

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

LAB CHRONICLE

OrderID:	Q2293	OrderDate:	6/11/2025 12:36:36 PM
Client:	ATG-GREENVILLE AEC	Project:	AEC-2025-0013- CSC 4016 Madison
Contact:	Daniel Maalouf	Location:	A12

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2293-01	SW-3	WATER			06/10/25 12:05			06/11/25
			Anions Group1	300.0			06/11/25 10:52	
			COD	SM5220 D			06/12/25 14:23	
			Oil and Grease	1664A			06/17/25 09:30	
			pH	9040C			06/12/25 09:40	
			Phosphorus-Total	365.3		06/13/25	06/13/25 13:29	
			TKN	SM4500-N Org C-11 plus NH3 B plus G-11		06/12/25	06/16/25 15:53	
			TSS	SM2540 D			06/13/25 10:00	



SAMPLE DATA

Report of Analysis

Client:	ATG-GREENVILLE AEC	Date Collected:	06/10/25 12:05
Project:	AEC-2025-0013- CSC 4016 Madison	Date Received:	06/11/25
Client Sample ID:	SW-3	SDG No.:	Q2293
Lab Sample ID:	Q2293-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Nitrite	0.088	J	1	0.074	0.60	mg/L		06/11/25 10:52	300.0
Nitrate	0.32	J	1	0.095	0.50	mg/L		06/11/25 10:52	300.0
Nitrate+Nitrite	0.41	J	1	0.17	1.10	mg/L		06/11/25 10:52	300.0
COD	40.8		1	1.50	10.0	mg/L		06/12/25 14:23	SM 5220 D-11
Oil and Grease	0.30	J	1	0.29	5.00	mg/L		06/17/25 09:30	1664A
pH	7.31	H	1	0	0	pH		06/12/25 09:40	9040C
Phosphorus, Total	0.21		1	0.0050	0.050	mg/L	06/13/25 09:45	06/13/25 13:29	365.3
TKN	1.10		1	0.11	0.50	mg/L	06/12/25 08:50	06/16/25 15:53	SM4500-N Org C-11 plus NH3 B plus G-11
TSS	235		1	1.00	4.00	mg/L		06/13/25 10:00	SM 2540 D-15

Comments: pH result reported at temperature 20.3 °C

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: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136120

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	10.2	10	102	90-110	05/22/2025
Chloride	mg/L	3.1	3	103	90-110	05/22/2025
Fluoride	mg/L	2.1	2	105	90-110	05/22/2025
Nitrite	mg/L	3.1	3	103	90-110	05/22/2025
Nitrate	mg/L	2.6	2.5	104	90-110	05/22/2025
Sulfate	mg/L	15.1	15	101	90-110	05/22/2025
Orthophosphate as P	mg/L	5.3	5	106	90-110	05/22/2025
Sample ID: CCV1						
Bromide	mg/L	10.3	10	103	90-110	06/11/2025
Chloride	mg/L	3.1	3	103	90-110	06/11/2025
Fluoride	mg/L	2.1	2	105	90-110	06/11/2025
Nitrite	mg/L	3.1	3	103	90-110	06/11/2025
Nitrate	mg/L	2.6	2.5	104	90-110	06/11/2025
Sulfate	mg/L	15.2	15	101	90-110	06/11/2025
Orthophosphate as P	mg/L	5.3	5	106	90-110	06/11/2025
Sample ID: CCV2						
Bromide	mg/L	10.3	10	103	90-110	06/11/2025
Chloride	mg/L	3.1	3	103	90-110	06/11/2025
Fluoride	mg/L	2.1	2	105	90-110	06/11/2025
Nitrite	mg/L	3.1	3	103	90-110	06/11/2025
Nitrate	mg/L	2.6	2.5	104	90-110	06/11/2025
Sulfate	mg/L	15.2	15	101	90-110	06/11/2025
Orthophosphate as P	mg/L	5.3	5	106	90-110	06/11/2025
Sample ID: CCV3						
Bromide	mg/L	10.3	10	103	90-110	06/11/2025
Chloride	mg/L	3.1	3	103	90-110	06/11/2025
Fluoride	mg/L	2.1	2	105	90-110	06/11/2025
Nitrite	mg/L	3.1	3	103	90-110	06/11/2025
Nitrate	mg/L	2.6	2.5	104	90-110	06/11/2025
Sulfate	mg/L	15.3	15	102	90-110	06/11/2025
Orthophosphate as P	mg/L	5.5	5	110	90-110	06/11/2025

