99.75000ml of W3112 + 0.25000ml of WP109850 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
306	TOC CAL 1.0PPM	WP109854	09/24/2024	10/01/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 09/24/2024

FROM 99.50000ml of W3112 + 0.50000ml of WP109850 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
307	TOC CAL 2.0PPM	WP109855	09/24/2024	10/01/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 09/24/2024

FROM 99.00000ml of W3112 + 1.00000ml of WP109850 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
308	TOC CAL 5.0PPM	WP109856	09/24/2024	10/01/2024	Niha Farheen Shaik	None	None	Mohan Bera 09/24/2024

FROM 97.50000ml of W3112 + 2.50000ml of WP109850 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
310	TOC CAL 20.0PPM	WP109857	09/24/2024	10/01/2024	Niha Farheen Shaik	None	None	Mohan Bera 09/24/2024

FROM 90.00000ml of W3112 + 10.00000ml of WP109850 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1650	TOC ICV/LCS STD. 10PPM	WP109859	09/24/2024	10/01/2024	Niha Farheen Shaik	None	None	Mohan Bera 09/24/2024

FROM 190.00000ml of W3112 + 10.00000ml of WP109851 = Final Quantity: 200.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3887	Inorganic carbon solution, 20ppm	WP109860	09/24/2024	10/01/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 09/24/2024

FROM 49.00000ml of W3112 + 1.00000ml of WP108534 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4003	Solution A	WP109861	09/24/2024	10/01/2024	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Mohan Bera 09/24/2024

FROM 1000.00000ml of W3112 + 2.56500gram of W3018 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4004	Solution B	WP109862	09/24/2024	10/01/2024	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Mohan Bera 09/24/2024

FROM 0.24800gram of W3020 + 0.28100gram of M5501 + 0.28300gram of W2800 + 0.59400gram of W1993 + 1000.00000ml of W3112 + 2.05000gram of W3017 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4005	Solution C	WP109863	09/24/2024	10/01/2024	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Mohan Bera 09/24/2024

FROM 0.70500gram of W3016 + 1000.00000ml of W3112 + 2.80600gram of W2647 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4006	Solution D	WP109864	09/24/2024	10/01/2024	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Mohan Bera 09/24/2024

FROM 1.86200gram of W3022 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4007	IC-removal check solution	WP109865	09/24/2024	10/01/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 09/24/2024

FROM 0.04000ml of M6041 + 10.00000ml of WP109861 + 10.00000ml of WP109862 + 10.00000ml of WP109863 + 10.00000ml of WP109864 = Final Quantity: 40.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
613	Phosphoric acid reagent	WP109953	09/25/2024	03/25/2025	Niha Farheen Shaik	None	None	Iwona Zarych 09/27/2024

FROM 150.00000ml of W3112 + 50.00000ml of W2860 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2487	Anions 300/9056 calibration standard 1	WP110250	10/16/2024	10/17/2024	Iwona Zarych	None	None	Jignesh Parikh 10/17/2024

FROM 10.00000ml of W3112 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
24	Anions 300/9056 calibration standard 2	WP110251	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 0.20000ml of W3062 + 9.80000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
25	Anions 300/9056 calibration standard 3	WP110252	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 0.40000ml of W3062 + 9.60000ml of W3112 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
26	Anions 300/9056 calibration standard 4	WP110253	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 0.50000ml of W3062 + 9.50000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3680	Anions 300/9056 calibration standard 5-CCV	WP110254	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 45.00000ml of W3112 + 5.00000ml of W3062 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3679	Anions 300/9056 calibration standard 6	WP110255	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 2.00000ml of W3062 + 8.00000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3681	Anions 300/9056 calibration standard 7	WP110256	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 2.50000ml of W3062 + 7.50000ml of W3112 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
34	Anions 300/9056 calibration standard 8	WP110257	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 5.00000ml of W3062 + 5.00000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3233	Anions 300/9056 ICV-LCS std	WP110258	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

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

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Wet Chemistry STANDARD PREPARATION LOG

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

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4036	IC ELUENT FOR IC-1	WP110260	10/16/2024	11/16/2024	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 10/17/2024

