

Cover Page

Order ID : Q2425

Project ID : AS Jenks School

Client : Kleinfelder

Lab Sample Number

Q2425-01
Q2425-02
Q2425-03

Client Sample Number

COMP-1
COMP-2
COMP-3

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

Signature : _____

Date: 6/28/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following “ Results Qualifiers” are used:

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2425

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: KETAN PATEL

Date: 06/28/2025

LAB CHRONICLE

OrderID:	Q2425	OrderDate:	6/25/2025 2:03:00 PM
Client:	Kleinfelder	Project:	AS Jenks School
Contact:	Mark Warchol	Location:	D51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2425-01	COMP-1	SOIL			06/24/25 09:05			06/25/25
			Ammonia	SM4500-NH3		06/26/25	06/27/25 11:35	
			Anions Group1	9056A			06/26/25 10:27	
			Hexavalent Chromium	7196A		06/26/25	06/26/25 12:17	
			Trivalent Chromium	6010D			06/27/25 18:19	
Q2425-02	COMP-2	SOIL			06/24/25 09:30			06/25/25
			Ammonia	SM4500-NH3		06/26/25	06/27/25 11:43	
			Anions Group1	9056A			06/26/25 11:32	
			Hexavalent Chromium	7196A		06/26/25	06/26/25 12:18	
			Trivalent Chromium	6010D			06/27/25 18:24	
Q2425-03	COMP-3	SOIL			06/24/25 09:45			06/25/25
			Ammonia	SM4500-NH3		06/26/25	06/27/25 11:43	
			Anions Group1	9056A			06/26/25 11:53	
			Hexavalent Chromium	7196A		06/26/25	06/26/25 12:19	
			Trivalent Chromium	6010D			06/27/25 19:03	



SAMPLE DATA

Report of Analysis

Client:	Kleinfelder	Date Collected:	06/24/25 09:05
Project:	AS Jenks School	Date Received:	06/25/25
Client Sample ID:	COMP-1	SDG No.:	Q2425
Lab Sample ID:	Q2425-01	Matrix:	SOIL
		% Solid:	76.9

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Ammonia as N	2.80	U	1	2.80	6.30	mg/Kg	06/26/25 10:45	06/27/25 11:35	SM 4500-NH3 B plus G-21
Chloride	6.20	J	1	4.50	15.5	mg/Kg		06/26/25 10:27	9056A
Fluoride	11.5		1	2.30	10.4	mg/Kg		06/26/25 10:27	9056A
Sulfate	19.5	J	1	11.4	77.7	mg/Kg		06/26/25 10:27	9056A
Hexavalent Chromium	0.090	U	1	0.090	0.52	mg/Kg	06/26/25 08:35	06/26/25 12:17	7196A
Trivalent Chromium	12.1		1	0.65	0.65	mg/Kg		06/27/25 18:19	6010D

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Kleinfelder	Date Collected:	06/24/25 09:30
Project:	AS Jenks School	Date Received:	06/25/25
Client Sample ID:	COMP-2	SDG No.:	Q2425
Lab Sample ID:	Q2425-02	Matrix:	SOIL
		% Solid:	79.7

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Ammonia as N	2.70	U	1	2.70	6.20	mg/Kg	06/26/25 10:45	06/27/25 11:43	SM 4500-NH3 B plus G-21
Chloride	9.40	J	1	4.30	14.9	mg/Kg		06/26/25 11:32	9056A
Fluoride	4.80	J	1	2.20	9.90	mg/Kg		06/26/25 11:32	9056A
Sulfate	21.8	J	1	10.9	74.4	mg/Kg		06/26/25 11:32	9056A
Hexavalent Chromium	0.086	U	1	0.086	0.49	mg/Kg	06/26/25 08:35	06/26/25 12:18	7196A
Trivalent Chromium	8.04		1	0.63	0.63	mg/Kg		06/27/25 18:24	6010D

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Kleinfelder	Date Collected:	06/24/25 09:45
Project:	AS Jenks School	Date Received:	06/25/25
Client Sample ID:	COMP-3	SDG No.:	Q2425
Lab Sample ID:	Q2425-03	Matrix:	SOIL
		% Solid:	82.6

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Ammonia as N	2.60	J	1	2.60	5.80	mg/Kg	06/26/25 10:45	06/27/25 11:43	SM 4500-NH3 B plus G-21
Chloride	36.6		1	4.20	14.5	mg/Kg		06/26/25 11:53	9056A
Fluoride	2.90	J	1	2.10	9.70	mg/Kg		06/26/25 11:53	9056A
Sulfate	17.6	J	1	10.6	72.6	mg/Kg		06/26/25 11:53	9056A
Hexavalent Chromium	0.083	U	1	0.083	0.47	mg/Kg	06/26/25 08:35	06/26/25 12:19	7196A
Trivalent Chromium	17.8		1	0.61	0.61	mg/Kg		06/27/25 19:03	6010D

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits



QC RESULT SUMMARY

Initial and Continuing Calibration Verification

Client: Kleinfelder

SDG No.: Q2425

Project: AS Jenks School

RunNo.: LB136282

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	9.7	10	97	90-110	06/23/2025
Chloride	mg/L	2.9	3	97	90-110	06/23/2025
Fluoride	mg/L	2	2	100	90-110	06/23/2025
Nitrite	mg/L	2.9	3	97	90-110	06/23/2025
Nitrate	mg/L	2.4	2.5	96	90-110	06/23/2025
Sulfate	mg/L	14.3	15	95	90-110	06/23/2025
Orthophosphate as P	mg/L	4.9	5	98	90-110	06/23/2025
Sample ID: CCV1						
Bromide	mg/L	10.1	10	101	90-110	06/26/2025
Chloride	mg/L	3	3	100	90-110	06/26/2025
Fluoride	mg/L	2	2	100	90-110	06/26/2025
Nitrite	mg/L	3	3	100	90-110	06/26/2025
Nitrate	mg/L	2.5	2.5	100	90-110	06/26/2025
Sulfate	mg/L	14.9	15	99	90-110	06/26/2025
Orthophosphate as P	mg/L	5.1	5	102	90-110	06/26/2025
Sample ID: CCV2						
Bromide	mg/L	10.1	10	101	90-110	06/26/2025
Chloride	mg/L	3	3	100	90-110	06/26/2025
Fluoride	mg/L	2.1	2	105	90-110	06/26/2025
Nitrite	mg/L	3	3	100	90-110	06/26/2025
Nitrate	mg/L	2.5	2.5	100	90-110	06/26/2025
Sulfate	mg/L	15	15	100	90-110	06/26/2025
Orthophosphate as P	mg/L	5.1	5	102	90-110	06/26/2025

Initial and Continuing Calibration Verification

Client: Kleinfelder

SDG No.: Q2425

Project: AS Jenks School

RunNo.: LB136293

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Hexavalent Chromium	mg/L	0.492	0.5	98	90-110	06/26/2025
Sample ID: CCV1 Hexavalent Chromium	mg/L	0.497	0.5	99	90-110	06/26/2025
Sample ID: CCV2 Hexavalent Chromium	mg/L	0.493	0.5	99	90-110	06/26/2025
Sample ID: CCV3 Hexavalent Chromium	mg/L	0.500	0.5	100	90-110	06/26/2025

Initial and Continuing Calibration Verification

Client: Kleinfelder

SDG No.: Q2425

Project: AS Jenks School

RunNo.: LB136312

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Ammonia as N	mg/L	0.99	1	99	90-110	06/27/2025
Sample ID: CCV1 Ammonia as N	mg/L	0.98	1	98	90-110	06/27/2025
Sample ID: CCV2 Ammonia as N	mg/L	1	1	100	90-110	06/27/2025
Sample ID: CCV3 Ammonia as N	mg/L	1	1	100	90-110	06/27/2025

Initial and Continuing Calibration Blank Summary

Client: Kleinfelder

SDG No.: Q2425

Project: AS Jenks School

RunNo.: LB136282

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/23/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/23/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/23/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/23/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/23/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/23/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/23/2025
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/26/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/26/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/26/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/26/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/26/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/26/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/26/2025
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/26/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/26/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/26/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/26/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/26/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/26/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/26/2025

Initial and Continuing Calibration Blank Summary

Client: Kleinfelder

SDG No.: Q2425

Project: AS Jenks School

RunNo.: LB136293

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	06/26/2025
Sample ID: CCB1 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	06/26/2025
Sample ID: CCB2 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	06/26/2025
Sample ID: CCB3 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	06/26/2025

Initial and Continuing Calibration Blank Summary

Client: Kleinfelder

SDG No.: Q2425

Project: AS Jenks School

RunNo.: LB136312

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	06/27/2025
Sample ID: CCB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	06/27/2025
Sample ID: CCB2 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	06/27/2025
Sample ID: CCB3 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	06/27/2025

Preparation Blank Summary

Client: Kleinfelder

SDG No.: Q2425

Project: AS Jenks School

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB136282BLS							
Bromide	mg/Kg	< 20.0000	20.0000	U	7	40	06/26/2025
Chloride	mg/Kg	< 6.0000	6.0000	U	3.5	12	06/26/2025
Fluoride	mg/Kg	< 4.0000	4.0000	U	1.8	8	06/26/2025
Nitrite	mg/Kg	< 6.0000	6.0000	U	1.5	12	06/26/2025
Nitrate	mg/Kg	< 5.0000	5.0000	U	1.8	10	06/26/2025
Sulfate	mg/Kg	< 30.0000	30.0000	U	8.8	60	06/26/2025
Orthophosphate as P	mg/Kg	< 10.0000	10.0000	U	6.7	20	06/26/2025
Sample ID: PB168617BL							
Hexavalent Chromium	mg/Kg	< 0.2000	0.2000	U	0.07	0.4	06/26/2025
Sample ID: PB168620BL							
Ammonia as N	mg/Kg	< 2.5000	2.5000	U	2.2	5	06/27/2025

Matrix Spike Summary

Client:	Kleinfelder	SDG No.:	Q2425
Project:	AS Jenks School	Sample ID:	Q2416-01
Client ID:	MH-G/HMS	Percent Solids for Spike Sample:	89.7

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	1420		0.078	U	1430	40	99		06/26/2025

Matrix Spike Summary

Client:	Kleinfelder	SDG No.:	Q2425
Project:	AS Jenks School	Sample ID:	Q2416-01
Client ID:	MH-G/HMS	Percent Solids for Spike Sample:	89.7

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	85-115	42.7		0.078	U	44.6	2	96		06/26/2025

Matrix Spike Summary

Client:	Kleinfelder	SDG No.:	Q2425
Project:	AS Jenks School	Sample ID:	Q2416-01
Client ID:	MH-G/HMS	Percent Solids for Spike Sample:	89.7

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	36.9		0.078	U	44.6	2	83		06/26/2025

Matrix Spike Summary

Client:	Kleinfelder	SDG No.:	Q2425
Project:	AS Jenks School	Sample ID:	Q2425-01
Client ID:	COMP-1MS	Percent Solids for Spike Sample:	76.9

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/Kg	75-125	63.5		2.80	U	62.5	1	102		06/27/2025
Bromide	mg/Kg	80-120	254		9.10	U	260	1	98		06/26/2025
Chloride	mg/Kg	80-120	81.6		6.20	J	77.3	1	98		06/26/2025
Fluoride	mg/Kg	80-120	54.5		11.5		51.5	1	83		06/26/2025
Nitrite	mg/Kg	80-120	75.6		2.00	U	77.3	1	98		06/26/2025
Nitrate	mg/Kg	80-120	62.4		2.30	U	64.4	1	97		06/26/2025
Sulfate	mg/Kg	80-120	386		19.5	J	390	1	94		06/26/2025
Orthophosphate as P	mg/Kg	80-120	97.0		9.70	J	130	1	67	*	06/26/2025

Matrix Spike Summary

Client:	Kleinfelder	SDG No.:	Q2425
Project:	AS Jenks School	Sample ID:	Q2425-01
Client ID:	COMP-1MSD	Percent Solids for Spike Sample:	76.9

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/Kg	75-125	62.9		2.80	U	63.1	1	100		06/27/2025
Bromide	mg/Kg	80-120	257		9.10	U	260	1	99		06/26/2025
Chloride	mg/Kg	80-120	81.5		6.20	J	78	1	97		06/26/2025
Fluoride	mg/Kg	80-120	55.0		11.5		52	1	84		06/26/2025
Nitrite	mg/Kg	80-120	76.5		2.00	U	78	1	98		06/26/2025
Nitrate	mg/Kg	80-120	63.0		2.30	U	65	1	97		06/26/2025
Sulfate	mg/Kg	80-120	386		19.5	J	390	1	94		06/26/2025
Orthophosphate as P	mg/Kg	80-120	118		9.70	J	130	1	83		06/26/2025

Duplicate Sample Summary

Client:	Kleinfelder	SDG No.:	Q2425
Project:	AS Jenks School	Sample ID:	Q2416-01
Client ID:	MH-G/HDUP	Percent Solids for Spike Sample:	89.7

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	+/-20	0.078	U	0.078	U	1	0		06/26/2025

Duplicate Sample Summary

Client: Kleinfelder Project: AS Jenks School Client ID: COMP-1DUP	SDG No.: Q2425 Sample ID: Q2425-01 Percent Solids for Spike Sample: 76.9
--	---

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ammonia as N	mg/Kg	+/-20	2.80	U	2.80	U	1	0		06/27/2025

Duplicate Sample Summary

Client: Kleinfelder Project: AS Jenks School Client ID: COMP-1MSD	SDG No.: Q2425 Sample ID: Q2425-01 Percent Solids for Spike Sample: 76.9
--	---

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Chloride	mg/Kg	+/-15	81.6		81.5		1	0		06/26/2025
Sulfate	mg/Kg	+/-15	386		386		1	0		06/26/2025
Bromide	mg/Kg	+/-15	254		257		1	1		06/26/2025
Fluoride	mg/Kg	+/-15	54.5		55.0		1	1		06/26/2025
Nitrate	mg/Kg	+/-15	62.4		63.0		1	1		06/26/2025
Nitrite	mg/Kg	+/-15	75.6		76.5		1	1		06/26/2025
Orthophosphate as P	mg/Kg	+/-15	97.0		118		1	20		06/26/2025
Ammonia as N	mg/Kg	+/-20	63.5		62.9		1	1		06/27/2025

Laboratory Control Sample Summary

Client: Kleinfelder

SDG No.: Q2425

Project: AS Jenks School

Run No.: LB136282

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136282BSS							
Bromide	mg/Kg	200	203		102	1	90-110	06/26/2025
Chloride	mg/Kg	60	59.8		100	1	90-110	06/26/2025
Fluoride	mg/Kg	40	41.0		102	1	90-110	06/26/2025
Nitrite	mg/Kg	60	60.2		100	1	90-110	06/26/2025
Nitrate	mg/Kg	50	49.0		98	1	90-110	06/26/2025
Sulfate	mg/Kg	300	299		100	1	90-110	06/26/2025
Orthophosphate as P	mg/Kg	100	102		102	1	90-110	06/26/2025

Laboratory Control Sample Summary

Client: Kleinfelder

SDG No.: Q2425

Project: AS Jenks School

Run No.: LB136293

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB168617BS							
Hexavalent Chromium	mg/Kg	20	20.1		101	1	84-110	06/26/2025

Laboratory Control Sample Summary

Client: Kleinfelder

SDG No.: Q2425

Project: AS Jenks School

Run No.: LB136312

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB168620BS							
Ammonia as N	mg/Kg	50	48.9		98	1	90-110	06/27/2025

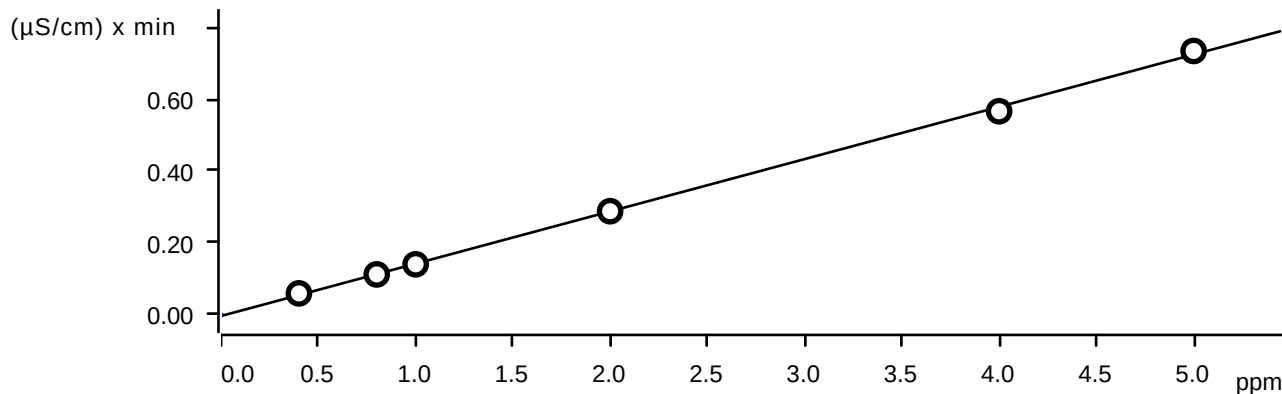


RAW DATA

Clear table

Instrument ID: IC-2 Analyst : Method: 300.0 / 9056A														
ident	concentrat ion F-	concentratio n CL-	concentrati on NO2	concentrati on BR-	True Value NO2	True Value BR-	True Value NO3	True Value HPO4	concentratio n HPO4	concentrati on SO4	file name	date time	Initial wt/ Final	Analyst
STD1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	IC1-062325	6/23/2025 15:17	10	RM/IZ
STD2	0.4310	0.6340	0.6430	2.1270	0.6340	2.1270	0.5340	1.0520	1.0520	3.2340	IC1-062325	6/23/2025 15:38	10	RM/IZ
STD3	0.7950	1.1950	1.1990	3.9780	1.1990	3.9780	1.9350	2.5510	1.9350	6.0370	IC1-062325	6/23/2025 16:00	10	RM/IZ
STD4	0.9880	1.4760	1.4700	4.9160	1.4700	4.9160	1.2300	5.0760	2.5510	7.4220	IC1-062325	6/23/2025 16:21	10	RM/IZ
STD5	2.0040	3.0170	3.0040	10.0450	3.0040	10.0450	2.5050	9.6020	5.0760	14.8650	IC1-062325	6/23/2025 16:43	10	RM/IZ
STD6	3.9150	5.9120	5.9140	19.7090	5.9140	19.7090	4.9250	12.7840	9.6020	29.4540	IC1-062325	6/23/2025 17:04	10	RM/IZ
STD7	5.0680	7.5660	7.5700	25.2250	7.5700	25.2250	6.3100		12.7840	37.4880	IC1-062325	6/23/2025 17:25	10	RM/IZ
ident	True Value F-	True Value CL-	True Value NO2	True Value BR-	True Value NO3	True Value HPO4	True Value SO4	Relative Error CL-	Relative Error NO2	Relative Error BR-	Relative Error NO3	Relative Error HPO4	Relative Error 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	0.6000	2.0000	0.5000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
STD3	0.8000	1.2000	1.2000	4.0000	1.2000	4.0000	1.0000	1.0000	1.0000	3.0000	6.0000	2.0000	3.0000	
STD4	1.0000	1.5000	1.5000	5.0000	1.5000	5.0000	1.2500	2.5000	2.0000	6.0000	7.5000	2.5000	6.0000	
STD5	2.0000	3.0000	3.0000	10.0000	3.0000	10.0000	2.5000	5.0000	2.5000	15.0000	30.0000	5.0000	15.0000	
STD6	4.0000	6.0000	6.0000	20.0000	6.0000	20.0000	5.0000	10.0000	5.0000	30.0000	37.0000	10.0000	30.0000	
STD7	5.0000	7.5000	7.5000	25.0000	7.5000	25.0000	6.2500	12.5000	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	7.7500	5.6667	7.1667	6.3500	6.8000	5.2000	7.8000							
STD2	-0.6250	-0.4167	-0.0833	-0.5500	-0.3000	-3.2500	0.6167							
STD3	-1.2000	-1.6000	-2.0000	-1.6800	-1.6000	2.0400	-1.0400							
STD4	0.2000	0.5667	0.1333	0.4500	0.2000	1.5200	-0.9000							
STD5	-2.1250	-1.4667	-1.4333	-1.4550	-1.5000	-3.9800	-1.8200							
STD6	1.3600	0.8800	0.9333	0.9000	0.9600	2.2720	1.3189							

Fluoride (Anions)



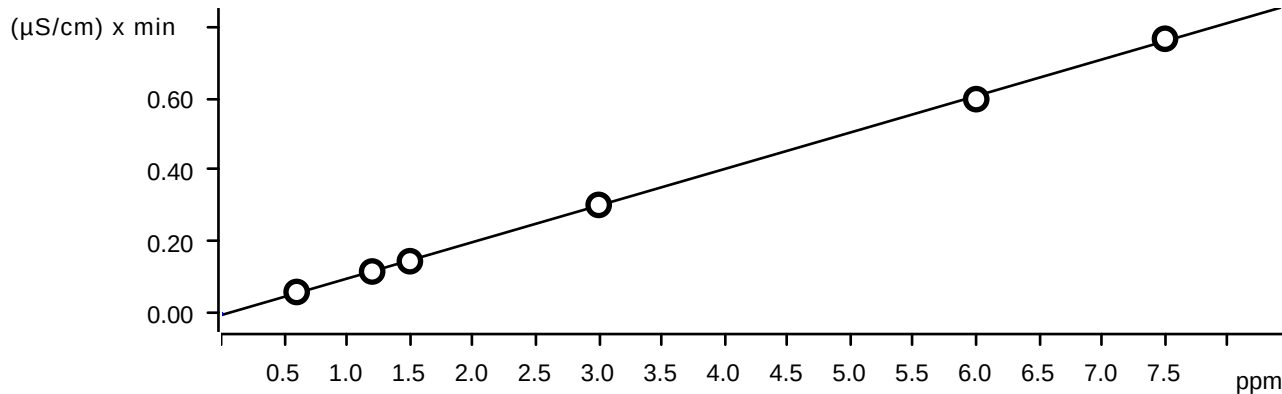
Function: $A = -4.55276E-3 + 0.0145788 \times Q$

Relative standard deviation 2.633289 %

Correlation coefficient 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)

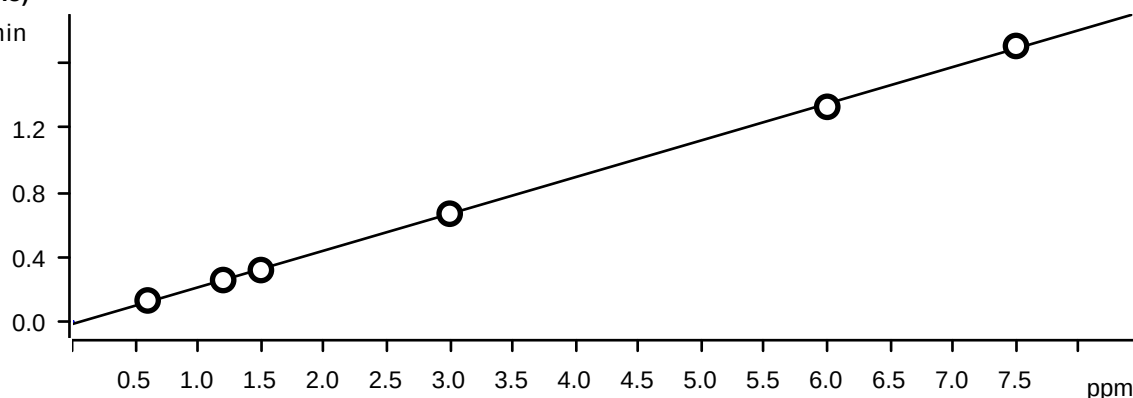


Function: $A = -4.66825E-3 + 0.0101843 \times Q$

Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0166933 + 0.0227623 \times Q$

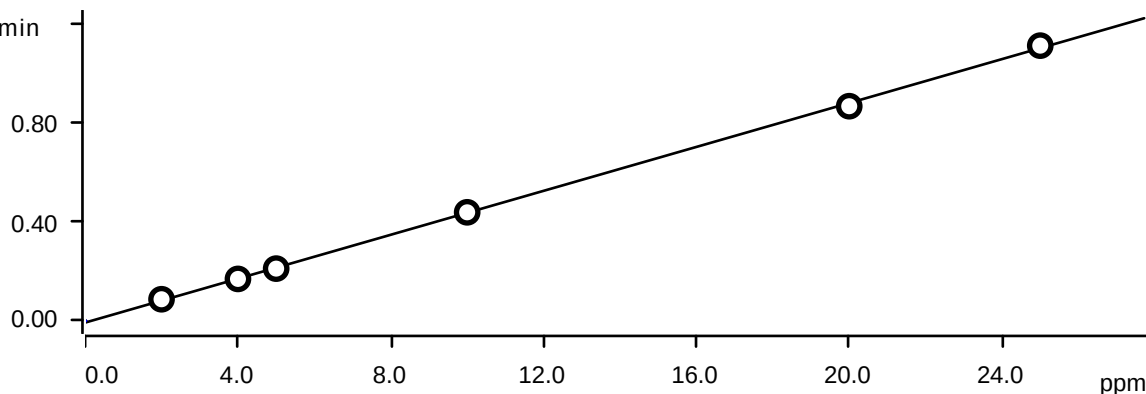
Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)

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



Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

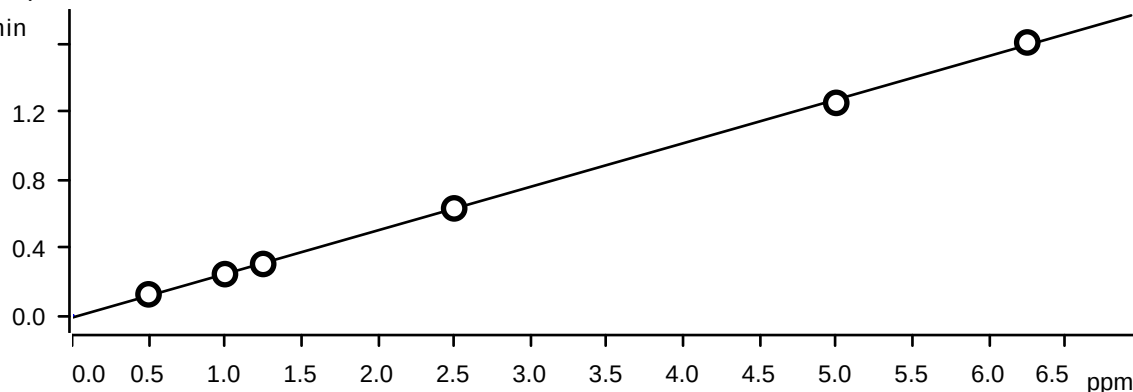
Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

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

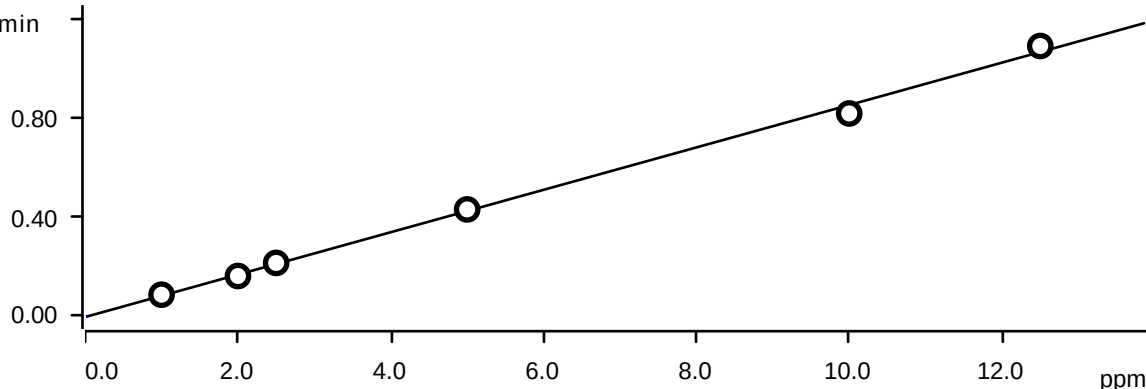


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

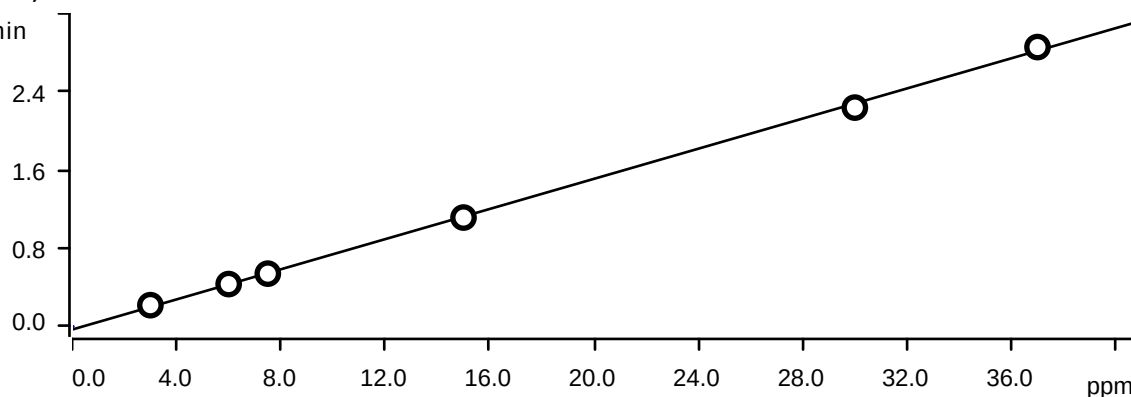
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

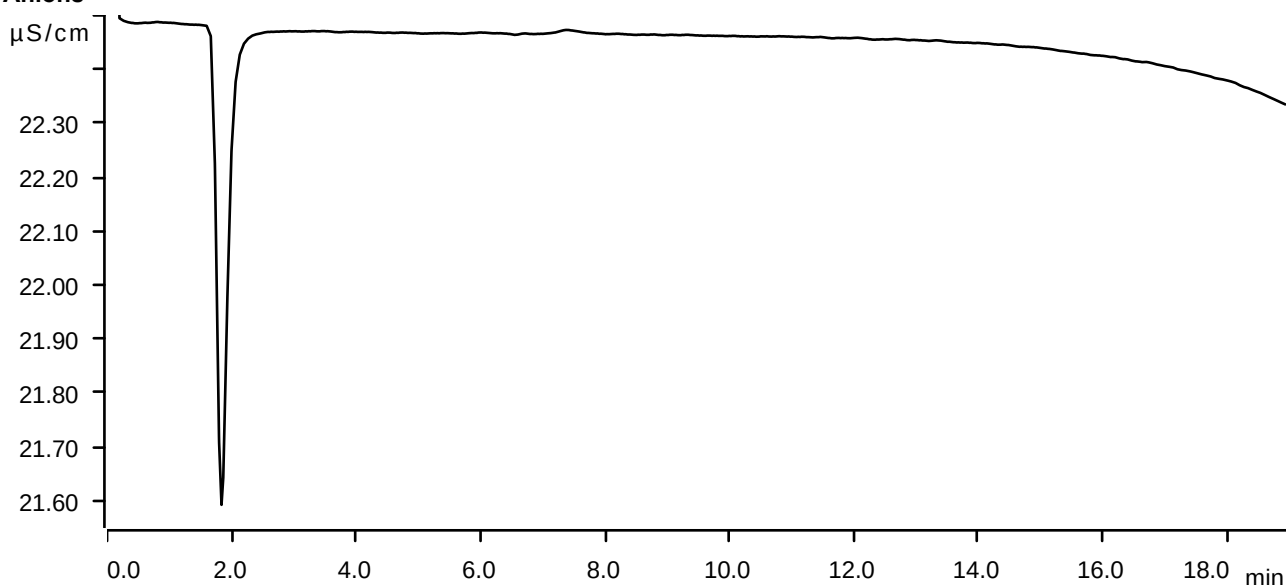
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

Sample data

Ident STD1
Sample type Standard 1
Determination start 2025-06-23 15:17:36 UTC-4
Method IC1-062325
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

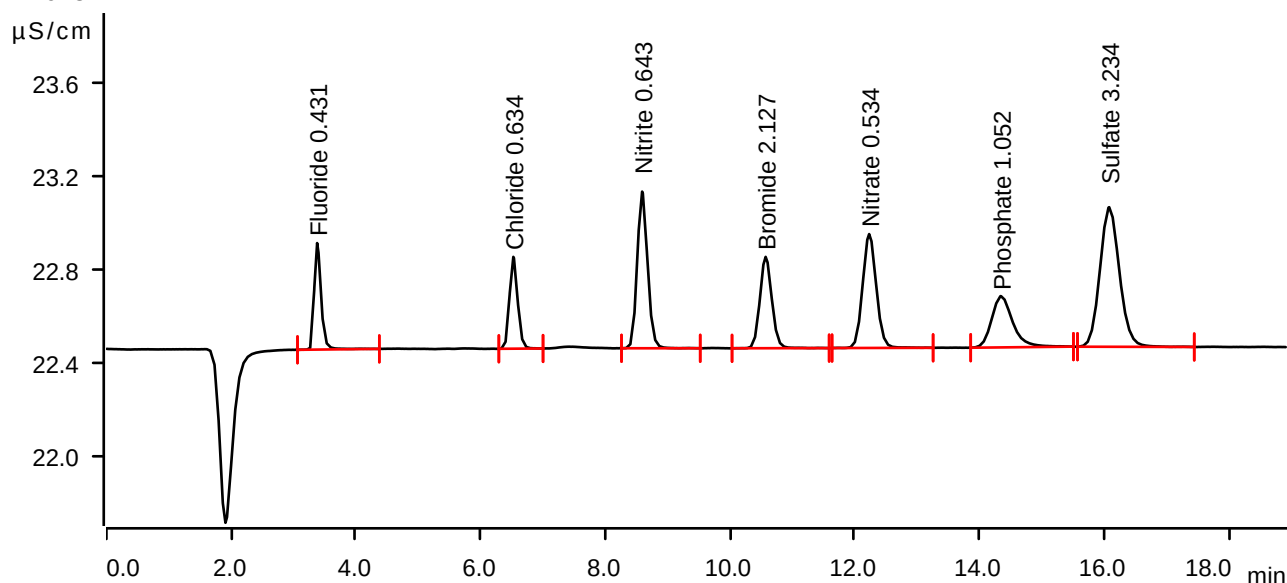
Anions

Sample data

Ident STD2
 Sample type Standard 2
 Determination start 2025-06-23 15:38:59 UTC-4
 Method IC1-062325
 Operator