Initial and Continuing Calibration Verification

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136131

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV pH	pH	7.02	7	100	90-110	06/12/2025
Sample ID: CCV1 pH	pH	2.01	2.00	101	90-110	06/12/2025
Sample ID: CCV2 pH	pH	12.02	12.00	100	90-110	06/12/2025

Initial and Continuing Calibration Verification

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136134

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	49.946	50	100	95-105	06/12/2025
Sample ID: CCV2 COD	mg/L	48.931	50	98	95-105	06/12/2025
Sample ID: CCV3 COD	mg/L	50.962	50	102	95-105	06/12/2025

Initial and Continuing Calibration Verification

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136153

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Phosphorus, Total	mg/L	0.494	0.50	99	90-110	06/13/2025
Sample ID: CCV1 Phosphorus, Total	mg/L	0.514	0.50	103	90-110	06/13/2025
Sample ID: CCV2 Phosphorus, Total	mg/L	0.496	0.50	99	90-110	06/13/2025
Sample ID: CCV3 Phosphorus, Total	mg/L	0.502	0.50	100	90-110	06/13/2025

Initial and Continuing Calibration Verification

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136167

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 TKN	mg/L	4.8	5	96	90-110	06/16/2025
Sample ID: CCV1 TKN	mg/L	5.1	5	102	90-110	06/16/2025
Sample ID: CCV2 TKN	mg/L	4.9	5	98	90-110	06/16/2025
Sample ID: CCV3 TKN	mg/L	5	5	100	90-110	06/16/2025
Sample ID: CCV4 TKN	mg/L	5.2	5	104	90-110	06/16/2025

Initial and Continuing Calibration Verification

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136167

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
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Initial and Continuing Calibration Blank Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136120

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	06/11/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/11/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/11/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/11/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/11/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/11/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/11/2025
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/11/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/11/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/11/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/11/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/11/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/11/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/11/2025
Sample ID: CCB3							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/11/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/11/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/11/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/11/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/11/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/11/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/11/2025

Initial and Continuing Calibration Blank Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136134

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	06/12/2025
Sample ID: CCB2 COD	mg/L	< 5.0000	5.0000	U	1.50	10	06/12/2025
Sample ID: CCB3 COD	mg/L	< 5.0000	5.0000	U	1.50	10	06/12/2025

Initial and Continuing Calibration Blank Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136153

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Phosphorus, Total	mg/L	0.008	0.0250	J	0.0045	0.05	06/13/2025
Sample ID: CCB1 Phosphorus, Total	mg/L	0.010	0.0250	J	0.0045	0.05	06/13/2025
Sample ID: CCB2 Phosphorus, Total	mg/L	0.010	0.0250	J	0.0045	0.05	06/13/2025
Sample ID: CCB3 Phosphorus, Total	mg/L	0.008	0.0250	J	0.0045	0.05	06/13/2025

Initial and Continuing Calibration Blank Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136167

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	06/16/2025
Sample ID: CCB1 TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	06/16/2025
Sample ID: CCB2 TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	06/16/2025
Sample ID: CCB3 TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	06/16/2025
Sample ID: CCB4 TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	06/16/2025

Initial and Continuing Calibration Blank Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