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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4037	IC H2SO4 FOR IC-1	WP110261	10/16/2024	11/16/2024	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 10/17/2024

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3888	TOC Water Intermediate std-200ppm	WP110670	11/11/2024	11/18/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/14/2024

FROM 95.00000ml of W3112 + 5.00000ml of WP109217 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3889	TOC Water Intermediate std SS-200ppm	WP110671	11/11/2024	11/18/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/14/2024

FROM 95.00000ml of W3112 + 5.00000ml of WP109218 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3331	TOC CAL-CCV std, 10PPM	WP110672	11/11/2024	11/18/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/14/2024

FROM 190.00000ml of W3112 + 10.00000ml of WP110670 = Final Quantity: 200.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1650	TOC ICV/LCS STD. 10PPM	WP110673	11/11/2024	11/18/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/14/2024

FROM 190.00000ml of W3112 + 10.00000ml of WP110671 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3680	Anions 300/9056 calibration standard 5-CCV	WP110712	11/14/2024	11/15/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/18/2024

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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3233	Anions 300/9056 ICV-LCS std	WP110713	11/14/2024	11/15/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/18/2024

FROM 45.00000ml of W3112 + 5.00000ml of W3062 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3680	Anions 300/9056 calibration standard 5-CCV	WP110718	11/15/2024	11/16/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/18/2024

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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3233	Anions 300/9056 ICV-LCS std	WP110719	11/15/2024	11/16/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/18/2024

FROM 45.00000ml of W3112 + 5.00000ml of W3062 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3407	Acidity-Alkalinity Stock Std(-+2500PPM)	WP110765	11/19/2024	11/26/2024	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Mohan Bera 11/21/2024

FROM 0.62500gram of W3058 + 249.40000ml of W3112 = Final Quantity: 250.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
293	alkalinity LCSW 50 ppm	WP110766	11/19/2024	11/26/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 11/21/2024

FROM 196.00000ml of W3112 + 4.00000ml of WP110765 = Final Quantity: 200.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	07/24/2023 / mohan	04/14/2023 / mohan	M5501

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	XE09B	04/08/2025	04/08/2015 / apatel	04/08/2015 / apatel	W1993

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	10/24/2024	10/24/2019 / apatel	10/24/2019 / apatel	W2606

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	201089	06/30/2025	12/23/2020 / apatel	12/16/2020 / apatel	W2784

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3040-1 / POTASSIUM CHLORIDE, CRYS, ACS, 500G	198947	09/30/2025	03/08/2021 / apatel	03/08/2021 / apatel	W2800

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0260-3 / Phosphoric Acid, 2.5 L	0000278313	01/31/2026	07/12/2021 / apatel	07/12/2021 / apatel	W2860

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	20A225205	07/13/2026	07/19/2023 / Al-Terek	07/13/2021 / apatel	W2862

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	S9390-100G / Sodium phosphate dibasic heptahydrate	SLCP6576	11/30/2025	04/03/2023 / Iwona	04/03/2023 / Iwona	W3016

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	C7902-500G / Calcium chloride dihydrate - 500G	SLCP4280	08/31/2025	04/03/2023 / Iwona	04/03/2023 / Iwona	W3017

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J2500-1 / MAGNESIUM SULFATE 7-HYDRATE CRYSTALS 500G	SLCN3621	12/31/2024	04/03/2023 / Iwona	04/03/2023 / Iwona	W3018

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Thermo Fisher Scientific	012364.36 / Calcium nitrate tetrahydrate, ACS, 99.0-103.0%	MKCS4612	09/30/2025	04/03/2023 / Iwona	04/03/2023 / Iwona	W3020

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	S4392-250G / Sodium metasilicate nonahydrate	SLCM8472	03/31/2025	04/05/2023 / Iwona	04/05/2023 / Iwona	W3022

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

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	T2-MEB716667	02/12/2025	02/12/2024 / Iwona	10/30/2023 / Iwona	W3062

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

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14055-3 / PH 4 BUFFER SOLUTION	AL14055-3	02/27/2026	09/05/2024 / jignesh	05/13/2024 / jignesh	W3107

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	24A1956910	01/18/2025	06/26/2024 / Iwona	06/26/2024 / Iwona	W3111