Anions

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

Anions

Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.380	0.0584	0.457	0.431	Fluoride
2	6.525	0.0599	0.394	0.634	Chloride
3	8.590	0.1297	0.673	0.643	Nitrite
4	10.570	0.0870	0.392	2.127	Bromide
5	12.230	0.1239	0.489	0.534	Nitrate
6	14.343	0.0862	0.220	1.052	Phosphate
7	16.078	0.2176	0.600	3.234	Sulfate

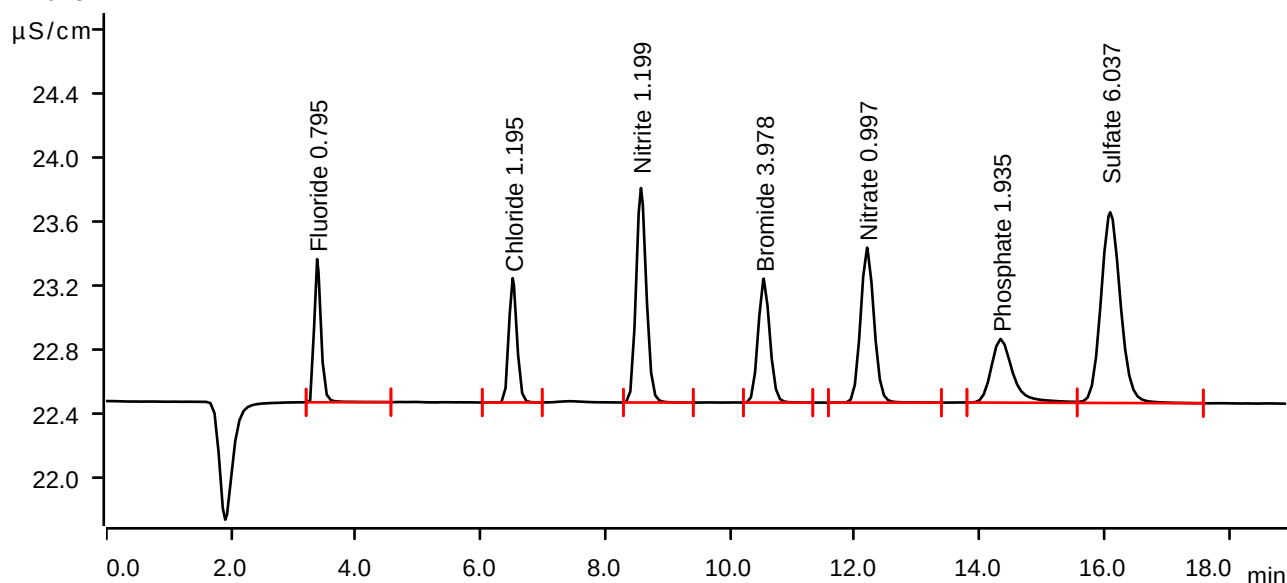
Sample data

Ident STD3
Sample type Standard 3
Determination start 2025-06-23 16:00:23 UTC-4
Method IC1-062325
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.380	0.1114	0.894	0.795	Fluoride
2	6.515	0.1170	0.776	1.195	Chloride
3	8.572	0.2561	1.340	1.199	Nitrite
4	10.540	0.1688	0.774	3.978	Bromide
5	12.197	0.2428	0.968	0.997	Nitrate
6	14.338	0.1616	0.398	1.935	Phosphate
7	16.095	0.4335	1.191	6.037	Sulfate

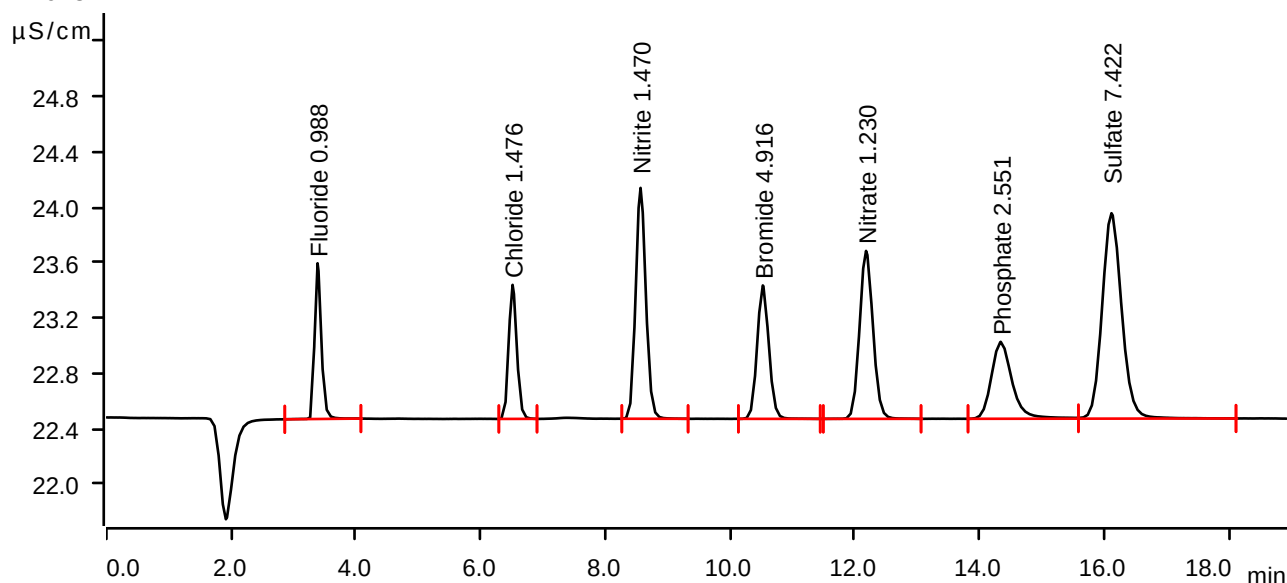
Sample data

Ident STD4
Sample type Standard 4
Determination start 2025-06-23 16:21:47 UTC-4
Method IC1-062325
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.387	0.1394	1.124	0.988	Fluoride
2	6.513	0.1456	0.968	1.476	Chloride
3	8.565	0.3180	1.668	1.470	Nitrite
4	10.525	0.2103	0.964	4.916	Bromide
5	12.180	0.3026	1.213	1.230	Nitrate
6	14.340	0.2142	0.555	2.551	Phosphate
7	16.115	0.5402	1.484	7.422	Sulfate

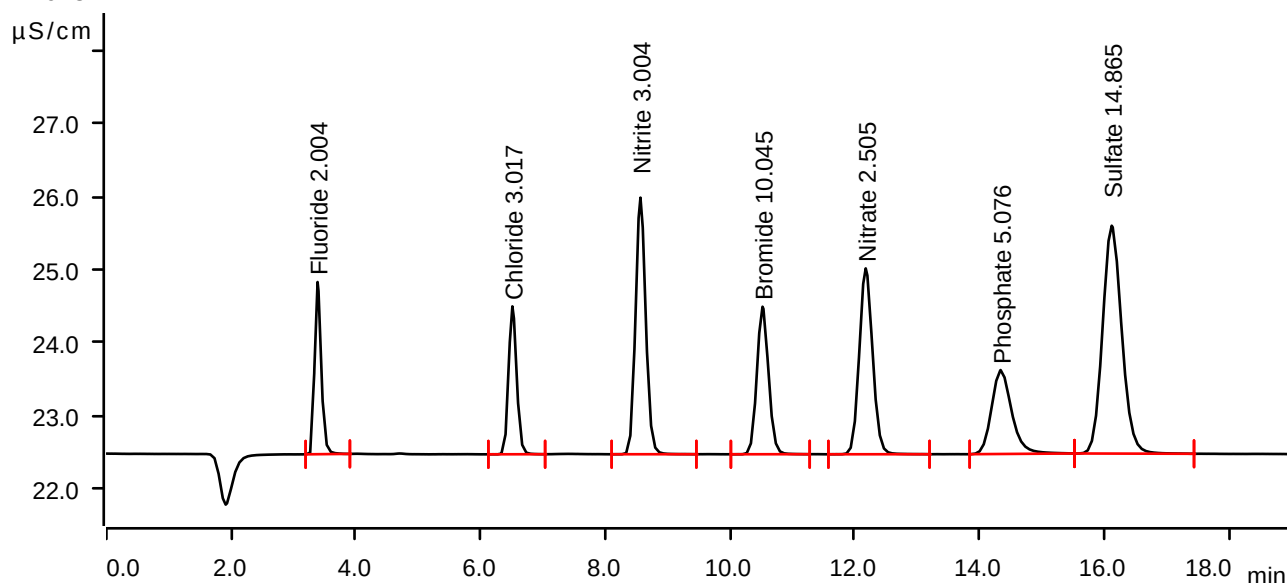
Sample data

Ident STD5
Sample type Standard 5
Determination start 2025-06-23 16:43:01 UTC-4
Method IC1-062325
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.387	0.2876	2.353	2.004	Fluoride
2	6.510	0.3026	2.021	3.017	Chloride
3	8.563	0.6671	3.507	3.004	Nitrite
4	10.520	0.4371	2.016	10.045	Bromide
5	12.175	0.6299	2.540	2.505	Nitrate
6	14.338	0.4297	1.146	5.076	Phosphate
7	16.118	1.1136	3.114	14.865	Sulfate

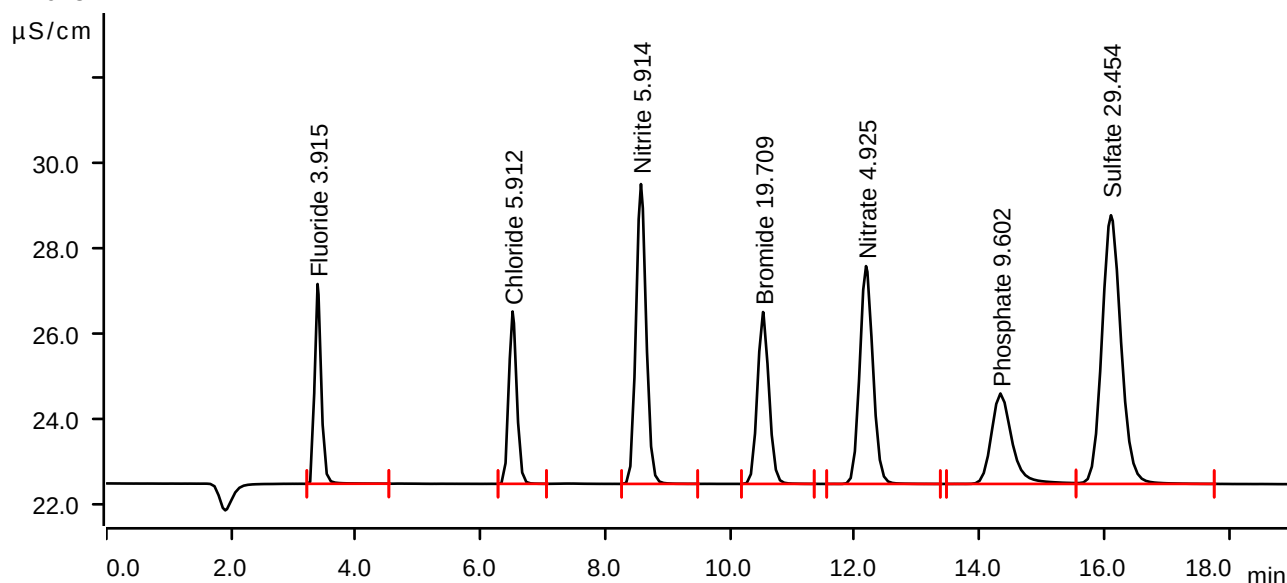
Sample data

Ident STD6
Sample type Standard 6
Determination start 2025-06-23 17:04:27 UTC-4
Method IC1-062325
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.387	0.5661	4.679	3.915	Fluoride
2	6.513	0.5975	4.037	5.912	Chloride
3	8.572	1.3294	7.024	5.914	Nitrite
4	10.528	0.8644	4.027	19.709	Bromide
5	12.180	1.2509	5.103	4.925	Nitrate
6	14.335	0.8161	2.118	9.602	Phosphate
7	16.107	2.2375	6.295	29.454	Sulfate

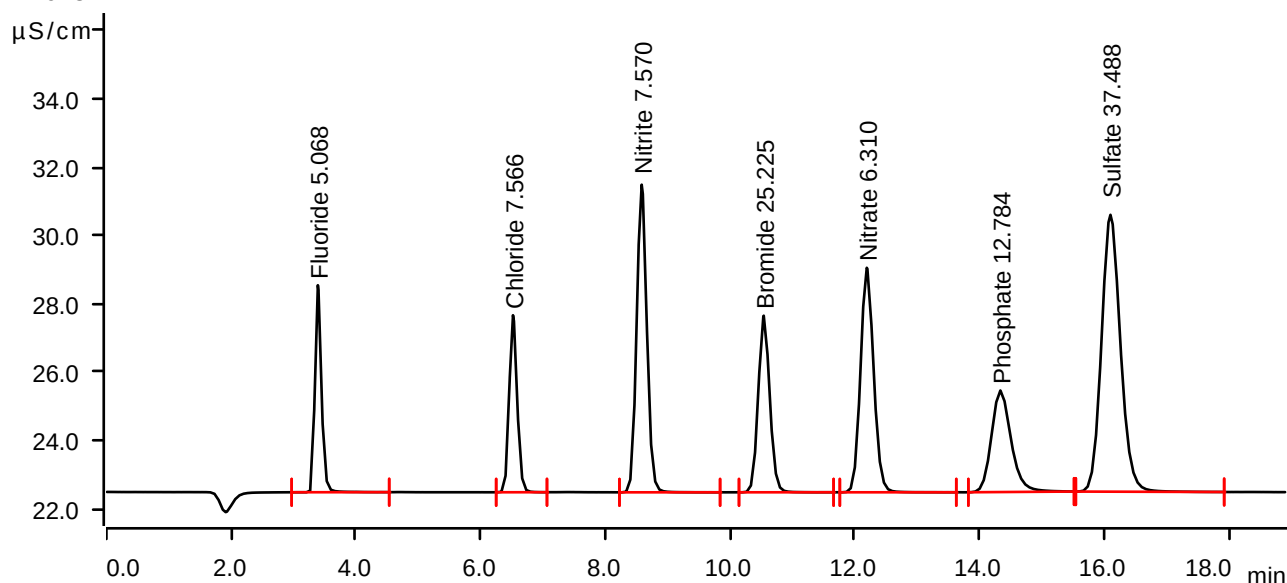
Sample data

Ident STD7
Sample type Standard 7
Determination start 2025-06-23 17:25:53 UTC-4
Method IC1-062325
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.392	0.7342	6.060	5.068	Fluoride
2	6.520	0.7659	5.183	7.566	Chloride
3	8.583	1.7064	9.009	7.570	Nitrite
4	10.540	1.1083	5.172	25.225	Bromide
5	12.192	1.6065	6.575	6.310	Nitrate
6	14.333	1.0878	2.972	12.784	Phosphate
7	16.098	2.8564	8.108	37.488	Sulfate

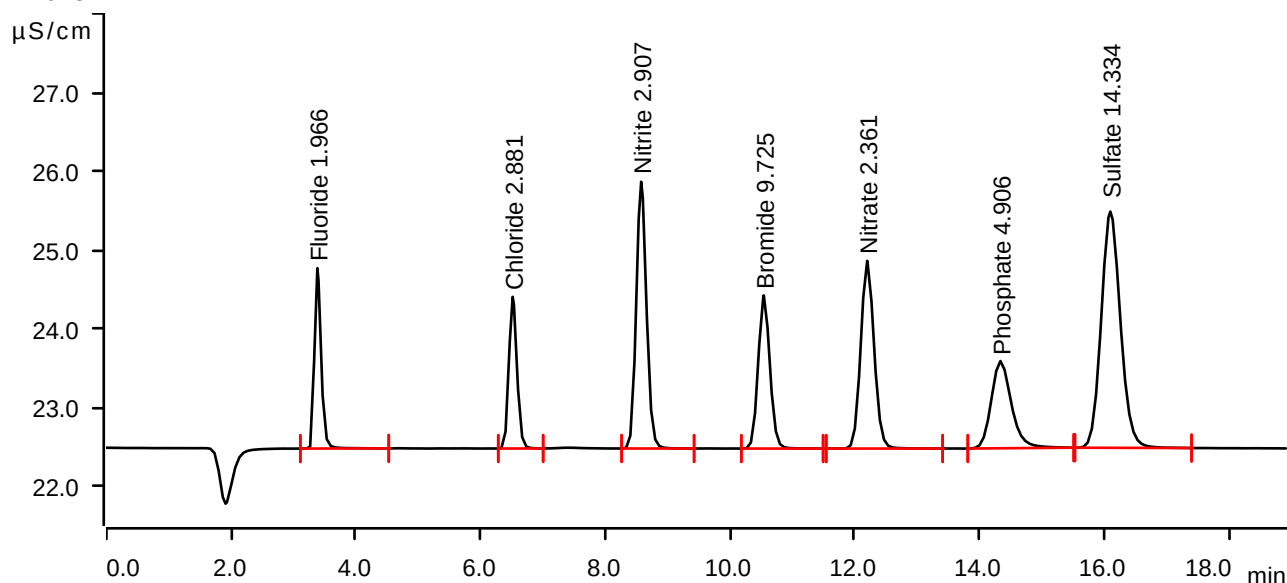
Sample data

Ident ICV
Sample type Check standard 1
Determination start 2025-06-23 17:47:21 UTC-4
Method IC1-062325
Operator

Anions

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

Anions



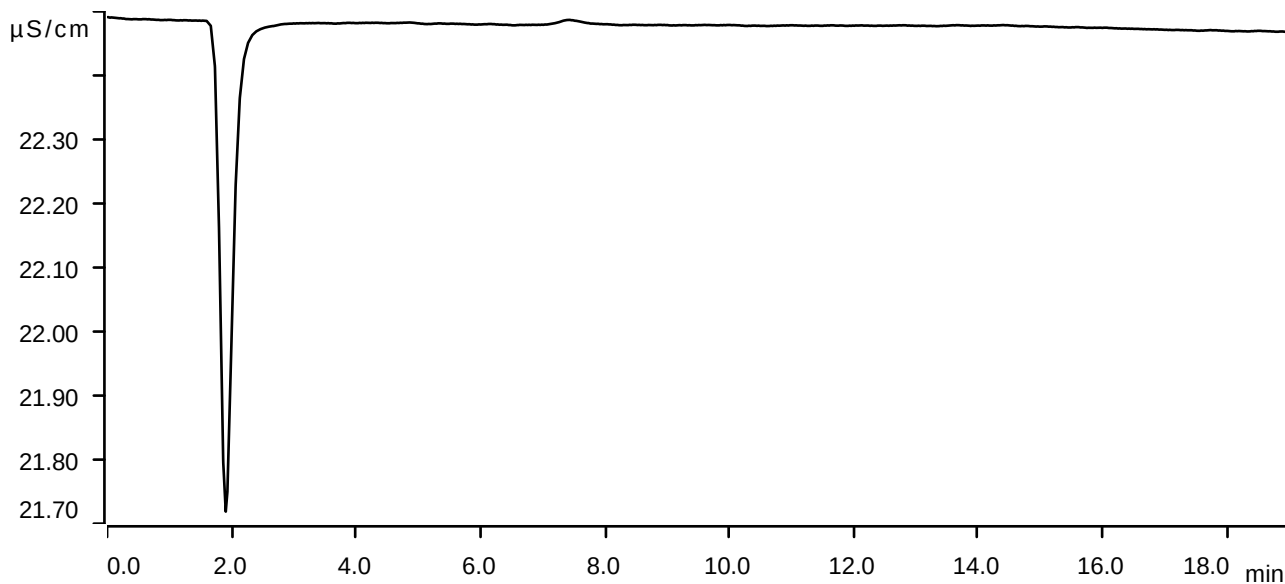
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.383	0.2821	2.288	1.966	Fluoride
2	6.515	0.2887	1.924	2.881	Chloride
3	8.575	0.6450	3.385	2.907	Nitrite
4	10.542	0.4229	1.943	9.725	Bromide
5	12.198	0.5928	2.382	2.361	Nitrate
6	14.335	0.4152	1.107	4.906	Phosphate
7	16.097	1.0727	2.998	14.334	Sulfate

Sample data

Ident ICB
Sample type Sample
Determination start 2025-06-23 18:08:49 UTC-4
Method IC1-062325
Operator

Anions

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

Anions

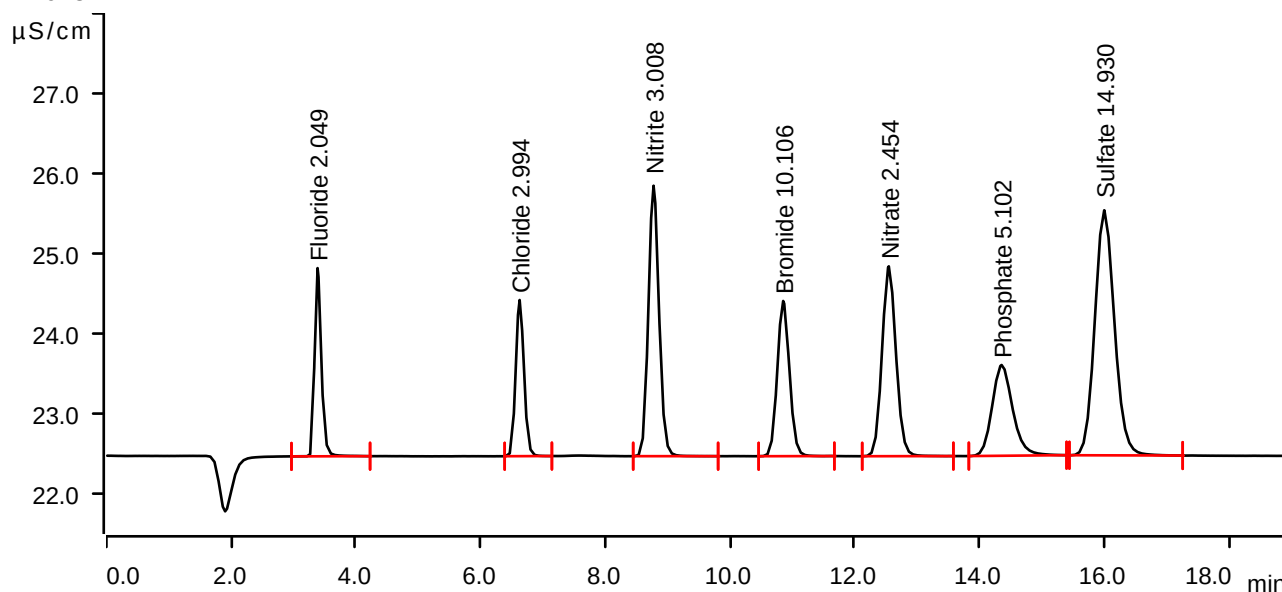
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-06-26 08:45:13 UTC-4
Method IC1-062325
Operator

Anions

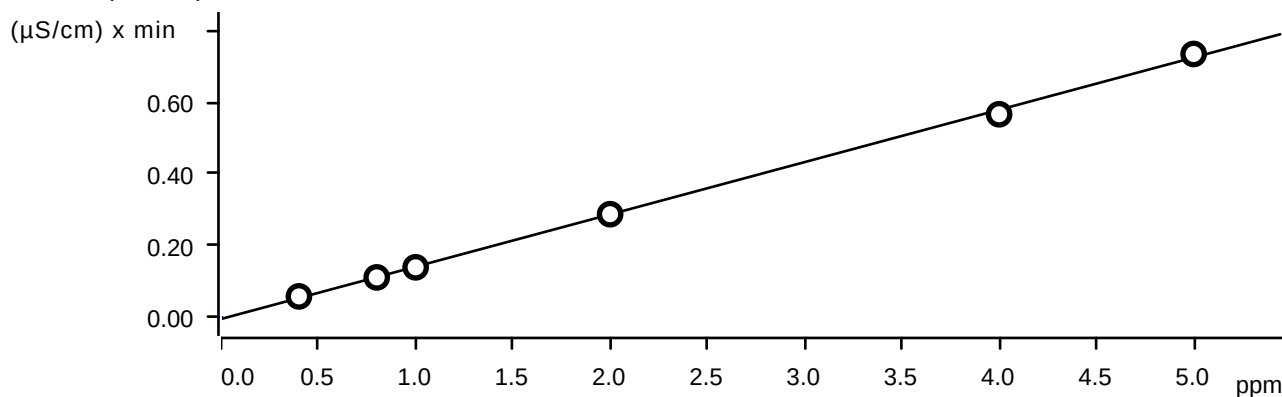
Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.39 MPa
Maximum pressure monitored yes
Temperature ----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

Anions



Peak number	Retention time	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	3.387	0.2942	2.351	2.049	Fluoride
2	6.627	0.3003	1.951	2.994	Chloride
3	8.773	0.6679	3.379	3.008	Nitrite
4	10.852	0.4398	1.939	10.106	Bromide
5	12.545	0.6168	2.372	2.454	Nitrate
6	14.353	0.4319	1.134	5.102	Phosphate
7	15.998	1.1186	3.062	14.930	Sulfate

Fluoride (Anions)

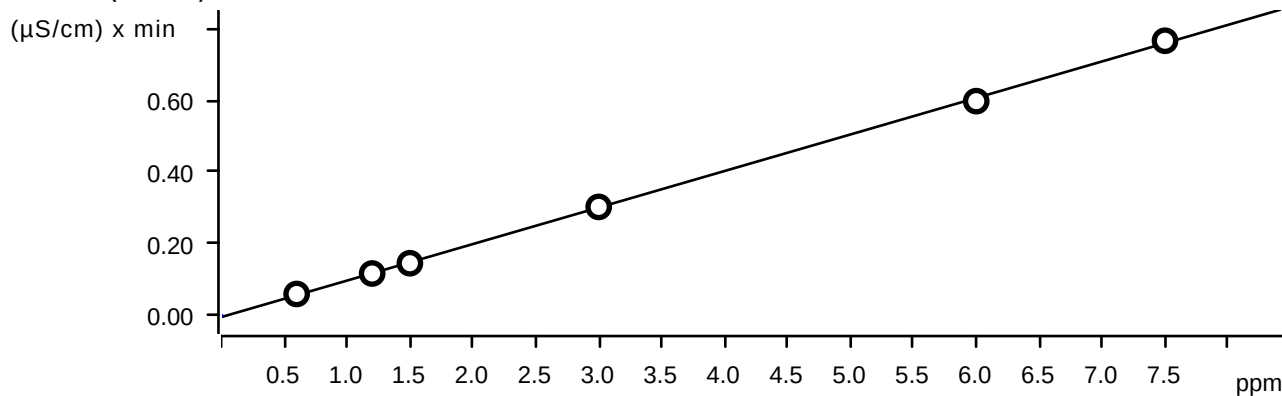
Function: $A = -4.55276E-3 + 0.0145788 \times Q$

Relative standard deviation 2.633289 %

Correlation coefficient 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)

Function: $A = -4.66825E-3 + 0.0101843 \times Q$

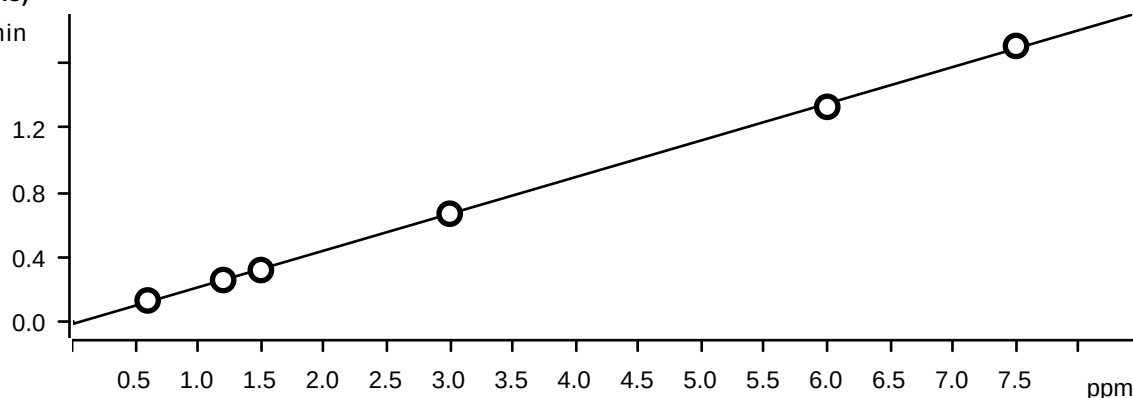
Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

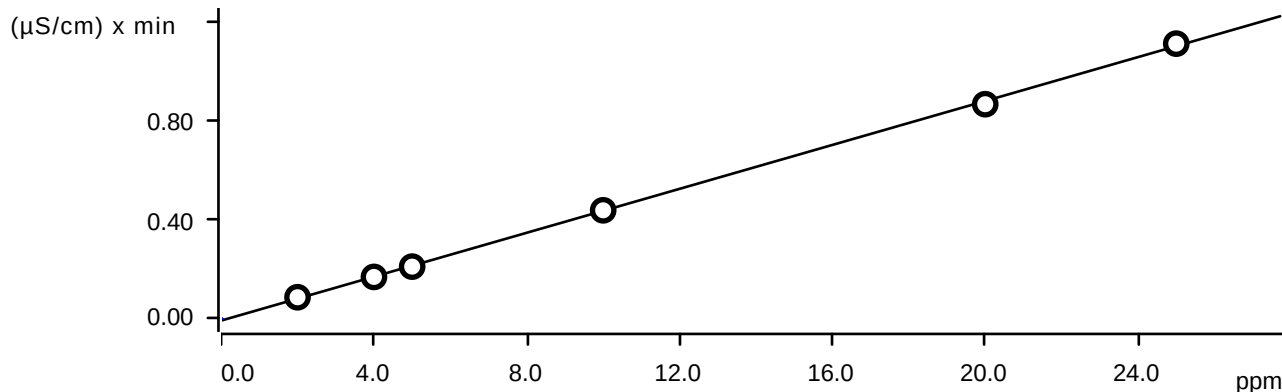
Function: $A = -0.0166933 + 0.0227623 \times Q$

Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)



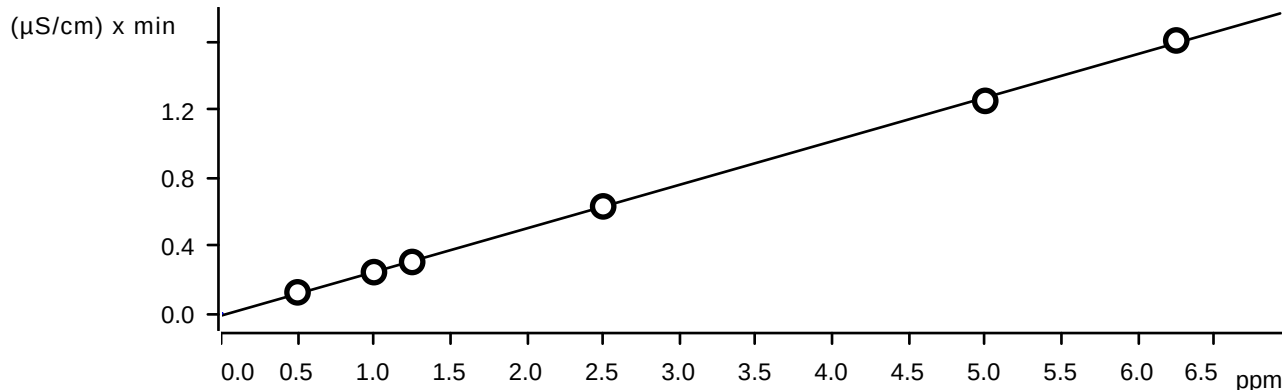
Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

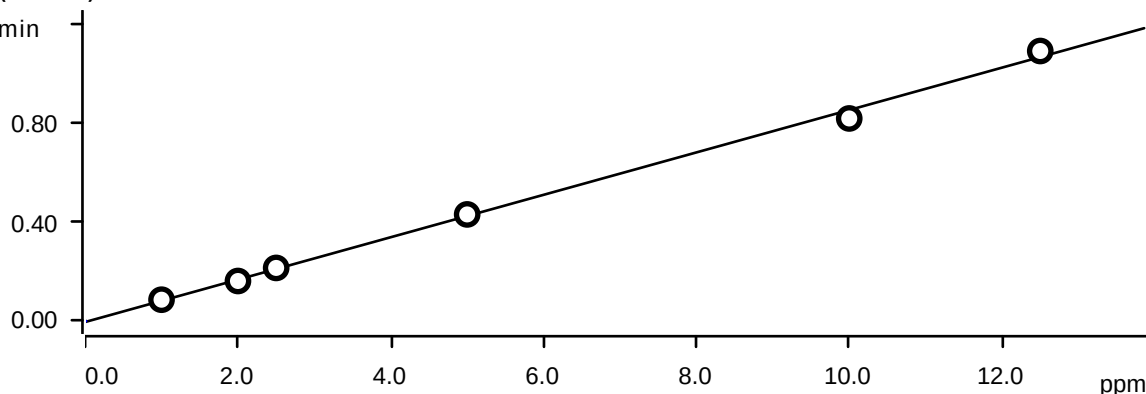


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

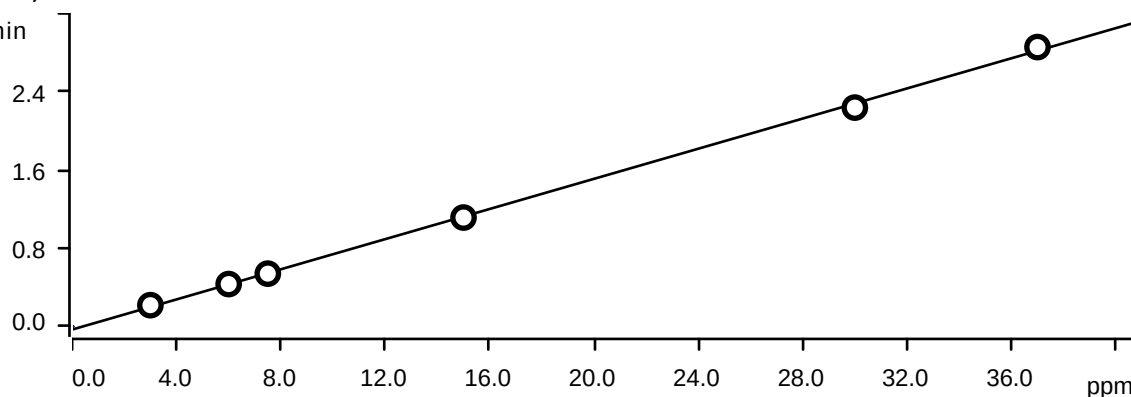
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

