

Cover Page

Order ID : Q2334

Project ID : Buff

Client : G Environmental

Lab Sample Number

Q2334-01
Q2334-02
Q2334-03

Client Sample Number

MW3
MW4
GBTW1

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: 6/21/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

G Environmental

Project Name: Buff

Project # N/A

Order ID # Q2334

Test Name: Alkalinity,Anions Group1,COD

A. Number of Samples and Date of Receipt:

3 Water samples were received on 06/13/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Alkalinity, Anions Group1, COD, Metals Group4 and VOCMS Group1. This data package contains results for Alkalinity,Anions Group1,COD.

C. Analytical Techniques:

The analysis of Anions Group1 was based on method 300.0, The analysis of Alkalinity was based on method SM2320 B and The analysis of COD was based on method SM5220 D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

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

The Calibration met the requirements.

E. Additional Comments:

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

Signature_____

DATA REPORTING QUALIFIERS- INORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2334

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: PRADIP PRAJAPATI

Date: 06/21/2025

LAB CHRONICLE

OrderID:	Q2334	OrderDate:	6/13/2025 3:40:07 PM
Client:	G Environmental	Project:	Buff
Contact:	Gary Landis	Location:	D52,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2334-01	MW3	WATER			06/12/25 13:45			06/13/25
			Alkalinity	SM2320 B			06/19/25 12:24	
			Anions Group1	300.0			06/13/25 17:54	
			COD	SM5220 D			06/19/25 13:32	
Q2334-02	MW4	WATER			06/12/25 12:45			06/13/25
			Alkalinity	SM2320 B			06/19/25 12:34	
			Anions Group1	300.0			06/13/25 18:58	
			COD	SM5220 D			06/19/25 13:34	
Q2334-03	GBTW1	WATER			06/12/25 13:00			06/13/25
			Alkalinity	SM2320 B			06/19/25 12:38	
			Anions Group1	300.0			06/13/25 19:20	
			COD	SM5220 D			06/19/25 13:35	



SAMPLE DATA

Report of Analysis

Client:	G Environmental	Date Collected:	06/12/25 13:45
Project:	Buff	Date Received:	06/13/25
Client Sample ID:	MW3	SDG No.:	Q2334
Lab Sample ID:	Q2334-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	122		1	1.00	2.00	mg/L		06/19/25 12:24	SM 2320 B-21
Nitrate	0.18	J	1	0.095	0.50	mg/L		06/13/25 17:54	300.0
Sulfate	4.70		1	0.46	3.00	mg/L		06/13/25 17:54	300.0
COD	14.4		1	1.50	10.0	mg/L		06/19/25 13:32	SM 5220 D-11

Comments: The alkalinity to pH 4.31=122 mg CaCO3/L

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	G Environmental	Date Collected:	06/12/25 12:45
Project:	Buff	Date Received:	06/13/25
Client Sample ID:	MW4	SDG No.:	Q2334
Lab Sample ID:	Q2334-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	104		1	1.00	2.00	mg/L		06/19/25 12:34	SM 2320 B-21
Nitrate	0.43	J	1	0.095	0.50	mg/L		06/13/25 18:58	300.0
Sulfate	16.2		1	0.46	3.00	mg/L		06/13/25 18:58	300.0
COD	15.4		1	1.50	10.0	mg/L		06/19/25 13:34	SM 5220 D-11

Comments: The alkalinity to pH 4.30=104 mg CaCO₃/L

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	G Environmental	Date Collected:	06/12/25 13:00
Project:	Buff	Date Received:	06/13/25
Client Sample ID:	GBTW1	SDG No.:	Q2334
Lab Sample ID:	Q2334-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	84.9		1	1.00	2.00	mg/L		06/19/25 12:38	SM 2320 B-21
Nitrate	0.095	U	1	0.095	0.50	mg/L		06/13/25 19:20	300.0
Sulfate	19.4		1	0.46	3.00	mg/L		06/13/25 19:20	300.0
COD	53.0		1	1.50	10.0	mg/L		06/19/25 13:35	SM 5220 D-11

Comments: The alkalinity to pH 4.33=84.9 mg CaCO3/L

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits



QC RESULT SUMMARY

Initial and Continuing Calibration Verification

Client: G Environmental

SDG No.: Q2334

Project: Buff

RunNo.: LB136158

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	10.2	10	102	90-110	05/22/2025
Chloride	mg/L	3.1	3	103	90-110	05/22/2025
Fluoride	mg/L	2.1	2	105	90-110	05/22/2025
Nitrite	mg/L	3.1	3	103	90-110	05/22/2025
Nitrate	mg/L	2.6	2.5	104	90-110	05/22/2025
Sulfate	mg/L	15.1	15	101	90-110	05/22/2025
Orthophosphate as P	mg/L	5.3	5	106	90-110	05/22/2025
Sample ID: CCV1						
Bromide	mg/L	9.9	10	99	90-110	06/13/2025
Chloride	mg/L	3	3	100	90-110	06/13/2025
Fluoride	mg/L	0.81	2	40	90-110	06/13/2025
Nitrite	mg/L	3	3	100	90-110	06/13/2025
Nitrate	mg/L	2.5	2.5	100	90-110	06/13/2025
Sulfate	mg/L	14.6	15	97	90-110	06/13/2025
Orthophosphate as P	mg/L	4.5	5	90	90-110	06/13/2025
Sample ID: CCV2						
Bromide	mg/L	10	10	100	90-110	06/13/2025
Chloride	mg/L	3	3	100	90-110	06/13/2025
Fluoride	mg/L	2	2	100	90-110	06/13/2025
Nitrite	mg/L	3	3	100	90-110	06/13/2025
Nitrate	mg/L	2.5	2.5	100	90-110	06/13/2025
Sulfate	mg/L	14.8	15	99	90-110	06/13/2025
Orthophosphate as P	mg/L	5	5	100	90-110	06/13/2025

Initial and Continuing Calibration Verification

Client: G Environmental

SDG No.: Q2334

Project: Buff

RunNo.: LB136206

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV						
COD		mg/L	50.962	50	102	95-105	05/28/2025
Sample ID:	CCV1						
COD		mg/L	47.915	50	96	95-105	06/19/2025
Sample ID:	CCV2						
COD		mg/L	48.931	50	98	95-105	06/19/2025

Initial and Continuing Calibration Blank Summary

Client: G Environmental

SDG No.: Q2334

Project: Buff

RunNo.: LB136158

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	05/22/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	05/22/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	05/22/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	05/22/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	05/22/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	05/22/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	05/22/2025
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/13/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/13/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/13/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/13/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/13/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/13/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/13/2025
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/13/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/13/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/13/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/13/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/13/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/13/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/13/2025

Initial and Continuing Calibration Blank Summary

Client: G Environmental

SDG No.: Q2334

Project: Buff

RunNo.: LB136206

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB COD	mg/L	< 5.0000	5.0000	U	1.50	10	05/28/2025
Sample ID: CCB1 COD	mg/L	< 5.0000	5.0000	U	1.50	10	06/19/2025
Sample ID: CCB2 COD	mg/L	< 5.0000	5.0000	U	1.50	10	06/19/2025

Preparation Blank Summary

Client: G Environmental

SDG No.: Q2334

Project: Buff

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB136158BLW							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/13/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/13/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/13/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/13/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/13/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/13/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/13/2025
Sample ID: LB136205BLW							
Alkalinity	mg/L	< 1.0000	1.0000	U	1	2	06/19/2025
Sample ID: LB136206BL							
COD	mg/L	< 5.0000	5.0000	U	1.5	10.0	06/19/2025

Matrix Spike Summary

Client:	G Environmental	SDG No.:	Q2334
Project:	Buff	Sample ID:	Q2334-01
Client ID:	MW3MS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	10.1		0.37	U	10	1	101		06/13/2025
COD	mg/L	75-125	61.1		14.4		50.0	1	93		06/19/2025
Chloride	mg/L	80-120	4.20		1.20		3	1	100		06/13/2025
Fluoride	mg/L	80-120	2.10		0.11	U	2	1	105		06/13/2025
Nitrite	mg/L	80-120	3.00		0.074	U	3	1	100		06/13/2025
Nitrate	mg/L	80-120	2.60		0.18	J	2.5	1	97		06/13/2025
Sulfate	mg/L	80-120	19.2		4.70		15	1	97		06/13/2025
Orthophosphate as P	mg/L	80-120	5.30		0.34	U	5	1	106		06/13/2025

Matrix Spike Summary

Client:	G Environmental	SDG No.:	Q2334
Project:	Buff	Sample ID:	Q2334-01
Client ID:	MW3MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	10.1		0.37	U	10	1	101		06/13/2025
COD	mg/L	75-125	60.1		14.4		50.0	1	91		06/19/2025
Chloride	mg/L	80-120	4.20		1.20		3	1	100		06/13/2025
Fluoride	mg/L	80-120	2.10		0.11	U	2	1	105		06/13/2025
Nitrite	mg/L	80-120	3.00		0.074	U	3	1	100		06/13/2025
Nitrate	mg/L	80-120	2.60		0.18	J	2.5	1	97		06/13/2025
Sulfate	mg/L	80-120	19.2		4.70		15	1	97		06/13/2025
Orthophosphate as P	mg/L	80-120	5.00		0.34	U	5	1	100		06/13/2025

Duplicate Sample Summary

Client:	G Environmental	SDG No.:	Q2334
Project:	Buff	Sample ID:	Q2334-01
Client ID:	MW3DUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Alkalinity	mg/L	+/-20	122		121		1	1		06/19/2025
COD	mg/L	+/-20	14.4		15.4		1	6.71		06/19/2025

Duplicate Sample Summary

Client: G Environmental	SDG No.: Q2334
Project: Buff	Sample ID: Q2334-01
Client ID: MW3MSD	Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Bromide	mg/L	+/-20	10.1		10.1		1	0		06/13/2025
Chloride	mg/L	+/-20	4.20		4.20		1	0		06/13/2025
Fluoride	mg/L	+/-20	2.10		2.10		1	0		06/13/2025
Nitrate	mg/L	+/-20	2.60		2.60		1	0		06/13/2025
Nitrite	mg/L	+/-20	3.00		3.00		1	0		06/13/2025
Sulfate	mg/L	+/-20	19.2		19.2		1	0		06/13/2025
Orthophosphate as P	mg/L	+/-20	5.30		5.00		1	6		06/13/2025
COD	mg/L	+/-20	61.1		60.1		1	1.65		06/19/2025

Laboratory Control Sample Summary

Client: G Environmental

SDG No.: Q2334

Project: Buff

Run No.: LB136158

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136158BSW							
Bromide	mg/L	10	10.0		100	1	90-110	06/13/2025
Chloride	mg/L	3	3.00		100	1	90-110	06/13/2025
Fluoride	mg/L	2	2.00		100	1	90-110	06/13/2025
Nitrite	mg/L	3	3.00		100	1	90-110	06/13/2025
Nitrate	mg/L	2.5	2.50		100	1	90-110	06/13/2025
Sulfate	mg/L	15	15.0		100	1	90-110	06/13/2025
Orthophosphate as P	mg/L	5	4.90		98	1	90-110	06/13/2025

Laboratory Control Sample Summary

Client: G Environmental

SDG No.: Q2334

Project: Buff

Run No.: LB136205

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136205BSW							
Alkalinity	mg/L	50	47.5		95	1	80-120	06/19/2025

Laboratory Control Sample Summary

Client: G Environmental

SDG No.: Q2334

Project: Buff

Run No.: LB136206

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136206BS							
COD	mg/L	50	51.0		102	1	90-110	06/19/2025