RunNo.: LB136167

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
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Preparation Blank Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB136120BLW							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	06/11/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	06/11/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	06/11/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	06/11/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	06/11/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	06/11/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	06/11/2025
Sample ID: LB136134BL							
COD	mg/L	< 5.0000	5.0000	U	1.5	10.0	06/12/2025
Sample ID: LB136145BL							
TSS	mg/L	1	2.0000	J	1	4	06/13/2025
Sample ID: LB136172BL							
Oil and Grease	mg/L	< 2.5000	2.5000	U	0.29	5.0	06/17/2025
Sample ID: PB168445BL							
TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	06/16/2025
Sample ID: PB168478BL							
Phosphorus, Total	mg/L	0.007	0.0250	J	0.005	0.05	06/13/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2286-03
Client ID:	LAW-25-0084MS	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
TKN	mg/L	75-125	23.4	OR	21.8	OR	5	1	32	*	06/16/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2286-03
Client ID:	LAW-25-0084MSD	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
TKN	mg/L	75-125	23.0	OR	21.8	OR	5	1	24	*	06/16/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2289-01
Client ID:	SP-1MS	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
Phosphorus, Total	mg/L	90-110	0.51		0.046	J	0.5	1	93		06/13/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2289-01
Client ID:	SP-1MSD	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
Phosphorus, Total	mg/L	90-110	0.51		0.046	J	0.5	1	92		06/13/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2291-01
Client ID:	Outfall 001MS	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	10.3	OR	0.37	U	10	1	103		06/11/2025
Chloride	mg/L	80-120	30.7		28.4	OR	3	1	77	*	06/11/2025
Fluoride	mg/L	80-120	2.50		0.41		2	1	104		06/11/2025
Nitrite	mg/L	80-120	3.10		0.092	J	3	1	100		06/11/2025
Nitrate	mg/L	80-120	3.20		0.65		2.5	1	102		06/11/2025
Sulfate	mg/L	80-120	18.9		4.20		15	1	98		06/11/2025
Orthophosphate as P	mg/L	80-120	5.30		0.34	U	5	1	106		06/11/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2291-01
Client ID:	Outfall 001MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	10.5	OR	0.37	U	10	1	105		06/11/2025
Chloride	mg/L	80-120	30.7		28.4	OR	3	1	77	*	06/11/2025
Fluoride	mg/L	80-120	2.50		0.41		2	1	104		06/11/2025
Nitrite	mg/L	80-120	3.20		0.092	J	3	1	104		06/11/2025
Nitrate	mg/L	80-120	3.20		0.65		2.5	1	102		06/11/2025
Sulfate	mg/L	80-120	19.4		4.20		15	1	101		06/11/2025
Orthophosphate as P	mg/L	80-120	5.50		0.34	U	5	1	110		06/11/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2294-01
Client ID:	Outfall 1MS	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
COD	mg/L	75-125	64.2		18.5		50.0	1	91		06/12/2025

Matrix Spike Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2294-01
Client ID:	Outfall 1MSD	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
COD	mg/L	75-125	64.2		18.5		50.0	1	91		06/12/2025

Duplicate Sample Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	LB136172BS
Client ID:	LB136172BSD	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
Oil and Grease	mg/L	+/-18	17.0		17.2		1	1.17		06/17/2025

Duplicate Sample Summary

Client: ATG-GREENVILLE AEC	SDG No.: Q2293
Project: AEC-2025-0013- CSC 4016 Madison	Sample ID: Q2286-03
Client ID: LAW-25-0084DUP	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
TKN	mg/L	+/-20	21.8	OR	23.0	OR	1	5		06/16/2025
TKN	mg/L	+/-20	25.8	D	25.8	D	5	0		06/16/2025

Duplicate Sample Summary

Client: ATG-GREENVILLE AEC	SDG No.: Q2293
Project: AEC-2025-0013- CSC 4016 Madison	Sample ID: Q2286-03
Client ID: LAW-25-0084MSD	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
TKN	mg/L	+/-20	23.4	OR	23.0	OR	1	2		06/16/2025

Duplicate Sample Summary

Client: ATG-GREENVILLE AEC	SDG No.: Q2293
Project: AEC-2025-0013- CSC 4016 Madison	Sample ID: Q2289-01
Client ID: SP-1DUP	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
pH	pH	+/-20	7.59		7.61		1	0.26		06/12/2025
Phosphorus, Total	mg/L	+/-20	0.046	J	0.046	J	1	0		06/13/2025

Duplicate Sample Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2289-01
Client ID:	SP-1MSD	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
Phosphorus, Total	mg/L	+/-20	0.51		0.51		1	1.18		06/13/2025

Duplicate Sample Summary

Client: ATG-GREENVILLE AEC	SDG No.: Q2293
Project: AEC-2025-0013- CSC 4016 Madison	Sample ID: Q2291-01
Client ID: Outfall 001MSD	Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Fluoride	mg/L	+/-20	2.50		2.50		1	0		06/11/2025
Nitrate	mg/L	+/-20	3.20		3.20		1	0		06/11/2025
Chloride	mg/L	+/-20	30.7	OR	30.7	OR	1	0		06/11/2025
Bromide	mg/L	+/-20	10.3		10.5		1	2		06/11/2025
Nitrite	mg/L	+/-20	3.10		3.20		1	3		06/11/2025
Sulfate	mg/L	+/-20	18.9		19.4		1	3		06/11/2025
Orthophosphate as P	mg/L	+/-20	5.30		5.50		1	4		06/11/2025