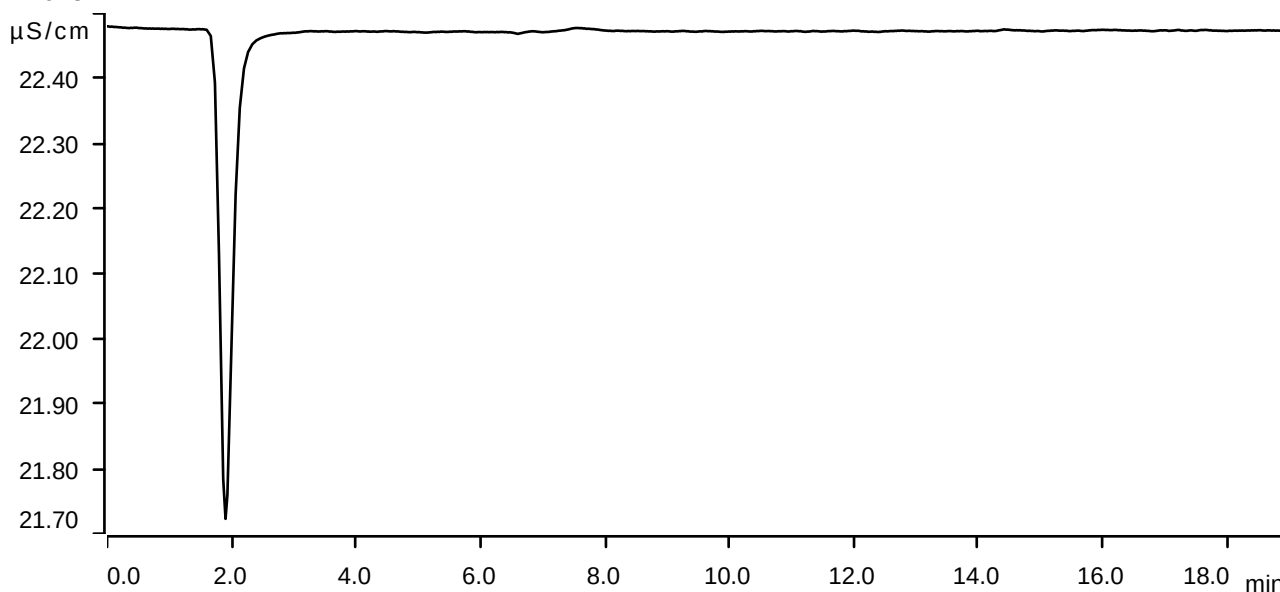
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

Sample data

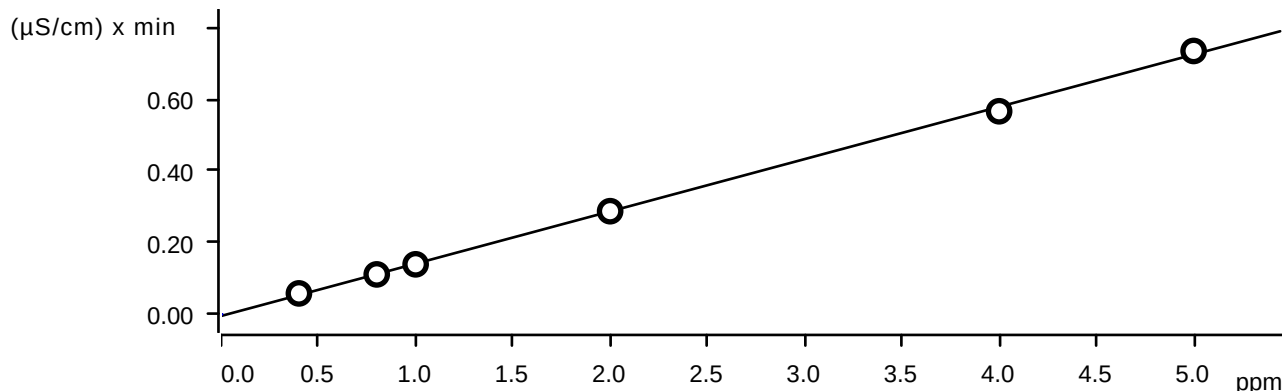
Ident CCB
Sample type Sample
Determination start 2025-06-26 09:06:43 UTC-4
Method IC1-062325
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.27 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions

Fluoride (Anions)



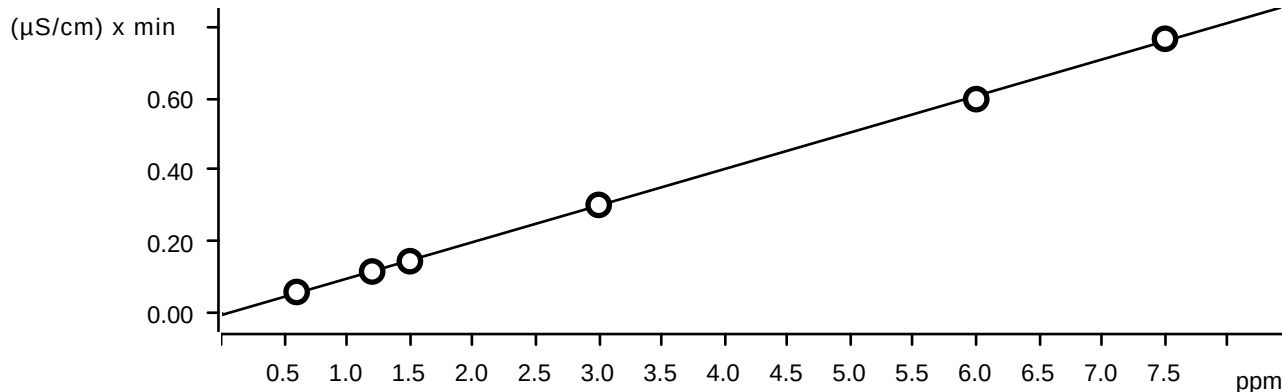
Function: $A = -4.55276E-3 + 0.0145788 \times Q$

Relative standard deviation 2.633289 %

Correlation coefficient 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)



Function: $A = -4.66825E-3 + 0.0101843 \times Q$

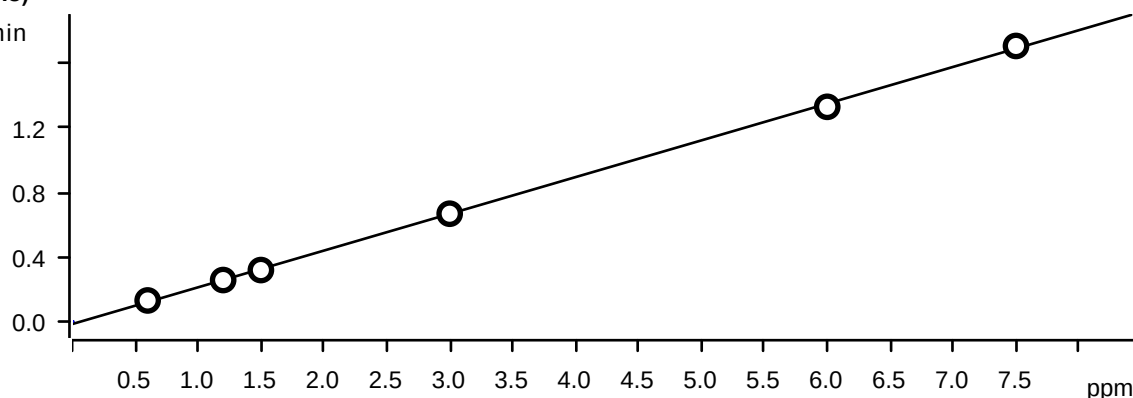
Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

Function: $A = -0.0166933 + 0.0227623 \times Q$

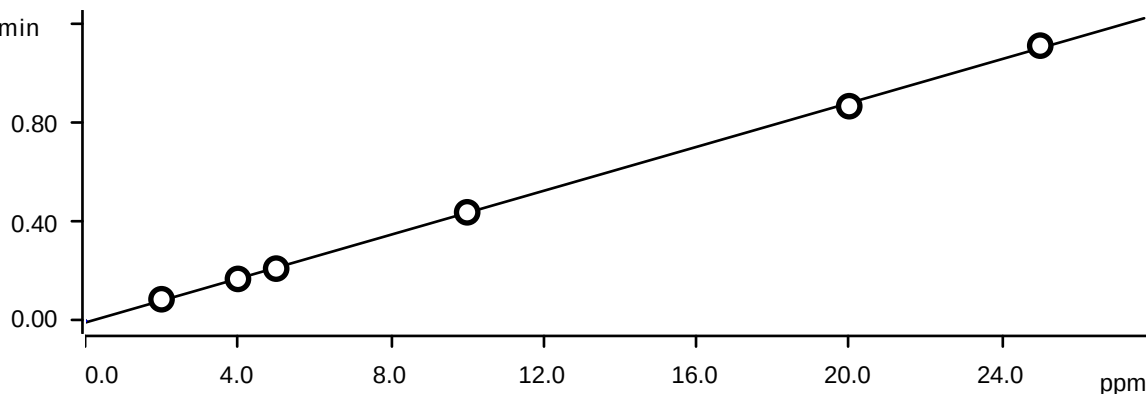
Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)

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



Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

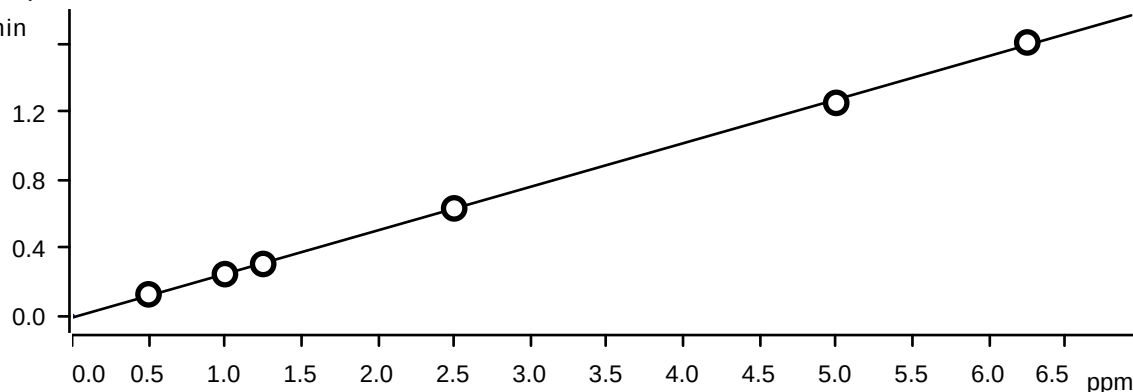
Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

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

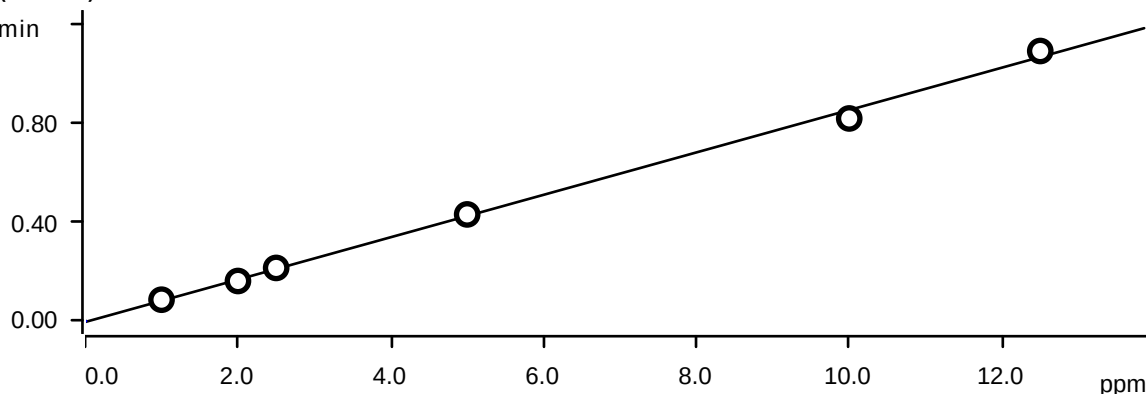


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

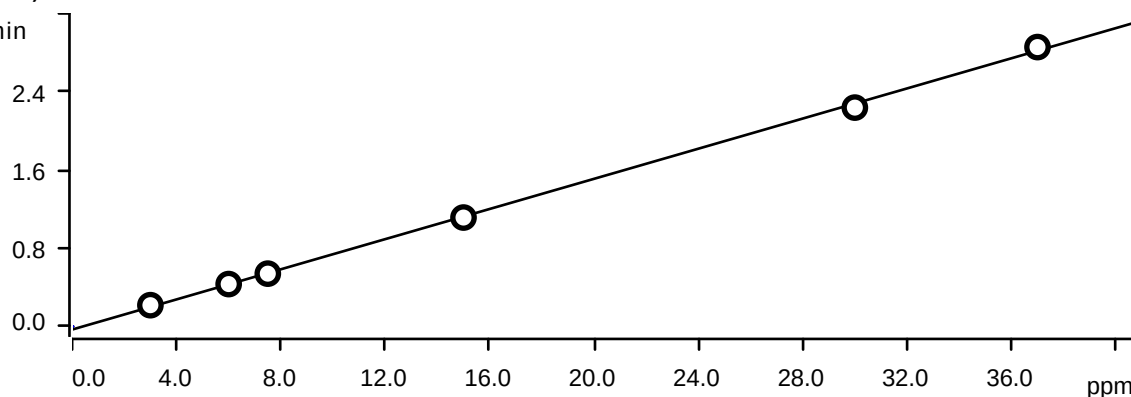
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

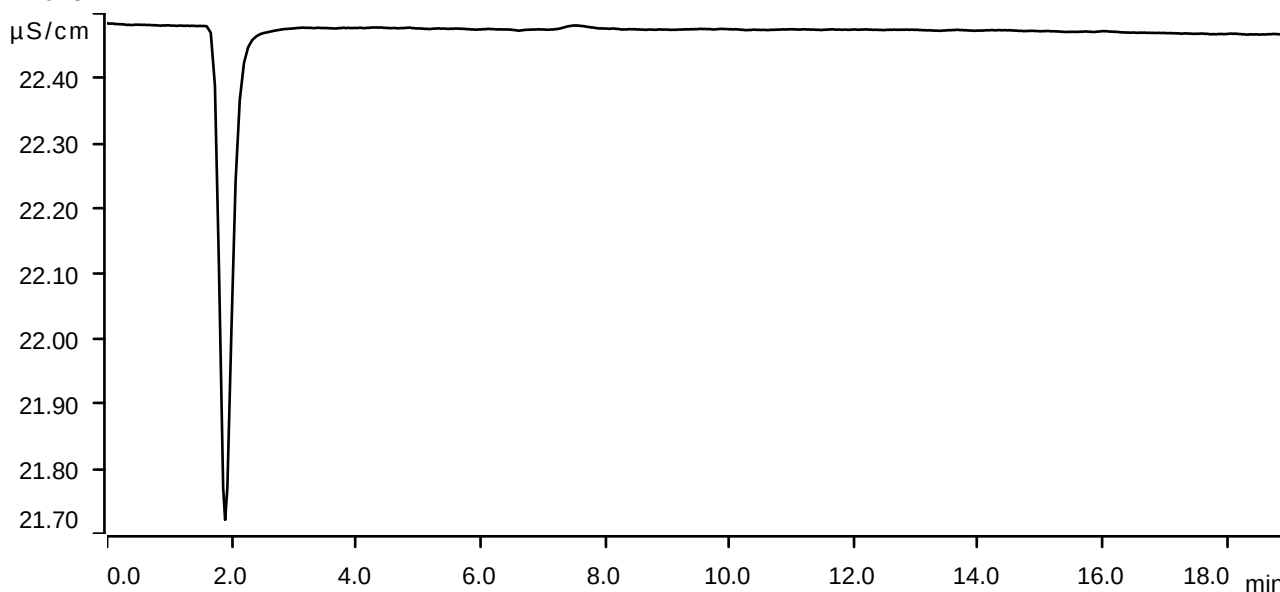
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

Sample data

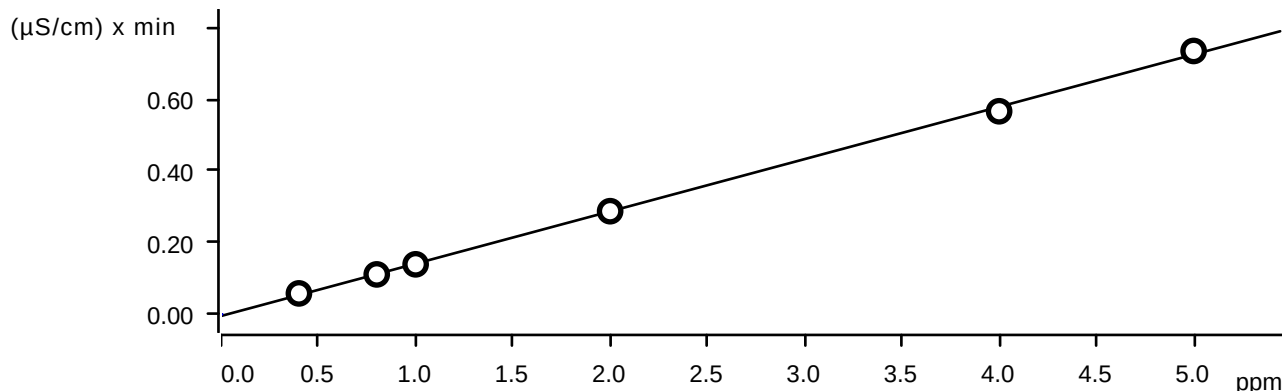
Ident LB136282BLS
Sample type Sample
Determination start 2025-06-26 09:28:13 UTC-4
Method IC1-062325
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.22 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions

Fluoride (Anions)



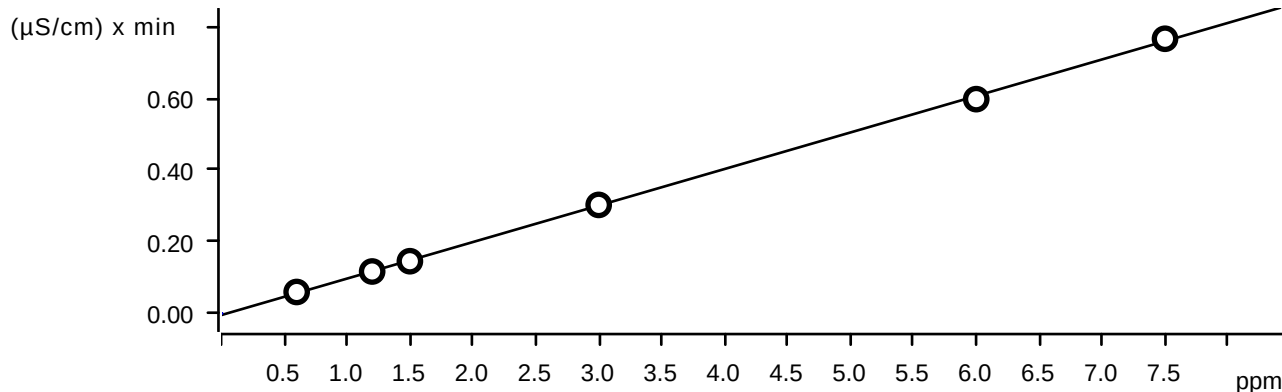
Function: $A = -4.55276E-3 + 0.0145788 \times Q$

Relative standard deviation 2.633289 %

Correlation coefficient 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)



Function: $A = -4.66825E-3 + 0.0101843 \times Q$

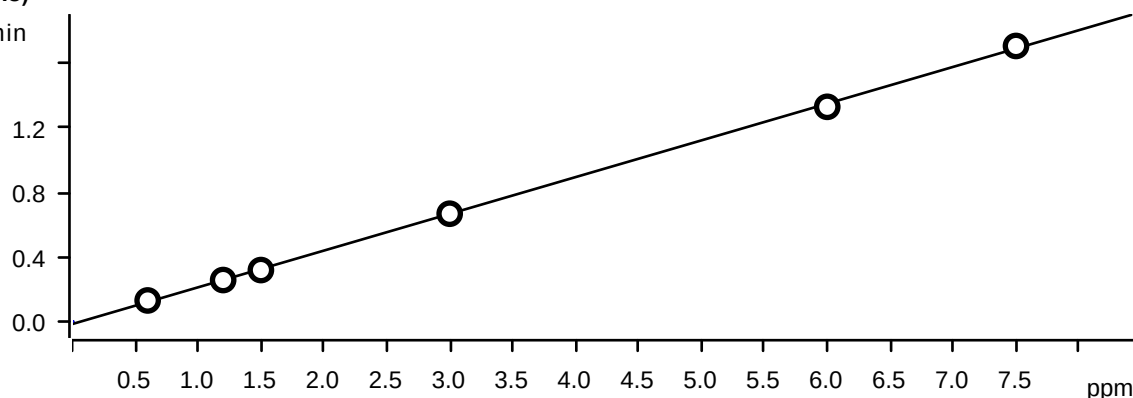
Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

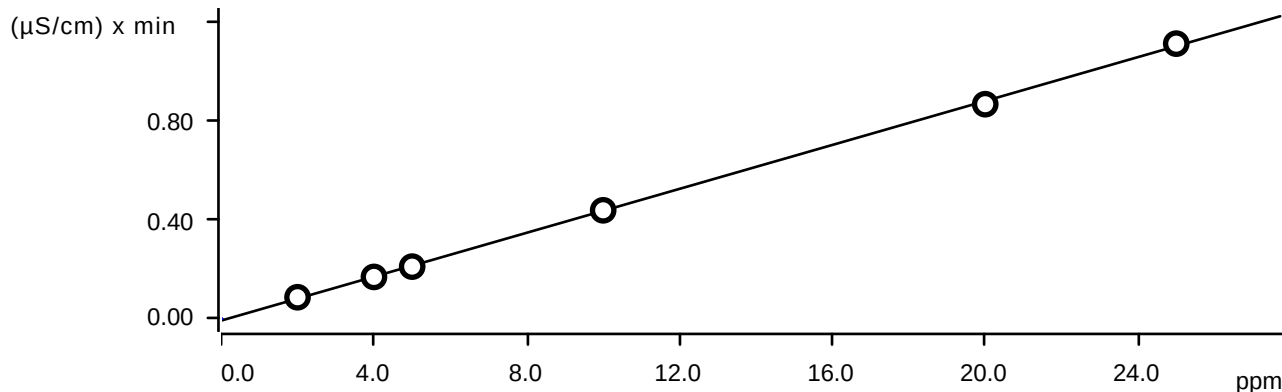
Function: $A = -0.0166933 + 0.0227623 \times Q$

Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)



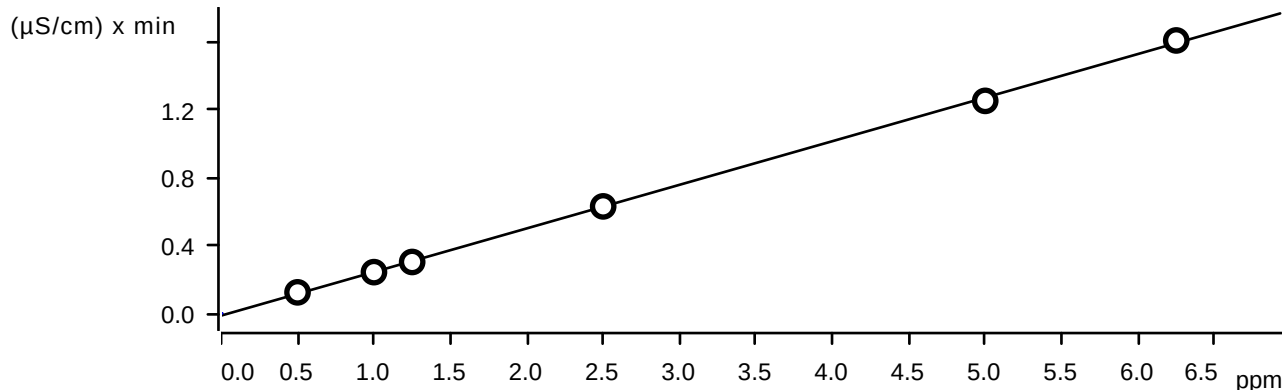
Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

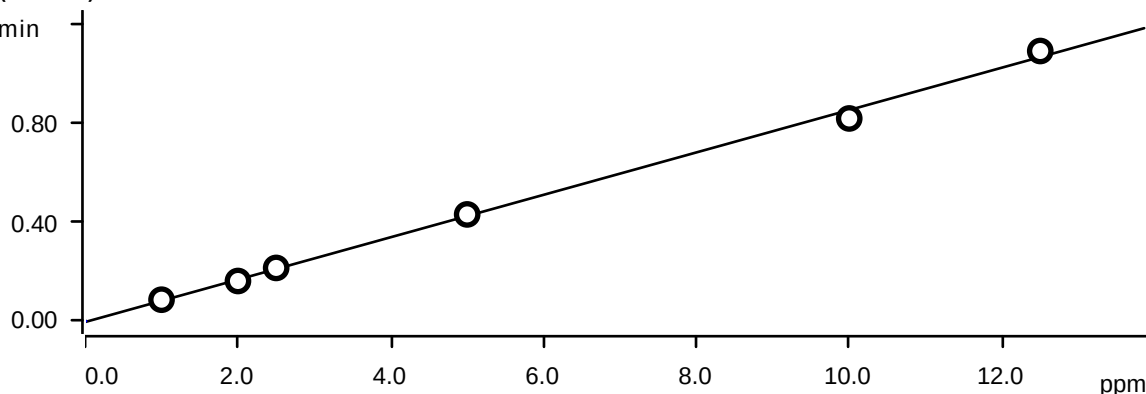


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

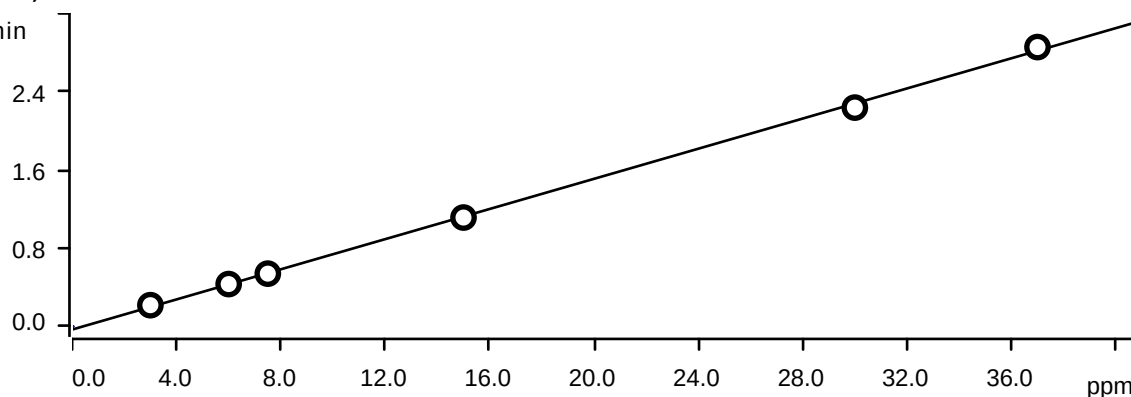
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

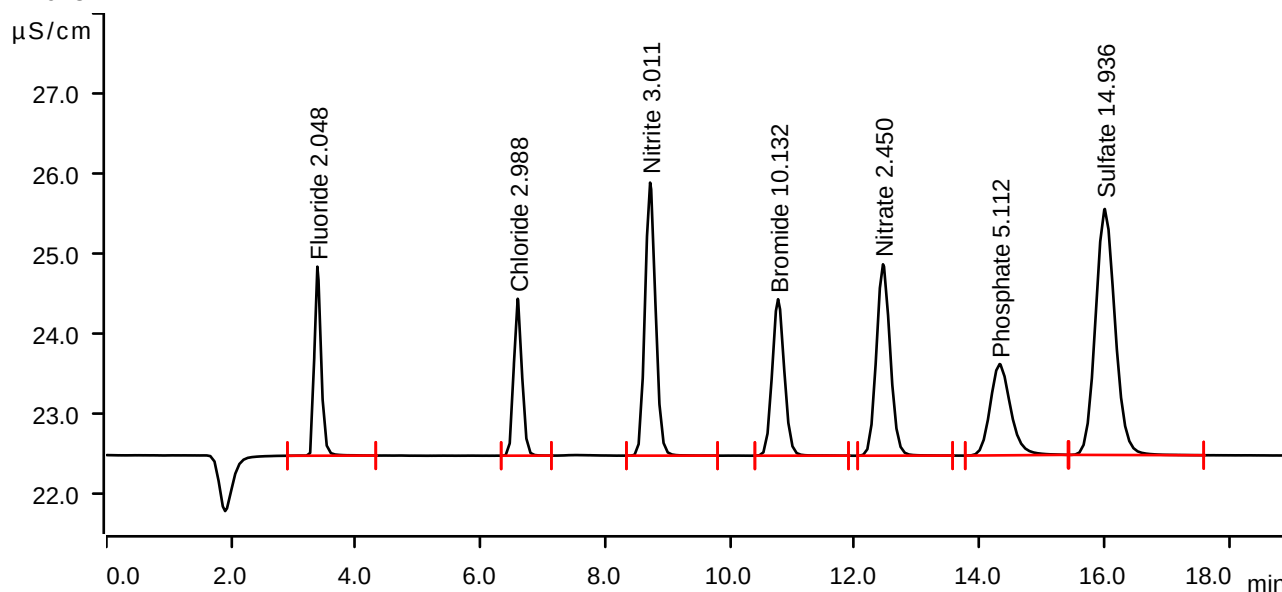
Sample data

Ident LB136282BSS
Sample type Check standard 1
Determination start 2025-06-26 09:49:44 UTC-4
Method IC1-062325
Operator

Anions

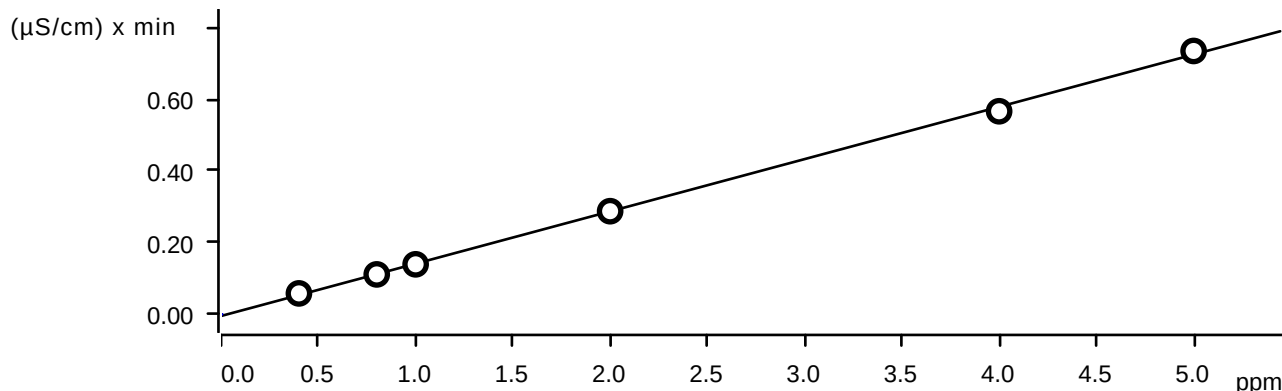
Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.16 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	3.383	0.2941	2.361	2.048	Fluoride
2	6.595	0.2997	1.960	2.988	Chloride
3	8.718	0.6687	3.411	3.011	Nitrite
4	10.770	0.4409	1.955	10.132	Bromide
5	12.452	0.6157	2.391	2.450	Nitrate
6	14.322	0.4328	1.141	5.112	Phosphate
7	16.008	1.1191	3.073	14.936	Sulfate

Fluoride (Anions)



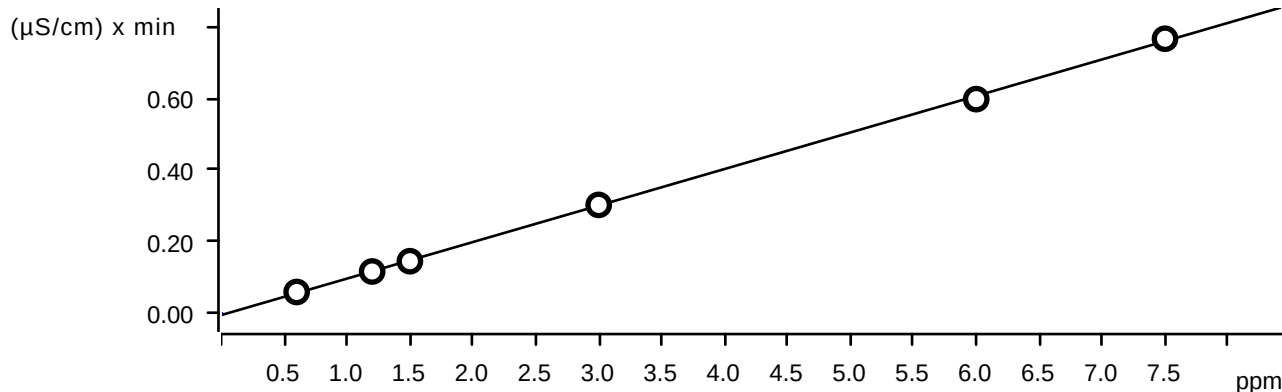
Function: $A = -4.55276E-3 + 0.0145788 \times Q$

Relative standard deviation 2.633289 %

Correlation coefficient 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)



Function: $A = -4.66825E-3 + 0.0101843 \times Q$

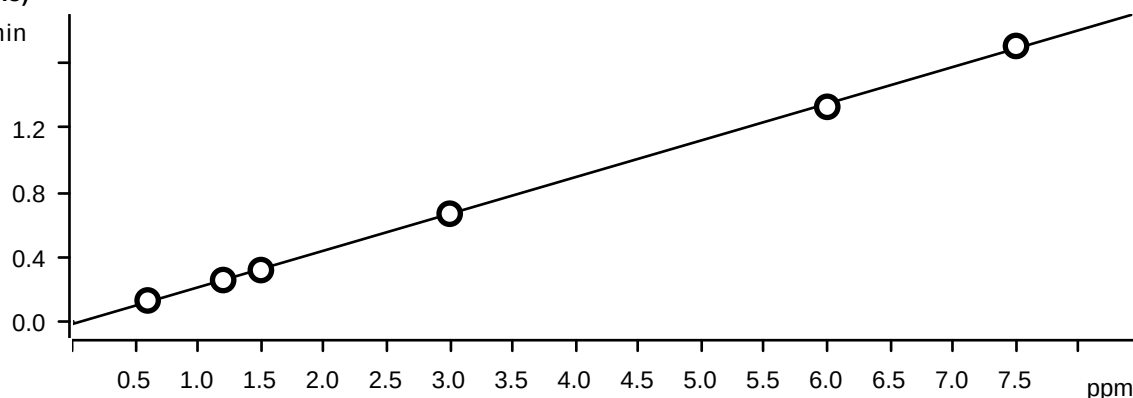
Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