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

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

Certificate of Analysis

Date of Release: *5/12/2014*

Product: ***Ammonium Chloride GR ACS***

Catalog No.: ***AX1270 all size codes***

Grade: ***Meets ACS Specifications***

CAS #: ***12125-02-9***

Country of Origin: ***India***

FW: ***53.49***

Lot No.: ***XE09B***

ClH_4N

Characteristic	Requirement Minimum	Maximum	Results	UOM
Assay (argentometric)	99.5		99.8	%
Calcium (Ca)		0.001	0.0001	%
Form	White crystals		White crystals	
Heavy metals (as Pb)		5	5	ppm
Identification	To pass test		Passes	
Insoluble matter		0.005	0.002	%
Iron (Fe)		2	2	ppm
Loss on drying (105 C)		0.5	0.22	%
Magnesium (Mg)		5	0.7	ppm
pH of a 5% solution at 25 C	4.5	5.5	4.95	
Phosphate (PO4)		2	2	ppm
Residue after ignition		0.01	0.002	%
Sulfate (SO4)		0.002	0.002	%

Joe Schoellkopff

Quality Control Manager

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

EMD Millipore Corporation
290 Concord Road
Billerica, MA 01821

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

(sodium hydrogen carbonate)

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

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

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

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

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

Jamie Ethier
Vice President Global Quality

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

Phosphoric Acid
BAKER ANALYZED® A.C.S. Reagent

(orthophosphoric acid)

Material No.: 0260-03
Batch No.: 0000278313
Manufactured Date: 2021/02/01
Retest Date: 2026/01/31
Revision No: 2

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (H_3PO_4) (by acidimetry)	85.0 - 87.0 %	85.8
Calcium (Ca)	<= 0.002 %	< 0.001
Color (APHA)	<= 10	5
Insoluble Matter	<= 0.001 %	< 0.001
ACS - Magnesium (Mg)	<= 0.002 %	<0.002
Sulfate (SO_4)	<= 12 ppm	< 4
Volatile Acids (as CH_3COOH)	<= 0.001 %	0.001
Reducing Substances	Passes Test	PT
Chloride (Cl)	<= 3 ppm	< 1
Nitrate (NO_3)	<= 5 ppm	< 2
Trace Impurities - Antimony (Sb)	<= 20.000 ppm	0.007
Trace Impurities - Arsenic (As)	<= 0.500 ppm	< 0.001
Trace Impurities - Iron (Fe)	<= 10.000 ppm	< 1.000
Heavy Metals (as Pb)	<= 8 ppm	< 3
Trace Impurities - Manganese (Mn)	<= 0.500 ppm	0.005
Trace Impurities - Potassium (K)	<= 40.000 ppm	< 0.001
Trace Impurities - Sodium (Na)	<= 200.000 ppm	0.082

For Laboratory, Research or Manufacturing Use
Exceeds A.C.S. Specifications
Meets Reagent Specifications for testing USP/NF monographs

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

Jamie Ethier
Vice President Global Quality

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

RICCA CHEMICAL COMPANY®

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

W3071
Rec 12/6/23

Certificate of Analysis

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

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

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

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

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

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

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

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

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

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

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

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

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

This product was tested in an ISO 17025 Accredited Laboratory

Sigma-Aldrich.

W3016
Rec 04/03/23 12

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

Certificate of Analysis

Product Name:
Sodium phosphate dibasic heptahydrate - ACS reagent, 98.0-102.0%

$Na_2HPO_4 \cdot 7H_2O$

Product Number:	**S9390**
Batch Number:	**SLCP6576**
Brand:	SIGALD
CAS Number:	7782-85-6
MDL Number:	MFCD00149180
Formula:	HNa2O4P · 7H2O
Formula Weight:	268.07 g/mol
Quality Release Date:	02 NOV 2022
Recommended Retest Date:	NOV 2025

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Assay	98.0 - 102.0 %	99.8 %
Insoluble Matter	≤ 0.005 %	0.003 %
Chloride (Cl) < or = 0.001%	Pass	Pass
Sulfate < or = 0.005%	Pass	Pass
Iron (Fe) < or = 0.001%	Pass	Pass
Heavy Metals by ICP	< = 0.001%	< 0.001%
pH of 5% solution at 25 deg C	8.7 - 9.3	9.2
Note ACS Tests	_____	_____