RAW DATA

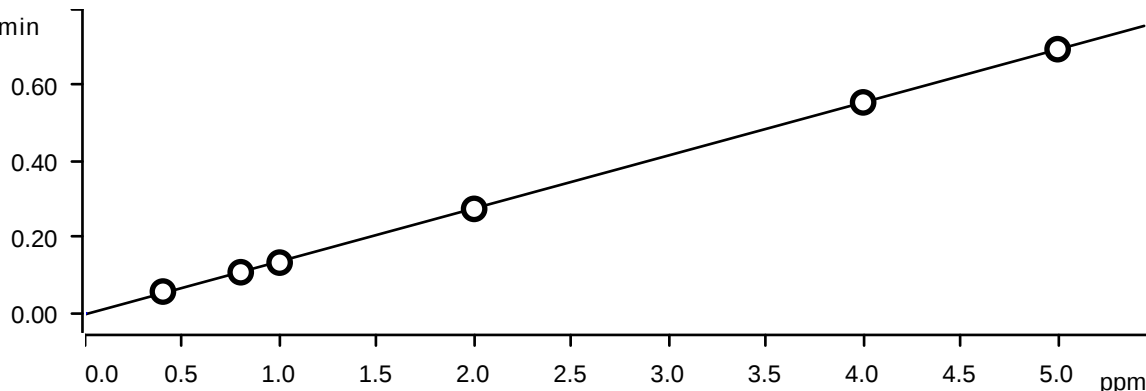
Ident	Instrument IC-1				Analyst: NF	Method: 300.0 / 9056A			
	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO4	Con SO4 Method nam	date time	Initie Analyst
STD1	0.000	0.000	0.000	0.000	0.000	0.000	0.000 IC1-052225	5/22/2025 11:09	10 NF/IZ
STD2	0.430	0.640	0.649	2.129	0.543	1.098	3.287 IC1-052225	5/22/2025 11:30	10 NF/IZ
STD3	0.795	1.207	1.205	4.018	1.004	1.867	6.069 IC1-052225	5/22/2025 11:52	10 NF/IZ
STD4	0.977	1.480	1.479	4.929	1.229	2.477	7.415 IC1-052225	5/22/2025 12:13	10 NF/IZ
STD5	1.991	2.968	2.960	9.916	2.467	5.110	14.621 IC1-052225	5/22/2025 12:35	10 NF/IZ
STD6	4.001	5.967	5.959	19.868	4.966	9.870	29.848 IC1-052225	5/22/2025 12:56	10 NF/IZ
STD7	5.006	7.539	7.548	25.140	6.290	12.578	37.260 IC1-052225	5/22/2025 13:17	10 NF/IZ
ICV	2.054	3.101	3.056	10.229	2.610	5.286	15.128 IC1-052225	5/22/2025 13:39	10 NF/IZ
ICB	0.000	0.000	0.000	0.000	0.000	0.000	0.000 IC1-052225	5/22/2025 14:22	10 NF/IZ
CCV	0.814	2.985	2.963	9.894	2.522	4.517	14.647 IC1-052225	6/13/2025 16:28	10 NF/IZ
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000 IC1-052225	6/13/2025 16:49	10 NF/IZ
LB136158BLW	0.000	0.000	0.000	0.000	0.000	0.000	0.000 IC1-052225	6/13/2025 17:11	10 NF/IZ
LB136158BSW	2.012	3.007	2.991	10.033	2.492	4.910	14.966 IC1-052225	6/13/2025 17:32	10 NF/IZ
Q2334-01	0.091	1.210	0.000	0.000	0.176	0.000	4.714 IC1-052225	6/13/2025 17:54	10 NF/IZ
Q2334-01MS	2.104	4.150	2.995	10.065	2.636	5.263	19.154 IC1-052225	6/13/2025 18:15	10 NF/IZ
Q2334-01MSD	2.123	4.154	3.000	10.101	2.641	5.018	19.210 IC1-052225	6/13/2025 18:37	10 NF/IZ
Q2334-02	0.243	3.722	0.000	0.000	0.434	0.122	16.221 IC1-052225	6/13/2025 18:58	10 NF/IZ
Q2334-03	0.141	7.012	0.000	0.000	0.085	0.000	19.402 IC1-052225	6/13/2025 19:20	10 NF/IZ
CCV	1.989	2.999	2.993	10.003	2.488	4.981	14.773 IC1-052225	6/13/2025 19:42	10 NF/IZ
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000 IC1-052225	6/13/2025 20:03	10 NF/IZ

Clear table

Instrument ID: IC-2 Analyst : IZ Method: 300.0 / 9056A									
ident	concentra tion F-	concentratio n CL-	concentrati on NO2	concentrati on BR-	concentrati on NO3	concentrati on HPO4	concentrati on SO4	file name	Initial wt/ Final
STD1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	IC1-052225	10 NF/IZ
STD2	0.4300	0.6400	0.6490	2.1290	0.5430	1.0980	3.2870	IC1-052225	10 NF/IZ
STD3	0.7950	1.2070	1.2050	4.0180	1.0040	1.8670	6.0690	IC1-052225	10 NF/IZ
STD4	0.9770	1.4800	1.4790	4.9290	1.2290	2.4770	7.4150	IC1-052225	10 NF/IZ
STD5	1.9910	2.9680	2.9600	9.9160	2.4670	5.1100	14.6210	IC1-052225	10 NF/IZ
STD6	4.0010	5.9670	5.9590	19.8680	4.9660	9.8700	29.8480	IC1-052225	10 NF/IZ
STD7	5.0060	7.5390	7.5480	25.1400	6.2900	12.5780	37.2600	IC1-052225	10 NF/IZ
ident	True Value F-	True Value CL-	True Value NO2	True Value BR-	True Value NO3	True Value HPO4	True Value SO4		
STD1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
STD2	0.4000	0.6000	0.6000	2.0000	0.5000	1.0000	3.0000		
STD3	0.8000	1.2000	1.2000	4.0000	1.0000	2.0000	6.0000		
STD4	1.0000	1.5000	1.5000	5.0000	1.2500	2.5000	7.5000		
STD5	2.0000	3.0000	3.0000	10.0000	2.5000	5.0000	15.0000		
STD6	4.0000	6.0000	6.0000	20.0000	5.0000	10.0000	30.0000		
STD7	5.0000	7.5000	7.5000	25.0000	6.2500	12.5000	37.0000		
ident	Relative Error F-	Relative Error CL-	Relative Error NO2	Relative Error BR-	Relative Error NO3	Relative Error HPO4	Relative Error SO4		
STD1	7.5000	6.6667	8.1667	6.4500	8.6000	9.8000	9.5667		
STD2	-0.6250	0.5833	0.4167	0.4500	0.4000	-6.6500	1.1500		
STD3	-2.3000	-1.3333	-1.4000	-1.4200	-1.6800	-0.9200	-1.1333		
STD4	-0.4500	-1.0667	-1.3333	-0.8400	-1.3200	2.2000	-2.5267		
STD5	0.0250	-0.5500	-0.6833	-0.6600	-0.6800	-1.3000	-0.5067		
STD6	0.1200	0.5200	0.6400	0.5600	0.6400	0.6240	0.7027		
STD7									
date time	5/22/2025 11:09	5/22/2025 11:30	5/22/2025 11:52	5/22/2025 12:13	5/22/2025 12:35	5/22/2025 12:56	5/22/2025 13:17		

Fluoride (Anions)

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



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

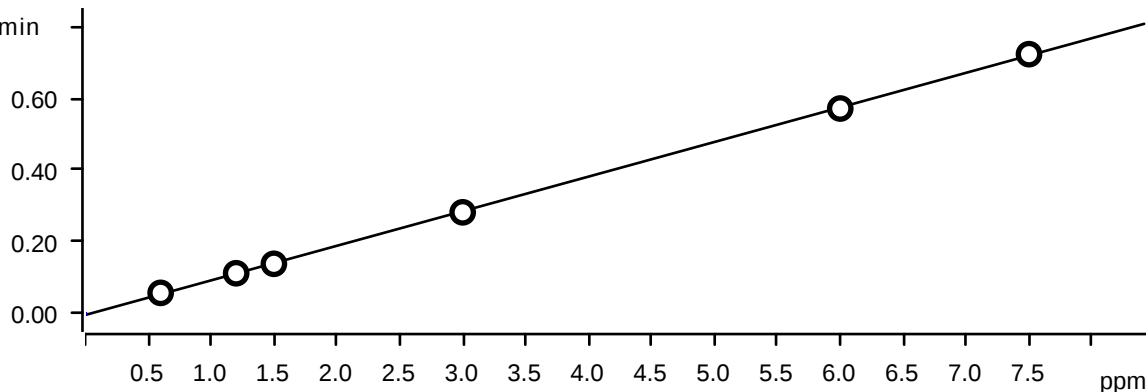
Relative standard deviation 0.920519 %

Correlation coefficient 0.999955

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.057	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.108	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.133	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.275	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.555	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.695	STD7	2025-05-22 13:17:57 UTC-4	used

Chloride (Anions)

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



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

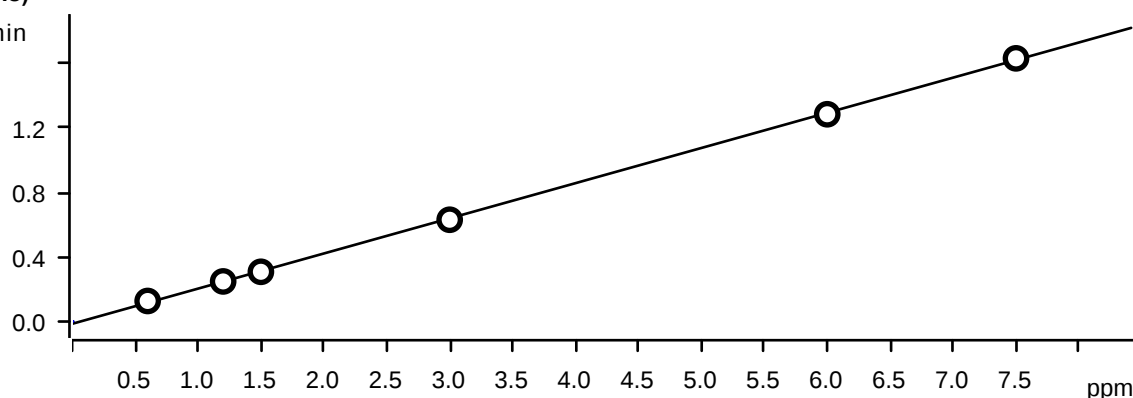
Relative standard deviation 1.154335 %

Correlation coefficient 0.999929

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.057	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.112	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.138	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.282	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.571	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.723	STD7	2025-05-22 13:17:57 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

Function: $A = -0.0150155 + 0.0217890 \times Q$

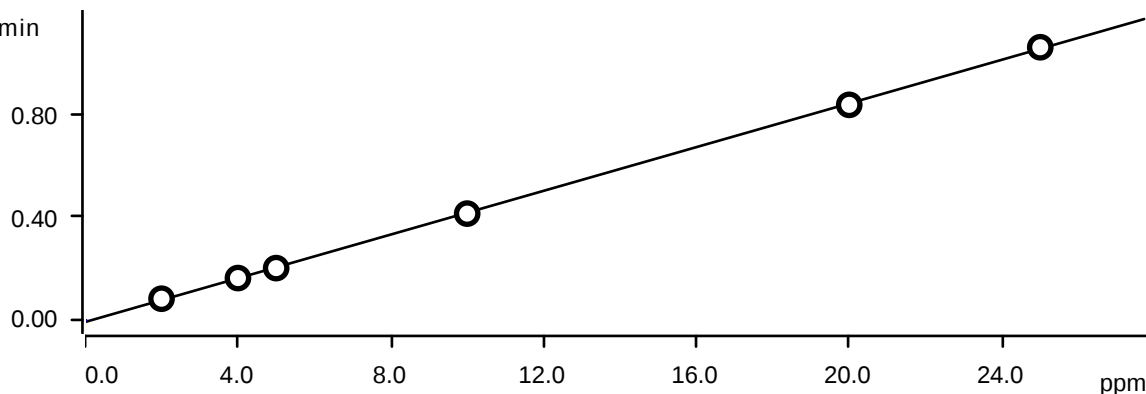
Relative standard deviation 1.428639 %

Correlation coefficient 0.999893

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.126	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.248	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.307	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.630	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.283	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.630	STD7	2025-05-22 13:17:57 UTC-4	used

Bromide (Anions)

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



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

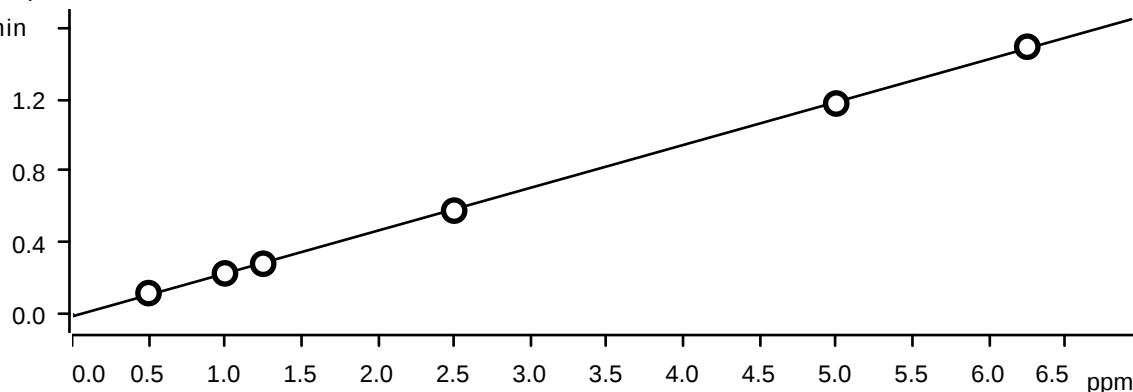
Relative standard deviation: 1.185575 %

Correlation coefficient: 0.999925

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.084	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.164	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.202	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.413	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.834	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.058	STD7	2025-05-22 13:17:57 UTC-4	used

Nitrate (Anions)

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

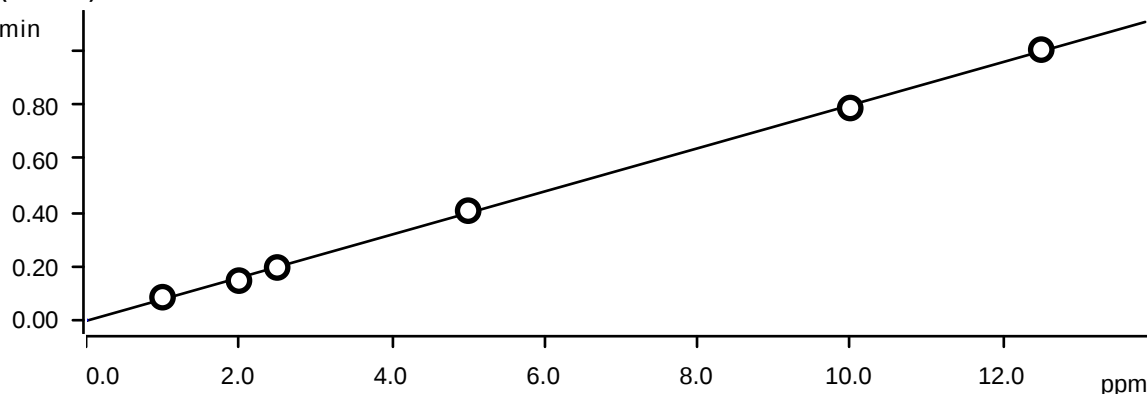


Function: $A = -0.0109593 + 0.0239055 \times Q$

Relative standard deviation: 1.451672 %

Correlation coefficient 0.999889

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.119	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.229	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.283	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.579	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.176	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.493	STD7	2025-05-22 13:17:57 UTC-4	used