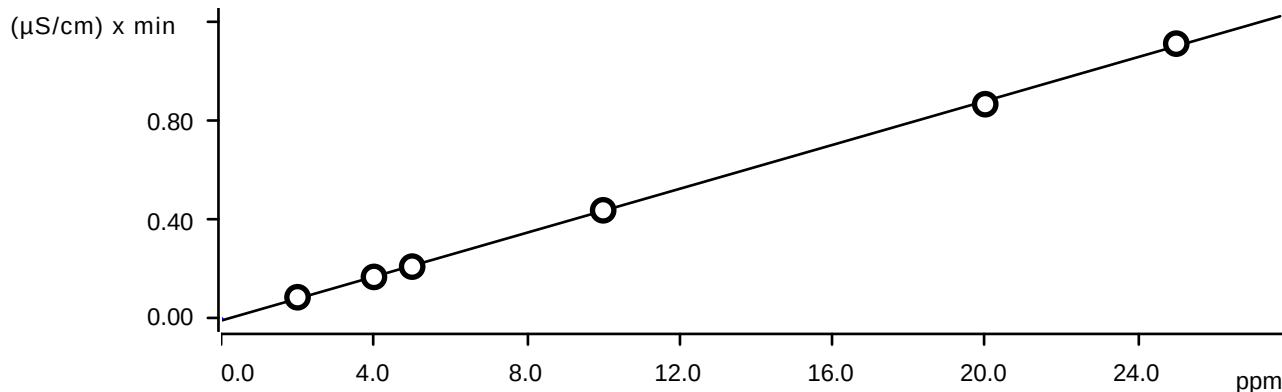
Function: $A = -0.0166933 + 0.0227623 \times Q$

Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)



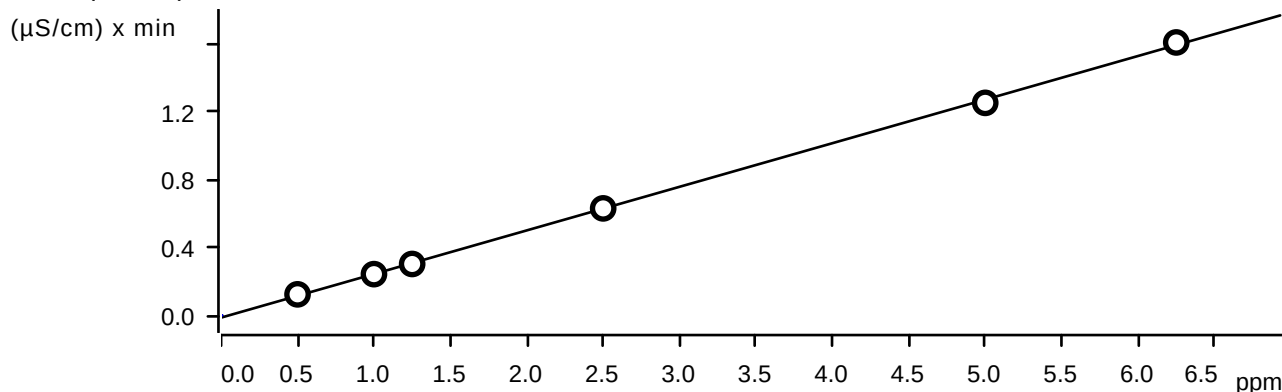
Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

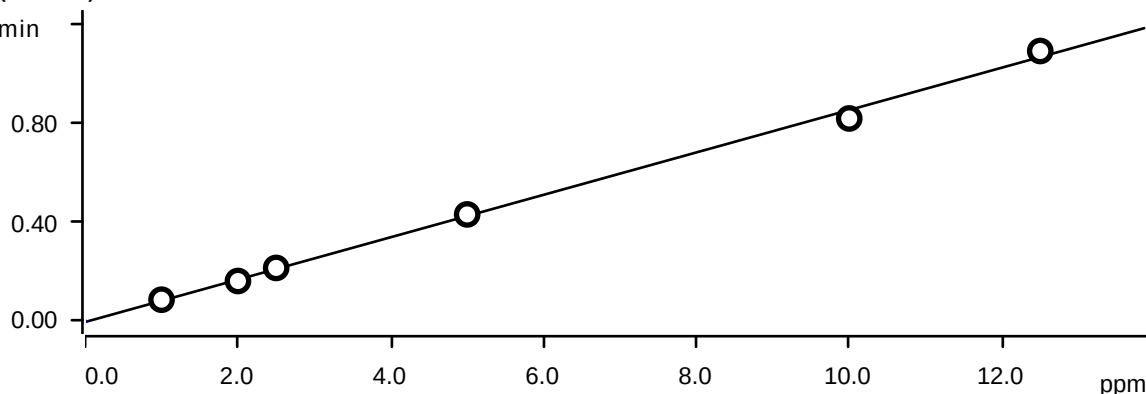


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

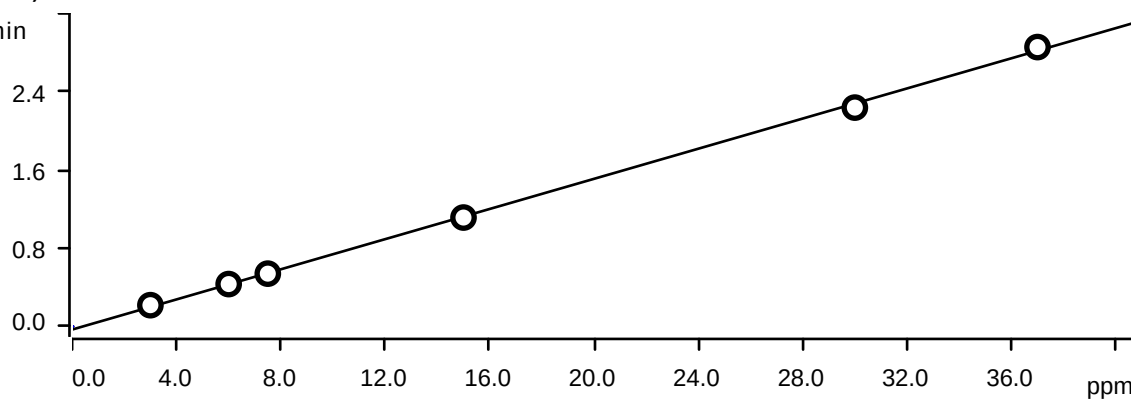
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

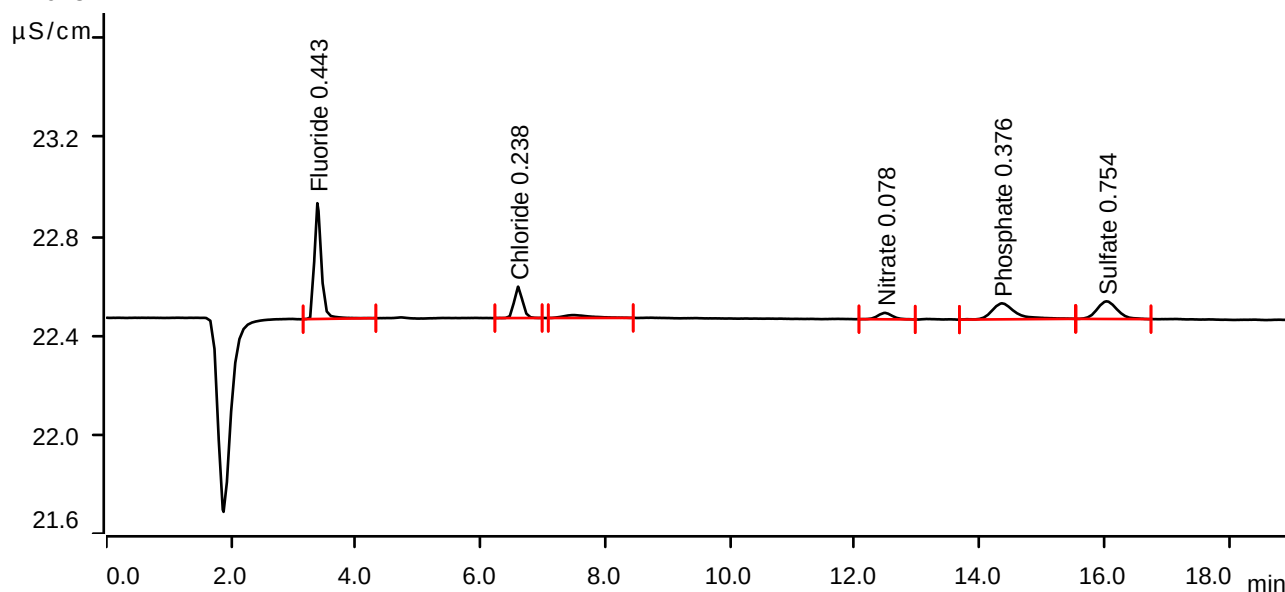
Sample data

Ident Q2425-01
Sample type Sample
Determination start 2025-06-26 10:27:26 UTC-4
Method IC1-062325
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

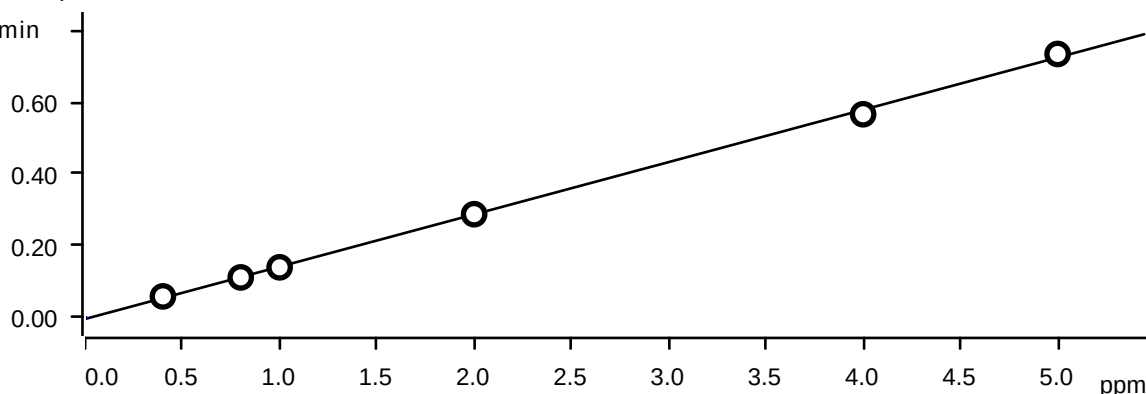
Anions



Peak number	Retention time	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	3.383	0.0600	0.467	0.443	Fluoride
2	6.603	0.0196	0.126	0.238	Chloride
3	7.508	0.0061	0.012	invalid	
4	12.488	0.0070	0.026	0.078	Nitrate
5	14.358	0.0285	0.065	0.376	Phosphate
6	16.033	0.0266	0.071	0.754	Sulfate

Fluoride (Anions)

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



Function: $A = -4.55276E-3 + 0.0145788 \times Q$

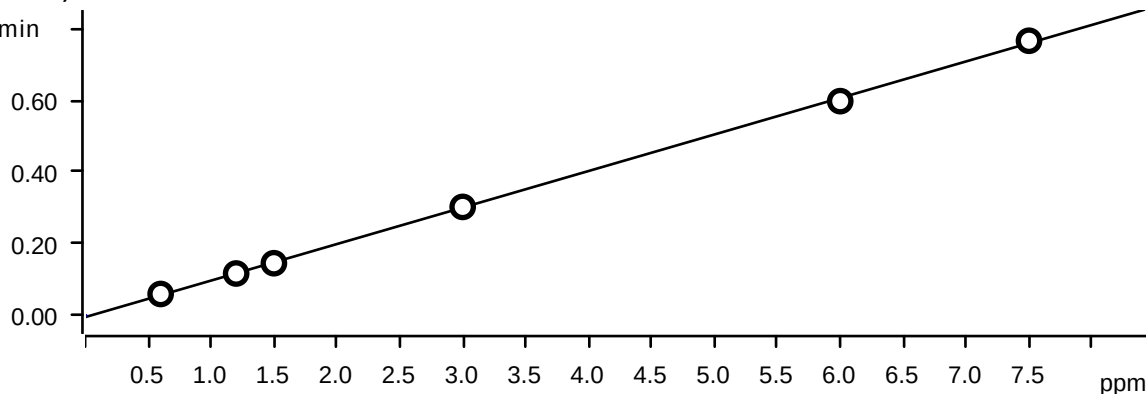
Relative standard deviation: 2.633289 %

Correlation coefficient: 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)

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

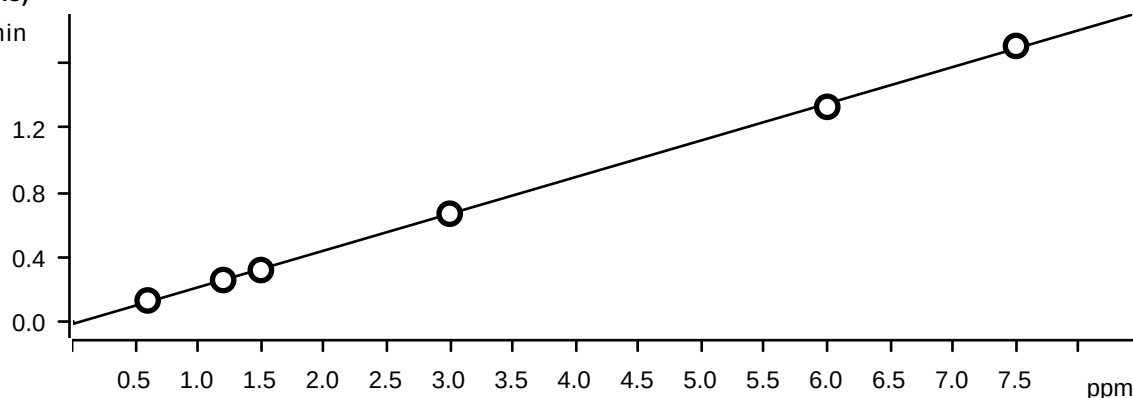


Function: $A = -4.66825E-3 + 0.0101843 \times Q$

Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

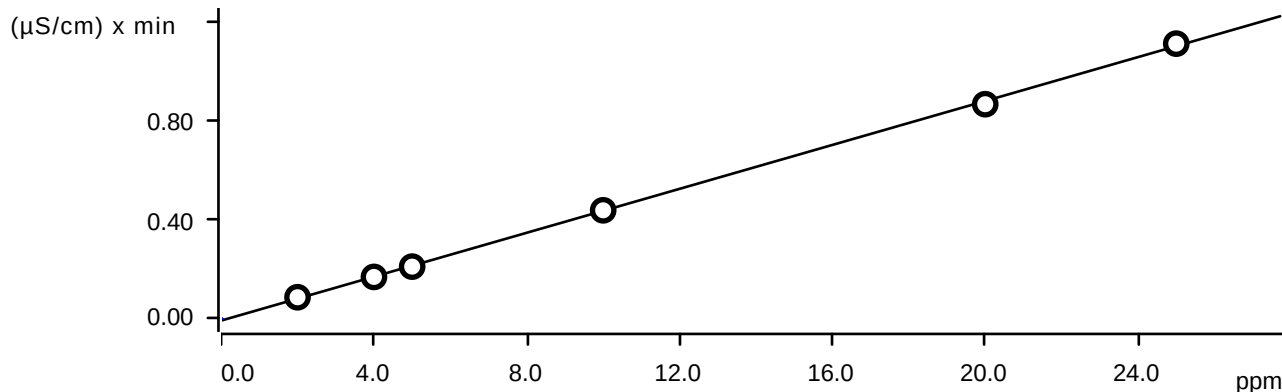
Nitrite (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0166933 + 0.0227623 \times Q$

Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)



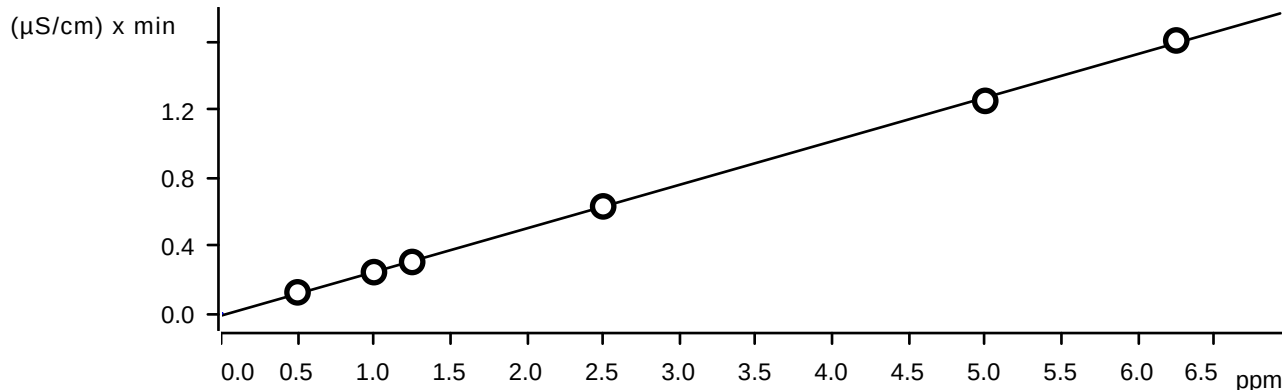
Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

Relative standard deviation 1.851347 %

Correlation coefficient 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

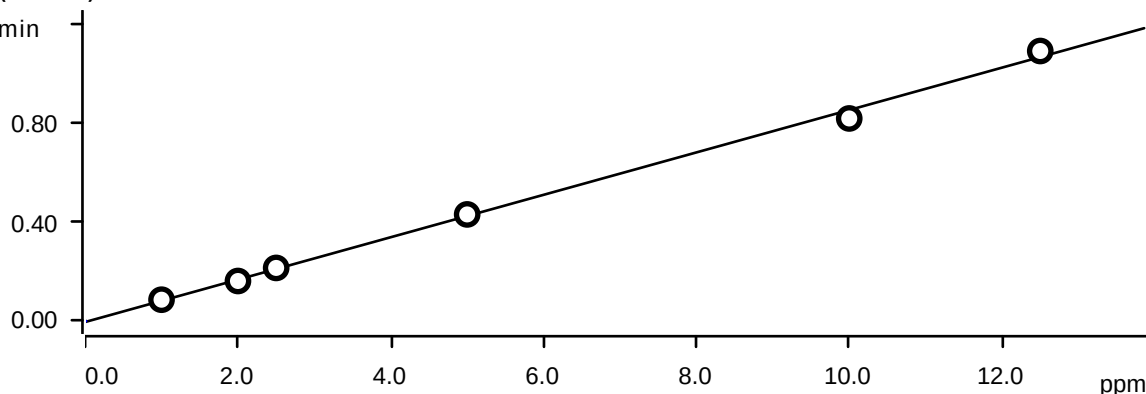


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

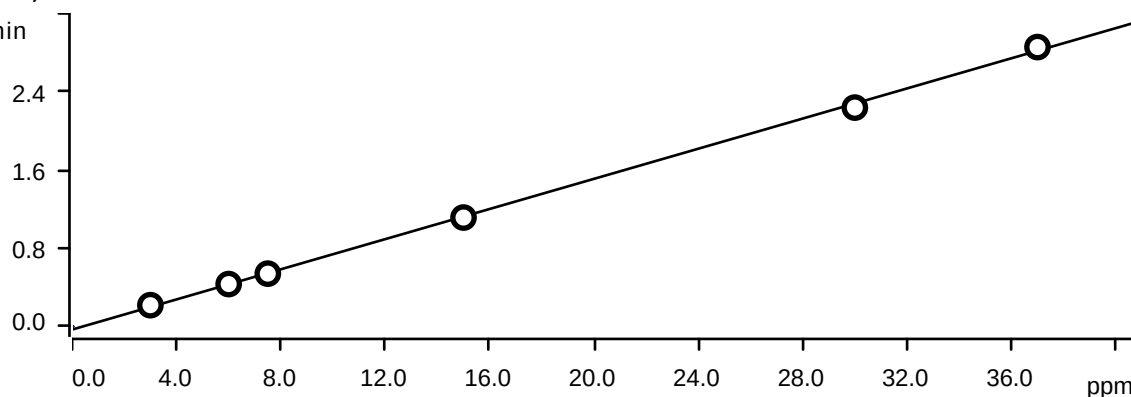
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

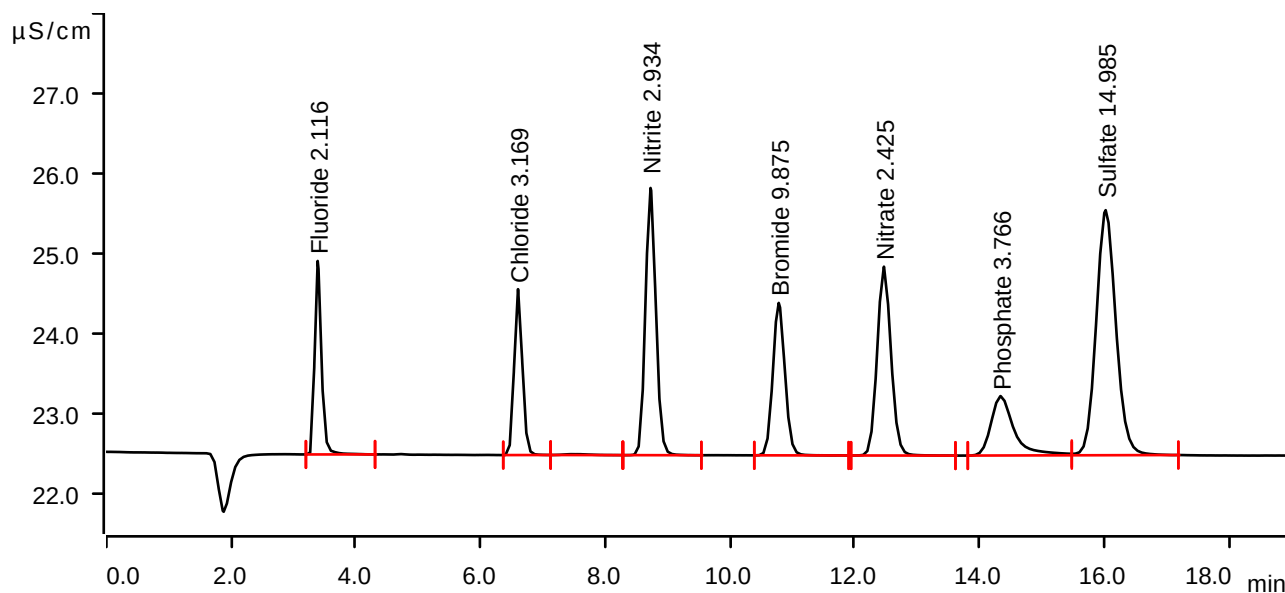
Sample data

Ident Q2425-01MS
Sample type Sample
Determination start 2025-06-26 10:49:04 UTC-4
Method IC1-062325
Operator

Anions

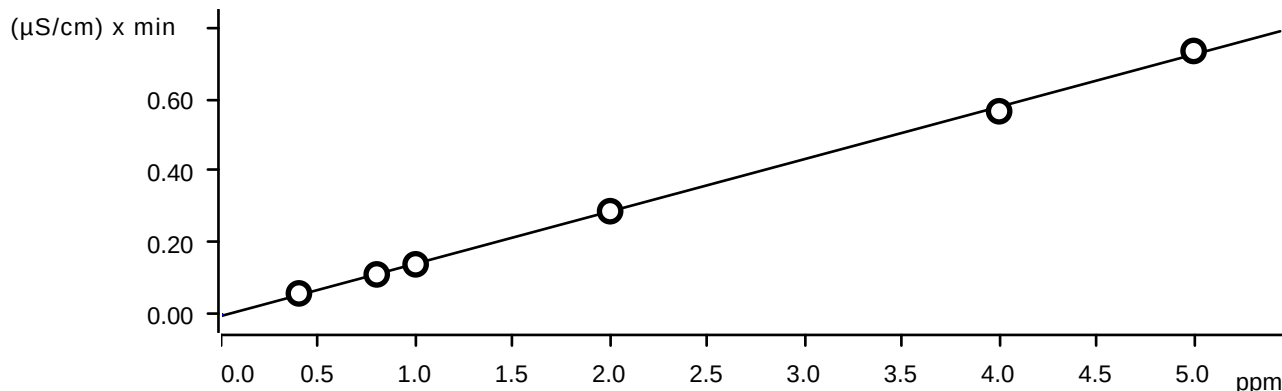
Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.22 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time	Area	Height	Concentration	Component name
	min	($\mu\text{S/cm}$) x min	$\mu\text{S/cm}$	ppm	
1	3.388	0.3039	2.417	2.116	Fluoride
2	6.602	0.3180	2.072	3.169	Chloride
3	7.493	0.0052	0.011	invalid	
4	8.725	0.6511	3.339	2.934	Nitrite
5	10.780	0.4296	1.905	9.875	Bromide
6	12.465	0.6093	2.359	2.425	Nitrate
7	14.338	0.3179	0.742	3.766	Phosphate
8	16.022	1.1228	3.062	14.985	Sulfate

Fluoride (Anions)



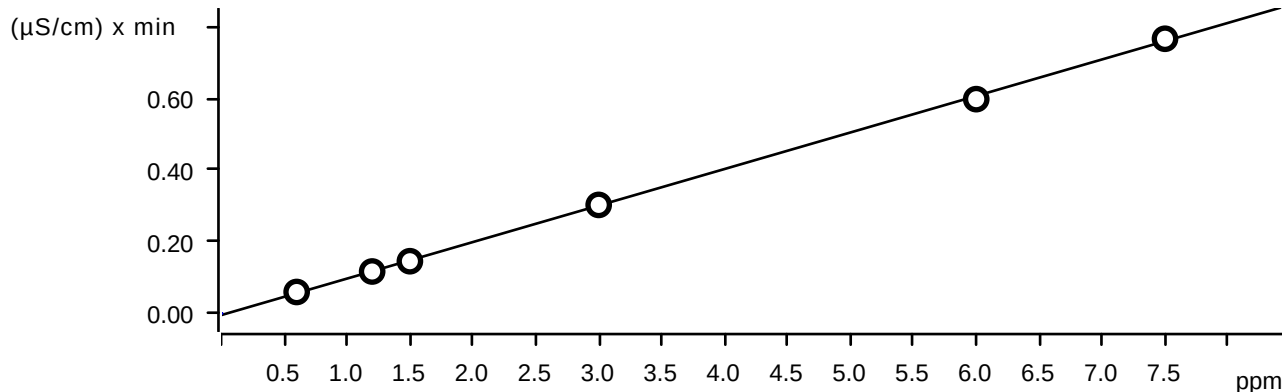
Function: $A = -4.55276E-3 + 0.0145788 \times Q$

Relative standard deviation 2.633289 %

Correlation coefficient 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)



Function: $A = -4.66825E-3 + 0.0101843 \times Q$

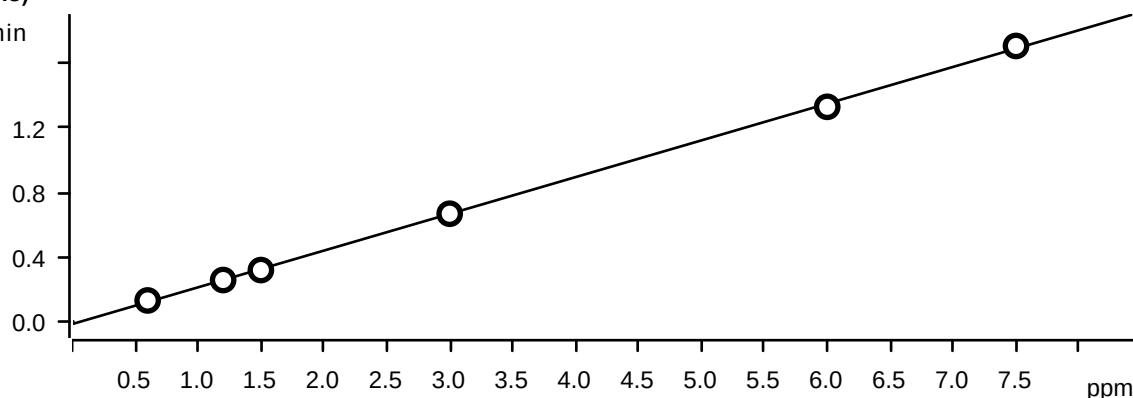
Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

Function: $A = -0.0166933 + 0.0227623 \times Q$

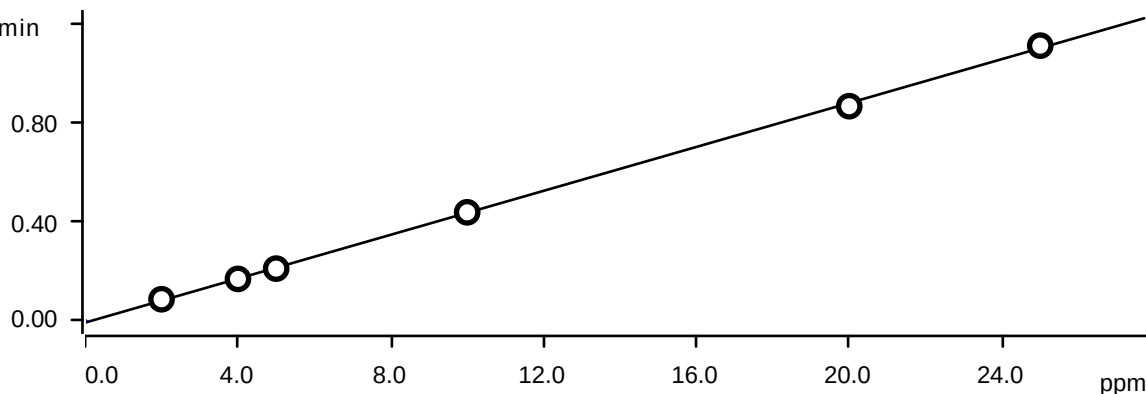
Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)

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



Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

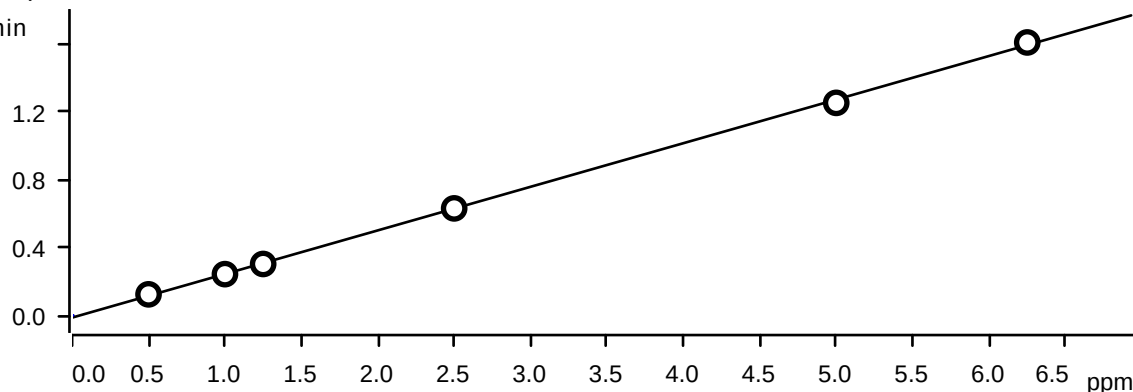
Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

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



Function: $A = -0.0130270 + 0.0256654 \times Q$

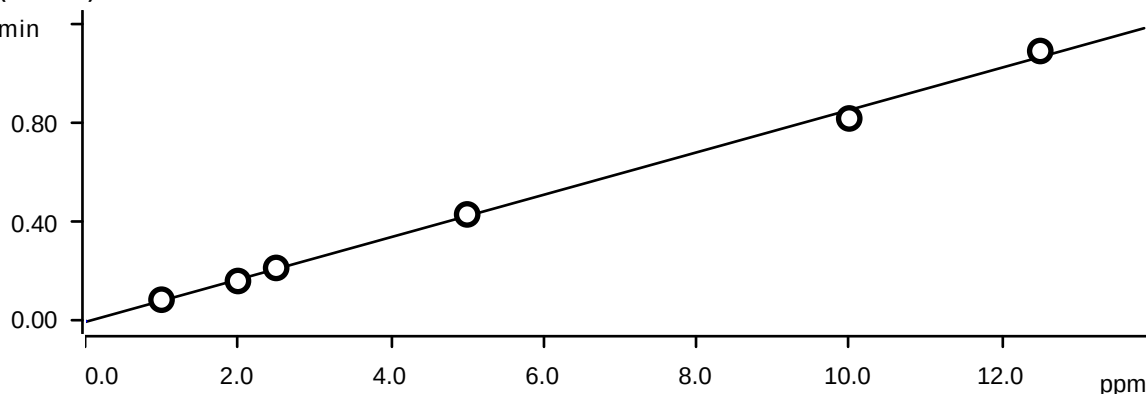
Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

Phosphate (Anions)

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



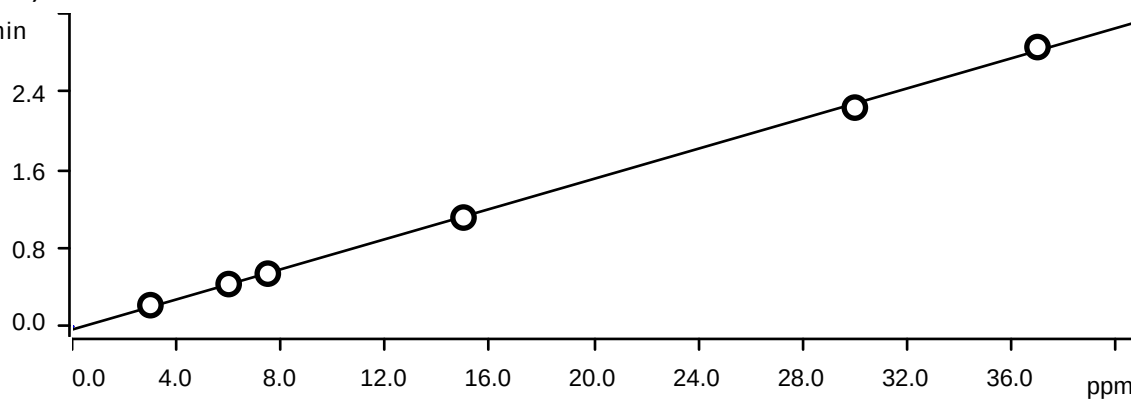
Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