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

Sigma-Aldrich

W3017
Rec 4/3/23 12

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

Certificate of Analysis

Product Name:

Calcium chloride dihydrate - BioReagent, suitable for cell culture, suitable for insect cell culture, suitable for plant cell culture, ≥99.0%

$CaCl_2 \cdot 2H_2O$

Product Number:	**C7902**
Batch Number:	**SLCP4280**
Brand:	SIGMA
CAS Number:	10035-04-8
MDL Number:	MFCD00149613
Formula:	CaCl2 · 2H2O
Formula Weight:	147.01 g/mol
Quality Release Date:	14 NOV 2022
Recommended Retest Date:	AUG 2025

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity) 294 mg/mL, H2O	Clear	Clear
Titration with EDTA	99.0 - 105.0 %	103.3 %
Cell Culture Test	Pass	Pass
Insect Cell Test	Pass	Pass
Plant Cell Culture Test	Pass	Pass

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

Sigma-Aldrich

W3018
Rec. 4/3/23

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

Certificate of Analysis

Product Name:
Magnesium sulfate heptahydrate - ReagentPlus®, ≥99.0%

Product Number:	**M1880**
Batch Number:	**SLCN3621**
Brand:	SIGALD
CAS Number:	10034-99-8
MDL Number:	MFCD00149785
Formula:	MgO4S · 7H2O
Formula Weight:	246.47 g/mol
Quality Release Date:	04 MAY 2022
Recommended Retest Date:	DEC 2024

$MgSO_4 \cdot 7H_2O$

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Crystals
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity) 100 mg/mL, H2O	Clear	Clear
Titration with EDTA	≥ 99.0 %	100.6 %

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

Sigma-Aldrich.

W 3020
Rec. 4/3/23
12

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

Certificate of Analysis

Product Name:
Calcium nitrate tetrahydrate - ACS reagent, 99%

$Ca(NO_3)_2 \cdot 4H_2O$

Product Number:	**237124**
Batch Number:	**MKCS4612**
Brand:	SIGALD
CAS Number:	13477-34-4
MDL Number:	MFCD00149604
Formula:	CaN2O6 · 4H2O
Formula Weight:	236.15 g/mol
Quality Release Date:	27 FEB 2023
Recommended Retest Date:	SEP 2025

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Conforms to Requirements	Crystals
Granular Powder or Crystals or Flakes		
Complexometric EDTA	99.0 - 103.0 %	99.6 %
X-Ray Diffraction	Conforms to Structure	Conforms
pH	5.0 - 7.0	5.4
c = 5%, Water, 25 Deg C		
Insoluble Matter	≤ 0.005 %	< 0.001 %
c = 10%, Water		
Chloride Content	≤ 0.005 %	< 0.005 %
Nitrite (NO2)	≤ 0.001 %	< 0.001 %
Sulfate (SO4)	≤ 0.002 %	< 0.002 %
Barium	≤ 0.005 %	< 0.001 %
Heavy Metals	≤ 5.0 ppm	< 1.0 ppm
by ICP-OES		
Iron (Fe)	≤ 5.0 ppm	< 1.0 ppm
Magnesium (Mg)	≤ 0.05 %	< 0.01 %
Potassium (K)	≤ 0.005 %	< 0.001 %
Sodium (Na)	≤ 0.01 %	< 0.01 %
Strontium (Sr)	≤ 0.05 %	< 0.01 %
Meets ACS Requirements	Current ACS Specification	Conforms

WJ3020

Sigma-Aldrich.

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

Certificate of Analysis

Product Number: 237124
Batch Number: MKCS4612

Test	Specification	Result
Recommended Retest Period 3 Years	_____	_____

Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich.