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

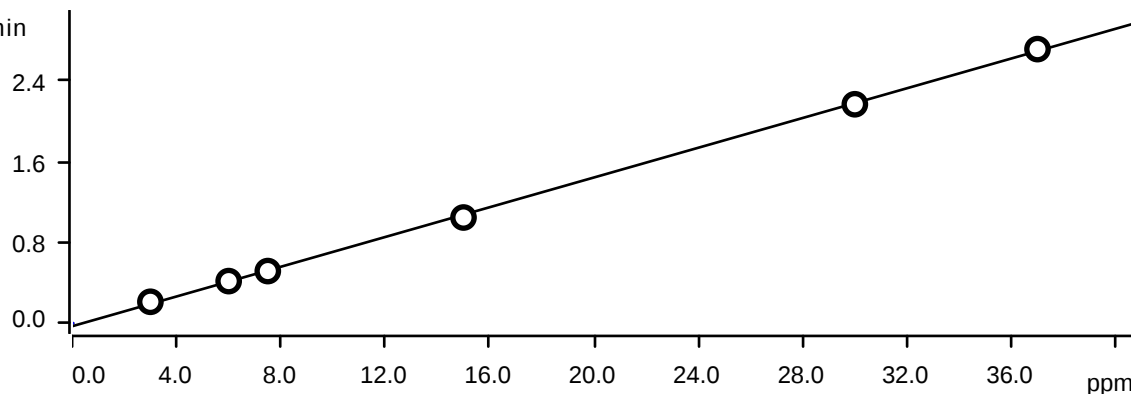
Relative standard deviation 2.297726 %

Correlation coefficient 0.999716

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.085	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.147	STD3	2025-05-22 11:52:16 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.196	STD4	2025-05-22 12:13:41 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.407	STD5	2025-05-22 12:35:06 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.788	STD6	2025-05-22 12:56:31 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.005	STD7	2025-05-22 13:17:57 UTC-4	used

Sulfate (Anions)

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



Function: $A = -0.0303663 + 7.37295E-3 \times Q$

Relative standard deviation 1.792871 %

Correlation coefficient 0.999832

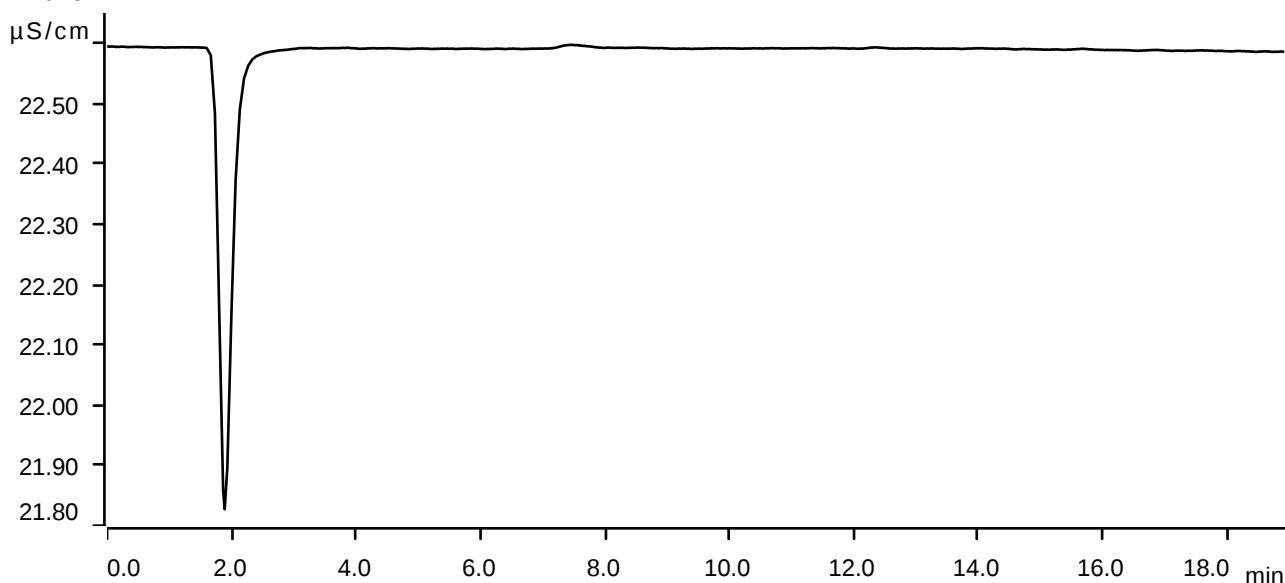
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.212	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.417	STD3	2025-05-22 11:52:16 UTC-4	used
Standard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

Sample data

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

Anions

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

Anions

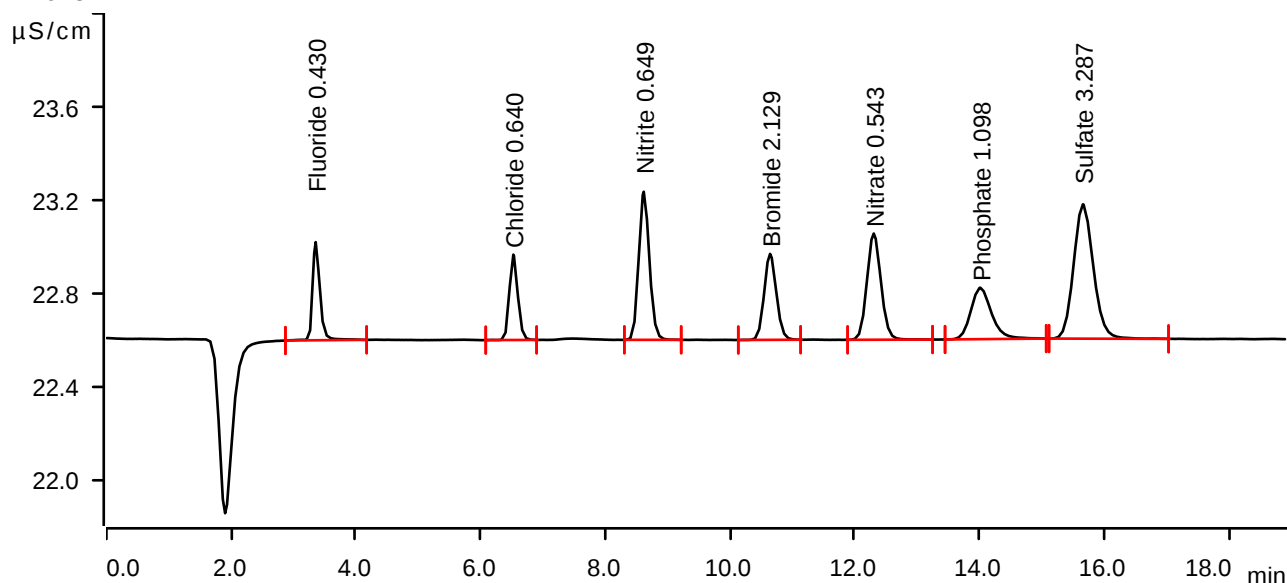
Sample data

Ident STD2
Sample type Standard 2
Determination start 2025-05-22 11:30:53 UTC-4
Method IC1-052225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.357	0.0572	0.421	0.430	Fluoride
2	6.525	0.0574	0.366	0.640	Chloride
3	8.617	0.1264	0.636	0.649	Nitrite
4	10.642	0.0838	0.369	2.129	Bromide
5	12.303	0.1190	0.456	0.543	Nitrate
6	14.013	0.0850	0.221	1.098	Phosphate
7	15.657	0.2120	0.577	3.287	Sulfate

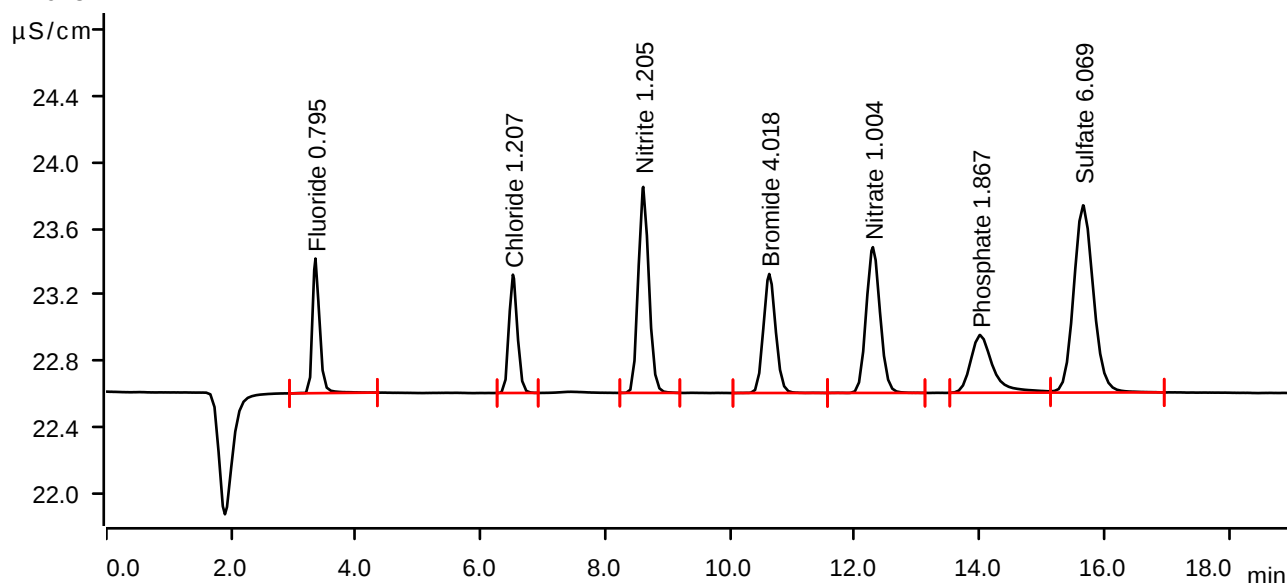
Sample data

Ident STD3
Sample type Standard 3
Determination start 2025-05-22 11:52:16 UTC-4
Method IC1-052225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.353	0.1081	0.814	0.795	Fluoride
2	6.518	0.1121	0.716	1.207	Chloride
3	8.608	0.2475	1.247	1.205	Nitrite
4	10.628	0.1637	0.720	4.018	Bromide
5	12.290	0.2290	0.882	1.004	Nitrate
6	14.008	0.1467	0.350	1.867	Phosphate
7	15.660	0.4171	1.133	6.069	Sulfate

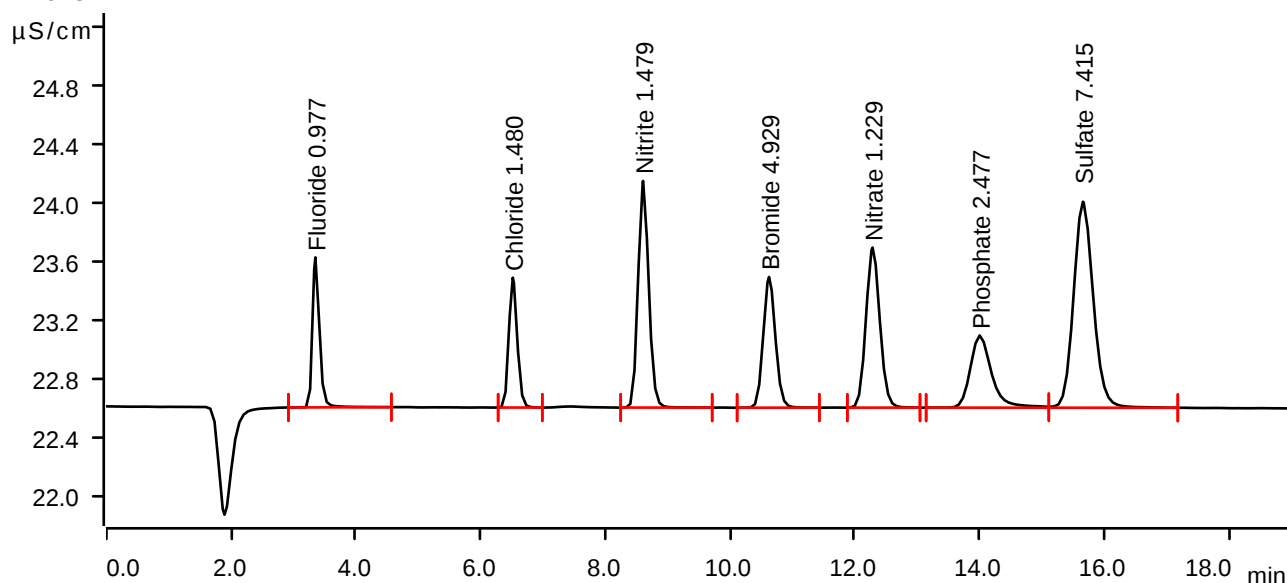
Sample data

Ident STD4
Sample type Standard 4
Determination start 2025-05-22 12:13:41 UTC-4
Method IC1-052225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.352	0.1334	1.024	0.977	Fluoride
2	6.517	0.1384	0.888	1.480	Chloride
3	8.607	0.3073	1.549	1.479	Nitrite
4	10.625	0.2023	0.894	4.929	Bromide
5	12.285	0.2828	1.094	1.229	Nitrate
6	14.003	0.1955	0.493	2.477	Phosphate
7	15.657	0.5164	1.408	7.415	Sulfate