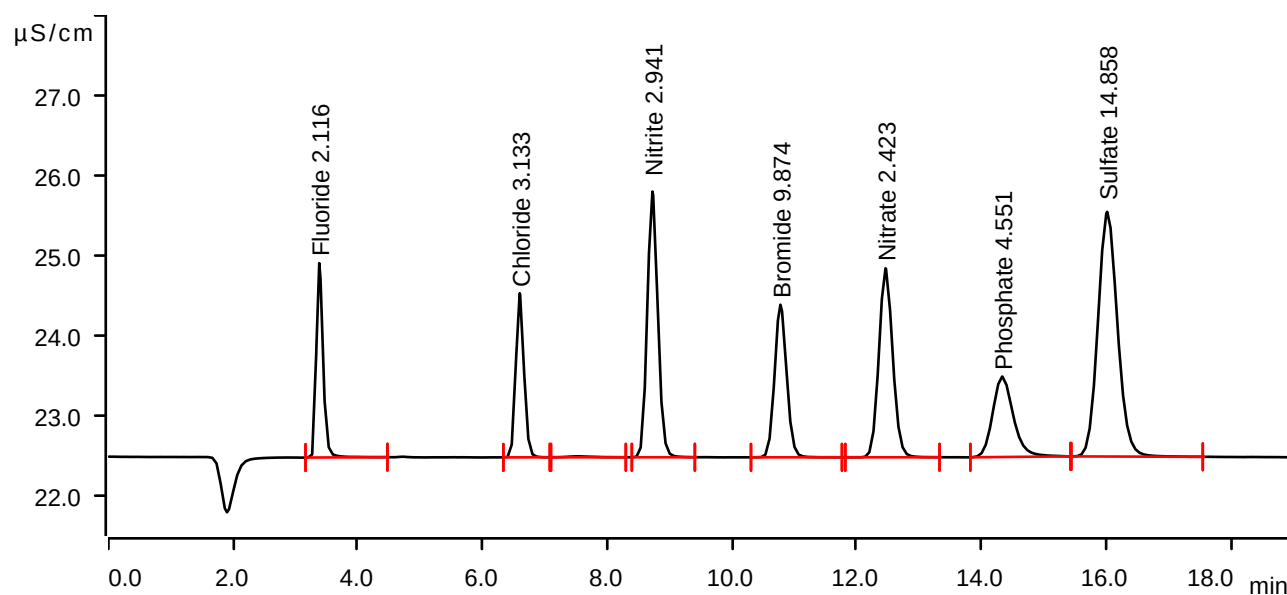
Sample data

Ident Q2425-01MSD
Sample type Sample
Determination start 2025-06-26 11:10:37 UTC-4
Method IC1-062325
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.27 MPa
Maximum pressure monitored yes
Temperature ---- °C

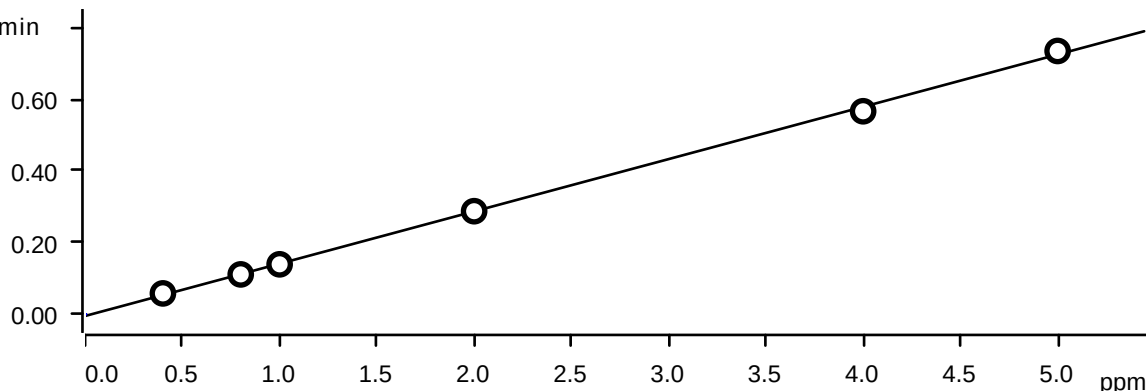
Anions



Peak number	Retention time min	Area ($\mu\text{S/cm}$) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.382	0.3039	2.428	2.116	Fluoride
2	6.595	0.3144	2.050	3.133	Chloride
3	7.512	0.0053	0.012	invalid	
4	8.723	0.6529	3.320	2.941	Nitrite
5	10.775	0.4296	1.907	9.874	Bromide
6	12.460	0.6088	2.361	2.423	Nitrate
7	14.330	0.3849	1.005	4.551	Phosphate
8	16.015	1.1131	3.057	14.858	Sulfate

Fluoride (Anions)

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



Function: $A = -4.55276E-3 + 0.0145788 \times Q$

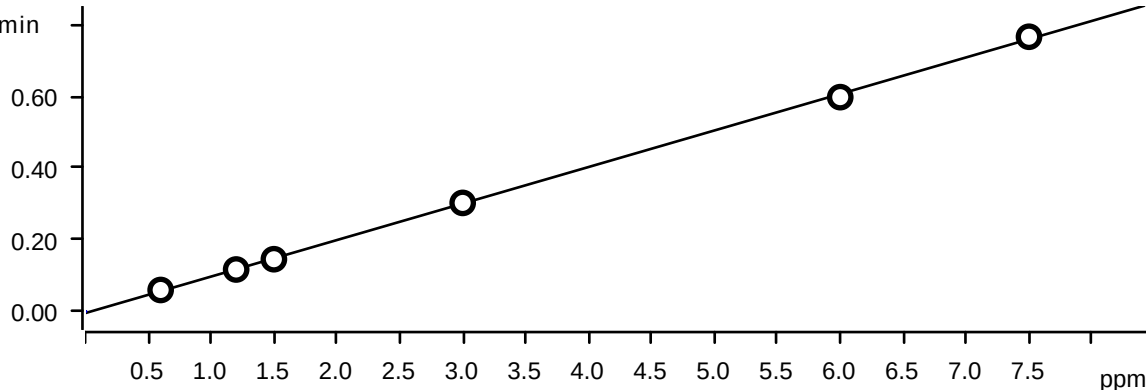
Relative standard deviation 2.633289 %

Correlation coefficient 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)

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



Function: $A = -4.66825E-3 + 0.0101843 \times Q$

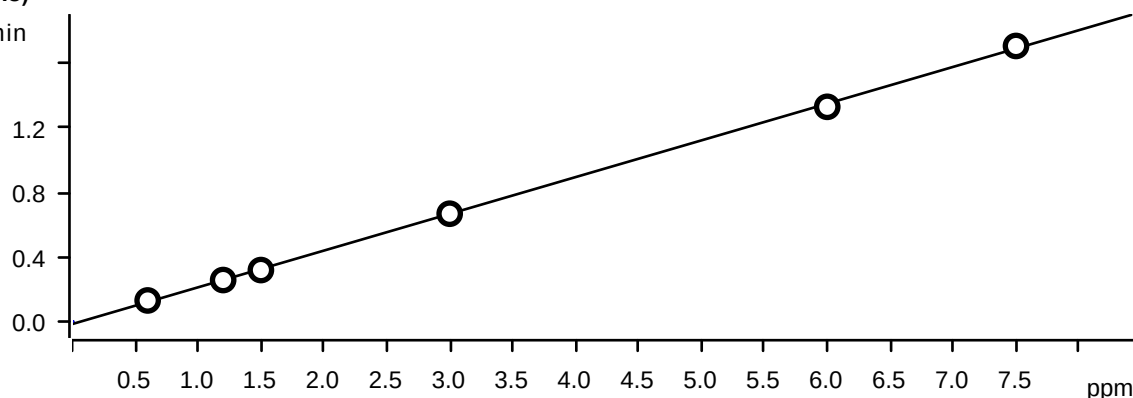
Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

Function: $A = -0.0166933 + 0.0227623 \times Q$

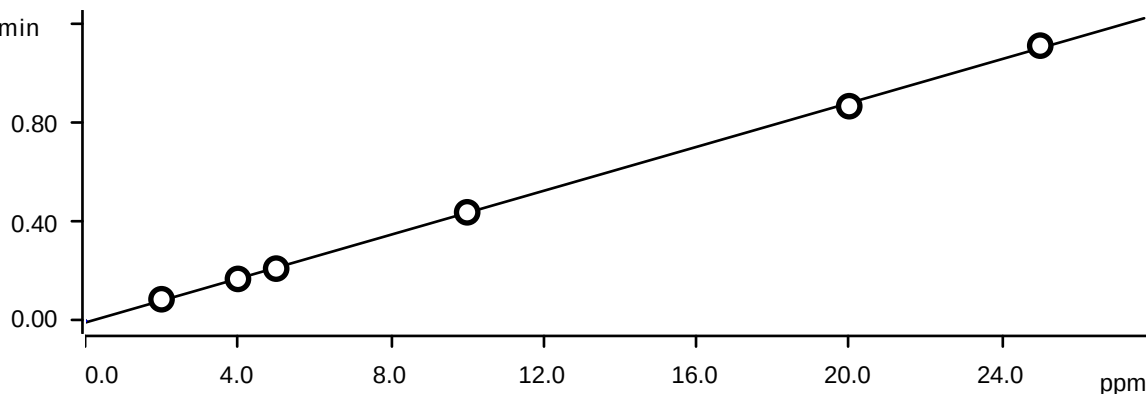
Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)

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



Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

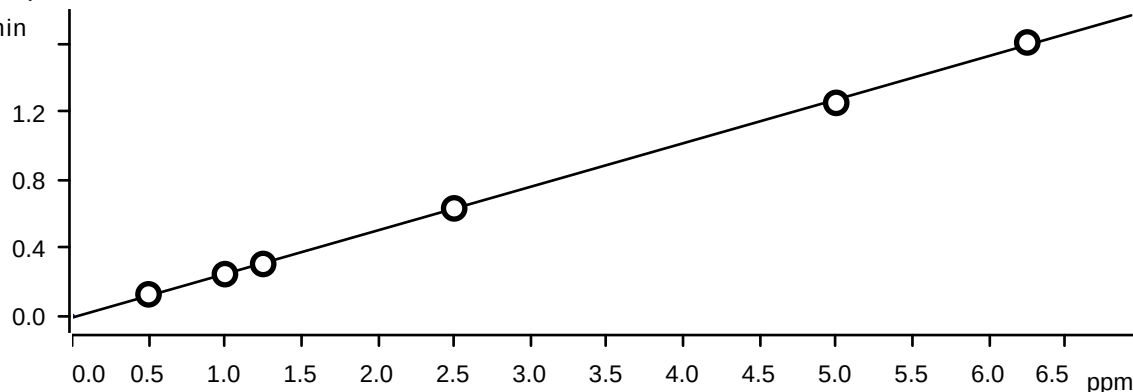
Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

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

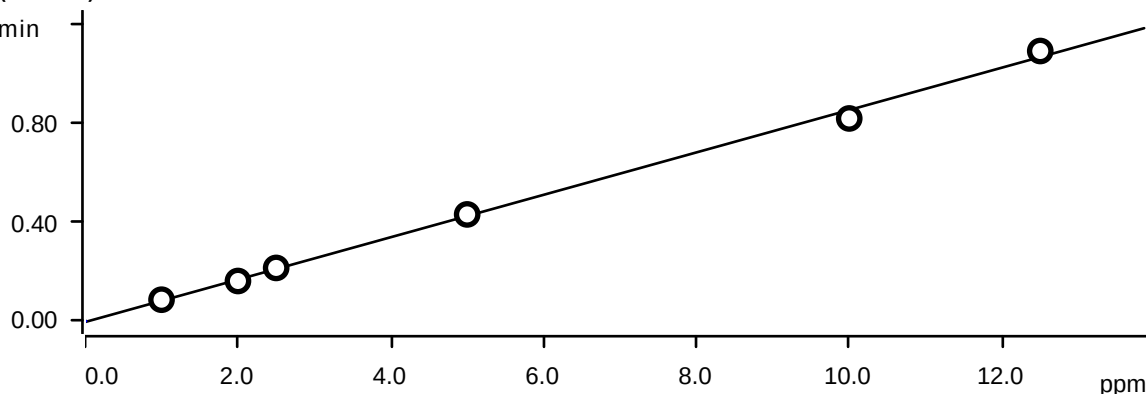


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

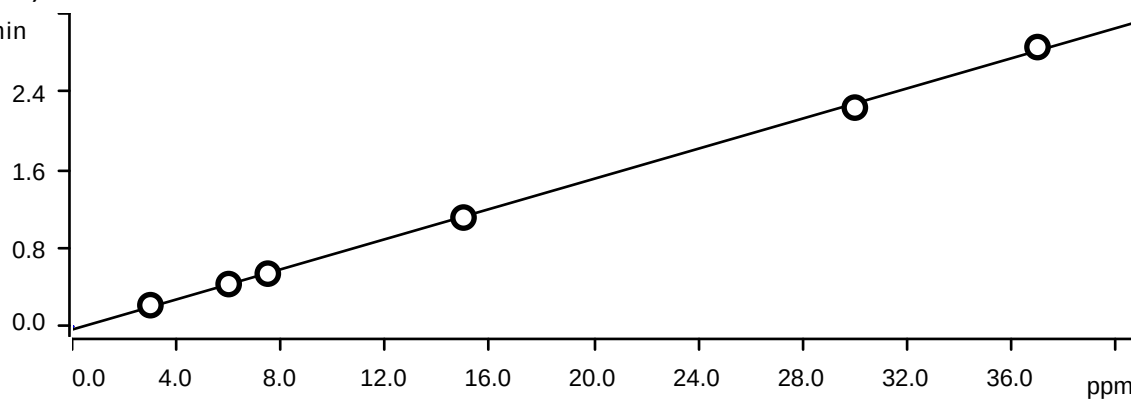
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

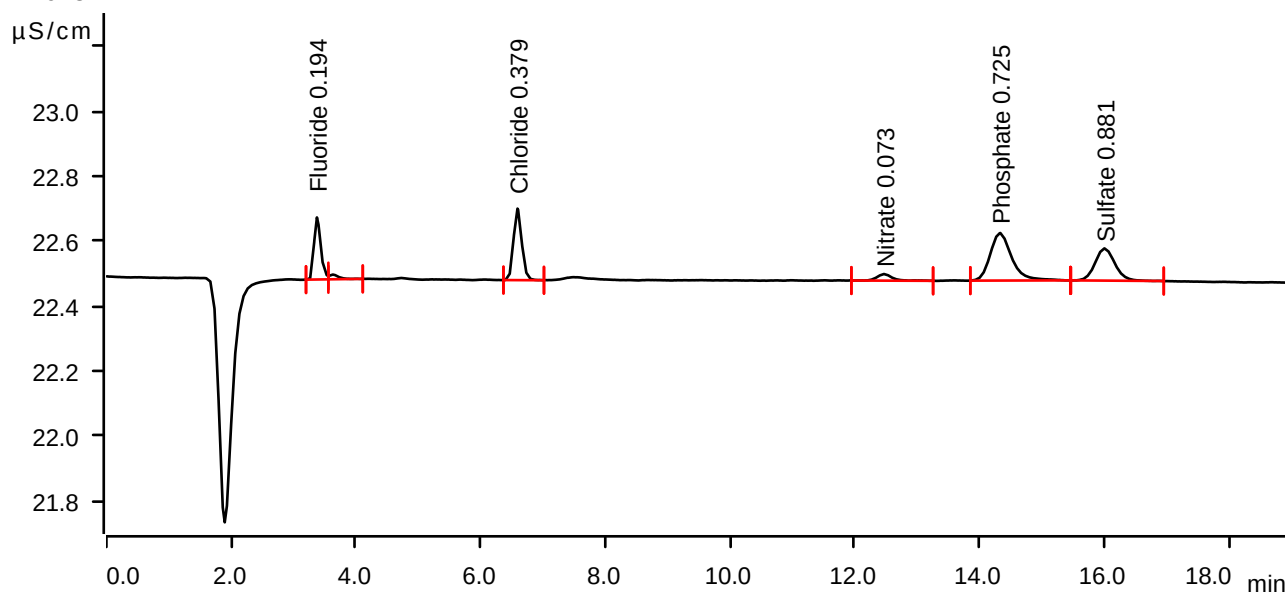
Sample data

Ident Q2425-02
Sample type Sample
Determination start 2025-06-26 11:32:11 UTC-4
Method IC1-062325
Operator

Anions

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

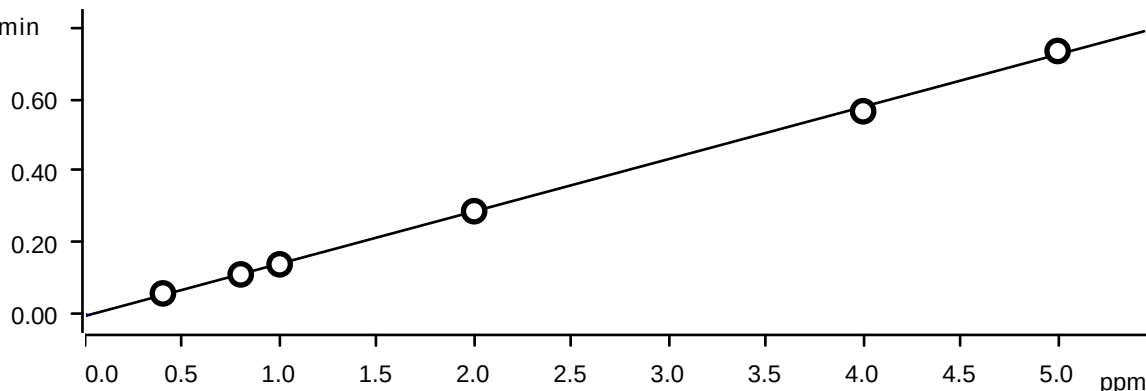
Anions



Peak number	Retention time	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	3.377	0.0238	0.191	0.194	Fluoride
2	3.635	0.0025	0.014	invalid	
3	6.592	0.0339	0.220	0.379	Chloride
4	12.468	0.0057	0.020	0.073	Nitrate
5	14.327	0.0583	0.146	0.725	Phosphate
6	16.003	0.0364	0.099	0.881	Sulfate

Fluoride (Anions)

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



Function: $A = -4.55276\text{E-}3 + 0.0145788 \times Q$

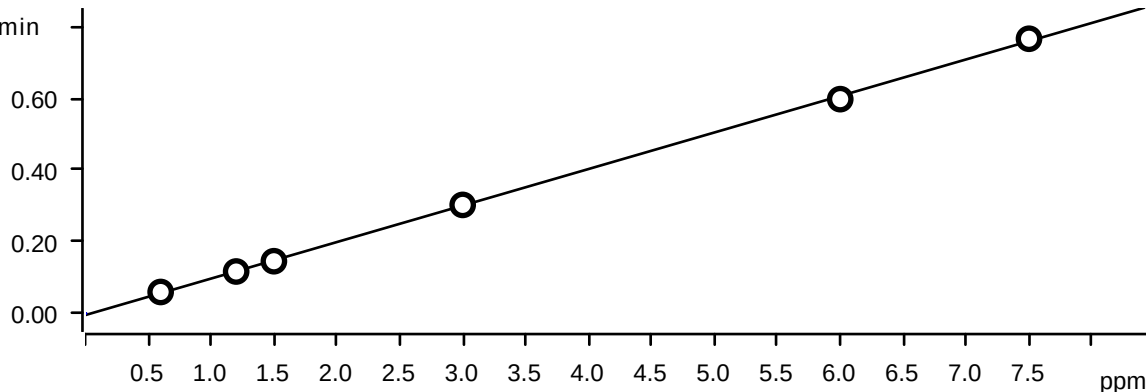
Relative standard deviation 2.633289 %

Correlation coefficient 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)

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



Function: $A = -4.66825\text{E-}3 + 0.0101843 \times Q$

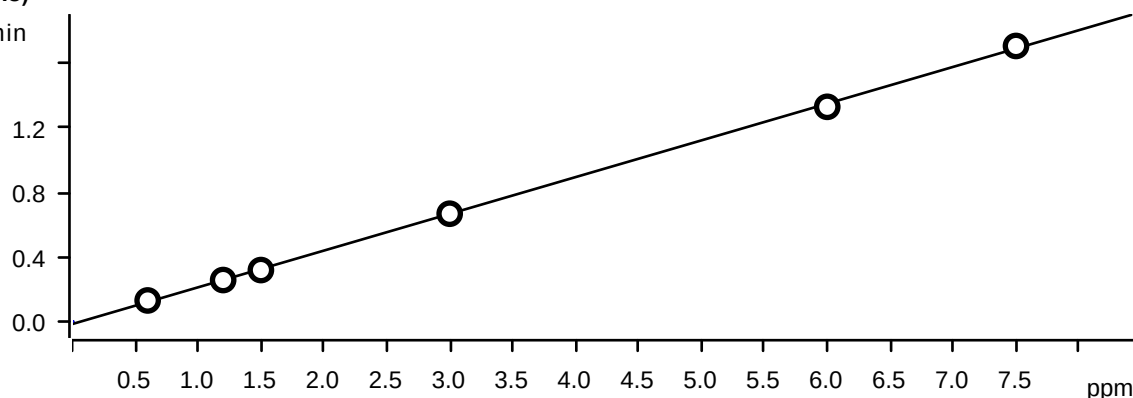
Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

Function: $A = -0.0166933 + 0.0227623 \times Q$

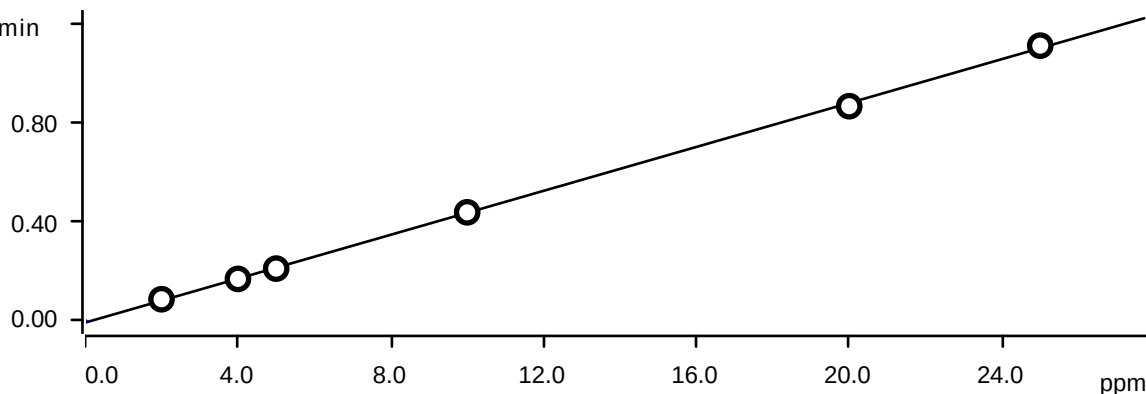
Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)

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



Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

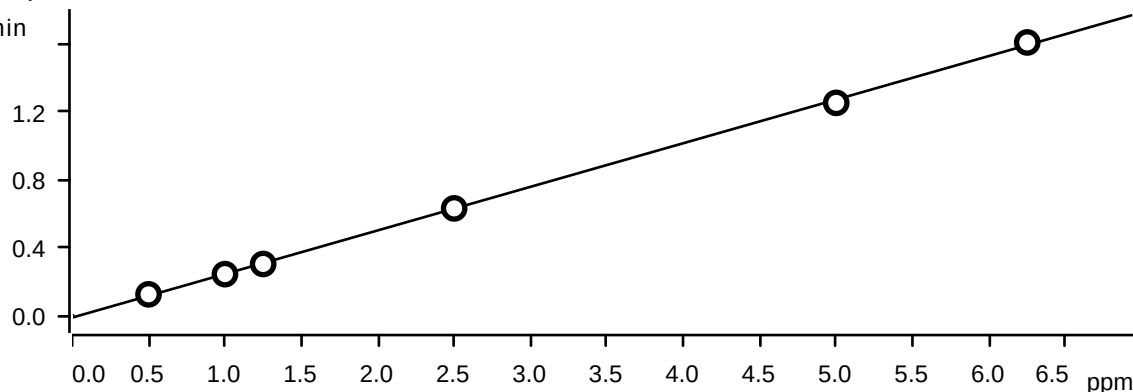
Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

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

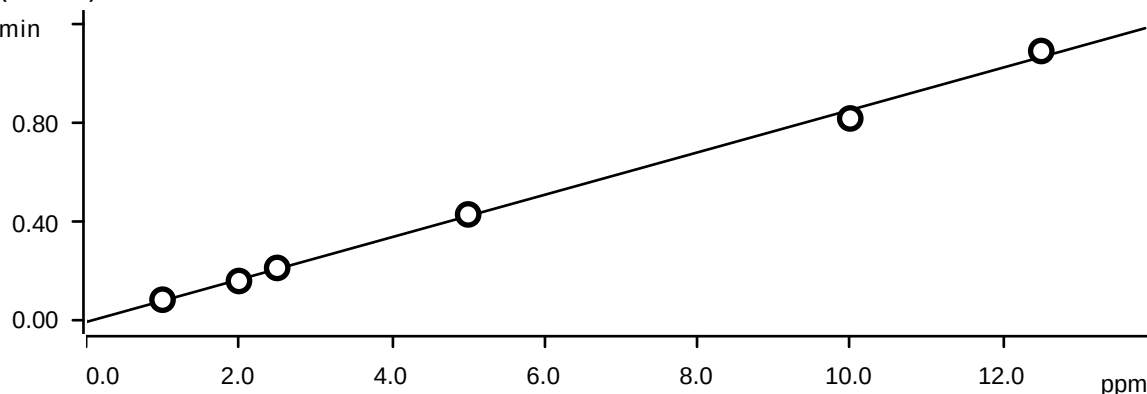


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

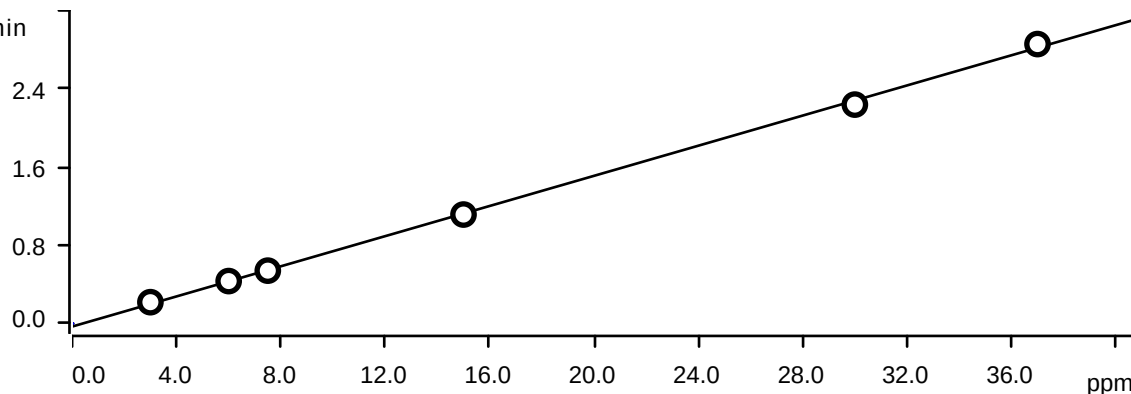
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

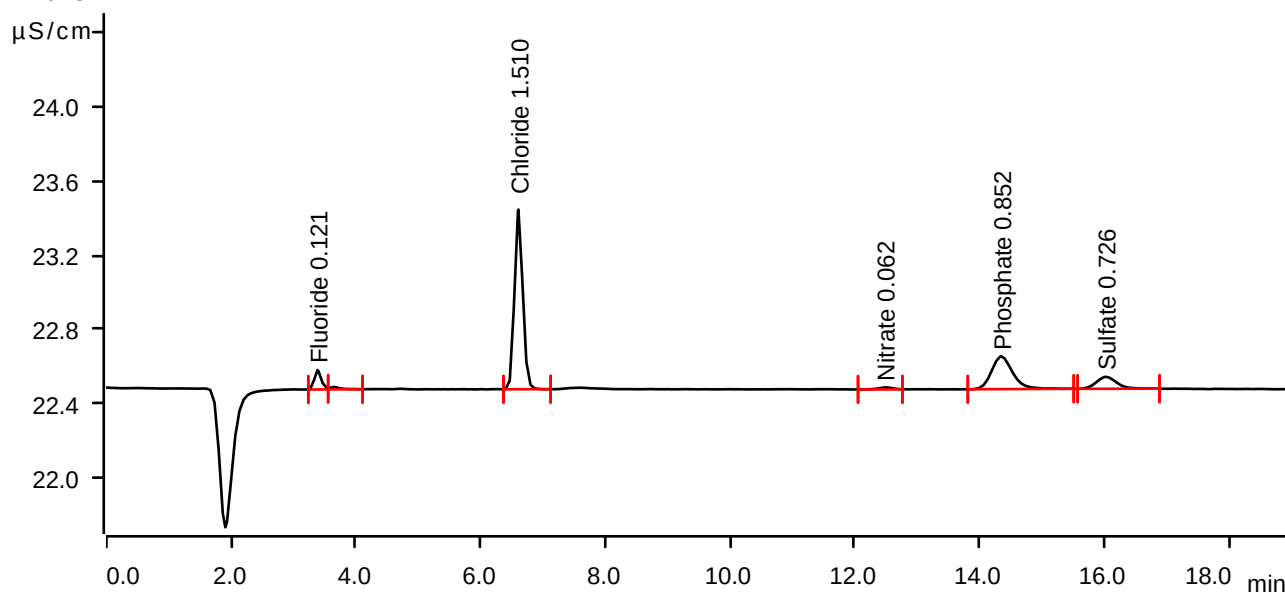
Sample data

Ident Q2425-03
Sample type Sample
Determination start 2025-06-26 11:53:45 UTC-4
Method IC1-062325
Operator

Anions

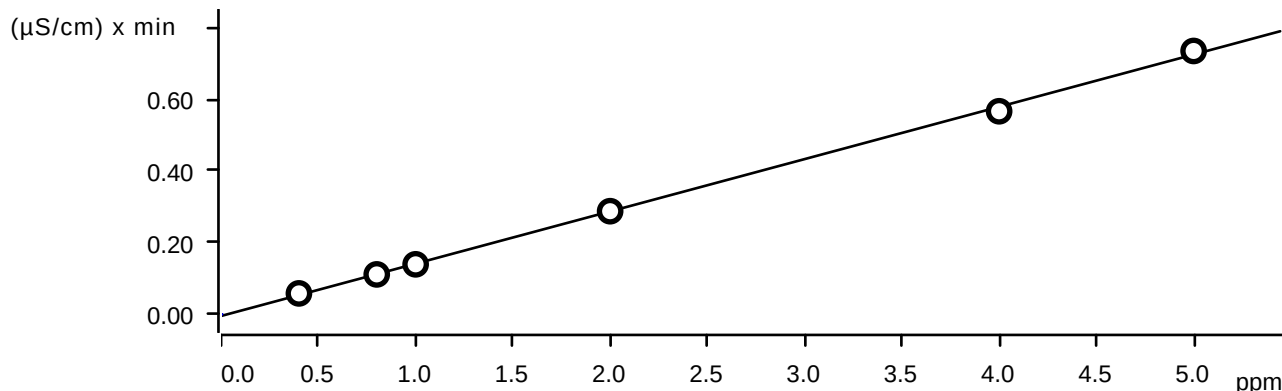
Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.16 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	3.385	0.0131	0.105	0.121	Fluoride
2	3.645	0.0025	0.013	invalid	
3	6.607	0.1491	0.967	1.510	Chloride
4	12.477	0.0029	0.010	0.062	Nitrate
5	14.345	0.0691	0.177	0.852	Phosphate
6	16.020	0.0244	0.064	0.726	Sulfate

Fluoride (Anions)



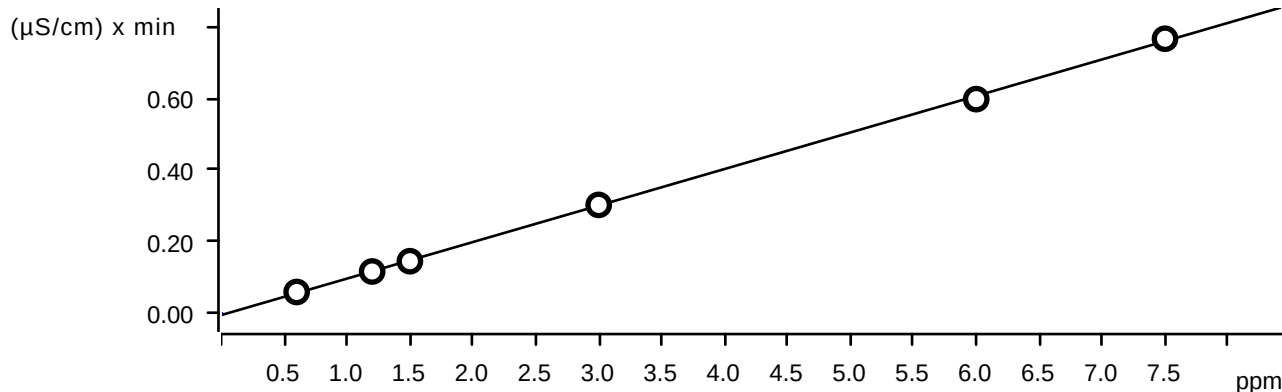
Function: $A = -4.55276E-3 + 0.0145788 \times Q$

Relative standard deviation 2.633289 %

Correlation coefficient 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)



Function: $A = -4.66825E-3 + 0.0101843 \times Q$

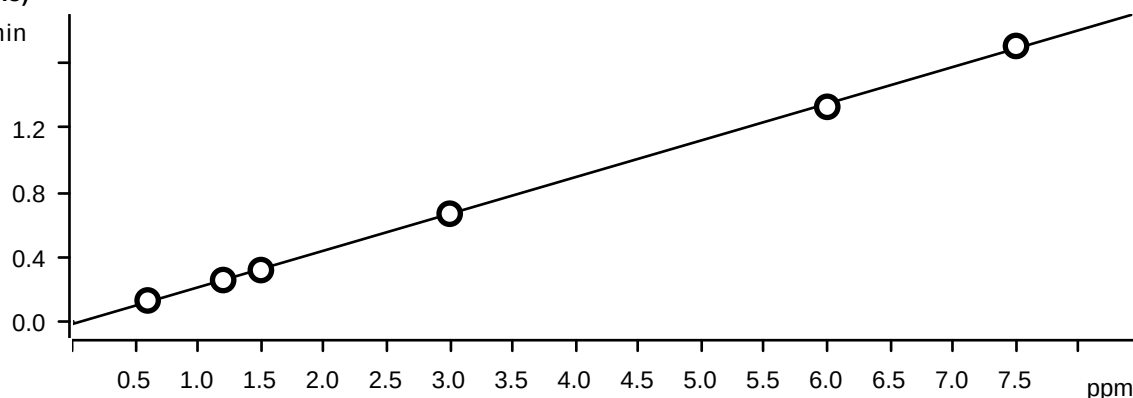
Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