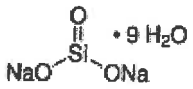
W 3022
Rec. 4/5/23 12

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

Certificate of Analysis

Product Name:
Sodium metasilicate nonahydrate - ≥98%

Product Number:	**S4392**
Batch Number:	**SLCM8472**
Brand:	ALDRICH
CAS Number:	13517-24-3
MDL Number:	MFCD00149175
Formula:	Na2O3Si · 9H2O
Formula Weight:	284.20 g/mol
Quality Release Date:	14 MAR 2022
Recommended Retest Date:	MAR 2025



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity) 50 mg/ml, H2O	Clear	Clear
Titration with HCl	≥ 98 %	100 %

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

Certificate Of Analysis

W 3058

Rec. 10/19/23 12

Date of Release: 1/27/2023

Name: **Sodium Carbonate, Anhydrous**
Powder, ACS

Item No: **SX0395 All Sizes**
Lot / Batch No: **2023012653**
Country of Origin: **India**

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

Joe Schoellkopff

Quality Control Manager

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

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

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

Form number: 00005624CA, Rev. 2.0

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

N 3062
NEC on 10/30/23
12

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Ion Chromatography Solution
Catalog Number:	300-CAL-A
Lot Number:	T2-MEB716667
Matrix:	H2O
Value / Analyte(s):	150 µg/mL ea: Sulfate, 100 µg/mL ea: Bromide, 50 µg/mL ea: o-Phosphate as P, 30 µg/mL ea: Chloride, Nitrite as N, 25 µg/mL ea: Nitrate as N, 20 µg/mL ea: Fluoride

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Bromide, Br	100.0 ± 0.5 µg/mL	Chloride, Cl	30.00 ± 0.13 µg/mL
Fluoride, F-	20.00 ± 0.06 µg/mL	Nitrate as N, NNO3-	25.00 ± 0.09 µg/mL
Nitrite as N, NNO2-	30.00 ± 0.15 µg/mL	o-Phosphate as P, PPO4	50.00 ± 0.30 µg/mL
Sulfate, SO4	150.0 ± 0.9 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	060925
Cl	Fajans	999c	999c
Cl	Calculated		See Sec. 4.2
F-	IC Assay	3183	140203
NNO3-	IC Assay	3185	050517
NNO2-	IC Assay		traceable to 40h
PPO4	IC Assay	3186	170606
SO4	IC Assay	3181	080603

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

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

5.0 CHROMATOGRAM

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2022

- 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

- March 17, 2027

- 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 Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

W3063
rec. 11/16/23 12

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

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

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

Assay Information:

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

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

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

5.0 CHROMATOGRAM

N/A

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 10, 2023

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

11.2 Lot Expiration Date

- August 10, 2028

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

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

11.3 Period of Validity

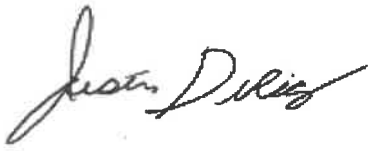
- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor



Certificate Approved By:

Nicholas Plymale
Custom VSM Coordinator

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

W2862
AP : 07/13/21

Certificate of Analysis

Date of Release: 10/24/2019

Name: Sodium carbonate anhydrous

Grade: Meets ACS Specifications. Meets Reagent Specifications for testing USP/NF monographs.

Item No: SX0395-3

Lot No.: 20A225205

Country of Origin: USA

Characteristic	Requirement	Results
Assay (calculated on dried substance)	Min. 99.5 %	100.1 %
Color	White	White
Form	Powder	Powder
Heavy metals (ICP-OES)	Max. 5 ppm	< 5 ppm
Insoluble matter	Max. 0.01 %	< 0.01 %
Loss on heating (285°C)	Max. 1.0 %	< 1.0 %
Sulphur compounds (as SO4)	Max. 0.003 %	< 0.003 %
Cl (Chloride)	Max. 0.001 %	< 0.001 %
PO4 (Phosphate)	Max. 0.001 %	< 0.001 %
SiO2 (Silica)	Max. 0.005 %	< 0.005 %
Ca (Calcium)	Max. 0.03 %	0.005 %
Fe (Iron)	Max. 5 ppm	< 5 ppm
K (Potassium)	Max. 0.005 %	< 0.005 %
Mg (Magnesium)	Max. 0.005 %	< 0.005 %