Duplicate Sample Summary

Client: ATG-GREENVILLE AEC	SDG No.: Q2293
Project: AEC-2025-0013- CSC 4016 Madison	Sample ID: Q2293-01
Client ID: SW-3DUP	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
TSS	mg/L	+/-5	235		235		1	0.34		06/13/2025

Duplicate Sample Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2294-01
Client ID:	Outfall 1DUP	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
COD	mg/L	+/-20	18.5		19.5		1	5.26		06/12/2025

Duplicate Sample Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Sample ID:	Q2294-01
Client ID:	Outfall 1MSD	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
COD	mg/L	+/-20	64.2		64.2		1	0		06/12/2025

Laboratory Control Sample Summary

Client:	ATG-GREENVILLE AEC	SDG No.:	Q2293
Project:	AEC-2025-0013- CSC 4016 Madison	Run No.:	LB136120

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136120BSW							
Bromide	mg/L	10	10.3		103	1	90-110	06/11/2025
Chloride	mg/L	3	3.10		103	1	90-110	06/11/2025
Fluoride	mg/L	2	2.10		105	1	90-110	06/11/2025
Nitrite	mg/L	3	3.10		103	1	90-110	06/11/2025
Nitrate	mg/L	2.5	2.60		104	1	90-110	06/11/2025
Sulfate	mg/L	15	15.2		101	1	90-110	06/11/2025
Orthophosphate as P	mg/L	5	5.30		106	1	90-110	06/11/2025

Laboratory Control Sample Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

Run No.: LB136134

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136134BS							
COD	mg/L	50	47.9		96	1	90-110	06/12/2025

Laboratory Control Sample Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

Run No.: LB136145

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136145BS							
TSS	mg/L	550	532		97	1	90-110	06/13/2025

Laboratory Control Sample Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

Run No.: LB136172

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136172BS							
Oil and Grease	mg/L	20.0	17.0		85	1	78-114	06/17/2025

Laboratory Control Sample Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

Run No.: LB136172

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136172BSD							
Oil and Grease	mg/L	20.0	17.2		86	1	78-114	06/17/2025

Laboratory Control Sample Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

Run No.: LB136167

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB168445BS							
TKN	mg/L	5	4.90		98	1	90-110	06/16/2025

Laboratory Control Sample Summary

Client: ATG-GREENVILLE AEC

SDG No.: Q2293

Project: AEC-2025-0013- CSC 4016 Madison

Run No.: LB136153

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB168478BS							
Phosphorus, Total	mg/L	0.50	0.49		98	1	90-110	06/13/2025