Function: $A = -0.0166933 + 0.0227623 \times Q$

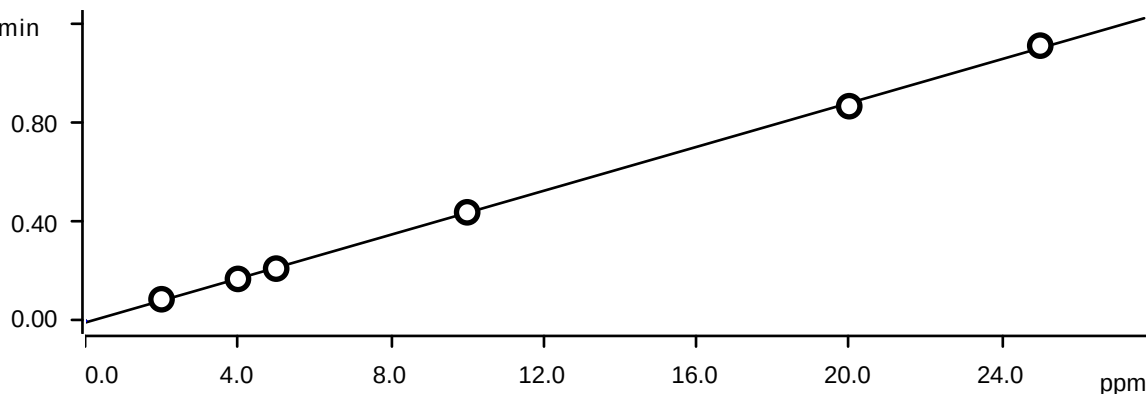
Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)

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



Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

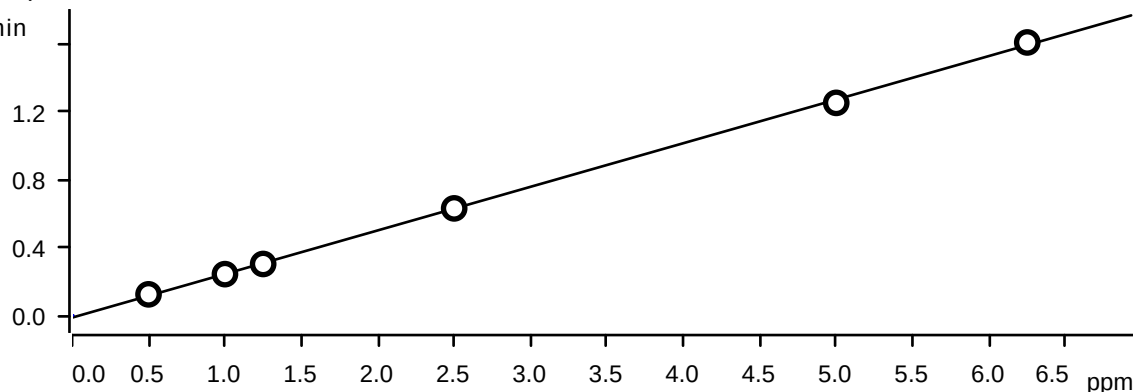
Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

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

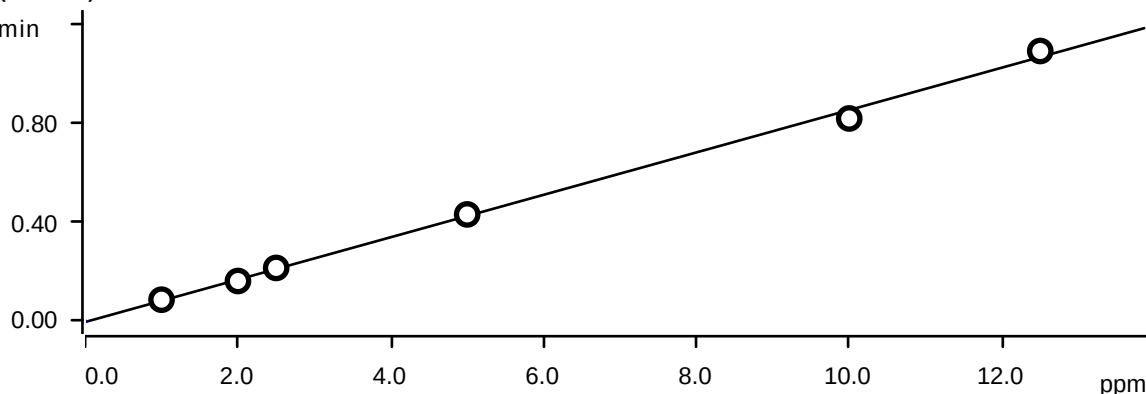


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

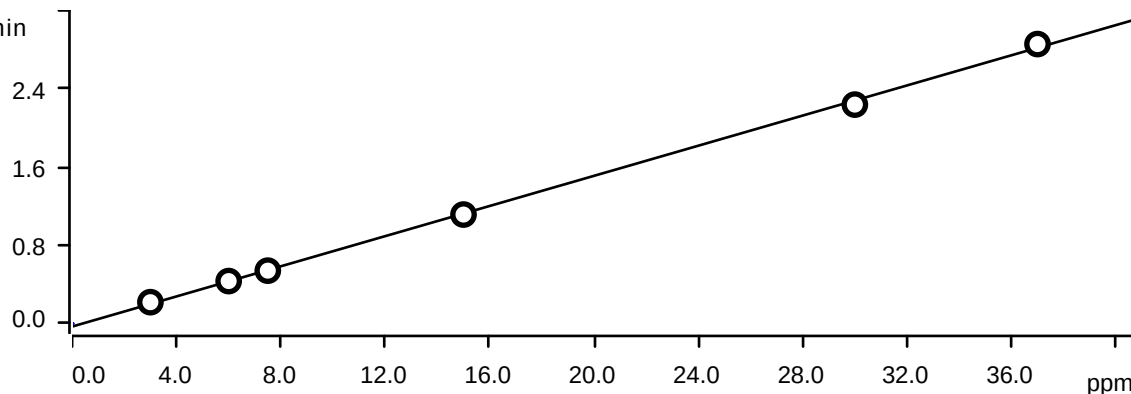
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

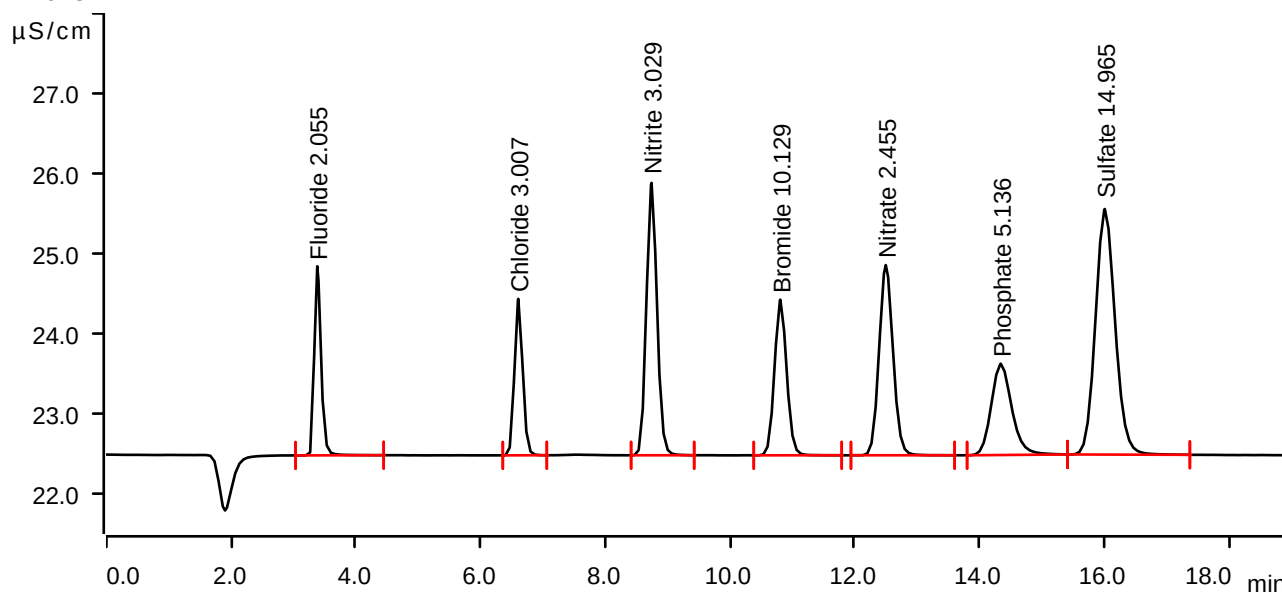
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-06-26 12:15:19 UTC-4
Method IC1-062325
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.27 MPa
Maximum pressure monitored yes
Temperature ---- °C

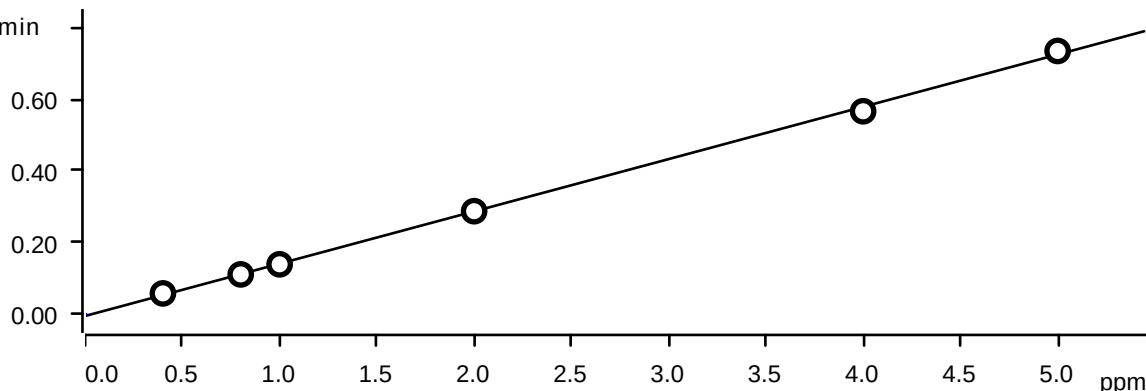
Anions



Peak number	Retention time	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	3.382	0.2951	2.362	2.055	Fluoride
2	6.605	0.3016	1.955	3.007	Chloride
3	8.742	0.6728	3.404	3.029	Nitrite
4	10.807	0.4408	1.944	10.129	Bromide
5	12.497	0.6171	2.377	2.455	Nitrate
6	14.340	0.4348	1.140	5.136	Phosphate
7	16.008	1.1213	3.068	14.965	Sulfate

Fluoride (Anions)

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



Function: $A = -4.55276E-3 + 0.0145788 \times Q$

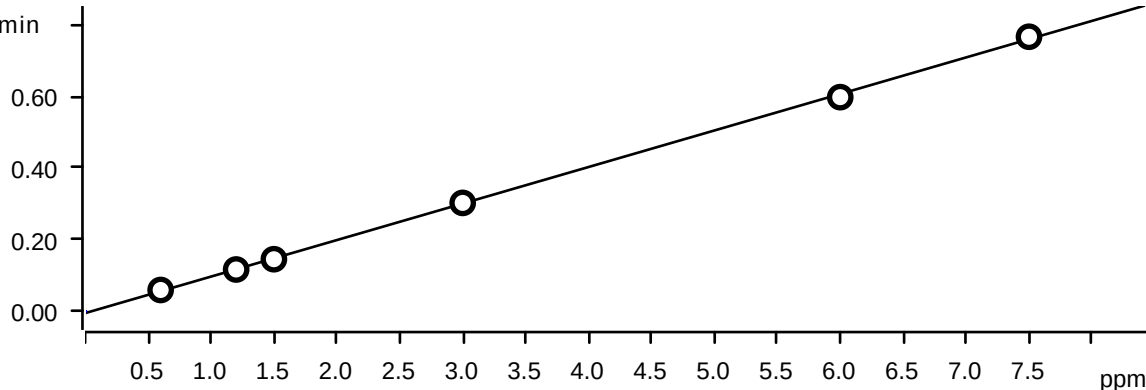
Relative standard deviation: 2.633289 %

Correlation coefficient: 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)

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



Function: $A = -4.66825E-3 + 0.0101843 \times Q$

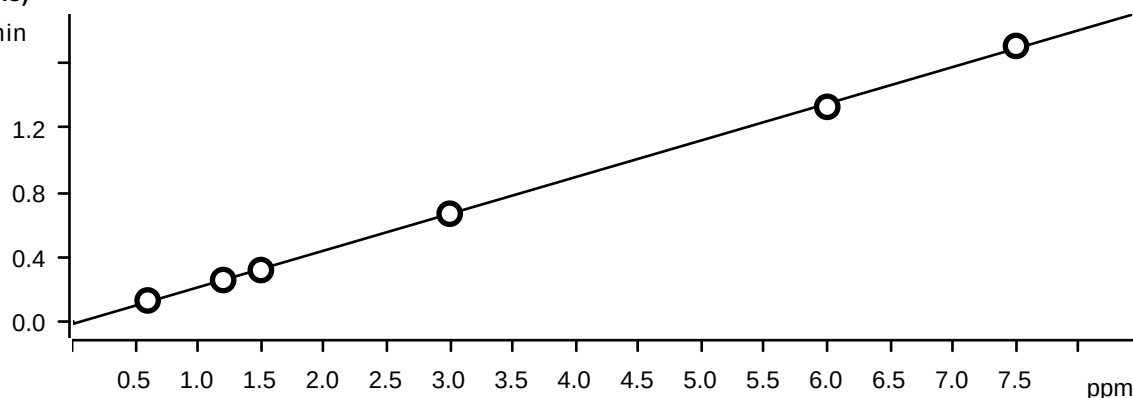
Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

Function: $A = -0.0166933 + 0.0227623 \times Q$

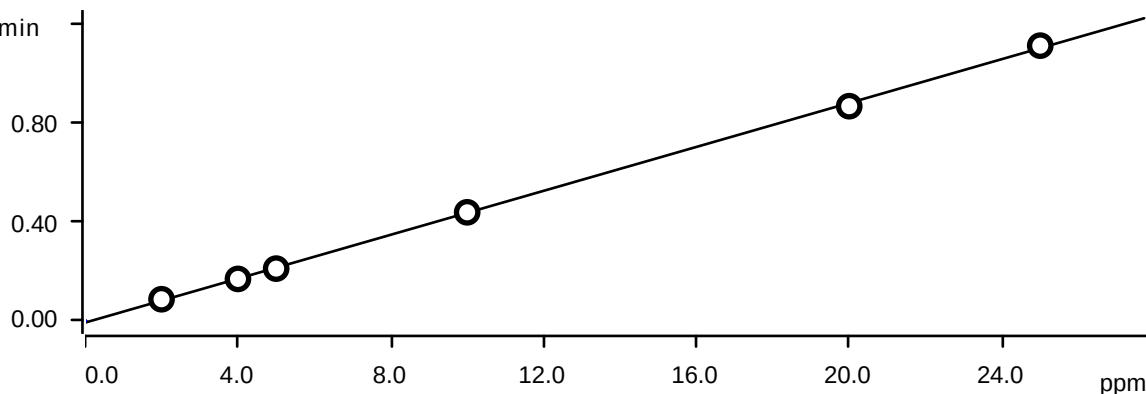
Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)

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



Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

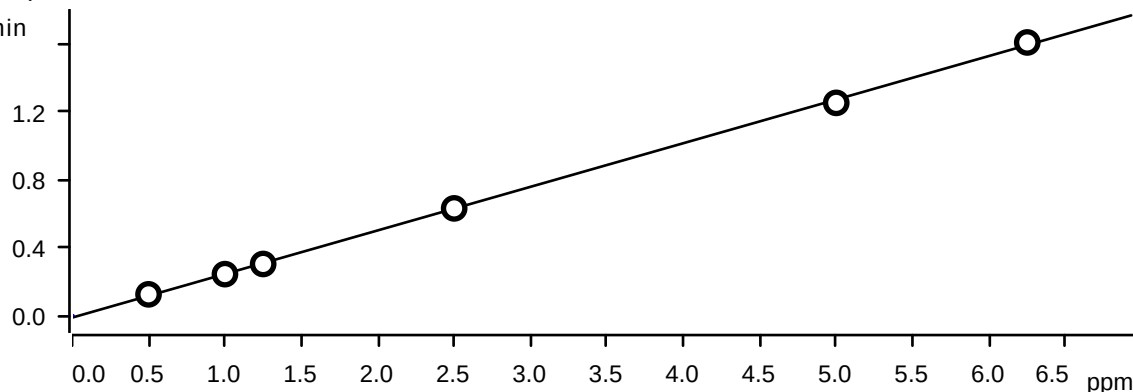
Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

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

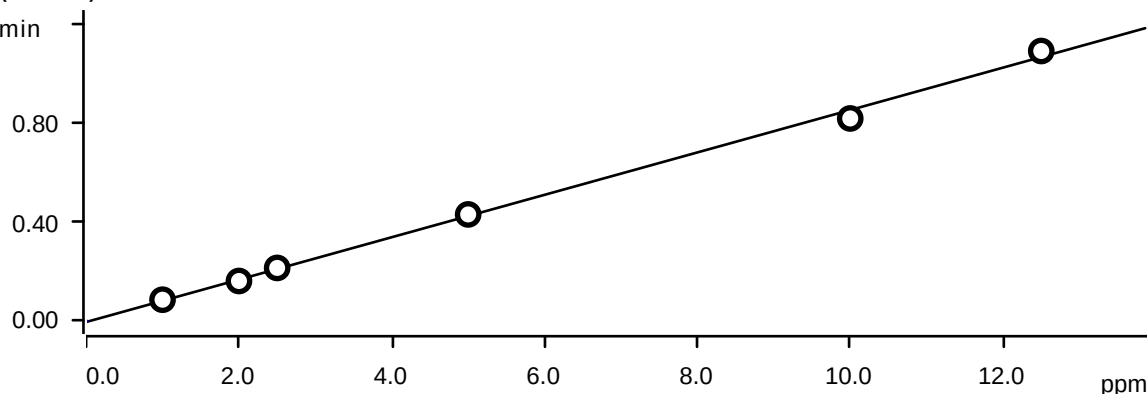


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

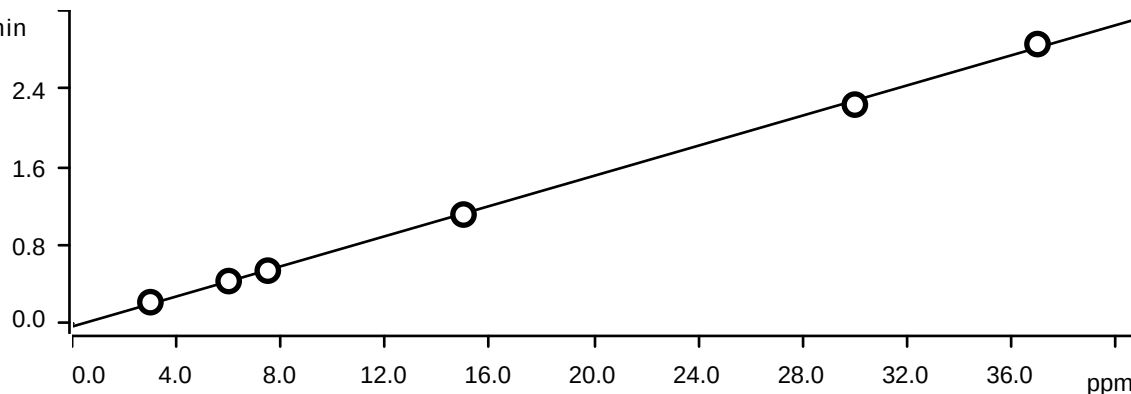
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

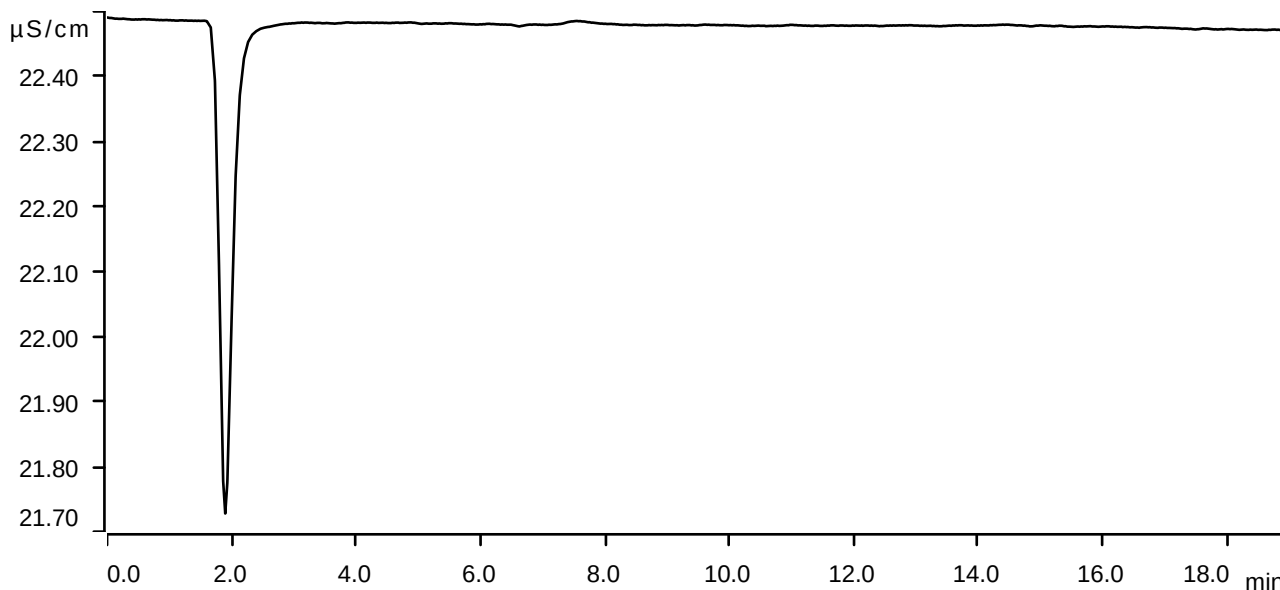
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

Sample data

Ident CCB
Sample type Sample
Determination start 2025-06-26 12:36:49 UTC-4
Method IC1-062325
Operator

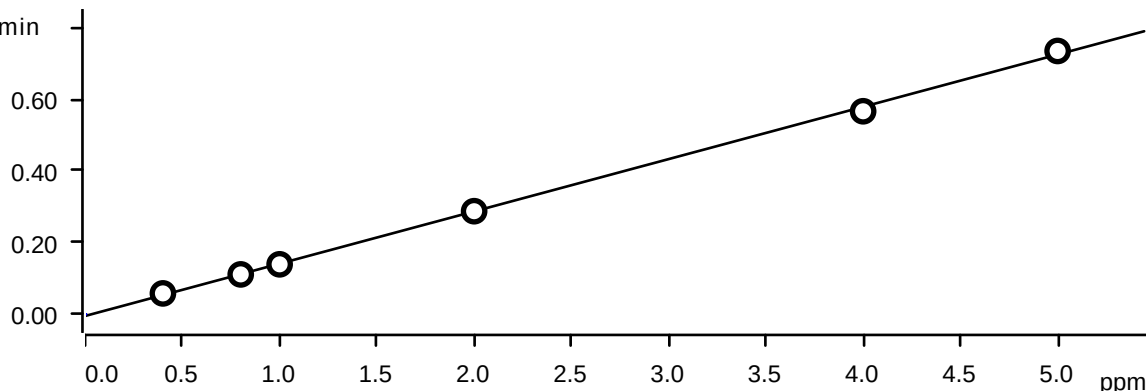
Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.27 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions

Fluoride (Anions)

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



Function: $A = -4.55276E-3 + 0.0145788 \times Q$

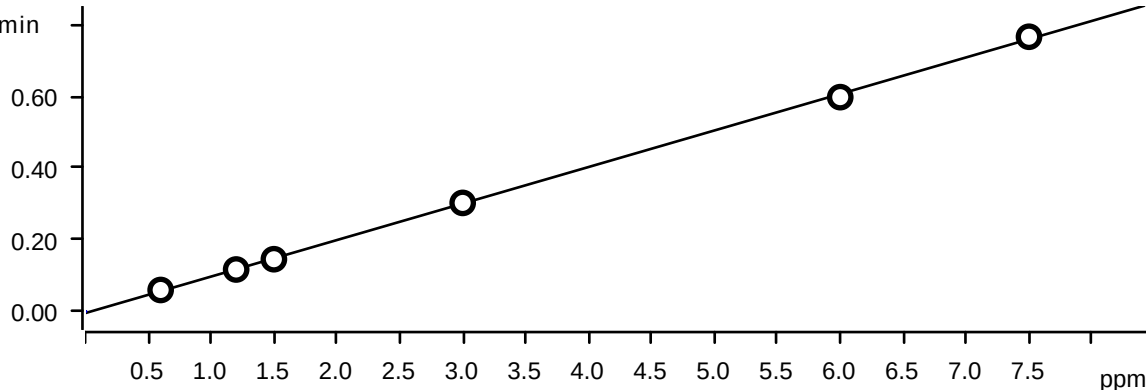
Relative standard deviation 2.633289 %

Correlation coefficient 0.999633

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.058	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.111	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.139	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.288	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.566	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2025-06-23 17:25:53 UTC-4	used

Chloride (Anions)

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



Function: $A = -4.66825E-3 + 0.0101843 \times Q$

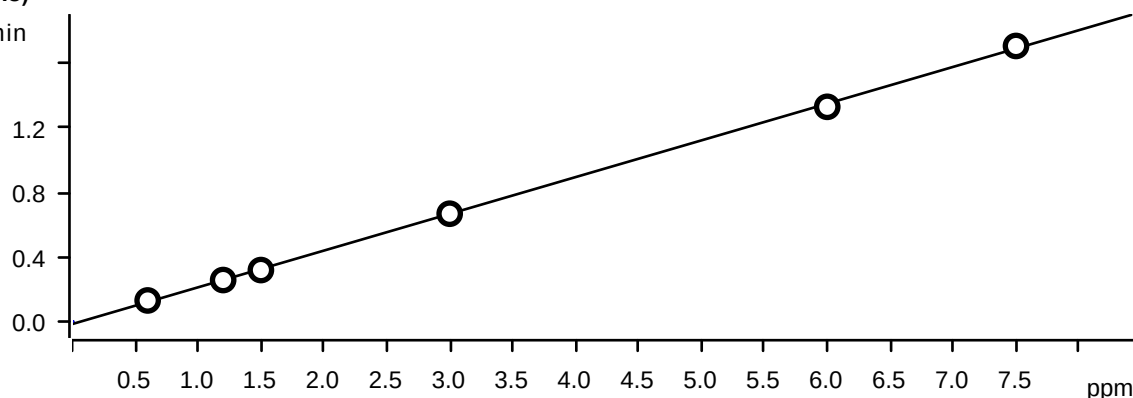
Relative standard deviation 1.824872 %

Correlation coefficient 0.999824

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.060	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.146	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.303	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.597	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.766	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

Function: $A = -0.0166933 + 0.0227623 \times Q$

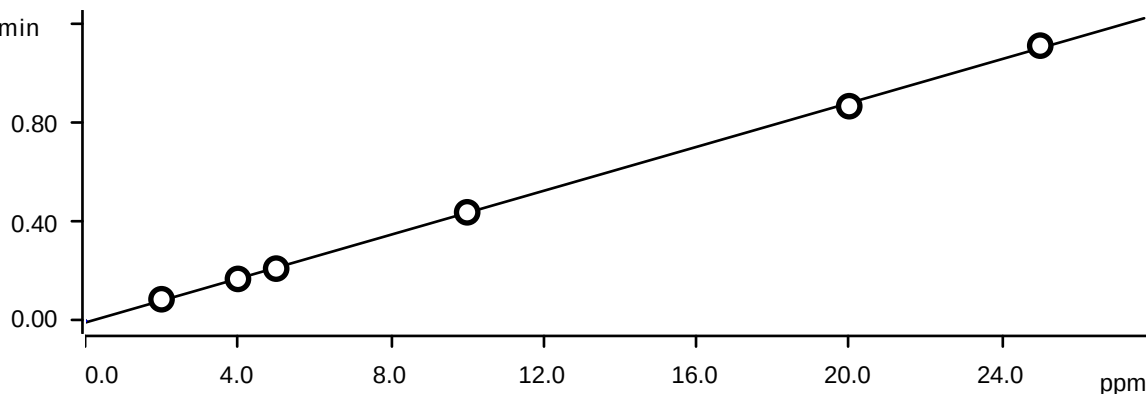
Relative standard deviation 1.905382 %

Correlation coefficient 0.999811

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.130	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.256	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.318	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.667	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.329	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.706	STD7	2025-06-23 17:25:53 UTC-4	used

Bromide (Anions)

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



Function: $A = -7.05131E-3 + 4.42168E-3 \times Q$

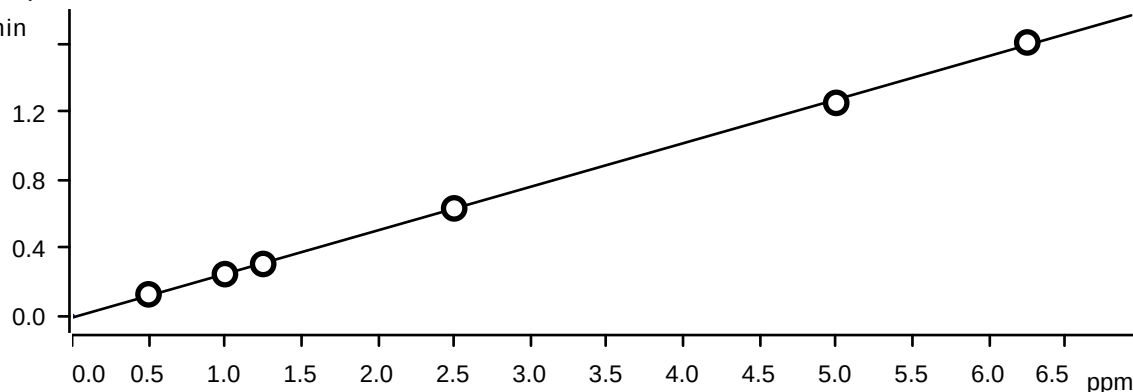
Relative standard deviation: 1.851347 %

Correlation coefficient: 0.999819

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.210	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.437	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.864	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.108	STD7	2025-06-23 17:25:53 UTC-4	used

Nitrate (Anions)

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

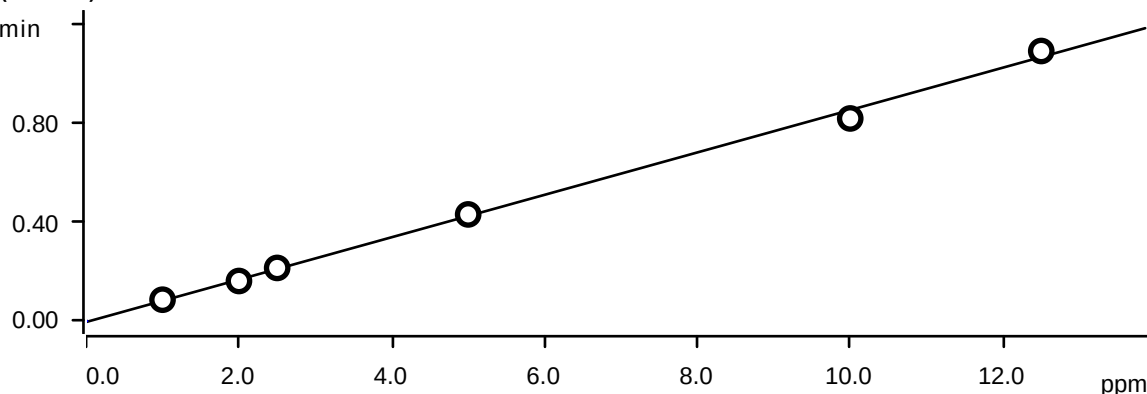


Function: $A = -0.0130270 + 0.0256654 \times Q$

Relative standard deviation: 1.929849 %

Correlation coefficient 0.999804

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.243	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.303	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.630	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.251	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.606	STD7	2025-06-23 17:25:53 UTC-4	used

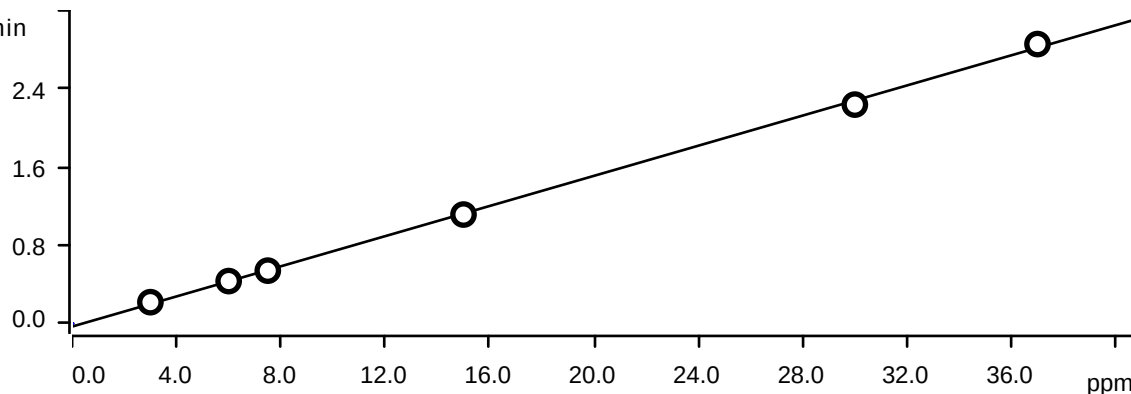
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.61656E-3 + 8.53718E-3 \times Q$

Relative standard deviation 4.618615 %

Correlation coefficient 0.998857

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.086	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.162	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.214	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.430	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.816	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.088	STD7	2025-06-23 17:25:53 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0315238 + 7.70359E-3 \times Q$