Joe Schoellkopff

Quality Control Manager

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

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

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

Form number: 00005624CA, Rev. 2.0

Certificate of Analysis

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

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

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

Catalog Number	P217	Quality Test / Release Date	09/03/2020
Lot Number	198947		
Description	POTASSIUM CHLORIDE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Sep/2025
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	White crystals
ASSAY	%	Inclusive Between 99.0 - 100.5	99.7
BARIUM (Ba)	PASS/FAIL	= P.T. (ABOUT 0.001%)	P.T. (ABOUT 0.001%)
BROMIDE	%	<= 0.01	<0.01
CALCIUM	%	<= 0.002	<0.002
CHLORATE & NITRATE	%	<= 0.003	<0.001
HEAVY METALS (as Pb)	ppm	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.005	<0.005
IODIDE	%	<= 0.002	<0.002
IRON (Fe)	ppm	<= 2	<1
MAGNESIUM	%	<= 0.001	<0.0005
PH 5% SOLUTION @ 25 DEG C		Inclusive Between 5.4 - 8.6	6.0
PHOSPHATE (PO4)	ppm	<= 5	<5
SODIUM (Na)	%	<= 0.005	<0.005
SULFATE (SO4)	%	<= 0.001	<0.001

Julian Burton

Julian Burton - Quality Control Manager – Fair Lawn

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

ThermoFisher SCIENTIFIC

Certificate of Analysis

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

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

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Catalog Number	P243	Quality Test / Release Date	06/19/2020
Lot Number	201089		
Description	POTASSIUM HYDROGEN PHTHALATE,ACIDIMETRIC STANDARD, A.C.S.		
Country of Origin	Spain	Suggested Retest Date	Jun/2025
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	WHITE CRYSTALS
ASSAY POTASSIUM HYDROGEN PHTHALATE	%	Inclusive Between 99.95 - 100.05	100.03
CHLORINE COMPOUNDS	%	<= 0.003	<0.003
HEAVY METALS (as Pb)	ppm	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.005	<0.005
IRON (Fe)	ppm	<= 5	<5
PH OF 0.05M SOLUTION		Inclusive Between 4.00 - 4.02	4.00
SODIUM (Na)	%	<= 0.005	<0.005
SULFUR COMPOUNDS	%	<= 0.002	<0.002%
TRACEABLE TO NIST	SOD CARBONATE	= LOT 351a	351a
TRACEABLE TO NIST KHP STD	POT. ACID PHTHALATE	= LOT 84L	84L

Julian Burton

Julian Burton - Quality Control Manager – Fair Lawn

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

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

M5493 - M5508
Rad on 4/14/23
MG

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 2

Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
Iodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Sulfate (SO_4)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory,Research,or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

James T 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

M 6041-46
MS

avantor™ | J.T.Baker®

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

Certificate of Analysis

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

>>> Continued on page 2 >>>

For questions on this Certificate of Analysis please contact Technical Services at 855 282 6867 or +1 610 386 1700

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

avantor™ | J.T.Baker®

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

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

For Laboratory,Research,or Manufacturing Use

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

James T Ethier
Jamie Ethier
Vice President Global Quality

RICCA CHEMICAL COMPANY®

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

W3107
38

Certificate of Analysis

Buffer, Reference Standard, pH 4.00 ± 0.01 at 25°C (Color Coded Red)

Lot Number: 4403F90 **Product Number:** 1501

Manufacture Date: MAR 09, 2024
Expiration Date: FEB 2026

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

°C	0	5	10	15	20	25	30	35	40	45	50
pH	4.00	4.00	4.00	4.00	4.00	4.00	4.01	4.02	4.03	4.04	4.06

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Acid Phthalate	877-24-7	Buffer
Preservative	Proprietary	Commercial
Red Dye	Proprietary	Purified

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

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	4.000	0.02	185i, 186-I-g, 186-II-g

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1501-2.5	10 L Cubitainer®	24 months
1501-32	1 L natural poly	24 months
1501-5	20 L Cubitainer®	24 months

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

Paul Brandon (03/09/2024)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

Certificate of Analysis

POTASSIUM HYDROGEN PHTHALATE

Material: **N983**

Grade: **ACS GRADE**

Batch Number: **24A1956910**

Chemical Formula: HOOCC6H4COOK
Molecular Weight: 204.22
CAS #: 877-24-7
Appearance:

White crystals.