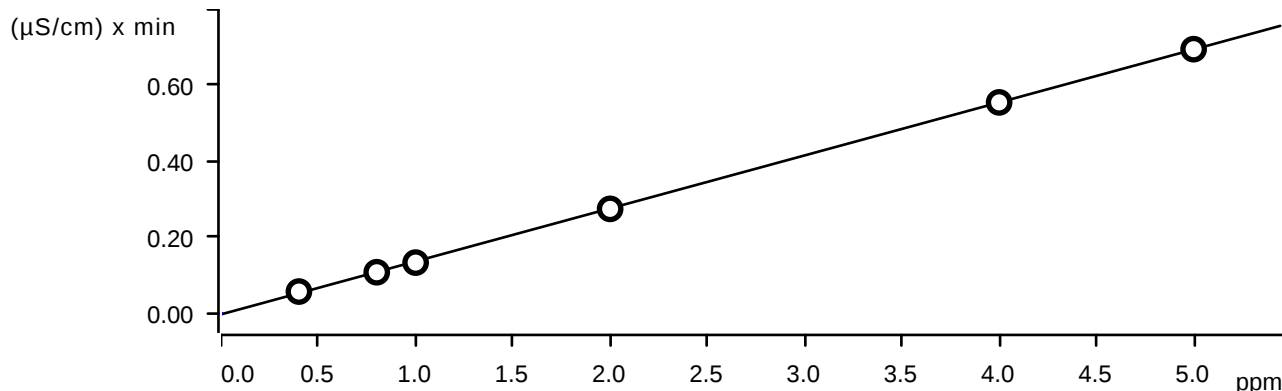
RAW DATA

Ident	Instrument IC-1				Analyst: NF		Method: 300.0 / 9056A		Initia Analyst		
	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO4	Con SO4	Method nam		date time	
STD1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	5/22/2025 11:09	10 NF/IZ
STD2	0.430	0.640	0.649	2.129	0.543	1.098	3.287	IC1-052225	5/22/2025 11:30	10 NF/IZ	
STD3	0.795	1.207	1.205	4.018	1.004	1.867	6.069	IC1-052225	5/22/2025 11:52	10 NF/IZ	
STD4	0.977	1.480	1.479	4.929	1.229	2.477	7.415	IC1-052225	5/22/2025 12:13	10 NF/IZ	
STD5	1.991	2.968	2.960	9.916	2.467	5.110	14.621	IC1-052225	5/22/2025 12:35	10 NF/IZ	
STD6	4.001	5.967	5.959	19.868	4.966	9.870	29.848	IC1-052225	5/22/2025 12:56	10 NF/IZ	
STD7	5.006	7.539	7.548	25.140	6.290	12.578	37.260	IC1-052225	5/22/2025 13:17	10 NF/IZ	
ICV	2.054	3.101	3.056	10.229	2.610	5.286	15.128	IC1-052225	5/22/2025 13:39	10 NF/IZ	
ICB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	5/22/2025 14:22	10 NF/IZ	
CCV	2.095	3.087	3.070	10.317	2.570	5.254	15.186	IC1-052225	6/11/2025 6:43	10 NF/IZ	
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	6/11/2025 7:04	10 NF/IZ	
LB136120E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	6/11/2025 7:26	10 NF/IZ	
LB136120E	2.083	3.074	3.070	10.277	2.554	5.256	15.151	IC1-052225	6/11/2025 7:47	10 NF/IZ	
Q2289-01	0.110	163.957	0.084	0.000	0.549	0.000	12.748	IC1-052225	6/11/2025 8:43	10 NF/IZ	
Q2289-02	0.080	29.727	0.000	0.000	0.227	0.000	5.060	IC1-052225	6/11/2025 9:04	10 NF/IZ	
Q2289-03	0.124	96.740	0.085	0.000	0.268	0.000	11.942	IC1-052225	6/11/2025 9:26	10 NF/IZ	
Q2290-01	0.085	108.747	0.000	0.000	0.868	0.000	7.754	IC1-052225	6/11/2025 9:47	10 NF/IZ	
Q2292-01	0.117	7.174	0.089	0.630	0.296	0.000	2.249	IC1-052225	6/11/2025 10:09	10 NF/IZ	
Q2292-02	0.074	780.954	0.000	0.000	0.157	0.000	26.270	IC1-052225	6/11/2025 10:30	10 NF/IZ	
Q2293-01	0.772	3.206	0.088	0.000	0.317	0.140	4.925	IC1-052225	6/11/2025 10:52	10 NF/IZ	
Q2290-02	0.081	247.979	0.000	0.210	0.000	0.000	11.206	IC1-052225	6/11/2025 11:14	10 NF/IZ	
CCV	2.087	3.088	3.078	10.278	2.558	5.311	15.182	IC1-052225	6/11/2025 11:35	10 NF/IZ	
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	6/11/2025 11:57	10 NF/IZ	
Q2291-01	0.408	28.365	0.092	0.000	0.650	0.000	4.247	IC1-052225	6/11/2025 12:18	10 NF/IZ	
Q2291-01N	2.476	30.660	3.069	10.252	3.155	5.343	18.897	IC1-052225	6/11/2025 12:40	10 NF/IZ	
Q2291-01N	2.527	30.746	3.156	10.527	3.218	5.469	19.377	IC1-052225	6/11/2025 13:01	10 NF/IZ	
Q2286-03	0.213	242.712	0.000	0.253	0.000	0.374	194.478	IC1-052225	6/11/2025 13:23	10 NF/IZ	
CCV	2.068	3.087	3.083	10.335	2.563	5.454	15.270	IC1-052225	6/11/2025 13:44	10 NF/IZ	
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-052225	6/11/2025 14:06	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	date time	Initial wt/ Final	Analyst
STD1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	IC1-052225	5/22/2025 11:09	10	NF/IZ
STD2	0.4300	0.6400	0.6490	2.1290	0.5430	1.0980	3.2870	IC1-052225	5/22/2025 11:30	10	NF/IZ
STD3	0.7950	1.2070	1.2050	4.0180	1.0040	1.8670	6.0690	IC1-052225	5/22/2025 11:52	10	NF/IZ
STD4	0.9770	1.4800	1.4790	4.9290	1.2290	2.4770	7.4150	IC1-052225	5/22/2025 12:13	10	NF/IZ
STD5	1.9910	2.9680	2.9600	9.9160	2.4670	5.1100	14.6210	IC1-052225	5/22/2025 12:35	10	NF/IZ
STD6	4.0010	5.9670	5.9590	19.8680	4.9660	9.8700	29.8480	IC1-052225	5/22/2025 12:56	10	NF/IZ
STD7	5.0060	7.5390	7.5480	25.1400	6.2900	12.5780	37.2600	IC1-052225	5/22/2025 13:17	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											