Relative standard deviation 2.454303 %

Correlation coefficient 0.999685

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-06-23 15:17:36 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2025-06-23 15:38:59 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.434	STD3	2025-06-23 16:00:23 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.540	STD4	2025-06-23 16:21:47 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.114	STD5	2025-06-23 16:43:01 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.237	STD6	2025-06-23 17:04:27 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.856	STD7	2025-06-23 17:25:53 UTC-4	used

Analytical Summary Report

Analysis Method: 7196A

ANALYST: Eman

Parameter: ~~Hexavalent Chromium~~

SUPERVISOR REVIEW BY: Iwona

Run Number: LB136293

pH Meter ID: pH Meter-1

Reagent/Standard	Lot/Log #
hexavalent chromium color reagent	WP113606
5N sulfuric acid	WP112831
HNO3 Hex-Chrome, 5M	WP112830
Hexchrome Cleaning Solution	WP113087

Intercept: 0.0006

Slope: 0.7654

Regression: 0.999973

Seq	Lab ID	True Value (mg/l)	DF	Initial Vol (ml)	Final Vol (ml)	pH HNO3	pH H2SO4	Absorb.at 540nm		Absorbance Difference	Result (mg/L)	%D	Anal Date	Anal Time
								Backgrnd	Color					
1	CAL1	0	1	100	100	7.34	1.85	0.000	0.000	0.000	-0.00		06/26/2025	11:50
2	CAL2	0.01	1	100	100	7.38	1.67	0.000	0.009	0.009	0.010	0	06/26/2025	11:51
3	CAL3	0.025	1	100	100	7.45	2.10	0.000	0.020	0.020	0.025	0	06/26/2025	11:52
4	CAL4	0.05	1	100	100	7.53	2.24	0.000	0.039	0.039	0.050	0	06/26/2025	11:53
5	CAL5	0.1	1	100	100	7.42	2.32	0.000	0.079	0.079	0.102	2	06/26/2025	11:54
6	CAL6	0.5	1	100	100	7.51	1.74	0.000	0.379	0.379	0.494	-1.2	06/26/2025	11:55
7	CAL7	1	1	100	100	7.36	1.89	0.000	0.768	0.768	1.002	0.2	06/26/2025	11:56

Analytical Summary Report

Analysis Method: 7196A

ANALYST:Eman

Parameter: Hexavalent Chromium

SUPERVISOR REVIEW BY:Iwona

Run Number: LB136293

pH Meter ID:pH Meter-1

Seq	Lab ID	True Value	DF	Initial Vol (ml/gm)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at540nm		Absorbance Difference	Intermediate Result (mg/L)	Anal Date	Anal Time
								Backgrnd	Color				
1	ICV	0.5	1	100	100	7.35	2.27	0.000	0.377	0.377	0.492	06/26/2025	11:57
2	ICB		1	100	100	7.31	2.45	0.000	0.001	0.001	0.001	06/26/2025	11:58
3	CCV1	0.5	1	100	100	7.42	1.96	0.000	0.381	0.381	0.497	06/26/2025	11:59
4	CCB1		1	100	100	7.24	1.87	0.000	0.000	0.000	-0.001	06/26/2025	12:00
5	RL Check	0.01	1	100	100	7.44	2.36	0.000	0.008	0.008	0.010	06/26/2025	12:01
6	PB168617BL		1	2.50	100	7.26	2.17	0.000	0.000	0.000	-0.001	06/26/2025	12:02
7	PB168617BS	20	1	2.50	100	7.48	1.76	0.000	0.385	0.385	0.502	06/26/2025	12:03
8	Q2405-01		1	2.52	100	7.54	1.68	0.004	0.004	0.000	-0.001	06/26/2025	12:04
9	Q2412-01		1	2.54	100	7.63	1.85	0.004	0.004	0.000	-0.001	06/26/2025	12:05
10	Q2414-01		1	2.54	100	7.41	2.07	0.002	0.002	0.000	-0.001	06/26/2025	12:06
11	Q2415-01		1	2.57	100	7.42	2.16	0.006	0.006	0.000	-0.001	06/26/2025	12:07
12	Q2416-01		1	2.51	100	7.65	2.24	0.000	0.001	0.001	0.001	06/26/2025	12:08
13	Q2416-01DU		1	2.51	100	7.69	2.36	0.000	0.001	0.001	0.001	06/26/2025	12:09
14	Q2416-01MS	40	2	2.52	100	7.63	1.63	0.000	0.320	0.320	0.417	06/26/2025	12:10
15	Q2416-01MS	1284	40	2.51	100	7.61	2.05	0.000	0.612	0.612	0.799	06/26/2025	12:11
16	CCV2	0.5	1	100	100	7.42	1.77	0.000	0.378	0.378	0.493	06/26/2025	12:12
17	CCB2		1	100	100	7.25	2.12	0.000	0.001	0.001	0.001	06/26/2025	12:13
18	Q2416-01MS	40	2	2.52	100	7.59	2.48	0.000	0.370	0.370	0.483	06/26/2025	12:14
19	Q2419-01		1	2.57	100	7.63	2.36	0.010	0.011	0.001	0.001	06/26/2025	12:15
20	Q2420-01		1	2.54	100	7.59	1.87	0.009	0.010	0.001	0.001	06/26/2025	12:16
21	Q2425-01		1	2.52	100	7.65	1.96	0.005	0.005	0.000	-0.001	06/26/2025	12:17
22	Q2425-02		1	2.55	100	7.68	2.35	0.018	0.018	0.000	-0.001	06/26/2025	12:18
23	Q2425-03		1	2.56	100	7.57	2.26	0.004	0.004	0.000	-0.001	06/26/2025	12:19
24	CCV3	0.5	1	100	100	7.65	2.14	0.000	0.383	0.383	0.500	06/26/2025	12:20
25	CCB3		1	100	100	7.46	2.07	0.000	0.001	0.001	0.001	06/26/2025	12:21

LB136312

Test results

Aquakem 7.2AQ1

Page:

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

6/27/2025 11:44

Reviewed by : RM

Instrument ID : Konelab

Test: Ammonia-N

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	0.990	0.0	0.245	
ICB1	0.015	0.0	0.048	
CCV1	0.984	0.0	0.244	
CCB1	0.010	0.0	0.047	
RL CHECK	0.097	0.0	0.064	
PB168619BL	0.006	0.0	0.046	
PB168619BS	0.998	0.0	0.247	
Q2418-01	1.382	0.0	0.325	
Q2418-01DUP	1.388	0.0	0.326	
Q2418-01MS	2.445	0.0	0.540	
Q2418-01MSD	2.308	0.0	0.513	Test limit high
PB168620BL	0.012	0.0	0.047	Test limit high
PB168620BS	0.977	0.0	0.243	
Q2425-01	0.027	0.0	0.050	
CCV2	0.999	0.0	0.247	
CCB2	0.008	0.0	0.046	
Q2425-01DUP	0.020	0.0	0.049	
Q2425-01MS	1.015	0.0	0.250	
Q2425-01MSD	0.996	0.0	0.246	
Q2425-02	0.022	0.0	0.049	
Q2425-03	0.044	0.0	0.053	
CCV3	1.004	0.0	0.248	
CCB3	0.013	0.0	0.047	

97% (50-150)
RM 06/27/2025

N 23
Mean 0.685
SD 0.7472
CV% 109.04

Aquakem v. 7.2AQ1

Results from time period:

Fri Jun 27 10:21:21 2025

Fri Jun 27 11:43:51 2025

Sample Id	Sam/Ctr/c/	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	Ammonia-† P		0.0139	mg/l	6/27/2025 10:21:21	
0.1PPM	A	Ammonia-† P		0.1069	mg/l	6/27/2025 10:21:22	
0.2PPM	A	Ammonia-† P		0.2062	mg/l	6/27/2025 10:21:23	
0.4PPM	A	Ammonia-† P		0.3977	mg/l	6/27/2025 10:21:24	
1.0PPM	A	Ammonia-† P		0.9913	mg/l	6/27/2025 10:21:25	
1.3PPM	A	Ammonia-† P		1.2738	mg/l	6/27/2025 10:21:26	
2.0PPM	A	Ammonia-† P		2.0435	mg/l	6/27/2025 10:21:27	
ICV1	S	Ammonia-† P		0.9898	mg/l	6/27/2025 11:13:54	
ICB1	S	Ammonia-† P		0.0154	mg/l	6/27/2025 11:13:57	
CCV1	S	Ammonia-† P		0.9842	mg/l	6/27/2025 11:13:59	
CCB1	S	Ammonia-† P		0.0102	mg/l	6/27/2025 11:14:01	
RL CHECK	S	Ammonia-† P		0.0972	mg/l	6/27/2025 11:14:02	
PB168619BL	S	Ammonia-† P		0.0063	mg/l	6/27/2025 11:24:38	
PB168619BS	S	Ammonia-† P		0.9979	mg/l	6/27/2025 11:24:41	
Q2418-01	S	Ammonia-† P		1.3821	mg/l	6/27/2025 11:24:42	
Q2418-01DUP	S	Ammonia-† P		1.3881	mg/l	6/27/2025 11:24:45	
Q2418-01MS	S	Ammonia-† P		2.445	mg/l	6/27/2025 11:24:46	
Q2418-01MSD	S	Ammonia-† P		2.3075	mg/l	6/27/2025 11:24:47	
PB168620BL	S	Ammonia-† P		0.0117	mg/l	6/27/2025 11:24:49	
PB168620BS	S	Ammonia-† P		0.9772	mg/l	6/27/2025 11:35:21	
Q2425-01	S	Ammonia-† P		0.0266	mg/l	6/27/2025 11:35:22	
CCV2	S	Ammonia-† P		0.9994	mg/l	6/27/2025 11:35:24	
CCB2	S	Ammonia-† P		0.0082	mg/l	6/27/2025 11:35:25	
Q2425-01DUP	S	Ammonia-† P		0.0196	mg/l	6/27/2025 11:35:27	
Q2425-01MS	S	Ammonia-† P		1.015	mg/l	6/27/2025 11:35:28	
Q2425-01MSD	S	Ammonia-† P		0.9957	mg/l	6/27/2025 11:35:29	
Q2425-02	S	Ammonia-† P		0.0218	mg/l	6/27/2025 11:43:44	
Q2425-03	S	Ammonia-† P		0.0442	mg/l	6/27/2025 11:43:45	
CCV3	S	Ammonia-† P		1.0043	mg/l	6/27/2025 11:43:48	
CCB3	S	Ammonia-† P		0.013	mg/l	6/27/2025 11:43:51	

Calibration results

Aquakem 7.2AQ1

Page: 1

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

6/27/2025 10:39

Reviewed by : RM

Instrument ID : Konelab

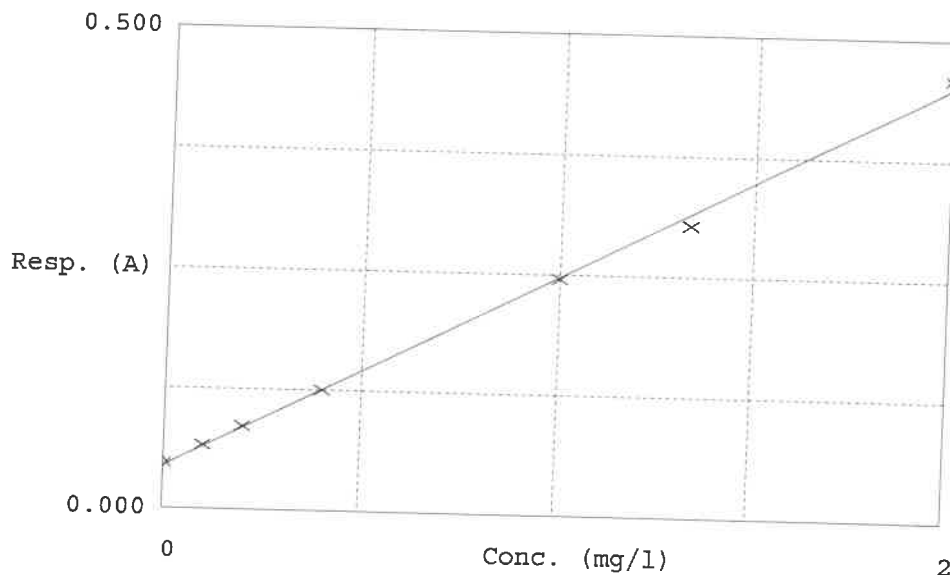
Test Ammonia-N

Accepted 6/27/2025 10:39

Factor 4.931
Bias 0.045

Coeff. of det. 0.998281

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.00PPM	0.047	0.0139	0.0000	-
2	NH3-2PPM	0.066	0.1069	0.1000	6.9
3	NH3-2PPM	0.086	0.2062	0.2000	3.1
4	NH3-2PPM	0.125	0.3977	0.4000	-0.6
5	NH3-2PPM	0.246	0.9913	1.0000	-0.9
6	NH3-2PPM	0.303	1.2738	1.3333	-2.0
7	NH3-2PPM	0.459	2.0435	2.0000	2.2

06/27/2025
RM

SOP ID : M3060A,7196A-Hex.Chromium-26

SDG No : N/A

Matrix : SOIL

Pipette ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#3

Block ID : WC S-2, WC S-1

Weigh By : RM

Start Digest Date: 06/26/2025 Time : 08:35 Temp : 90 °C

End Digest Date: 06/26/2025 Time : 09:35 Temp : 95 °C

Il batch
06/26/2025 10:00 90 °C
06/26/2025 11:00 95 °C

Digestion tube ID : M6054

Block Thermometer ID : WC-Block#1

Filter paper ID : 400213

Prep Technician Signature: *RM*

pH Meter ID : WC pH meter-1

Supervisor Signature: *12*

Standard Name	MLS USED	STD REF. # FROM LOG
PRE-DIGESTION SPIKE	2.0ML	WP111315
INSOLUBLE SPIKE	0.02GM	W2202
POST-DIGESTION SPIKE	2.0ML	WP111315
LCSS	1.0ML	WP111316
PBS003	50.ML	W3112

Chemical Used	ML/SAMPLE USED	Lot Number
MAGNESIUM CHLORIDE	0.4GM	W3152
PHOSPHATE BUFFER	0.5ML	WP112903
HEX. DIGESTION SOLN.	50.0ML	WP113608
5M HNO3	5-7ML	WP112830
5N H2SO4	1-3ML	WP112831
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Vol(ml)	Comment
CAL1	CAL1	2.5ML	W3112
CAL2	CAL2	0.2ML	WP113709
CAL3	CAL3	0.5ML	WP113709
CAL4	CAL4	1ML	WP113709
CAL5	CAL5	0.2ML	WP111315
CAL6	CAL6	1ML	WP111315
CAL7	CAL7	2.0ML	WP111315
ICV	ICV	1ML	WP111316
ICB	ICB	2.5ML	W3112
CCV	CCV	1ML	WP111315
CCB	CCB	2.5ML	W3112

Extraction Conformance/Non-Conformance Comments:

N/A

06/26/2025 *RM*

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/Nitrite	Comment	Prep Pos
PB168617BL	PBS617	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
PB168617BS	LCS617	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2405-01	MH-M/H	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2412-01	TR-05-062425	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2414-01	WC-1	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2415-01	WC-1	2.57	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2416-01	MH-G/H	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2416-01DUP	MH-G/HDUP	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2416-01MSPre	MH-G/HMSPRE	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2416-01MS2Ins	MH-G/HMS2INS	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2416-01MS3Post	MH-G/HMS3POST	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2419-01	EO-03-06252025	2.57	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2420-01	72-11933	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2425-01	COMP-1	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2425-02	COMP-2	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
Q2425-03	COMP-3	2.56	100	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : HEX-6-25

WorkList ID : 190388

Department : Distillation

Date : 06-25-2025 17:24:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2405-01	MH-M/H	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	D41	06/24/2025	7196A
Q2412-01	TR-05-062425	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG05	D41	06/24/2025	7196A
Q2414-01	WC-1	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG01	A33	06/25/2025	7196A
Q2415-01	WC-1	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03		06/24/2025	7196A
Q2416-01	MH-G/H	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	A42	06/25/2025	7196A
Q2419-01	EO-03-06252025	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG05	D51	06/25/2025	7196A
Q2420-01	72-11933	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	D41	06/25/2025	7196A
Q2425-01	COMP-1	Solid	Hexavalent Chromium	Cool 4 deg C	POWE02	D51	06/24/2025	7196A
Q2425-02	COMP-2	Solid	Hexavalent Chromium	Cool 4 deg C	POWE02	D51	06/24/2025	7196A
Q2425-03	COMP-3	Solid	Hexavalent Chromium	Cool 4 deg C	POWE02	D51	06/24/2025	7196A

Date/Time 06/26/2025 08:06
 Raw Sample Received by: R14 CWJ
 Raw Sample Relinquished by: JH WJC

Date/Time 06/26/2025 10:20
 Raw Sample Received by: JH WJC
 Raw Sample Relinquished by: R14 CWJ

SOP ID : MSM4500-NH3 B,G-Ammonia-18

SDG No : N/A

Start Digest Date: 06/26/2025 Time : 10:45 Temp : 150 °C

Matrix : SOIL

End Digest Date: 06/26/2025 Time : 11:45 Temp : 160 °C

Pipette ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#2

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Block ID : WC-DIST-BLOCK-1

Filter paper ID : N/A

Prep Technician Signature:

Weigh By : RM

pH Meter ID : N/A

Supervisor Signature:

Standard Name	MLS USED	STD REF. # FROM LOG
LCSS	1.0ML	WP113449
MS/MSD SPIKE SOL.	1.0ML	WP113450
PBS003	50.0ML	W3112
RL CHECK	N/A	AS PER PB168619
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
BORATE BUFFER	2.5ML	WP111325
NAOH 6N	0.5-2.0ML	WP111318
H2SO4 0.04N	5.0ML	WP112828
pH strip-Ammonia	N/A	W3133
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

ALL GLASSWEAR ARE STEAMED OUT AND THERE WERE NO TRACE OF AMMONIA USING NESLER REAGENT
WP111604,

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
06/26/2025 11:55	RM CWG	RM CWG
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB168620BL	PBS620	1.00	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
PB168620BS	LCS620	1.00	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2425-01DUP	COMP-1DUP	1.03	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2425-01MS	COMP-1MS	1.04	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2425-01MSD	COMP-1MSD	1.03	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2425-01	COMP-1	1.03	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2425-02	COMP-2	1.01	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2425-03	COMP-3	1.04	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : AMMONIA SOIL-6-25

WorkList ID : 190385

Department : Distillation

Date : 06-25-2025 17:22:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2425-01	COMP-1	Solid	Ammonia	Cool 4 deg C	POWE02	D51	06/24/2025	SM4500-NH3
Q2425-02	COMP-2	Solid	Ammonia	Cool 4 deg C	POWE02	D51	06/24/2025	SM4500-NH3
Q2425-03	COMP-3	Solid	Ammonia	Cool 4 deg C	POWE02	D51	06/24/2025	SM4500-NH3

Date/Time 06/26/2025 08:10
 Raw Sample Received by: RMW
 Raw Sample Relinquished by: SS(COC)

Date/Time 06/26/2025 11:45
 Raw Sample Received by: JCC
 Raw Sample Relinquished by: RMW

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136282

Review By	rubina	Review On	6/27/2025 12:45:03 PM
Supervise By	Iwona	Supervise On	6/27/2025 1:03:52 PM
SubDirectory	LB136282	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP113629,WP113630,WP113631,WP113632,WP113633,WP113634,WP113635		
ICV Standard	WP113636		
CCV Standard	WP1137110		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113711		
Chk Standard	WP113637,WP113638		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	STD1	STD1	CAL1	06/23/25 15:17	All standards, samples, and	RM/IZ	OK
2	STD2	STD2	CAL2	06/23/25 15:38	QC are filtered through	RM/IZ	OK
3	STD3	STD3	CAL3	06/23/25 16:00	0.45um, filter lot W3160	RM/IZ	OK
4	STD4	STD4	CAL4	06/23/25 16:21		RM/IZ	OK
5	STD5	STD5	CAL5	06/23/25 16:43		RM/IZ	OK
6	STD6	STD6	CAL6	06/23/25 17:04		RM/IZ	OK
7	STD7	STD7	CAL7	06/23/25 17:25		RM/IZ	OK
8	ICV1	ICV1	ICV	06/23/25 17:47		RM/IZ	OK
9	ICB1	ICB1	ICB	06/23/25 18:08		RM/IZ	OK
10	CCV1	CCV1	CCV	06/26/25 08:45		RM/IZ	OK
11	CCB1	CCB1	CCB	06/26/25 09:06		RM/IZ	OK
12	LB136282BLS	LB136282BLS	MB	06/26/25 09:28		RM/IZ	OK
13	LB136282BSS	LB136282BSS	LCS	06/26/25 09:49		RM/IZ	OK
14	Q2425-01	COMP-1	SAM	06/26/25 10:27		RM/IZ	OK
15	Q2425-01MS	COMP-1MS	MS	06/26/25 10:49	5ml W3092	RM/IZ	OK
16	Q2425-01MSD	COMP-1MSD	MSD	06/26/25 11:10	5ml W3092	RM/IZ	OK
17	Q2425-02	COMP-2	SAM	06/26/25 11:32		RM/IZ	OK
18	Q2425-03	COMP-3	SAM	06/26/25 11:53		RM/IZ	OK

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136282

Review By	rubina	Review On	6/27/2025 12:45:03 PM
Supervise By	Iwona	Supervise On	6/27/2025 1:03:52 PM
SubDirectory	LB136282	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP113629,WP113630,WP113631,WP113632,WP113633,WP113634,WP113635		
ICV Standard	WP113636		
CCV Standard	WP1137110		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113711		
Chk Standard	WP113637,WP113638		

19	CCV2	CCV2	CCV	06/26/25 12:15		RM/IZ	OK
20	CCB2	CCB2	CCB	06/26/25 12:36		RM/IZ	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136293

Review By	Eman	Review On	6/26/2025 1:27:05 PM
Supervise By	Iwona	Supervise On	6/27/2025 11:02:12 AM
SubDirectory	LB136293	Test	Hexavalent Chromium
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	WP113606,WP112831,WP112830,WP113087		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	06/26/25 11:50		Eman	OK
2	CAL2	CAL2	CAL	06/26/25 11:51		Eman	OK
3	CAL3	CAL3	CAL	06/26/25 11:52		Eman	OK
4	CAL4	CAL4	CAL	06/26/25 11:53		Eman	OK
5	CAL5	CAL5	CAL	06/26/25 11:54		Eman	OK
6	CAL6	CAL6	CAL	06/26/25 11:55		Eman	OK
7	CAL7	CAL7	CAL	06/26/25 11:56		Eman	OK
8	ICV	ICV	ICV	06/26/25 11:57		Eman	OK
9	ICB	ICB	ICB	06/26/25 11:58		Eman	OK
10	CCV1	CCV1	CCV	06/26/25 11:59		Eman	OK
11	CCB1	CCB1	CCB	06/26/25 12:00		Eman	OK
12	RL Check	RL Check	RL	06/26/25 12:01		Eman	OK
13	PB168617BL	PB168617BL	MB	06/26/25 12:02		Eman	OK
14	PB168617BS	PB168617BS	LCS	06/26/25 12:03		Eman	OK
15	Q2405-01	MH-M/H	SAM	06/26/25 12:04		Eman	OK
16	Q2412-01	TR-05-062425	SAM	06/26/25 12:05		Eman	OK
17	Q2414-01	WC-1	SAM	06/26/25 12:06		Eman	OK
18	Q2415-01	WC-1	SAM	06/26/25 12:07		Eman	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136293

Review By	Eman	Review On	6/26/2025 1:27:05 PM
Supervise By	Iwona	Supervise On	6/27/2025 11:02:12 AM
SubDirectory	LB136293	Test	Hexavalent Chromium
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	WP113606,WP112831,WP112830,WP113087		

19	Q2416-01	MH-G/H	SAM	06/26/25 12:08		Eman	OK
20	Q2416-01DUP	MH-G/HDUP	DUP	06/26/25 12:09		Eman	OK
21	Q2416-01MSPre	MH-G/HMS	MS	06/26/25 12:10		Eman	OK
22	Q2416-01MS2Ins	MH-G/HMS	MS	06/26/25 12:11		Eman	OK
23	CCV2	CCV2	CCV	06/26/25 12:12		Eman	OK
24	CCB2	CCB2	CCB	06/26/25 12:13		Eman	OK
25	Q2416-01MS3Post	MH-G/HMS	MS	06/26/25 12:14		Eman	OK
26	Q2419-01	EO-3-6-25-2025	SAM	06/26/25 12:15		Eman	OK
27	Q2420-01	72-11933	SAM	06/26/25 12:16		Eman	OK
28	Q2425-01	COMP-1	SAM	06/26/25 12:17		Eman	OK
29	Q2425-02	COMP-2	SAM	06/26/25 12:18		Eman	OK
30	Q2425-03	COMP-3	SAM	06/26/25 12:19		Eman	OK
31	CCV3	CCV3	CCV	06/26/25 12:20		Eman	OK
32	CCB3	CCB3	CCB	06/26/25 12:21		Eman	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB136312

Review By	rubina	Review On	6/27/2025 3:31:32 PM
Supervise By	Iwona	Supervise On	6/27/2025 3:35:46 PM
SubDirectory	LB136312	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP113748		
ICV Standard	WP113750		
CCV Standard	WP113749		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113449		
Chk Standard	WP113429,WP111745,WP111385,WP111660		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	06/27/25 10:21		rubina	OK
2	0.1PPM	0.1PPM	CAL2	06/27/25 10:21		rubina	OK
3	0.2PPM	0.2PPM	CAL3	06/27/25 10:21		rubina	OK
4	0.4PPM	0.4PPM	CAL4	06/27/25 10:21		rubina	OK
5	1.0PPM	1.0PPM	CAL5	06/27/25 10:21		rubina	OK
6	1.3PPM	1.3PPM	CAL6	06/27/25 10:21		rubina	OK
7	2.0PPM	2.0PPM	CAL7	06/27/25 10:21		rubina	OK
8	ICV1	ICV1	ICV	06/27/25 11:13		rubina	OK
9	ICB1	ICB1	ICB	06/27/25 11:13		rubina	OK
10	CCV1	CCV1	CCV	06/27/25 11:13		rubina	OK
11	CCB1	CCB1	CCB	06/27/25 11:14		rubina	OK
12	RL	RL	LOQ	06/27/25 11:14		rubina	OK
13	PB168619BL	PB168619BL	MB	06/27/25 11:24		rubina	OK
14	PB168619BS	PB168619BS	LCS	06/27/25 11:24		rubina	OK
15	Q2418-01	VAC-TRUCK-4074	SAM	06/27/25 11:24		rubina	OK
16	Q2418-01DUP	VAC-TRUCK-4074DUP	DUP	06/27/25 11:24		rubina	OK
17	Q2418-01MS	VAC-TRUCK-4074MS	MS	06/27/25 11:24	NH3 is high	rubina	OK
18	Q2418-01MSD	VAC-TRUCK-4074MSD	MSD	06/27/25 11:24	NH3 is high	rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB136312

Review By	rubina	Review On	6/27/2025 3:31:32 PM
Supervise By	Iwona	Supervise On	6/27/2025 3:35:46 PM
SubDirectory	LB136312	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP113748		
ICV Standard	WP113750		
CCV Standard	WP113749		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113449		
Chk Standard	WP113429,WP111745,WP111385,WP111660		

19	PB168620BL	PB168620BL	MB	06/27/25 11:24		rubina	OK
20	PB168620BS	PB168620BS	LCS	06/27/25 11:35		rubina	OK
21	Q2425-01	COMP-1	SAM	06/27/25 11:35		rubina	OK
22	CCV2	CCV2	CCV	06/27/25 11:35		rubina	OK
23	CCB2	CCB2	CCB	06/27/25 11:35		rubina	OK
24	Q2425-01DUP	COMP-1DUP	DUP	06/27/25 11:35		rubina	OK
25	Q2425-01MS	COMP-1MS	MS	06/27/25 11:35		rubina	OK
26	Q2425-01MSD	COMP-1MSD	MSD	06/27/25 11:35		rubina	OK
27	Q2425-02	COMP-2	SAM	06/27/25 11:43		rubina	OK
28	Q2425-03	COMP-3	SAM	06/27/25 11:43		rubina	OK
29	CCV3	CCV3	CCV	06/27/25 11:43		rubina	OK
30	CCB3	CCB3	CCB	06/27/25 11:43		rubina	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2425

Test : Ammonia, Anions Group1, Hexavalent Chromium, Percent Solids, Trivalent Chromium

Prepbatch ID : PB168617, PB168620,

Sequence ID/Qc Batch ID: LB136282, LB136293, LB136312, LB136322,

Standard ID :

WP111315, WP111316, WP111317, WP111318, WP111325, WP111385, WP111660, WP111745, WP112611, WP112612, WP112796, WP112828, WP112830, WP112831, WP112903, WP113087, WP113429, WP113449, WP113450, WP113606, WP113608, WP113629, WP113630, WP113631, WP113632, WP113633, WP113634, WP113635, WP113636, WP113637, WP113638, WP113711, WP113710, WP113748, WP113749, WP113750,

Chemical ID :

AS PER

PB168619, E3944, M6041, M6151, M6158, W2202, W2647, W2651, W2652, W2666, W2700, W2858, W2979, W3112, W3113, W3132, W3133, W3152, W3163, W3168, W3174, W3180, W3195, W3196, W3197, W3206,



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1993	HEXAVALENTCHROMIUM STOCK STD 1, 50PPM	WP111315	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 0.14140gram of W2651 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1994	HEXAVALENTCHROMIUM STOCK STD 2, 50PPM	WP111316	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 0.14140gram of W2652 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1796	NaOH, 0.1N	WP111317	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_7 (WC SC-6)	None	Iwona Zarych 01/09/2025
<u>FROM</u>	4.00000gram of W3113 + 996.00000ml of W3112 = Final Quantity: 1000.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1471	NaOH Solution, 6N	WP111318	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_7 (WCS-6)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 240.00000gram of W3113 + 760.00000ml of W3112 = Final Quantity: 1000.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1494	BORATE BUFFER	WP111325	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 100.00000L of W3112 + 9.50000gram of W2700 + 88.00000ml of WP111317 = Final Quantity: 100.000 L								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
290	Phenol reagent for Ammonia	WP111385	01/13/2025	07/13/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 01/13/2025
<u>FROM</u> 3.20000gram of W3113 + 8.30000gram of W2858 + 88.80000ml of W3112 = Final Quantity: 100.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
635	EDTA BUFFER FOR AMMONIA	WP111660	01/28/2025	07/28/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 01/28/2025
<u>FROM</u> 5.50000gram of W3113 + 50.00000gram of W3132 + 950.00000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
289	Sodium Hypochlorite for Ammonia	WP111745	02/03/2025	07/31/2025	Rubina Mughal	None	None	Iwona Zarych 02/03/2025
<u>FROM</u> 50.00000ml of W3112 + 50.00000ml of W3174 = Final Quantity: 100.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
153	Ammonia Stock Std. (1000 ppm)	WP112611	04/07/2025	10/07/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 04/07/2025
<u>FROM</u> 3.81900gram of W3196 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1895	Ammonia Stock Std, 1000PPM-SS	WP112612	04/07/2025	10/07/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 04/07/2025
<u>FROM</u>	3.81900gram of W3195 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4035	IC ELUENT CONCENTRATE FOR IC-1	WP112796	04/22/2025	10/22/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 04/22/2025
<u>FROM</u> 2.10000gram of W2647 + 84.75000gram of W3163 + 913.15000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1597	0.04 N H2SO4	WP112828	04/25/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<u>FROM</u>		1.00000ml of M6041 + 999.00000ml of W3112 = Final Quantity: 1000.000 ml						

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1836	HNO3 Hex-Chrome, 5M	WP112830	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych
								04/25/2025

FROM 320.00000ml of M6158 + 680.00000ml of W3112 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
126	5N sulfuric acid	WP112831	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych
								04/25/2025

FROM 140.00000ml of M6041 + 860.00000ml of W3112 = Final Quantity: 1.000 L

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
190	HEX CHROME PHOSPHATE BUFFER	WP112903	05/01/2025	11/01/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych
								05/01/2025

FROM 0.84500L of W3112 + 68.04000gram of W3206 + 87.09000gram of W3168 = Final Quantity: 1.000 L

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3354	Hexchrome Cleaning Solution	WP113087	05/15/2025	08/18/2025	Rubina Mughal	None	None	Iwona Zarych
								05/15/2025

FROM 182.00000ml of M6151 + 727.00000ml of W3112 + 91.00000ml of M6158 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
740	sodium nitroferricyanide for ammonia	WP113429	06/06/2025	07/06/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 06/06/2025
<u>FROM</u> 0.05000gram of W2666 + 99.95000ml of W3112 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1639	Ammonia Intermediate Std-Second source, 50PPM	WP113449	06/09/2025	07/09/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 06/10/2025
<u>FROM</u>	95.00000ml of W3112 + 5.00000ml of WP112612 = Final Quantity: 100.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1322	Ammonia Intermediate Std, 50PPM	WP113450	06/09/2025	07/09/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 06/10/2025
<u>FROM</u> 95.00000ml of W3112 + 5.00000ml of WP112611 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
114	hexavalent chromium color reagent	WP113606	06/20/2025	06/27/2025	Eman Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 06/23/2025
<u>FROM</u> 0.25000gram of W2979 + 50.00000ml of E3944 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
148	hexchrome digestion fluid	WP113608	06/23/2025	07/23/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 06/23/2025
<u>FROM</u> 120.00000gram of W3163 + 4.00000L of W3112 + 80.00000gram of W3113 = Final Quantity: 4000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2487	Anions 300/9056 calibration standard 1	WP113629	06/23/2025	06/24/2025	Iwona Zarych	None	None	Jignesh Parikh 06/23/2025
<u>FROM</u>	10.00000ml of W3112 = Final Quantity: 10.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
24	Anions 300/9056 calibration standard 2	WP113630	06/23/2025	06/24/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3	Jignesh Parikh
(WC) FROM 0.20000ml of W3180 + 9.80000ml of W3112 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
25	Anions 300/9056 calibration standard 3	WP113631	06/23/2025	06/24/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3	Jignesh Parikh
FROM 0.40000ml of W3180 + 9.60000ml of W3112 = Final Quantity: 10.000 ml 								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
26	Anions 300/9056 calibration standard 4	WP113632	06/23/2025	06/24/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/23/2025
FROM 0.50000ml of W3180 + 9.50000ml of W3112 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3680	Anions 300/9056 calibration standard 5-CCV	WP113633	06/23/2025	06/24/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/23/2025
FROM 45.00000ml of W3112 + 5.00000ml of W3180 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3679	Anions 300/9056 calibration standard 6	WP113634	06/23/2025	06/24/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/23/2025
FROM 2.00000ml of W3180 + 8.00000ml of W3112 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3681	Anions 300/9056 calibration standard 7	WP113635	06/23/2025	06/24/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/23/2025
FROM 2.50000ml of W3180 + 7.50000ml of W3112 = Final Quantity: 10.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3233	Anions 300/9056 ICV-LCS std	WP113636	06/23/2025	06/24/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/23/2025
FROM 45.00000ml of W3112 + 5.00000ml of W3197 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4036	IC ELUENT FOR IC-1	WP113637	06/23/2025	07/23/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 06/23/2025
FROM 1980.00000ml of W3112 + 20.00000ml of WP112796 = Final Quantity: 2000.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4037	IC H2SO4 FOR IC-1	WP113638	06/23/2025	07/23/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 06/23/2025

FROM 5.60000ml of M6041 + 999.40000ml of W3112 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3233	Anions 300/9056 ICV-LCS std	WP113711	06/26/2025	06/27/2025	Eman Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 06/27/2025

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

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
275	Ammonia Calibration Std. (2 ppm)	WP113748	06/27/2025	06/28/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 06/27/2025
FROM 48.00000ml of W3112 + 2.00000ml of WP113450 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
285	Ammonia CCV Std. (1 ppm)	WP113749	06/27/2025	06/28/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 06/27/2025
FROM 49.00000ml of W3112 + 1.00000ml of WP113450 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
286	Ammonia ICV Std. (1 ppm)	WP113750	06/27/2025	06/28/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 06/27/2025
<u>FROM</u> 49.00000ml of W3112 + 1.00000ml of WP113449 = Final Quantity: 50.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	05/24/2027	06/20/2025 / RUPESH	05/14/2025 / RUPESH	E3944

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 #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA14125-36 / LEAD (II) CHROMATE, ACS, 500G	U19B018	01/23/2027	01/23/2017 / apatel	01/23/2017 / apatel	W2202

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA13450-36 / Potassium Dichromate, 500g(NEW)	T15F019	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2651

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P188-500 / Potassium Dichromate, 500g(new-2nd lot)	194664	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2652

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	31390 / 1,5-Diphenylcarbazine	MKCR6636	12/09/2027	12/09/2022 / lwona	12/09/2022 / lwona	W2979

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	01237-10KG / Magnesium Chloride Hexahydrate ACS 10KG	002126-2019-201	11/25/2029	11/25/2024 / lwona	11/25/2024 / lwona	W3152

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3252-1 / POTAS PHOSPHATE, DIBASIC PWD, ACS, 500G	24H0856239	04/19/2028	01/03/2025 / lwona	01/03/2025 / lwona	W3168

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

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

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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRYS, ACS, 500G	MKCX1379	01/31/2029	04/29/2025 / lwona	04/29/2025 / lwona	W3206

Certificate of analysis

Product No. 14125
Product: Lead(II) chromate, ACS, 98%
Lot No.: U19B018

Test	Limits	Results
Assay	98.0 % min	99.3 %
Soluble matter	0.15 % max	< 0.02 %
Carbon compounds	0.01 % max	< 0.01 %

Traceable to NIST? Yes

This document has been electronically generated and does not require a signature.