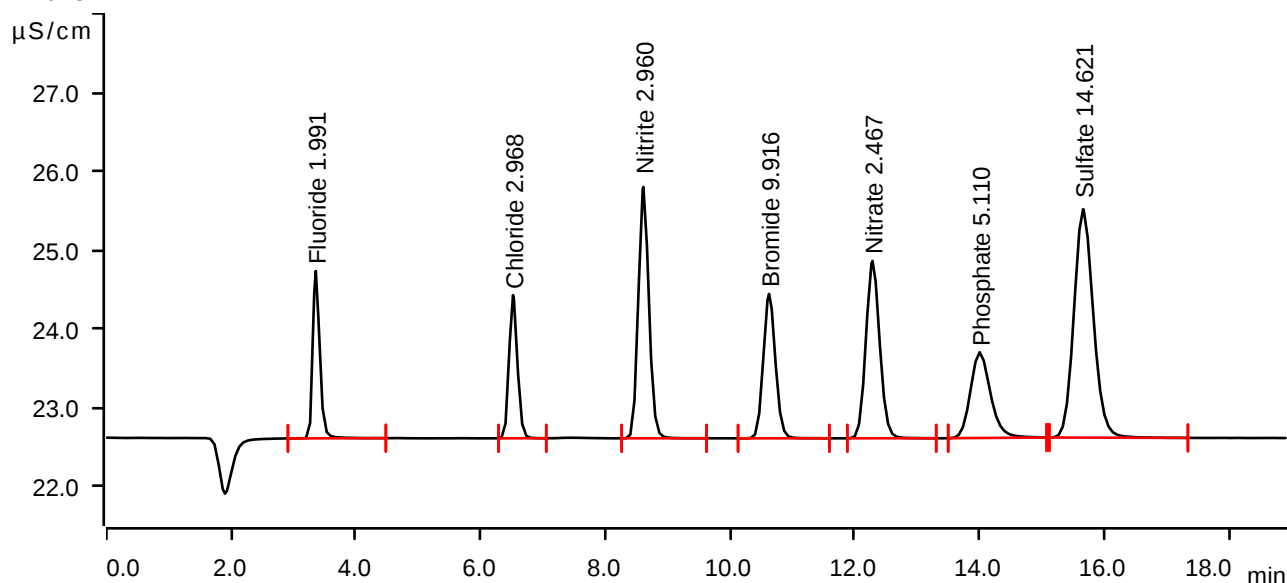
Sample data

Ident STD5
Sample type Standard 5
Determination start 2025-05-22 12:35:06 UTC-4
Method IC1-052225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.358	0.2749	2.123	1.991	Fluoride
2	6.520	0.2820	1.816	2.968	Chloride
3	8.610	0.6298	3.190	2.960	Nitrite
4	10.625	0.4133	1.833	9.916	Bromide
5	12.283	0.5789	2.251	2.467	Nitrate
6	14.002	0.4067	1.087	5.110	Phosphate
7	15.660	1.0476	2.898	14.621	Sulfate

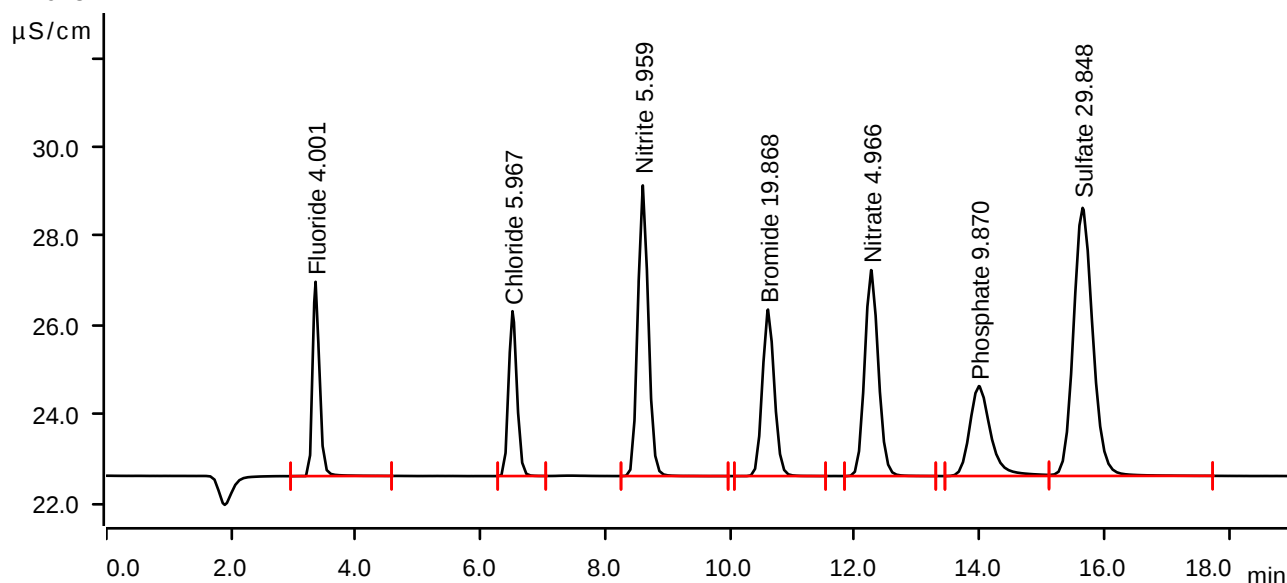
Sample data

Ident STD6
Sample type Standard 6
Determination start 2025-05-22 12:56:31 UTC-4
Method IC1-052225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.355	0.5553	4.361	4.001	Fluoride
2	6.512	0.5713	3.701	5.967	Chloride
3	8.602	1.2834	6.525	5.959	Nitrite
4	10.608	0.8345	3.739	19.868	Bromide
5	12.262	1.1762	4.624	4.966	Nitrate
6	13.990	0.7883	2.019	9.870	Phosphate
7	15.652	2.1703	6.019	29.848	Sulfate

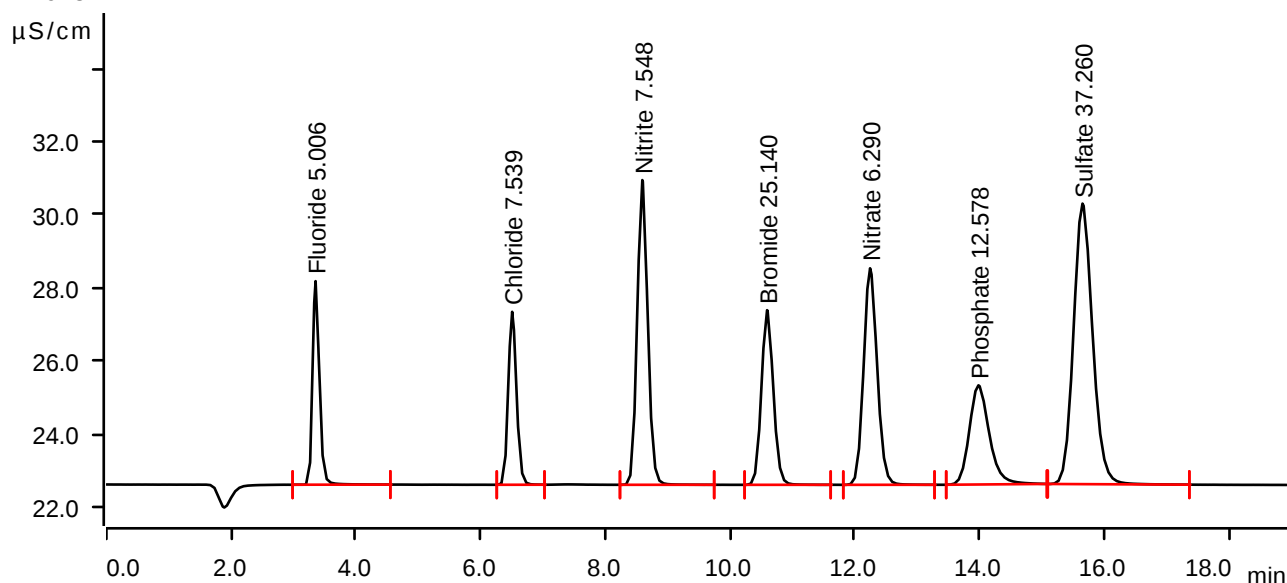
Sample data

Ident STD7
Sample type Standard 7
Determination start 2025-05-22 13:17:57 UTC-4
Method IC1-052225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.355	0.6954	5.562	5.006	Fluoride
2	6.507	0.7229	4.726	7.539	Chloride
3	8.593	1.6297	8.328	7.548	Nitrite
4	10.593	1.0576	4.774	25.140	Bromide
5	12.245	1.4927	5.918	6.290	Nitrate
6	13.982	1.0054	2.711	12.578	Phosphate
7	15.650	2.7168	7.668	37.260	Sulfate

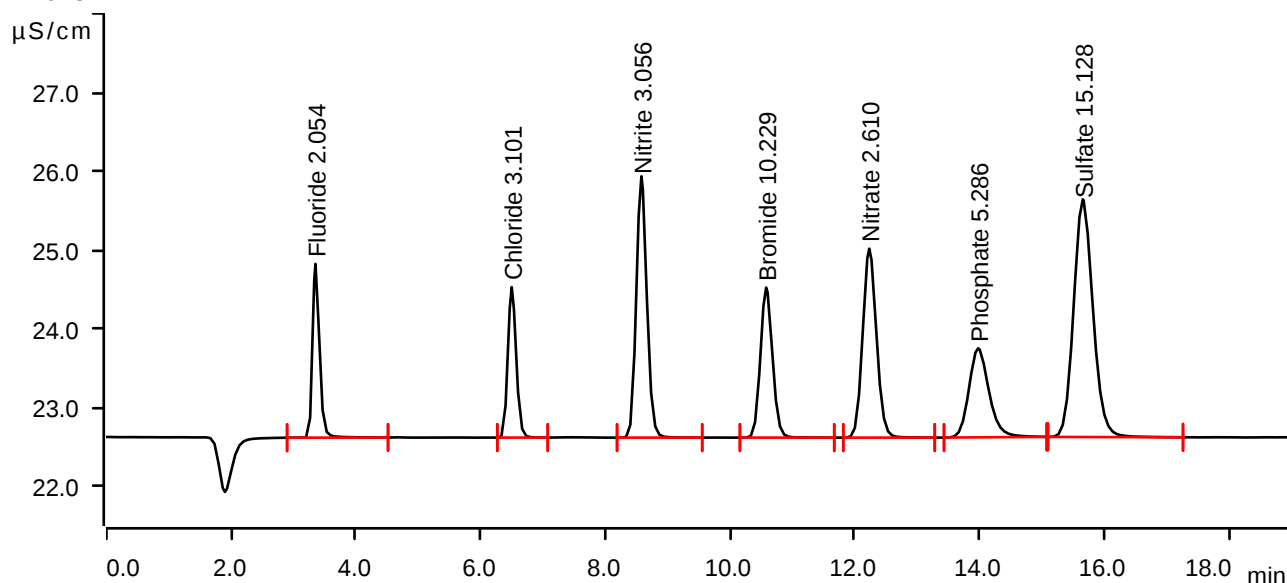
Sample data

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

Anions

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

Anions



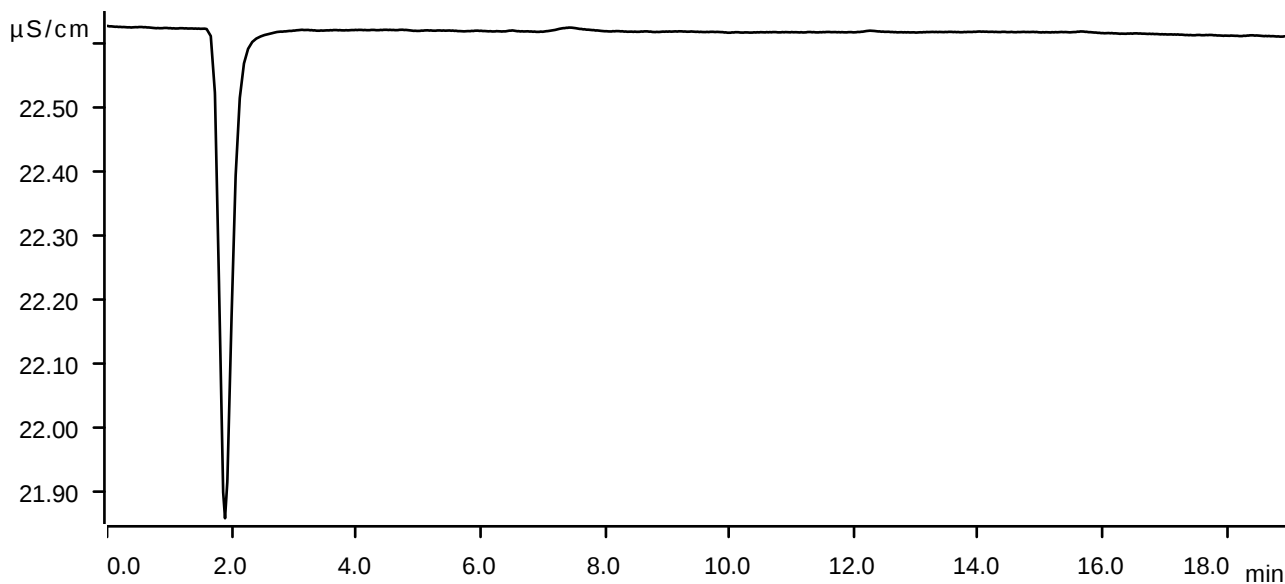
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.353	0.2837	2.205	2.054	Fluoride
2	6.500	0.2948	1.910	3.101	Chloride
3	8.578	0.6509	3.316	3.056	Nitrite
4	10.578	0.4266	1.904	10.229	Bromide
5	12.232	0.6129	2.398	2.610	Nitrate
6	13.977	0.4208	1.130	5.286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