Fluoride (Anions)



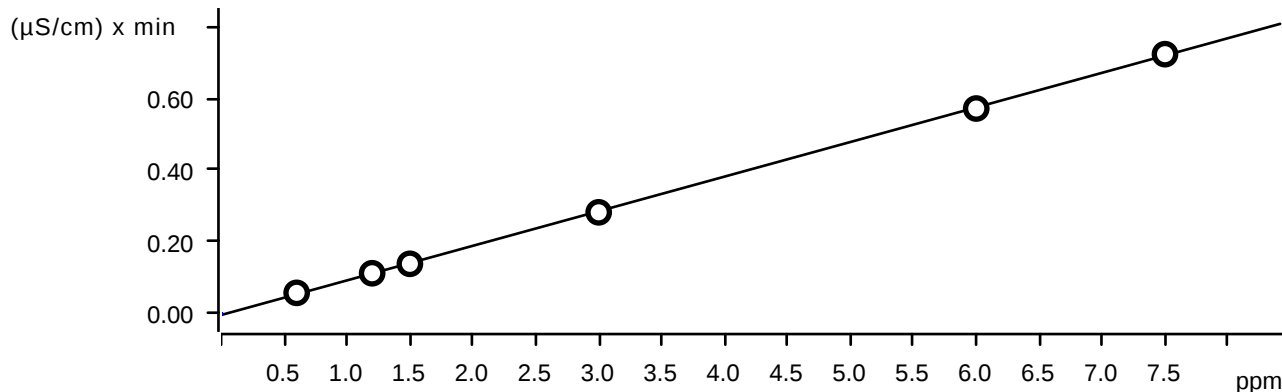
Function: $A = -2.82659E-3 + 0.0139492 \times Q$

Relative standard deviation 0.920519 %

Correlation coefficient 0.999955

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

Chloride (Anions)



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

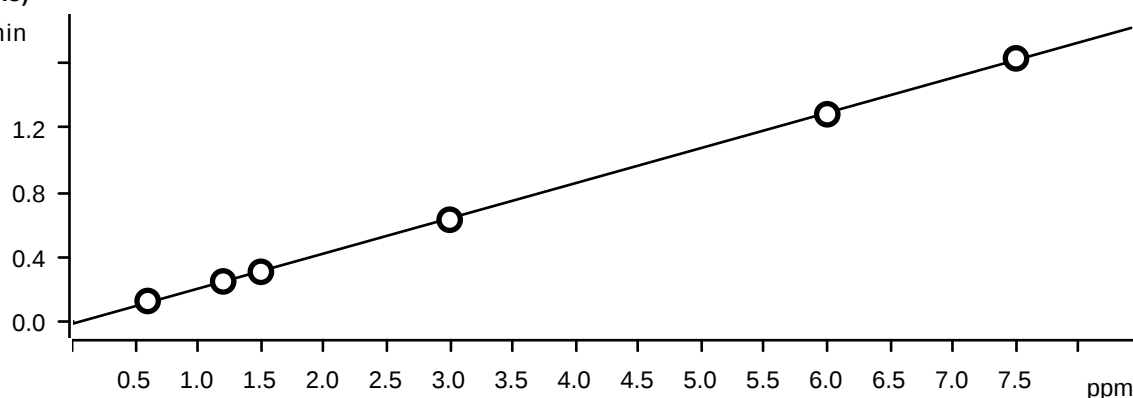
Relative standard deviation 1.154335 %

Correlation coefficient 0.999929

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

Nitrite (Anions)