Manufacture Date: 01/19/2022
Reassay Date: 01/18/2025

Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Assay (dried basis)	99.95 - 100.05 %	99.97 %	PASS
Chlorine Compounds	<= 0.003 %	<0.003 %	PASS
Heavy Metals (as Pb)	<= 5 ppm	<5 ppm	PASS
Insoluble Matter	<= 0.005 %	0.003 %	PASS
Iron	<= 5 ppm	<5 ppm	PASS
pH (0.05M, Water) @25C	4.00 - 4.02	4.00	PASS
Sodium	<= 0.005 %	<0.005 %	PASS
Sulfur Compounds	<= 0.002 %	<0.002 %	PASS

Spec Set: N983ACS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.

Certificate of Analysis

ThermoFisher SCIENTIFIC

Certificate of Analysis

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

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

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

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

Harout Sahagian - Quality Control Manager - Fair Lawn

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

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. P4873
QUOTE NO.
COC Number 2042605

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: EA Engineering
ADDRESS: 333 West Washington St
CITY Syracuse STATE: NY ZIP: 13202
ATTENTION: Jim Hayward
PHONE: 315 431 4610 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Former Scotia Navy Depot
PROJECT NO.: LOCATION: Scotia NY
PROJECT MANAGER: Jim Hayward
e-mail: jhayward@eaest.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: northeastap@eaest.com PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: STD TAT DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only) ☒ Level 4 (QC + Full Raw Data)
- ☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
- ☐ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B ☐ Other _____
- ☐ EDD FORMAT _____

ANALYSIS

1 VOC 8260D
2 TOC SM 5310B
3 MEE RSK 175
4 ALK SM2320
5 Anion SW9056A
6
7
8
9

PRESERVATIVES

1	2	3	4	5	6	7	8	9
A	C	C	E	E				

COMMENTS

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9	COMMENTS
1.	FSND-RB-4-20241114	GW		X	11/14/24	1200	8	X	X	X	X	X					
2.	FSND-MW-30-20241114	"		"	"	1055	8	X	X	X	X	X					
3.	TB-2	—		—		1205	2	X									Lab prepared
4.	FSND-MW-19-20241114	GW		X		0945											
5.	FSND-MW-32-20241114	"		"	"	1120											
6.	FSND-MW-34-20241114	"		"	"	1025											
7.	FSND-GEP-3-20241114	"		"	"	0925											
8.	FSND-MW-28-20241114	"		"	"	0930											
9.	FSND-MW-29-20241114	"		"	"	0830											
10.																	

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

	RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	Emily	11/14/24 1300	
2.		11-15-24 920	
3.			

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.0°C
Comments: Refrigerant

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other _____
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4873 EAEN05
Client Name : EA Engineering Science &
Client Contact : Jim Hayward
Invoice Name : EA Engineering Science &
Invoice Contact : Jim Hayward

Order Date : 11/15/2024 10:19:00 AM
Project Name : Scotia, NY - Annual Testing
Receive DateTime : 11/15/2024 9:20:00 AM
Purchase Order :

Project Mgr :
Report Type : Level 4
EDD Type : NYSDEC EDD V-4
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4873-01	FSND-RB-4-20241114	Water	11/14/2024	12:00					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4873-02	FSND-MW-30-20241114	Water	11/14/2024	10:55					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4873-03	TB-2	Water	11/14/2024	12:05					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4873-04	FSND-MW-19-20241114	Water	11/14/2024	09:45					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4873-05	FSND-MW-32-20241114	Water	11/14/2024	11:20					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4873-06	FSND-MW-34-20241114	Water	11/14/2024	10:25					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4873-07	FSND-GEP-3-20241114	Water	11/14/2024	09:25					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4873-08	FSND-MW-28-20241114	Water	11/14/2024	09:30					

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4873-09	FSND-MW-29-20241114	Water	11/14/2024	08:30					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days

Relinquished By :
Date / Time : 11-15-24 1155

Received By :
Date / Time : 11-15-24 11:55

Storage Area : VOA Refridgerator Room