Order our products online www.alfa.com

ThermoFisher
S C I E N T I F I C

Product No.: 13450
Product: Potassium dichromate, ACS, 99.0% min
Lot No.: T15F019

Test	Limits	Results
Appearance	Orange-red crystals	Orange-red crystals
Identification	To Pass	Passes
Purity	99.0 % min	99.67 %
Insoluble matter	0.005 % max	0.004 %
Loss on drying	0.05 % max	0.03 %
Chloride	0.001 % max	< 0.001 %
Sulfate	0.005 % max	< 0.005 %
Iron	0.001 % max	< 0.001 %
Calcium	0.003 % max	0.0012 %
Sodium	0.02 % max	0.0047 %

Order our products online [alfa.com](https://www.thermofisher.com/alfa)

This document has been electronically generated and does not require a signature.

This is to certify that units of the lot number above 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 purchaser, formulator or those performing further manufacturing 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 above information is the actual analytical results obtained.

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

(sodium hydrogen carbonate)



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

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (NaHCO ₃) (dried basis)	99.7 – 100.3 %	100.1
Insoluble Matter	<= 0.015 %	< 0.002
Chloride (Cl)	<= 0.003 %	0.003
Phosphate (PO ₄)	<= 0.001 %	0.001
Sulfur Compounds (as SO ₄)	<= 0.003 %	0.003
Calcium (Ca)	<= 0.02 %	0.02
Trace Impurities – Iron (Fe)	<= 0.001 %	0.001
Magnesium (Mg)	<= 0.005 %	0.005
Potassium (K)	<= 0.005 %	0.005
Ammonium (NH ₄)	<= 5 ppm	5
Trace Impurities – ACS – Heavy Metals (as Pb)	<= 5 ppm	5

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

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

James Ethier
Jamie Ethier
Vice President Global Quality

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

W2858 Received by AP on 07/07/2021

Product No.: 33213
Product: Phenol, ACS, 99+%, stab.
Lot No.: M13H048

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

Retest date: January 7, 2026

Order our products online [alfa.com](https://www.alfa.com)**This document has been electronically generated and does not require a signature.**

This is to certify that units of the lot number above 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 purchaser, formulator or those performing further manufacturing 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 above information is the actual analytical results obtained.

W2666 Recived on 02/10/2020 by AP

Product No.: 87683

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

Lot No.: W12F013

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

Order our products online [alfa.com](https://www.alfa.com)

This document has been electronically generated and does not require a signature.

This is to certify that units of the lot number above 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 purchaser, formulator or those performing further manufacturing 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 above information is the actual analytical results obtained.

Certificate Of Analysis



Date of Release: 11/14/2019

W2700 Recived by AP on 3/11/2020

Name: **Sodium Borate, Decahydrate**
ACS

Item No: **SX0355 All Sizes**

Lot / Batch No: **2019111354**

Country of Origin: **India**

Item	Specifications	Analysis
Assay (Na ₂ B ₄ O ₇ • 10H ₂ O)	99.5 - 105.0%	101.7%
Calcium (Ca)	0.005% max.	0.003%
Chloride (Cl)	0.001% max.	<0.001%
Color	White	Passes Test
Form	Crystals	Passes Test
Heavy Metals (as Pb)	0.001% max.	<0.001%
Insoluble Matter	0.005% max.	0.002%
Iron (Fe)	5 ppm max.	<5 ppm
pH of a 0.01 M solution at 25C	9.15 - 9.20	9.17
Phosphate (PO ₄)	0.001% max.	<0.001%
Sulfate (SO ₄)	0.005% max.	<0.005%

Joe Schoellkopf

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



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	P188	Quality Test / Release Date	08/12/2019
Lot Number	194664		
Description	POTASSIUM DICHROMATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Aug/2024
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.		
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Fine, orange-red crystals
ASSAY	%	>= 99	99.2
CALCIUM	%	<= 0.003	<0.003
CHLORIDE	%	<= 0.001	<0.001
LOSS ON DRYING @ 105 C	%	<= 0.05	<0.05
SULFATE (SO4)	%	<= 0.005	<0.005
INSOLUBLE MATTER	%	<= 0.005	0.003
IRON (Fe)	%	<= 0.001	<0.001
SODIUM (Na)	%	<= 0.02	<0.02
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Jerusa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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

*Based on suggested storage condition.

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

Avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	<= 0.3	0.2
Titration Base (μeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E3944

Jamie Croak

Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials LLC

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

avantor™



M 6041-4b
MS

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

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO ₂)	≤ 2 ppm	< 2 ppm
Ammonium (NH ₄)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO ₃)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO ₄)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

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

 **avantor™**

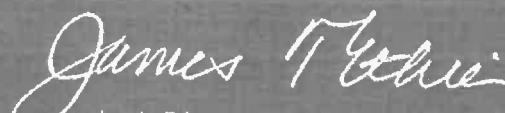


Material No.: 9673-33
Batch No.: 23D2462010

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

For Laboratory, Research, or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantor™**



M6151

R → 11/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid–base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO ₃)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH ₄)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantor™**



Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA–ANALYZED® Reagent
For Trace Metal Analysis



Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
------	---------------	--------

For Laboratory, Research, or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

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

A handwritten signature in cursive script that reads 'Jamie Ethier'.
Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

avantor™



R- 0210212025

m - 6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

 **avantorsTM**



Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

 **avantor™**



Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
------	---------------	--------

For Microelectronic Use

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

A handwritten signature in cursive script, appearing to read 'J. Croak'.

Jamie Croak
Director Quality Operations, Bioscience Production

W 2979

Rec: 12/09/22

exp. 12/09/27

Product Name:

1,5-Diphenylcarbazide - ACS reagent

Product Number:

259225

Batch Number:

MKCR6636

Brand:

SIAL

CAS Number:

140-22-7

MDL Number:

MFCD00003013

Formula:

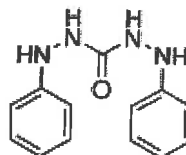
C₁₃H₁₄N₄O

Formula Weight:

242.28 g/mol

Quality Release Date:

02 JUN 2022



Certificate of Analysis

Test	Specification	Result
Appearance (Color)	Conforms to Requirements	Pink
Off-White to Pink, Light Purple or Tan		
Appearance (Form)	Powder or Chunks	Powder
Melting Point	173.0 - 176.0 °C	173.0 °C
Infrared Spectrum	Conforms to Structure	Conforms
Residue on ignition (Ash)	≤ 0.05 %	0.01 %
15 minutes, 800 Degrees Celsius		
Solubility	Pass	Pass
Sensitivity Test	Pass	Pass
Meets ACS Requirements	Current ACS Specification	Conforms



Larry Coers, Director
Quality Control
Milwaukee, WI US

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





Certificate of Analysis



Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

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

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

Storage: Room Temperature

Pellets

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

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.



Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

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

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

Storage: Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.

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

TEST	SPECIFICATION		RESULT
	MIN	MAX	
ASSAY (DRIED BASIS)	99.0	101.0 %	99.5 %
pH OF A 5% SOLUTION @ 25°C	4.0	6.0	4.6
LOSS ON DRYING	8.7	11.4 %	8.90 %
CALCIUM (Ca)	NO PRECIPITATE IS FORMED		NO PRECIPITATE IS FORMED
ELEMENTAL IMPURITIES:			.
NICKEL (Ni)	AS REPORTED		<0.3 ppm
CHROMIUM (Cr)	AS REPORTED		<0.3 ppm
NITRILOTRIACETIC ACID[n[(HOCOCH ₂) ₃ N]		0.1 %	<0.10 %
IDENTIFICATION A	MATCHES REFERENCE		MATCHES REFERENCE
IDENTIFICATION B	RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION		RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION
IDENTIFICATION C	MEETS THE REQUIREMENTS FOR SODIUM		MEETS THE REQUIREMENTS FOR SODIUM
CERTIFIED HALAL			CERTIFIED HALAL
EXPIRATION DATE			10-JUL-2026
DATE OF MANUFACTURE			11-JUL-2023
APPEARANCE			WHITE CRYSTALLINE POWDER
RESIDUAL SOLVENTS		AS REPORTED	NO RESIDUAL SOLVENTS PRESENT
MONOGRAPH EDITION			USP 2024

Certificate of Analysis Results Entered By:

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

Certificate of Analysis Results Approved By:

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

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ



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

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

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

Chem-Impex International, Inc.

Tel: (630) 766-2112**E-mail:** sales@chemimpex.com**Shipping and Correspondence:**

935 Dillon Drive

Wood Dale, IL 60191

Fax: (630) 766-2218**Web site:** www.chemimpex.com**Manufacturing site:**

825 Dillon Drive

Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number	01237
Lot Number	002126-2019-201
Product	Magnesium chloride hexahydrate

Magnesium chloride•6H₂O

CAS Number	7791-18-6
Molecular Formula	MgCl ₂ •6H ₂ O
Molecular Weight	203.3

Appearance	White crystals
Solubility	167 g in 100 mL water
Melting Point	~ 115 °C
Heavy Metals	4.393 ppm
Anion	Nitrate (NO ₃) : < 0.001% Phosphate (PO ₄) : < 5 ppm Sulfate (SO ₄) : < 0.002%
Cation	Ammonium (NH ₄) : < 0.002% Barium (Ba) : 0.005% Calcium (Ca) : 0.01% Iron (Fe) : 4.5 ppm Manganese (Mn) : 0.624 ppm Potassium (K) : 0.004% Sodium (Na) : 0.000003% Strontium (Sr) : 0.005%
Insoluble material	0.0021%
Assay by titration	100.83%
Grade	ACS reagent
Storage	Store at RT

Certificate of Analysis

Catalog Number: 01237

Lot Number: 002126-2019-201

Remarks

See material safety data sheet for additional information

For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

A handwritten signature in black ink, appearing to read 'Bala Kumar', with a stylized flourish at the end.

Bala Kumar
Quality Control Manager



W3163 Rec. on 12/10/24 by IZ

Certificate of Analysis



Material BDH9284-2.5KG
Material Description BDH SODIUM CARB ANHYD ACS 2.5KG
Grade U S P REAGENT (ACS GRADE)

Batch 24E3156178
Reassay Date 09/30/2027
CAS Number 497-19-8
Molecular Formula Na₂CO₃
Molecular Mass 105.99

Date of Manufacture 09/01/2023
Storage Room Temperature
Material is hygroscopic. Protect from Moisture.
Additional Product Description:

Characteristics	Specifications	Measured Values
Appearance	Fine white granular powder	Fine white granular powder
Calcium	<= 0.03 %	0.003 %
Chloride	<= 0.001 %	0.0003 %
Heavy Metals (as Pb)	<= 0.0005 %	0.0001 %
Insolubles	<= 0.01 %	0.001 %
Iron	<= 0.0005 %	0.0001 %
Loss on Heating	<= 1.0 %	0.03 %
Magnesium	<= 0.005 %	0.001 %
Phosphate	<= 0.001 %	0.001 %
Potassium	<= 0.005 %	0.003 %
Purity	>= 99.5 %	100.0 %
Silica	<= 0.005 %	0.001 %
Sulfur Compounds	<= 0.003 %	0.002 %
Extra Description:	Meets Reagent Specifications for testing USP/NF monographs	

Internal ID #: 710

Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA	Analysis may have been rounded to significant digits in specification limits Product meets analytical specifications of the grades listed.



Material	BDH9266-500G
Material Description	BDH POTASS PHOSPHAT DBSC 500GM
Grade	ACS GRADE
Batch	24H0856239
Reassay Date	04/19/2028
CAS Number	7758-11-4
Molecular Formula	K ₂ HPO ₄
Molecular Mass	174.18
Date of Manufacture	04/19/2024
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	Fine white crystalline powder	Fine white crystalline powder
Chloride	<= 0.003 %	0.002 %
Heavy Metals (as Pb)	<= 0.0005 %	<0.0005 %
Insolubles	<= 0.01 %	<0.01 %
Iron	<= 0.001 %	<0.001 %
Loss on Drying	<= 1.0 %	<0.5 %
Nitrogen Compounds	<= 0.001 %	<0.001 %
pH (5%, Water) @25C	8.5 - 9.6	8.8
Purity	>= 98.0 %	99.1 %
Sodium	<= 0.05 %	<0.05 %
Sulfate	<= 0.005 %	<0.002 %
CUSTOMER PART # BDH9266-500G		

Internal ID #: 793

Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA	Analysis may have been rounded to significant digits in specification limits Product meets analytical specifications of the grades listed.

Certificate of Analysis

Sodium Hypochlorite Solution, 5% available Chlorine

Lot Number: 2501J28**Product Number:** 7495.5**Manufacture Date:** JAN 17, 2025**Expiration Date:** JUL 2025

This solution is subject to slow decomposition upon exposure to air. Keep container tightly capped. Refrigeration may improve stability.
When used in the Phenate method for Ammonia, APHA recommends replacing this solution about every 2 months.

Name	CAS#	Grade
Water	7732-18-5	Commercial
Sodium Hypochlorite	7681-52-9	Commercial

Test	Specification	Result	NIST SRM#
Appearance	Colorless to greenish-yellow liquid	Passed	
Assay (vs. Sodium Thiosulfate/Starch)	4.75-5.25 % (w/w) Cl ₂	5.17 % (w/w) Cl ₂	136

Specification	Reference
Sodium Hypochlorite, 5%	APHA (4500-NH3 F)
Sodium Hypochlorite	ASTM (D 4785)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
7495.5-1	4 L black poly	6 months
7495.5-16	500 mL amber poly	6 months
7495.5-32	1 L amber poly	6 months
7495.5-8	250 mL amber poly	6 months

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

Jose Pena (01/17/2025)
Operations Manager

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



Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

1.0 ACCREDITATION / REGISTRATION

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



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Ion Chromatography Solution
Catalog Number: 300-CAL-A
Lot Number: V2-MEB742616
Matrix: H₂O
Value / Analyte(s):
150 µg/mL ea:
Sulfate,
100 µg/mL ea:
Bromide,
50 µg/mL ea:
o-Phosphate as P,
30 µg/mL ea:
Chloride, Nitrite as N,
25 µg/mL ea:
Nitrate as N,
20 µg/mL ea:
Fluoride

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Bromide, Br	100.0 ± 0.5 µg/mL	Chloride, Cl	30.01 ± 0.13 µg/mL
Fluoride, F-	20.00 ± 0.07 µg/mL	Nitrate as N, NNO ₃ -	25.00 ± 0.10 µg/mL
Nitrite as N, NNO ₂ -	30.00 ± 0.10 µg/mL	o-Phosphate as P, PPO ₄	50.00 ± 0.18 µg/mL
Sulfate, SO ₄	150.0 ± 0.8 µg/mL		

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

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Br	IC Assay	3184	151130
Br	Fajans	999c	999c
Cl	IC Assay	3182	190830
Cl	Fajans	999c	999c
F-	IC Assay	3183	140203
NNO3-	IC Assay	3185	170309
NNO2-	IC Assay	Traceable to 40H	08228TH-H2
NNO2-	Calculated	40h	40h
PPO4	IC Assay	3186	170606
SO4	IC Assay	3181	080603

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

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

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

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2(u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

5.0 CHROMATOGRAM

N/A

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 02, 2024

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

11.2 Lot Expiration Date

- **April 02, 2029**

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Thomas Kozikowski
Stock VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Certificate of Analysis



Material	BDH9208-500G
Material Description	BDH AMMONIUM CHLORIDE ACS 500G
Grade	U S P REAGENT (ACS GRADE)
Batch	24L0356561
Reassay Date	08/31/2027
CAS Number	12125-02-9
Molecular Formula	NH ₄ Cl
Molecular Mass	53.49
Date of Manufacture	08/01/2024
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	White granular powder	White granular powder
Calcium	<= 0.001 %	0.001 %
Heavy Metals (as Pb)	<= 0.0005 %	<0.0002 %
Insolubles	<= 0.005 %	0.001 %
Iron	<= 0.0002 %	<0.0002 %
Magnesium	<= 0.0005 %	0.0001 %
pH (5%, Water) @25C	4.5 - 5.5	4.8
Phosphate	<= 0.0002 %	<0.0002 %
Purity	>= 99.5 %	99.8 %
Residue on Ignition	<= 0.01 %	0.003 %
Sulfate	<= 0.002 %	<0.002 %
Extra Description:	Meets Reagent Specifications for testing USP/NF monographs	

Internal ID #: 710

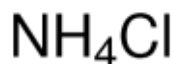
Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA	Analysis may have been rounded to significant digits in specification limits Product meets analytical specifications of the grades listed.

W3196 Received on 03/19/2025 by IZ

Certificate of Analysis

Product Name:

Ammonium chloride - ACS reagent, ≥99.5%



Product Number: 213330
Batch Number: MKCV1009
Brand: SIGALD
CAS Number: 12125-02-9
MDL Number: MFCD00011420
Formula: H4ClN
Formula Weight: 53.49 g/mol
Quality Release Date: 23 OCT 2023
Recommended Retest Date: SEP 2026

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals or Chunk(s)	Crystals
Titration by AgNO ₃	≥ 99.5 %	100.2 %
pH	4.5 - 5.5	4.9
@ 25 Deg c (5% Solution)		
Insoluble Matter	≤ 0.005 %	0.001 %
10%, H ₂ O		
Residue on ignition (Ash)	≤ 0.01 %	< 0.01 %
Calcium (Ca)	≤ 0.001 %	< 0.001 %
Magnesium (Mg)	≤ 5 ppm	1 ppm
Heavy Metals	≤ 5 ppm	< 1 ppm
by ICP		
Iron (Fe)	≤ 2 ppm	< 1 ppm
Phosphate (PO ₄)	≤ 2 ppm	< 2 ppm
Sulfate (SO ₄)	≤ 0.002 %	< 0.002 %
Meets ACS Requirements	Current ACS Specification	Conforms
Recommended Retest Period	-----	-----
3 Years		



Larry Coers, Director

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



Certificate of Analysis

Product Number: 213330
Batch Number: MKCV1009

Quality Control
Milwaukee, WI US

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



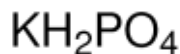
Ident	Instrument IC-1				Analyst :	NF	Method: 300.0 / 9056A		Initial Analyst	
	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO4	Con SO4	Method name date time		
STD1	0	0	0	0	0	0	0	IC1-032125	3/21/2025 10:45	10 NF/IZ
STD2	0.421	0.619	0.631	2.075	0.523	1.052	3.247	IC1-032125	3/21/2025 11:07	10 NF/IZ
STD3	0.795	1.199	1.203	3.994	1.001	1.993	5.998	IC1-032125	3/21/2025 11:28	10 NF/IZ
STD4	0.977	1.475	1.468	4.904	1.226	2.407	7.216	IC1-032125	3/21/2025 11:50	10 NF/IZ
STD5	1.993	3.009	2.995	10.03	2.493	4.968	14.842	IC1-032125	3/21/2025 12:11	10 NF/IZ
STD6	4.034	5.988	5.986	19.975	5.011	10.256	30.502	IC1-032125	3/21/2025 12:32	10 NF/IZ
STD7	4.979	7.51	7.517	25.022	6.247	12.323	36.695	IC1-032125	3/21/2025 12:54	10 NF/IZ
ICV	2.031	3.038	3.08	10.364	2.568	5.199	15.269	IC1-032125	3/21/2025 13:37	10 NF/IZ
ICB	0	0.122	0.08	0	0	0	0	IC1-032125	3/21/2025 13:58	10 NF/IZ
CCV	2.034	3.119	3.093	10.383	2.559	5.188	15.179	IC1-032125	4/3/2025 9:38	10 NF/IZ
CCB	0	0	0	0	0	0	0	IC1-032125	4/3/2025 9:59	10 NF/IZ
LB135296BSW	2.028	3.121	3.103	10.387	2.561	5.226	15.185	IC1-032125	4/3/2025 10:43	10 NF/IZ
LB135296BLW	0	0	0	0	0	0	0	IC1-032125	4/3/2025 11:04	10 NF/IZ
Q1711-01	0.332	26.59	0	0.215	0	2.108	10.666	IC1-032125	4/3/2025 12:29	10 NF/IZ
Q1711-02MS	2.301	28.881	3.076	10.43	2.571	2.367	24.892	IC1-032125	4/3/2025 12:50	10 NF/IZ
Q1711-03MSD	2.172	28.857	2.983	10.101	2.479	1.573	24.485	IC1-032125	4/3/2025 13:12	10 NF/IZ
Q1711-04	0.275	20.1	0	0.221	0	0	4.529	IC1-032125	4/3/2025 13:55	10 NF/IZ
Q1711-08	0	0.047	0	0	0	0	0	IC1-032125	4/3/2025 14:16	10 NF/IZ
Q1716-01	0.433	427.687	0	0.63	0.296	0	54.697	IC1-032125	4/3/2025 14:38	10 NF/IZ
Q1711-01DLX10	0.054	2.364	0	0	0	0	1.413	IC1-032125	4/3/2025 14:59	10 NF/IZ
Q1711-04DLX5	0.071	3.687	0	0	0	0	1.238	IC1-032125	4/3/2025 15:21	10 NF/IZ
CCV	2.072	3.107	3.112	10.418	2.589	5.237	15.386	IC1-032125	4/3/2025 15:43	10 NF/IZ
CCB	0	0	0	0	0	0	0	IC1-032125	4/3/2025 17:16	10 NF/IZ

Certificate of Analysis

Product Name:

Potassium phosphate monobasic - ACS reagent, ≥99.0%

Product Number: P0662
Batch Number: MKCX1379
Brand: SIGALD
CAS Number: 7778-77-0
MDL Number: MFCD00011401
Formula: H₂KO₄P
Formula Weight: 136.09 g/mol
Quality Release Date: 27 JAN 2025
Recommended Retest Date: JAN 2029



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Crystals
Assay	≥ 99.0 %	99.9 %
Insoluble Matter	≤ 0.01 %	< 0.01 %
Loss on Drying	≤ 0.2 %	< 0.1 %
At 105°C		
pH	4.1 - 4.5	4.5
(c = 5%, 25 deg C)		
Chloride Content	≤ 0.001 %	< 0.001 %
Sulfate (SO ₄)	≤ 0.003 %	< 0.003 %
Heavy Metals	≤ 0.001 %	< 0.001 %
by ICP		
Iron (Fe)	≤ 0.002 %	< 0.001 %
Sodium (Na)	≤ 0.005 %	< 0.001 %
Recommended Retest Period	-----	-----
4 Years		



Larry Coers, Director
Quality Control
Milwaukee, WI US

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



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 6/26/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:10
In Date: 06/25/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:14
Out Date: 06/26/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB136262

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
Q2413-01	TP-35	1	1.18	10.41	11.59	10.42	88.8	
Q2413-02	TP-34	2	1.13	10.60	11.73	10.88	92.0	
Q2413-03	TP-77	3	1.15	10.65	11.8	10.88	91.4	
Q2413-04	TP-74	4	1.15	10.83	11.98	10.84	89.5	
Q2413-05	TP-73	5	1.13	10.86	11.99	9.5	77.1	
Q2413-06	TP-72	6	1.16	10.74	11.9	10.5	87.0	
Q2414-01	WC-1	7	1.19	10.50	11.69	10.58	89.4	
Q2414-02	WC-1-EPH	8	1.17	10.08	11.25	10.22	89.8	
Q2414-03	WC-1-VOC	9	1.15	10.83	11.98	10.97	90.7	
Q2414-04	WC-1	10	1.19	10.50	11.69	10.58	89.4	
Q2415-01	WC-1	11	1.19	10.63	11.82	10.72	89.7	
Q2415-02	WC-1-EPH	12	1.15	10.00	11.15	10.12	89.7	
Q2415-03	WC-1-VOC	13	1.19	10.27	11.46	10.4	89.7	
Q2416-01	MH-G/H	14	1.15	10.86	12.01	10.89	89.7	
Q2416-02	MH-G/H-EPH	15	1.14	10.41	11.55	10.52	90.1	
Q2416-03	MH-G/H-VOC	16	1.12	10.57	11.69	10.8	91.6	
Q2416-04	MH-G/H	17	1.15	10.86	12.01	10.89	89.7	
Q2419-01	EO-03-06252025	26	1.17	10.53	11.7	10.97	93.1	
Q2419-02	EO-03-06252025-E2	27	1.13	10.23	11.36	10.36	90.2	
Q2420-01	72-11933	18	1.18	10.49	11.67	11.03	93.9	
Q2421-01	62325	19	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2421-02	624-A	20	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2421-03	624-B	21	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2421-04	624-C	22	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2421-05	624-D	23	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2421-06	62325-A	24	1.00	1.00	2.00	2.00	100.0	wipe sample
Q2422-01	60263	25	1.00	1.00	2.00	2.00	100.0	oil sample
Q2423-01	RT915	28	1.19	10.63	11.82	10.88	91.2	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 6/26/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:10
In Date: 06/25/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:14
Out Date: 06/26/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB136262

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
Q2423-02	RT915	29	1.14	10.45	11.59	10.84	92.8	
Q2425-01	COMP-1	30	1.19	10.38	11.57	9.17	76.9	
Q2425-02	COMP-2	31	1.15	10.37	11.52	9.41	79.7	
Q2425-03	COMP-3	32	1.12	10.71	11.83	9.97	82.6	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

136262

WorkList Name : %1-062525

WorkList ID : 190366

Department : Wet-Chemistry

Date : 06-25-2025 08:11:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2413-01	TP-35	Solid	Percent Solids	Cool 4 deg C	CAMP02	D41	06/24/2025	Chemtech -SO
Q2413-02	TP-34	Solid	Percent Solids	Cool 4 deg C	CAMP02	D41	06/24/2025	Chemtech -SO
Q2413-03	TP-77	Solid	Percent Solids	Cool 4 deg C	CAMP02	D41	06/24/2025	Chemtech -SO
Q2413-04	TP-74	Solid	Percent Solids	Cool 4 deg C	CAMP02	D41	06/24/2025	Chemtech -SO
Q2413-05	TP-73	Solid	Percent Solids	Cool 4 deg C	CAMP02	D41	06/24/2025	Chemtech -SO
Q2413-06	TP-72	Solid	Percent Solids	Cool 4 deg C	CAMP02	D41	06/24/2025	Chemtech -SO
Q2414-01	WC-1	Solid	Percent Solids	Cool 4 deg C	CAMP02	D41	06/24/2025	Chemtech -SO
Q2414-02	WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG01		06/25/2025	Chemtech -SO
Q2414-03	WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG01	A33	06/25/2025	Chemtech -SO
Q2414-04	WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG01	A33	06/25/2025	Chemtech -SO
Q2415-01	WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG01		06/25/2025	Chemtech -SO
Q2415-02	WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	A11	06/24/2025	Chemtech -SO
Q2415-03	WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	A11	06/24/2025	Chemtech -SO
Q2416-01	MH-G/H	Solid	Percent Solids	Cool 4 deg C	PSEG03	A11	06/24/2025	Chemtech -SO
Q2416-02	MH-G/H-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03		06/25/2025	Chemtech -SO
Q2416-03	MH-G/H-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	A42	06/25/2025	Chemtech -SO
Q2416-04	MH-G/H	Solid	Percent Solids	Cool 4 deg C	PSEG03	A42	06/25/2025	Chemtech -SO
Q2419-01	EO-03-06252025	Solid	Percent Solids	Cool 4 deg C	PSEG03		06/25/2025	Chemtech -SO
Q2419-02	EO-03-06252025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D51	06/25/2025	Chemtech -SO
Q2420-01	72-11933	Solid	Percent Solids	Cool 4 deg C	PSEG05	D51	06/25/2025	Chemtech -SO
Q2421-01	62325	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	06/25/2025	Chemtech -SO
Q2421-01	62325	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/25/2025	Chemtech -SO

Date/Time 06/25/25 15:10 Date/Time 06/25/25
 Raw Sample Received by: spwc Raw Sample Received by: CP SM
 Raw Sample Relinquished by: CP SM Raw Sample Relinquished by: spwc

WORKLIST(Hardcopy Internal Chain)

136262

WorkList Name : %1-062525

WorkList ID : 190366

Department : Wet-Chemistry

Date : 06-25-2025 08:11:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2421-02	624-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/25/2025	Chemtech -SO
Q2421-03	624-B	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/25/2025	Chemtech -SO
Q2421-04	624-C	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/25/2025	Chemtech -SO
Q2421-05	624-D	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/25/2025	Chemtech -SO
Q2421-06	62325-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/25/2025	Chemtech -SO
Q2422-01	60263	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/25/2025	Chemtech -SO
Q2423-01	RT915	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/25/2025	Chemtech -SO
Q2423-02	RT915	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	06/25/2025	Chemtech -SO
Q2425-01	COMP-1	Solid	Percent Solids	Cool 4 deg C	POWE02	D51	06/25/2025	Chemtech -SO
Q2425-02	COMP-2	Solid	Percent Solids	Cool 4 deg C	POWE02	D51	06/24/2025	Chemtech -SO
Q2425-03	COMP-3	Solid	Percent Solids	Cool 4 deg C	POWE02	D51	06/24/2025	Chemtech -SO

06/25/25 15:10

Date/Time

Raw Sample Received by: sf wocj

Raw Sample Relinquished by: cp sm

Date/Time

Raw Sample Received by: cp sm

Raw Sample Relinquished by: sf wocj



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Kleinfelder
ADDRESS: 180 Sheree Blvd. Suite 3800
CITY: Exton STATE: PA ZIP: 19341
ATTENTION: Mark Warchol
PHONE: 484-883-3892 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: AS Jenks School
PROJECT NO.: 36000957.001A LOCATION: Philadelphia, PA
PROJECT MANAGER: Mark Warchol
e-mail: mwarchol@kleinfelder.com
PHONE: 484-883-3892 FAX:

CLIENT BILLING INFORMATION

BILL TO: _____ PO#: _____
ADDRESS: Same
CITY: _____ STATE: _____ ZIP: _____
ATTENTION: _____ PHONE: _____

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 5 DAYS*
EDD: 5 DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

1. 2. 3. 4. 5. 6. 7. 8. 9.

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	COMP-1	Soil	✓		6/24/15	9:05	4	✓										
2.	COMP-2	↓	↓		↓	9:30	↓	↓										
3.	COMP-3	↓	↓		↓	9:45	↓	↓										
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

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

RELINQUISHED BY SAMPLER: 1. <u>[Signature]</u>	DATE/TIME: <u>6/24/15</u>	RECEIVED BY: 1. <u>[Signature]</u>	6/25/15 1345	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>2.5°C</u>
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY: 2.		Comments: _____
RELINQUISHED BY SAMPLER: 3.	DATE/TIME:	RECEIVED BY: 3.		Page <u>1</u> of <u>1</u> CLIENT: ☐ Hand Delivered ☒ Other <u>FedEx</u> Shipment Complete ☐ YES ☐ NO

Laboratory Certification

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2425 POWE02

Order Date : 6/25/2025 2:03:00 PM

Project Mgr :

Client Name : Kleinfelder

Project Name : AS Jenks School

Report Type : Results+QC

Client Contact : Mark Warchol

Receive DateTime : 6/25/2025 1:45:00 PM

EDD Type : EXCEL NOCLEANUP

Invoice Name : Kleinfelder

Purchase Order :

Hard Copy Date :

Invoice Contact : Mark Warchol

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2425-01	COMP-1	Solid	06/24/2025	09:05					
					VOCMS Group1		8260D	5 Bus. Days	
Q2425-02	COMP-2	Solid	06/24/2025	09:30					
					VOCMS Group1		8260D	5 Bus. Days	
Q2425-03	COMP-3	Solid	06/24/2025	09:45					
					VOCMS Group1		8260D	5 Bus. Days	

Relinquished By :

Date / Time : 6/24/25 14:50

Received By :

Date / Time :

Storage Area : VOA Refridgerator Room