Sample data

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

Anions

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

Anions

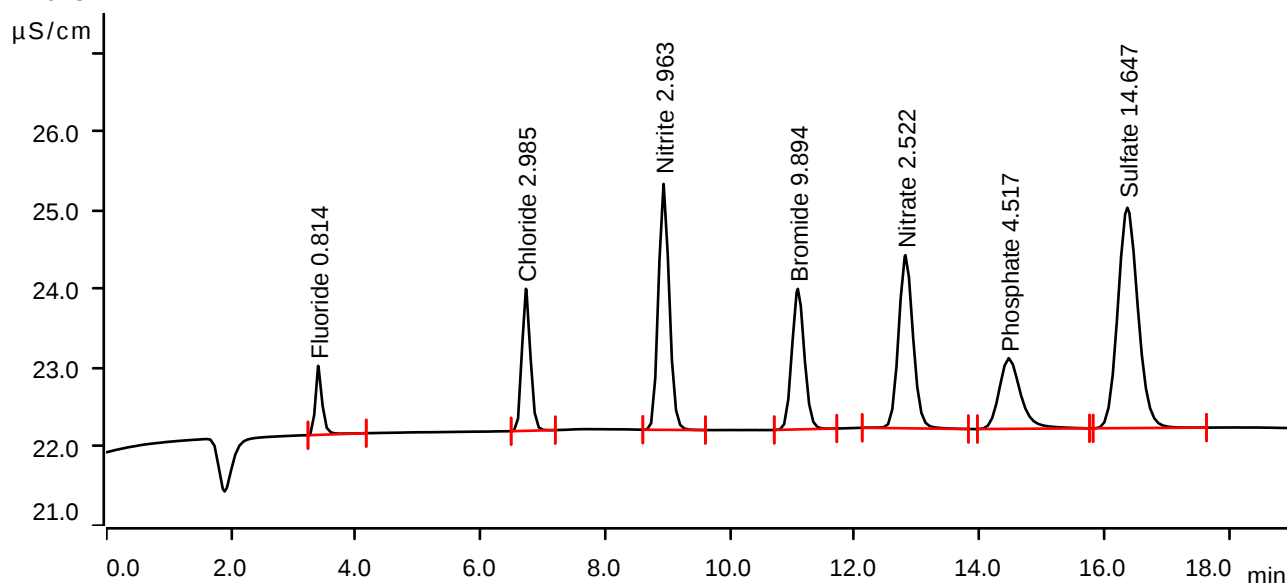
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-06-13 16:28:08 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.73 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



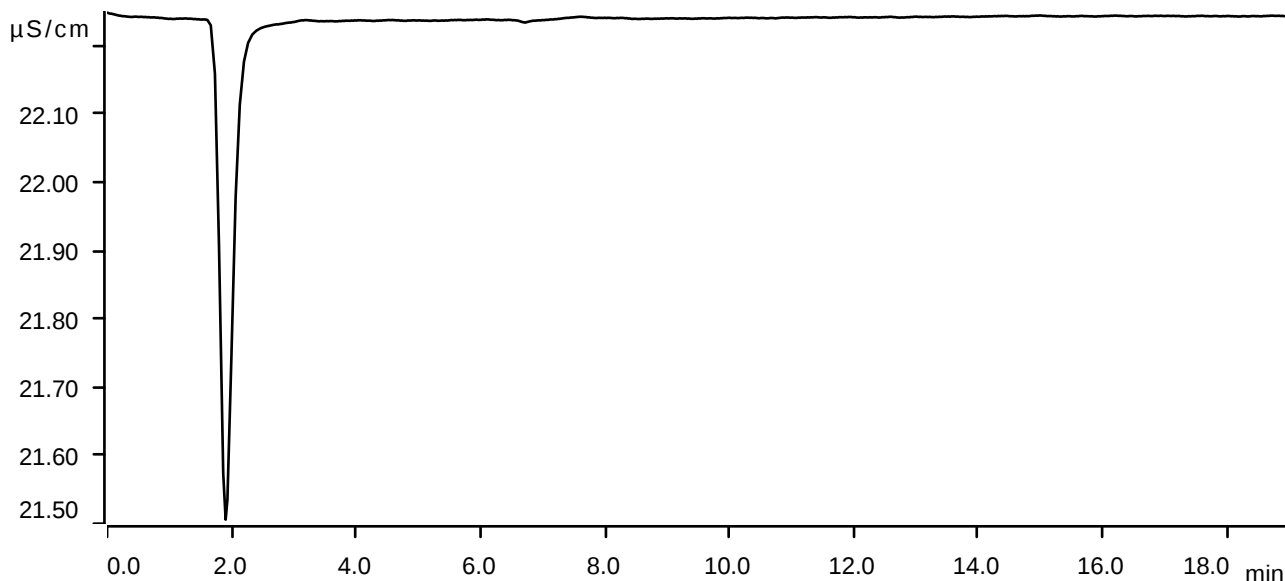
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.395	0.1108	0.876	0.814	Fluoride
2	6.727	0.2837	1.802	2.985	Chloride
3	8.935	0.6306	3.121	2.963	Nitrite
4	11.087	0.4124	1.784	9.894	Bromide
5	12.812	0.5920	2.197	2.522	Nitrate
6	14.468	0.3591	0.897	4.517	Phosphate
7	16.370	1.0495	2.798	14.647	Sulfate

Sample data

Ident CCB
Sample type Sample
Determination start 2025-06-13 16:49:38 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.56 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions

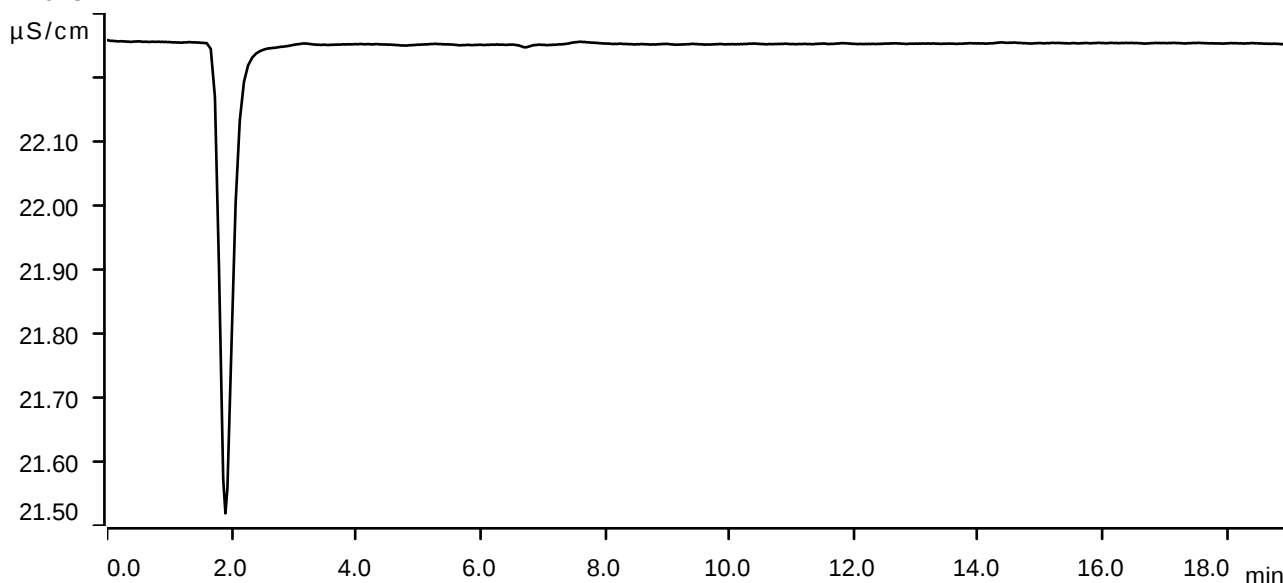
Sample data

Ident LB136158BLW
Sample type Sample
Determination start 2025-06-13 17:11:08 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.50 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



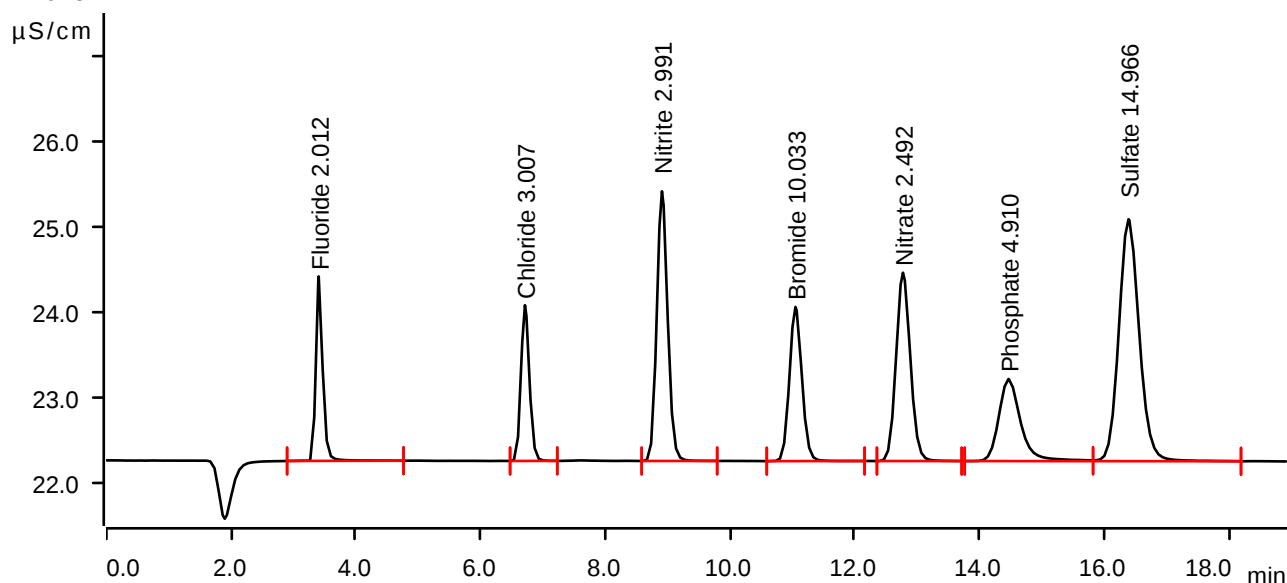
Sample data

Ident LB136158BSW
Sample type Check standard 1
Determination start 2025-06-13 17:32:39 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.50 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	3.405	0.2778	2.160	2.012	Fluoride
2	6.712	0.2858	1.824	3.007	Chloride
3	8.908	0.6368	3.159	2.991	Nitrite
4	11.048	0.4183	1.806	10.033	Bromide
5	12.772	0.5847	2.206	2.492	Nitrate
6	14.463	0.3906	0.962	4.910	Phosphate
7	16.388	1.0731	2.834	14.966	Sulfate

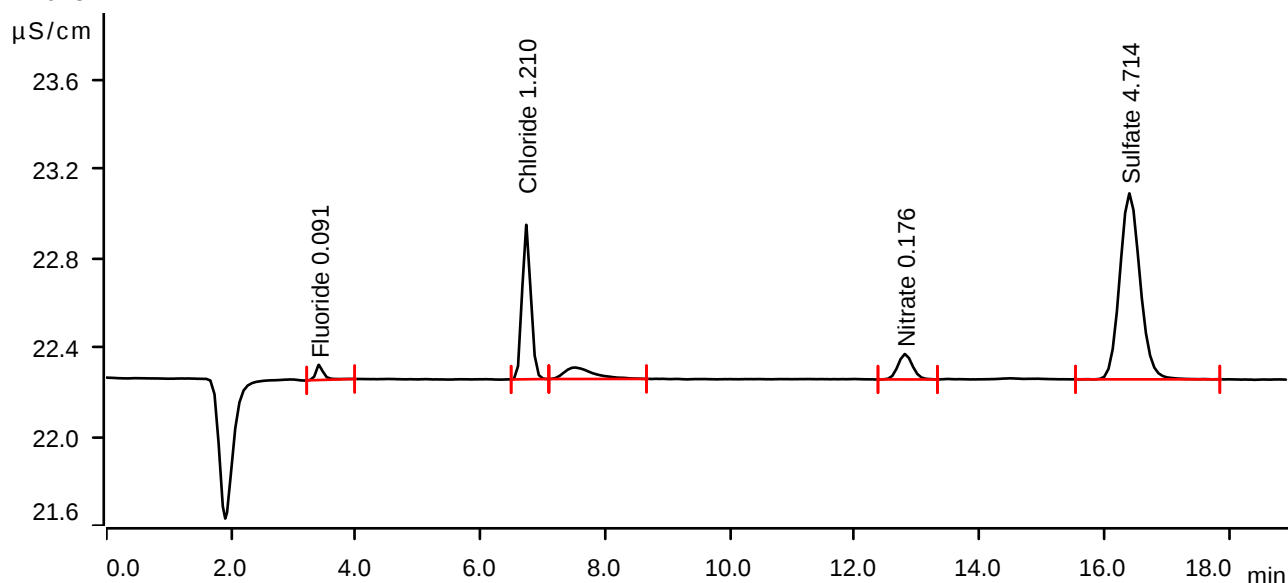
Sample data

Ident Q2334-01
Sample type Sample
Determination start 2025-06-13 17:54:12 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.50 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	3.408	0.0099	0.068	0.091	Fluoride
2	6.732	0.1124	0.694	1.210	Chloride
3	7.515	0.0284	0.051	invalid	
4	12.803	0.0311	0.114	0.176	Nitrate
5	16.403	0.3172	0.835	4.714	Sulfate

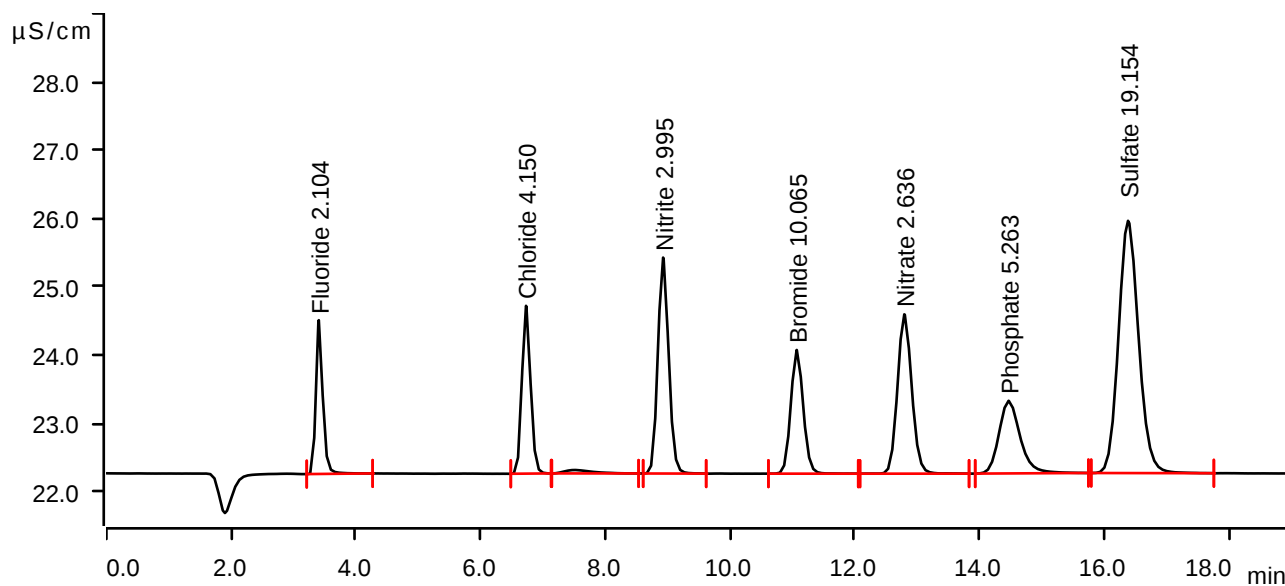
Sample data

Ident Q2334-01MS
Sample type Sample
Determination start 2025-06-13 18:15:44 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.61 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	3.407	0.2907	2.251	2.104	Fluoride
2	6.728	0.3960	2.457	4.150	Chloride
3	7.518	0.0256	0.050	invalid	
4	8.927	0.6375	3.162	2.995	Nitrite
5	11.070	0.4196	1.811	10.065	Bromide
6	12.793	0.6191	2.333	2.636	Nitrate
7	14.465	0.4189	1.063	5.263	Phosphate
8	16.380	1.3819	3.694	19.154	Sulfate

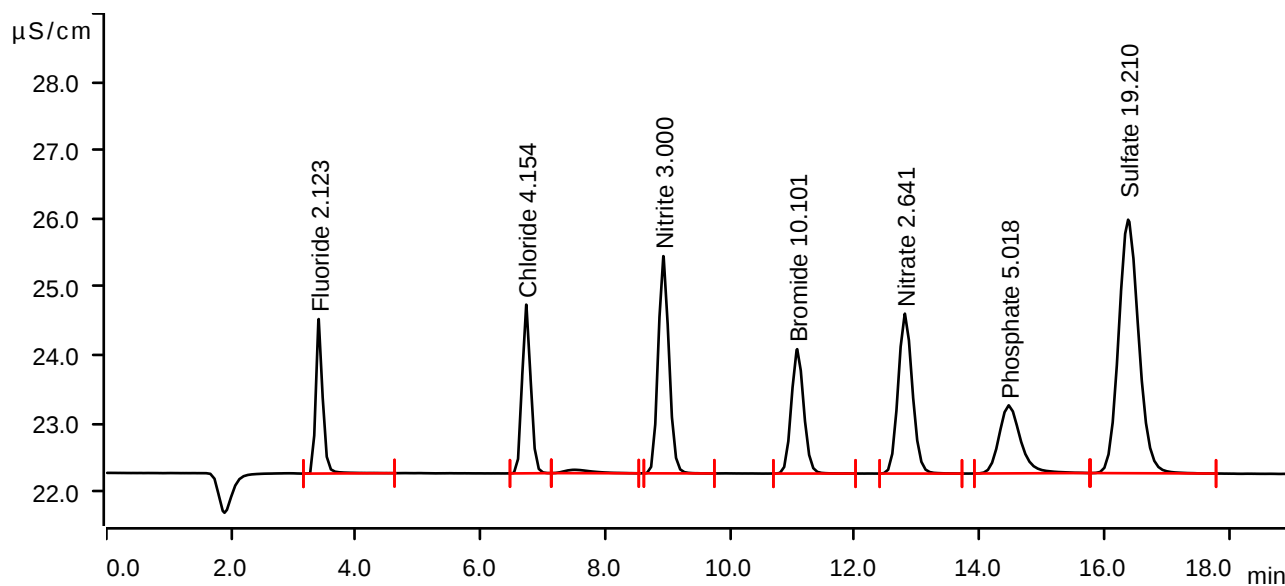
Sample data

Ident Q2334-01MSD
Sample type Sample
Determination start 2025-06-13 18:37:18 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.67 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	3.405	0.2934	2.262	2.123	Fluoride
2	6.732	0.3964	2.470	4.154	Chloride
3	7.507	0.0260	0.050	invalid	
4	8.930	0.6386	3.181	3.000	Nitrite
5	11.077	0.4211	1.822	10.101	Bromide
6	12.803	0.6204	2.341	2.641	Nitrate
7	14.468	0.3993	0.997	5.018	Phosphate
8	16.382	1.3860	3.712	19.210	Sulfate

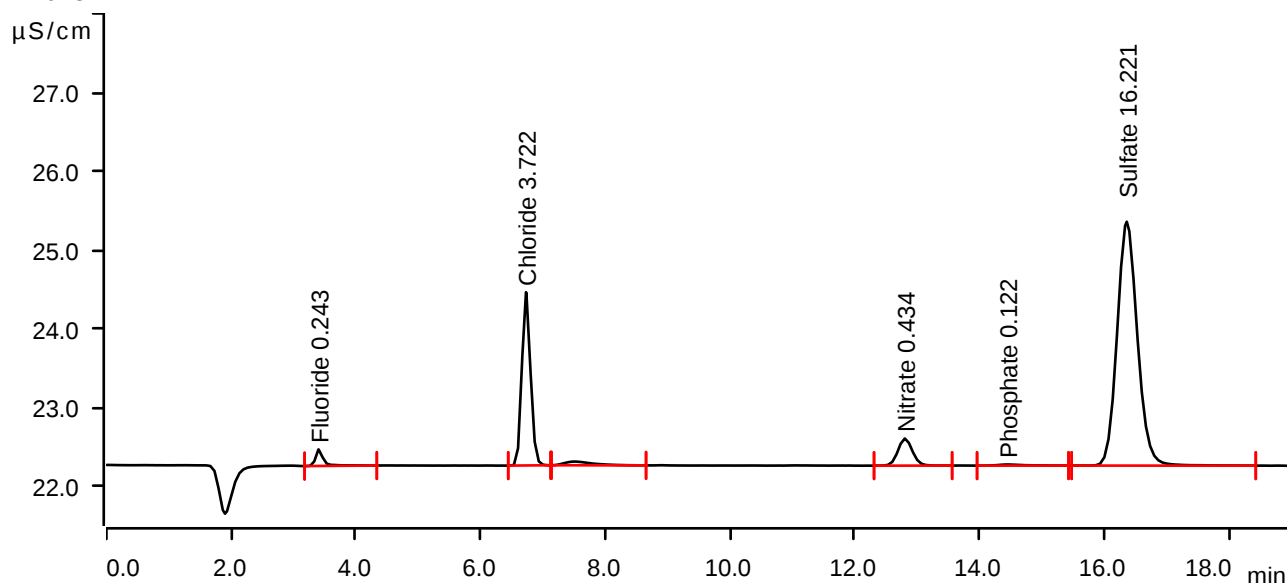
Sample data

Ident Q2334-02
Sample type Sample
Determination start 2025-06-13 18:58:52 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.84 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	3.403	0.0311	0.210	0.243	Fluoride
2	6.728	0.3547	2.199	3.722	Chloride
3	7.513	0.0246	0.047	invalid	
4	12.803	0.0927	0.344	0.434	Nitrate
5	14.445	0.0067	0.014	0.122	Phosphate
6	16.360	1.1656	3.095	16.221	Sulfate

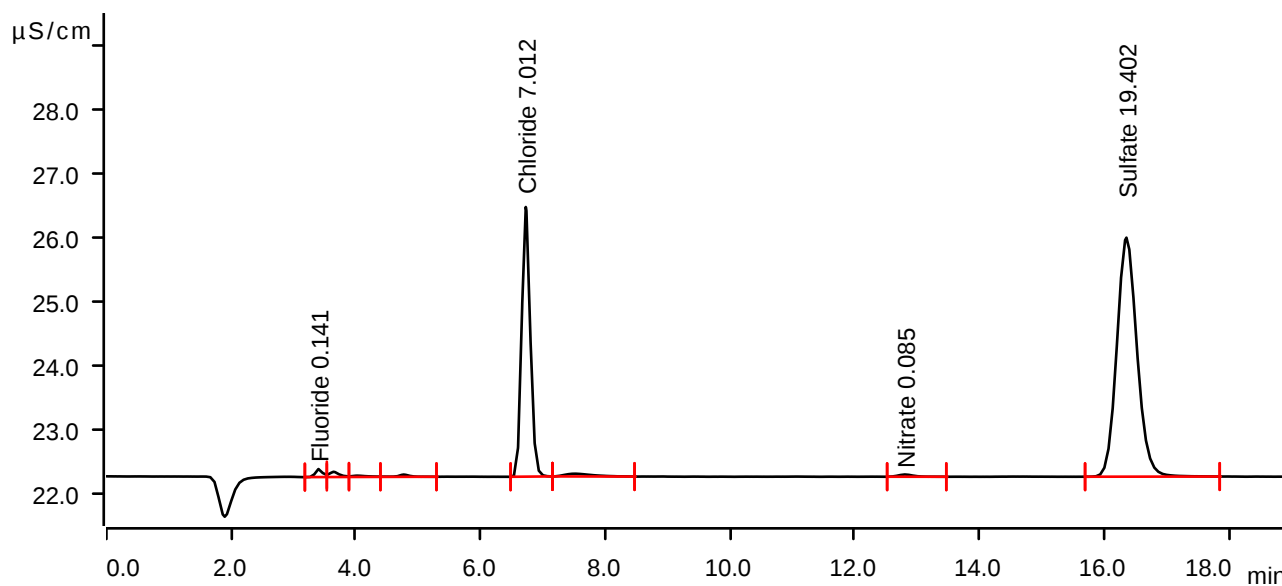
Sample data

Ident Q2334-03
Sample type Sample
Determination start 2025-06-13 19:20:27 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.78 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time min	Area ($\mu\text{S}/\text{cm}$) x min	Height $\mu\text{S}/\text{cm}$	Concentration ppm	Component name
1	3.400	0.0168	0.125	0.141	Fluoride
2	3.643	0.0149	0.082	invalid	
3	4.022	0.0058	0.020	invalid	
4	4.767	0.0073	0.035	invalid	
5	6.725	0.6721	4.211	7.012	Chloride
6	7.522	0.0219	0.043	invalid	
7	12.802	0.0093	0.034	0.085	Nitrate
8	16.355	1.4001	3.733	19.402	Sulfate

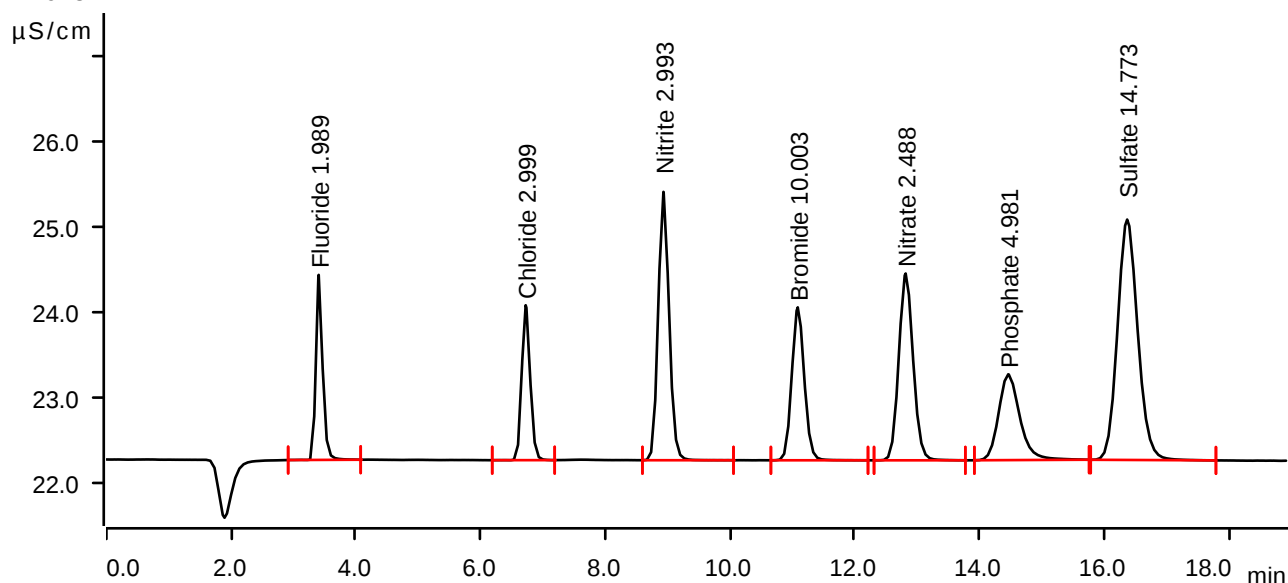
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-06-13 19:42:02 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.67 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



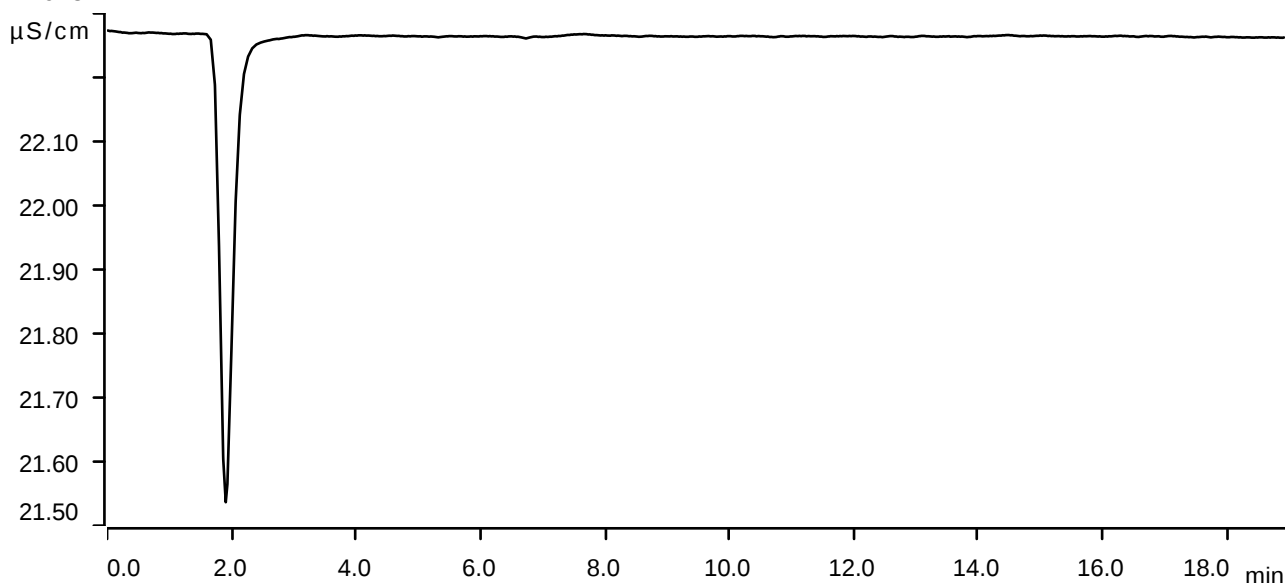
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.405	0.2746	2.167	1.989	Fluoride
2	6.723	0.2850	1.815	2.999	Chloride
3	8.932	0.6370	3.144	2.993	Nitrite
4	11.085	0.4170	1.792	10.003	Bromide
5	12.815	0.5838	2.188	2.488	Nitrate
6	14.460	0.3964	1.005	4.981	Phosphate
7	16.367	1.0588	2.816	14.773	Sulfate

Sample data

Ident CCB
Sample type Sample
Determination start 2025-06-13 20:03:32 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.56 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions

TitriSoft Report

Ident	Amount	DateTime	Alkalinity	Final pH (sample)	Initial pH (sample)	slope	offset
LB136205BLW	100	19/06/2025 12:15	0.00	3.98	3.99	101.4	7.02
LB136205BSW	100	19/06/2025 12:18	47.52	4.38	9.47	101.4	7.02
Q2334-01	50	19/06/2025 12:24	122.42	4.31	7.07	101.4	7.02
Q2334-01DUP	50	19/06/2025 12:29	120.66	4.35	7.08	101.4	7.02
Q2334-02	50	19/06/2025 12:34	103.64	4.30	7.09	101.4	7.02
Q2334-03	50	19/06/2025 12:38	84.86	4.33	6.77	101.4	7.02
Q2344-01	50	19/06/2025 12:43	63.60	4.31	6.35	101.4	7.02
Q2344-03	50	19/06/2025 12:49	307.48	4.40	6.96	101.4	7.02
Q2344-05	50	19/06/2025 12:55	306.42	4.37	6.92	101.4	7.02
Q2344-07	50	19/06/2025 13:02	454.48	4.32	6.98	101.4	7.02

06/19/2025

6/19/25
12

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Iwona

Parameter: COD

SUPERVISOR REVIEW BY: Sohil

Run Number: LB136206

Reagent/Standard	Lot/Log #
COD calibration std. 150 ppm	WP113238
COD calibration std. 100 ppm	WP113237
COD calibration std. 50 ppm	WP113235
COD calibration std. 10 ppm	WP113234
COD calibration std. 0 ppm	WP113233
COD ICV-LCS std, 50ppm	WP113240
COD calibration std. 75 ppm	WP113236
COD Digestion Vials Low Level 0-150Mg/L	W3129
COD CCV std, 50ppm	WP113586
COD ICV-LCS std, 50ppm	WP113587
RL CHECK	WP113588

Temp In (C): 148	Date In: 06/19/2025	Time In: 09:40
Temp Out (C): 151	Date Out: 06/19/2025	Time Out: 11:40

Intercept: 0.8179

Slope: 0.9847

Regression: 0.9995

Seq	Lab ID	TrueValue (mg/l)	DF	MATRIX	Reading	Result (mg/l)	%D	Anal Date	Anal Time
1	CAL1	0	1	Water	0.000	-0.831		05/28/2025	13:10
2	CAL2	10	1	Water	9.000	8.309	-16.9	05/28/2025	13:10
3	CAL3	50	1	Water	52.000	51.977	4	05/28/2025	13:11
4	CAL4	75	1	Water	77.000	77.366	3.2	05/28/2025	13:11
5	CAL5	100	1	Water	99.000	99.708	-0.3	05/28/2025	13:12
6	CAL6	150	1	Water	147.000	148.453	-1	05/28/2025	13:12

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Iwona

Parameter: COD

SUPERVISOR REVIEW BY: Sohil

Run Number: LB136206

Seq	Lab ID	True Value (mg/l)	Initial Weight (g)	Final Vol (ml)	DF	MATRIX	Reading	Result	AnalDate	AnalTime
1	ICV	50	NA	NA	1	Water	51.000	50.962	05/28/2025	13:13
2	ICB		NA	NA	1	Water	0.000	-0.831	05/28/2025	13:13
3	CCV1	50	NA	NA	1	Water	48.000	47.915	06/19/2025	13:30
4	CCB1		NA	NA	1	Water	1.000	0.185	06/19/2025	13:30
5	RL Check	10	NA	NA	1	Water	8.000	7.294	06/19/2025	13:31
6	LB136206BL		NA	NA	1	Water	1.000	0.185	06/19/2025	13:31
7	LB136206BS	50	NA	NA	1	Water	51.000	50.962	06/19/2025	13:32
8	Q2334-01		NA	NA	1	Water	15.000	14.402	06/19/2025	13:32
9	Q2334-01DUP		NA	NA	1	Water	16.000	15.418	06/19/2025	13:33
10	Q2334-01MS	50	NA	NA	1	Water	61.000	61.117	06/19/2025	13:33
11	Q2334-01MSD	50	NA	NA	1	Water	60.000	60.102	06/19/2025	13:34
12	Q2334-02		NA	NA	1	Water	16.000	15.418	06/19/2025	13:34
13	Q2334-03		NA	NA	1	Water	53.000	52.993	06/19/2025	13:35
14	CCV2	50	NA	NA	1	Water	49.000	48.931	06/19/2025	13:35
15	CCB2		NA	NA	1	Water	1.000	0.185	06/19/2025	13:36

WORKLIST(Hardcopy Internal Chain)

LB136206

WorkList Name : COD-061625

WorkList ID : 190215

Department : Wet-Chemistry

Date : 06-16-2025 09:46:53

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2334-01	MW3	Water	COD	Conc H2SO4 to pH < 2	GENV01	D52	06/12/2025	SM5220 D
Q2334-02	MW4	Water	COD	Conc H2SO4 to pH < 2	GENV01	D52	06/12/2025	SM5220 D
Q2334-03	GBTW1	Water	COD	Conc H2SO4 to pH < 2	GENV01	D52	06/12/2025	SM5220 D

Date/Time 06/19/25 09:15
Raw Sample Received by: 12 (S)
Raw Sample Relinquished by: 20 (S)

Date/Time 06/19/25 10:05
Raw Sample Received by: 20 (S)
Raw Sample Relinquished by: 12 (S)

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136158

Review By	Iwona	Review On	6/16/2025 1:26:39 PM
Supervise By	Sohil	Supervise On	6/16/2025 1:28:02 PM
SubDirectory	LB136158	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP113186,WP113187,WP113188,WP113189,WP113190,WP113191,WP113192		
ICV Standard	WP113193		
CCV Standard	WP113532		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113533		
Chk Standard	WP113194,WP113195		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	STD1	STD1	CAL1	05/22/25 11:09	All standards, samples, and	NF/IZ	OK
2	STD2	STD2	CAL2	05/22/25 11:30	QC are filtered through	NF/IZ	OK
3	STD3	STD3	CAL3	05/22/25 11:52	0.45um, filter lot W3160	NF/IZ	OK
4	STD4	STD4	CAL4	05/22/25 12:13		NF/IZ	OK
5	STD5	STD5	CAL5	05/22/25 12:35		NF/IZ	OK
6	STD6	STD6	CAL6	05/22/25 12:56		NF/IZ	OK
7	STD7	STD7	CAL7	05/22/25 13:17		NF/IZ	OK
8	ICV1	ICV1	ICV	05/22/25 13:39		NF/IZ	OK
9	ICB1	ICB1	ICB	05/22/25 14:22		NF/IZ	OK
10	CCV1	CCV1	CCV	06/13/25 16:28		NF/IZ	OK
11	CCB1	CCB1	CCB	06/13/25 16:49		NF/IZ	OK
12	LB136158BLW	LB136158BLW	MB	06/13/25 17:11		NF/IZ	OK
13	LB136158BSW	LB136158BSW	LCS	06/13/25 17:32		NF/IZ	OK
14	Q2334-01	MW3	SAM	06/13/25 17:54		NF/IZ	OK
15	Q2334-01MS	MW3MS	MS	06/13/25 18:15	9.5ml of sample, 0.5mL W3092	NF/IZ	OK
16	Q2334-01MSD	MW3MSD	MSD	06/13/25 18:37	9.5ml of sample, 0.5mL W3092	NF/IZ	OK
17	Q2334-02	MW4	SAM	06/13/25 18:58		NF/IZ	OK
18	Q2334-03	GBTW1	SAM	06/13/25 19:20		NF/IZ	OK

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136158

Review By	Iwona	Review On	6/16/2025 1:26:39 PM
Supervise By	Sohil	Supervise On	6/16/2025 1:28:02 PM
SubDirectory	LB136158	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP113186,WP113187,WP113188,WP113189,WP113190,WP113191,WP113192		
ICV Standard	WP113193		
CCV Standard	WP113532		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113533		
Chk Standard	WP113194,WP113195		

19	CCV2	CCV2	CCV	06/13/25 19:42		NF/IZ	OK
20	CCB2	CCB2	CCB	06/13/25 20:03		NF/IZ	OK

Instrument ID: TITRATOR

Daily Analysis Runlog For Sequence/QC Batch ID # LB136205

Review By	Iwona	Review On	6/20/2025 4:04:31 PM
Supervise By	Sohil	Supervise On	6/20/2025 4:09:21 PM
SubDirectory	LB136205	Test	Alkalinity
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113583		
Chk Standard	W3071,W3178,W3150		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB136205BLW	LB136205BLW	MB	06/19/25 12:15	pH=3.98	Iwona	OK
2	LB136205BSW	LB136205BSW	LCS	06/19/25 12:18	pH=4.38	Iwona	OK
3	Q2334-01	MW3	SAM	06/19/25 12:24	pH=4.31	Iwona	OK
4	Q2334-01DUP	MW3DUP	DUP	06/19/25 12:29	pH=4.35	Iwona	OK
5	Q2334-02	MW4	SAM	06/19/25 12:34	pH=4.30	Iwona	OK
6	Q2334-03	GBTW1	SAM	06/19/25 12:38	pH=4.33	Iwona	OK
7	Q2344-01	MW-1	SAM	06/19/25 12:43	pH=4.31	Iwona	OK
8	Q2344-03	MW-3	SAM	06/19/25 12:49	pH=4.40	Iwona	OK
9	Q2344-05	MW-4	SAM	06/19/25 12:55	pH=4.37	Iwona	OK
10	Q2344-07	MW-2	SAM	06/19/25 13:02	pH=4.32	Iwona	OK

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB136206

Review By	Iwona	Review On	6/19/2025 2:30:45 PM
Supervise By	Sohil	Supervise On	6/19/2025 2:34:44 PM
SubDirectory	LB136206	Test	COD
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	WP113238,WP113237,WP113235,WP113234,WP113233,WP113240,WP113236,W3129,WP113586,WP113587,WP1		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	05/28/25 13:10		Iwona	OK
2	CAL2	CAL2	CAL	05/28/25 13:10		Iwona	OK
3	CAL3	CAL3	CAL	05/28/25 13:11		Iwona	OK
4	CAL4	CAL4	CAL	05/28/25 13:11		Iwona	OK
5	CAL5	CAL5	CAL	05/28/25 13:12		Iwona	OK
6	CAL6	CAL6	CAL	05/28/25 13:12		Iwona	OK
7	ICV	ICV	ICV	05/28/25 13:13		Iwona	OK
8	ICB	ICB	ICB	05/28/25 13:13		Iwona	OK
9	CCV1	CCV1	CCV	06/19/25 13:30		Iwona	OK
10	CCB1	CCB1	CCB	06/19/25 13:30		Iwona	OK
11	RL Check	RL Check	RL	06/19/25 13:31		Iwona	OK
12	LB136206BL	LB136206BL	MB	06/19/25 13:31		Iwona	OK
13	LB136206BS	LB136206BS	LCS	06/19/25 13:32		Iwona	OK
14	Q2334-01	MW3	SAM	06/19/25 13:32		Iwona	OK
15	Q2334-01DUP	MW3DUP	DUP	06/19/25 13:33		Iwona	OK
16	Q2334-01MS	MW3MS	MS	06/19/25 13:33		Iwona	OK
17	Q2334-01MSD	MW3MSD	MSD	06/19/25 13:34		Iwona	OK
18	Q2334-02	MW4	SAM	06/19/25 13:34		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB136206

Review By	Iwona	Review On	6/19/2025 2:30:45 PM
Supervise By	Sohil	Supervise On	6/19/2025 2:34:44 PM
SubDirectory	LB136206	Test	COD
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	WP113238,WP113237,WP113235,WP113234,WP113233,WP113240,WP113236,W3129,WP113586,WP113587,WP1		

19	Q2334-03	GBTW1	SAM	06/19/25 13:35		Iwona	OK
20	CCV2	CCV2	CCV	06/19/25 13:35		Iwona	OK
21	CCB2	CCB2	CCB	06/19/25 13:36		Iwona	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2334

Test : Alkalinity,Anions Group1,COD

Prepbatch ID :

Sequence ID/Qc Batch ID: LB136158, LB136205, LB136206,

Standard ID :

WP112796, WP113186, WP113187, WP113188, WP113189, WP113190, WP113191, WP113192, WP113193, WP113194, WP113195, WP113231, WP113232, WP113233, WP113234, WP113235, WP113236, WP113237, WP113238, WP113240, WP113532, WP113533, WP113582, WP113583, WP113584, WP113585, WP113586, WP113587, WP113588,

Chemical ID :

M6041, W2647, W2784, W3058, W3071, W3112, W3129, W3150, W3163, W3169, W3178, W3180, W3197,



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

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

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>
24	Anions 300/9056 calibration standard 2	WP113187	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/22/2025
FROM 0.20000ml of W3180 + 9.80000ml of W3112 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
25	Anions 300/9056 calibration standard 3	WP113188	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/22/2025
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	WP113189	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/22/2025
FROM 0.50000ml of W3180 + 9.50000ml of W3112 = Final Quantity: 10.000 ml								

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

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	WP113191	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/22/2025
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	WP113192	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/22/2025
FROM 2.50000ml of W3180 + 7.50000ml of W3112 = Final Quantity: 10.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3233	Anions 300/9056 ICV-LCS std	WP113193	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3	Jignesh Parikh 05/22/2025

~~(WC)~~

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

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

Wet Chemistry STANDARD PREPARATION LOG

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

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2456	COD Stock std, 1000ppm	WP113231	05/28/2025	06/04/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 05/28/2025

FROM 0.08500gram of W2784 + 100.00000ml 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>
2457	COD Stock std-SS, 1000ppm	WP113232	05/28/2025	06/04/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 05/28/2025
<u>FROM</u>	0.08500gram of W3169 + 100.00000ml 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>
139	COD calibration std. 0 ppm	WP113233	05/28/2025	06/04/2025	Iwona Zarych	None	None	Jignesh Parikh 05/28/2025
<u>FROM</u> 10.00000ml of W3112 = Final Quantity: 10.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
138	COD calibration std. 10 ppm	WP113234	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/28/2025

FROM 9.90000ml of W3112 + 0.10000ml of WP113231 = 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>
137	COD calibration std. 50 ppm	WP113235	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/28/2025

FROM 9.50000ml of W3112 + 0.50000ml of WP113231 = 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>
4161	COD calibration std. 75 ppm	WP113236	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3	Jignesh Parikh
(WC)								
<u>FROM</u>	9.25000ml of W3112 + 0.75000ml of WP113231 = 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>
136	COD calibration std. 100 ppm	WP113237	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u> 9.00000ml of W3112 + 1.00000ml of WP113231 = 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>
135	COD calibration std. 150 ppm	WP113238	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u>	8.50000ml of W3112 + 1.50000ml of WP113231 = 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>
2459	COD ICV-LCS std, 50ppm	WP113240	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u> 9.50000ml of W3112 + 0.50000ml of WP113232 = Final Quantity: 10.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3680	Anions 300/9056 calibration standard 5-CCV	WP113532	06/13/2025	06/14/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 06/17/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3233	Anions 300/9056 ICV-LCS std	WP113533	06/13/2025	06/14/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 06/17/2025

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

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3407	Acidity-Alkalinity Stock Std(-+2500PPM)	WP113582	06/19/2025	06/26/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 06/23/2025

FROM 0.62500gram of W3058 + 249.40000ml of W3112 = Final Quantity: 250.000 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>
293	alkalinity LCSW 50 ppm	WP113583	06/19/2025	06/26/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 06/23/2025

FROM 196.00000ml of W3112 + 4.00000ml of WP113582 = Final Quantity: 200.000 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>
2456	COD Stock std, 1000ppm	WP113584	06/19/2025	06/26/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 06/23/2025
FROM 0.08500gram of W2784 + 100.00000ml 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>
2457	COD Stock std-SS, 1000ppm	WP113585	06/19/2025	06/26/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 06/23/2025
<u>FROM</u>	0.08500gram of W3169 + 100.00000ml 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>
2458	COD CCV std, 50ppm	WP113586	06/19/2025	06/26/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh
FROM 9.50000ml of W3112 + 0.50000ml of WP113584 = 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>
2459	COD ICV-LCS std, 50ppm	WP113587	06/19/2025	06/26/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 06/23/2025
<u>FROM</u> 9.50000ml of W3112 + 0.50000ml of WP113585 = 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>
4162	RL CHECK	WP113588	06/19/2025	06/26/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/23/2025
FROM 9.90000ml of W3112 + 0.10000ml of WP113584 = Final Quantity: 10.000 ml								

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Environmental Express LTD	B1010 / COD Digestion Vials Low Level 0-150Mg/L	13821	10/31/2027	06/16/2025 / Iwona	07/25/2024 / Iwona	W3129

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	24H0956262	04/28/2026	01/03/2025 / Iwona	01/03/2025 / Iwona	W3169

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

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

CHEMICAL RECEIPT LOG BOOK

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

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

(sodium hydrogen carbonate)



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

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

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

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

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

James Ethier
Jamie Ethier
Vice President Global Quality

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

W3071
Rec 12/6/23

Certificate of Analysis 12

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

Lot Number: 4308H30

Product Number: 1551

Manufacture Date: AUG 09, 2023

Expiration Date: JUL 2025

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

The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

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

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

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

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

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

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

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

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



Paul Brandon (08/09/2023)

Production Manager

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

This product was tested in an ISO 17025 Accredited Laboratory

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

Certificate Of Analysis



W 3058

Re. 10/19/23 12

Date of Release: 1/27/2023

Name: **Sodium Carbonate, Anhydrous**

Powder, ACS

Item No: **SX0395 All Sizes**

Lot / Batch No: **2023012653**

Country of Origin: **India**

Item	Specifications	Analysis
Assay (calculated on dried substance)	99.5% min.	100.2%
Calcium (Ca)	0.03% max.	0.004%
Chloride (Cl)	0.001% max.	<0.001%
Color	White	Passes Test
Form	Powder	Passes Test
Heavy metals (by ICP-OES)	5 ppm max.	<5 ppm
Insoluble Matter	0.01% max.	0.003%
Iron (Fe)	5 ppm max.	<5 ppm
Loss on heating at 285C	1.0% max.	0.1%
Magnesium (Mg)	0.005% max.	0.0008%
Phosphate (PO ₄)	0.001% max.	<0.001%
Potassium (K)	0.005% max.	0.003%
Silica (SiO ₂)	0.005% max.	<0.005%
Sulfur compounds (as SO ₄)	0.003% max.	<0.003%

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

ThermoFisher
SCIENTIFIC

Certificate of Analysis

1 Reagent Lane

Fair Lawn, NJ 07410

201.796.7100 tel

201.796.1329 fax

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

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

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

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



Julian Burton - Quality Control Manager – Fair Lawn

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

*Based on suggested storage condition.

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

avantor™



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™**

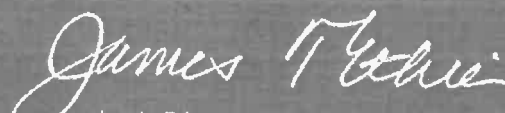


Material No.: 9673-33
Batch No.: 23D2462010

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

W3127 rec. 7/25/24 12
W3128 exp. 10/31/27
W3129

ENVIRONMENTAL EXPRESS
Charleston, SC USA
www.envexp.com
(800) 343-5319

October 27, 2022

CERTIFICATE OF ANALYSIS

Environmental Express certifies that the following COD Reagent Vials have been rigorously checked against NIST Traceable standards and also compared for conformance to another major brand name product. Environmental Express COD Vial performance is evaluated using bench top spectrophotometers. Acceptance guidelines are strict and ensure dependable, quality results.

Environmental Express further certifies that the COD products listed below are recognized by the United States Environmental Protection Agency (USEPA) as equivalent to an approved Water Pollutant Testing Procedure for COD (Federal Register, Vol. 45, No. 78, Monday, April 20th, 1980, page 26811) and as such can be used for National Pollution Discharge Elimination System (NPDES) reporting.

<u>Cat. No.</u>	<u>Lot No.</u>	<u>Product Description</u>
B1010	13821	COD Reagent Vials, 0 - 150 ppm

Certificate of Analysis

ThermoFisher
SCIENTIFIC

Certificate of Analysis

1 Reagent Lane

Fair Lawn, NJ 07410

201.796.7100 tel

201.796.1329 fax

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

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

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

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



Harout Sahagian - Quality Control Manager - Fair Lawn

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

*Based on suggested storage condition.



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	BDH9260-500G
Material Description	BDH POTASS HYDRGN PHTHLTE 500G
Grade	ACS GRADE
Batch	24H0956262
Reassay Date	04/28/2026
CAS Number	877-24-7
Molecular Formula	HOCC6H4COOK
Molecular Mass	204.22
Date of Manufacture	04/29/2023
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	White crystals.	White crystals.
Assay (dried basis)	99.95 - 100.05 %	99.98 %
Chlorine Compounds	<= 0.003 %	<0.003 %
Heavy Metals (as Pb)	<= 5 ppm	<5 ppm
Insoluble Matter	<= 0.005 %	0.003 %
Iron	<= 5 ppm	<5 ppm
pH (0.05M, Water) @25C	4.00 - 4.02	4.00
Sodium	<= 0.005 %	<0.005 %
Sulfur Compounds	<= 0.002 %	<0.002 %

Internal ID #: 322

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.

**RICCA CHEMICAL COMPANY®**

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Pocomoke City, MD 21851
<http://www.riccachemical.com>
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

021758 58

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

Lot Number: 2411A93

Product Number: 1501

Manufacture Date: NOV 04, 2024

Expiration Date: OCT 2026

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

The NIST Traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

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

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

Test	Specification	Result
Appearance	Red liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	4.008	0.02	185i, 186-I-g, 186-II-g

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1501-16	500 mL natural poly	24 months
1501-2.5	10 L Cubitainer®	24 months
1501-5	20 L Cubitainer®	24 months

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



Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

1.0 ACCREDITATION / REGISTRATION

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



2.0 PRODUCT DESCRIPTION

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

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

Assay Information:

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

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

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

5.0 CHROMATOGRAM

N/A

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 02, 2024

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

11.2 Lot Expiration Date

- **April 02, 2029**

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Thomas Kozikowski
Stock VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



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



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Geop Inc
ADDRESS: 8 CARRIDGE
CITY: Succasunna STATE: NJ ZIP: 07876
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

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

CLIENT BILLING INFORMATION

BILL TO: Geop Inc PO#:
ADDRESS: 8 CARRIDGE Lane
CITY: Succasunna STATE: NJ ZIP: 07876
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☒ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASPA ☐ NYS ASPB
+ Raw Data Other: *Excel, PDF*
EDD FORMAT: *results, NIDEP*

100% Sulfate, Nitrate, Ammonia, Mn, Fe, Cd

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.	MW3	GW		X	6/12/25	1345		X	X	X	X	X						
2.	MW4	GW		X	6/12/25	1245		X	X	X	X	X						
3.	GBTW1	GW		X	6/12/25	1300		X	X	X	X	X						
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

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

RELINQUISHED BY SAMPLER:	DATE/TIME: 6/13/25 1540	RECEIVED BY: <i>[Signature]</i>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP: 2.7-C °C
1. <i>[Signature]</i>		1.	Comments: MW3 MW4 GBTW1 IR Cond #1
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
2.		2.	
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
3.		3.	

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

Laboratory Certification

Certified By	License No.
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 : Q2334	GENV01	Order Date : 6/13/2025 3:40:07 PM	Project Mgr :
Client Name : G Environmental		Project Name : Buff	Report Type : NJ Reduced
Client Contact : Gary Landis		Receive DateTime : 6/13/2025 3:40:00 PM	EDD Type : NJ HAZSITE
Invoice Name : G Environmental		Purchase Order :	Hard Copy Date :
Invoice Contact : Gary Landis			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2334-01	MW3	Water	06/12/2025	13:45					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q2334-02	MW4	Water	06/12/2025	12:45					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q2334-03	GBTW1	Water	06/12/2025	13:00					
					VOCMS Group1		8260-Low	10 Bus. Days	

Relinquished By : 

Date / Time : 6/13/25 16:00

Received By : 

Date / Time : 6-13-25 16:00

Storage Area : VOA Refridgerator Room