(μS/cm) x min

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

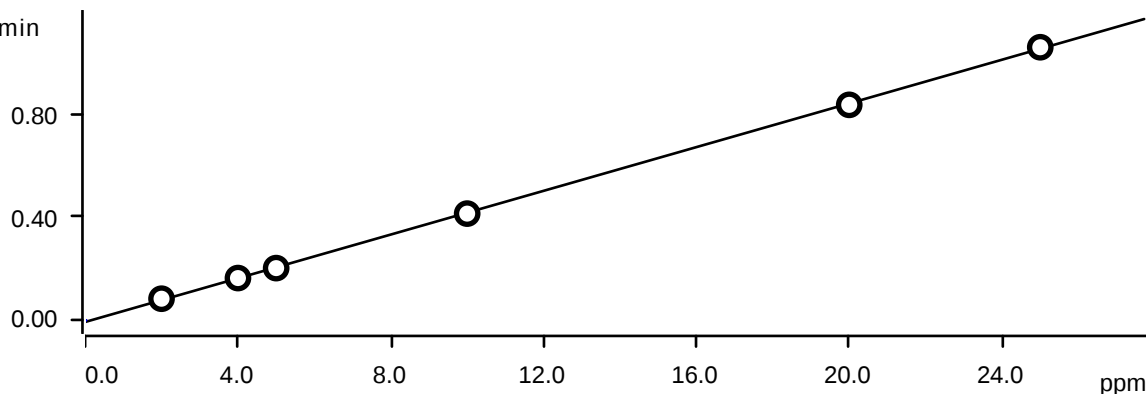
Relative standard deviation 1.428639 %

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

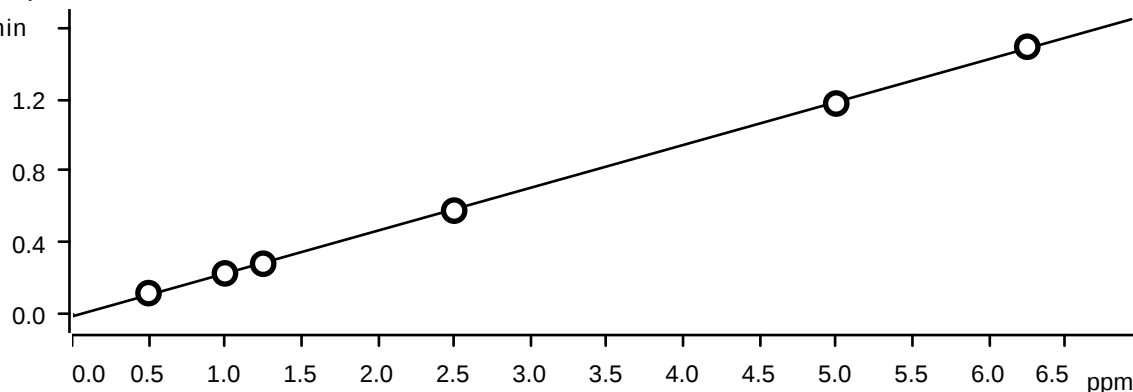
Relative standard deviation: 1.185575 %

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

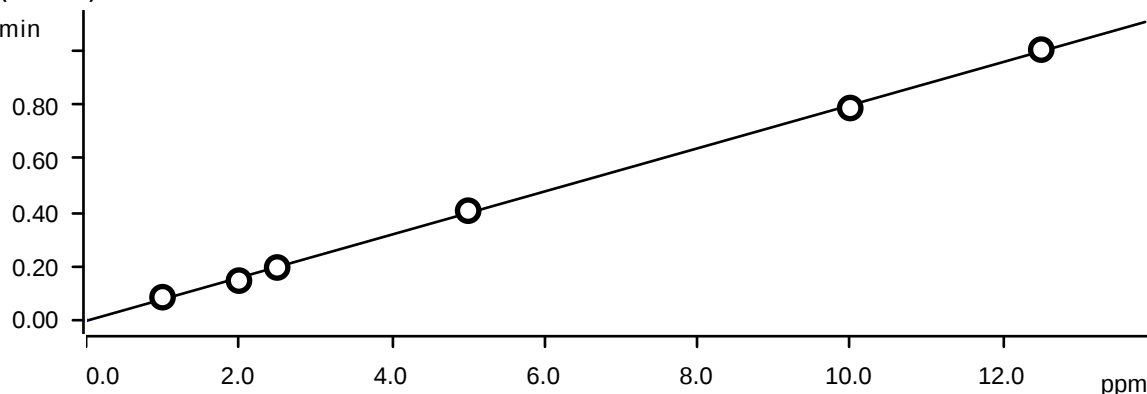


Function: $A = -0.0109593 + 0.0239055 \times Q$

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

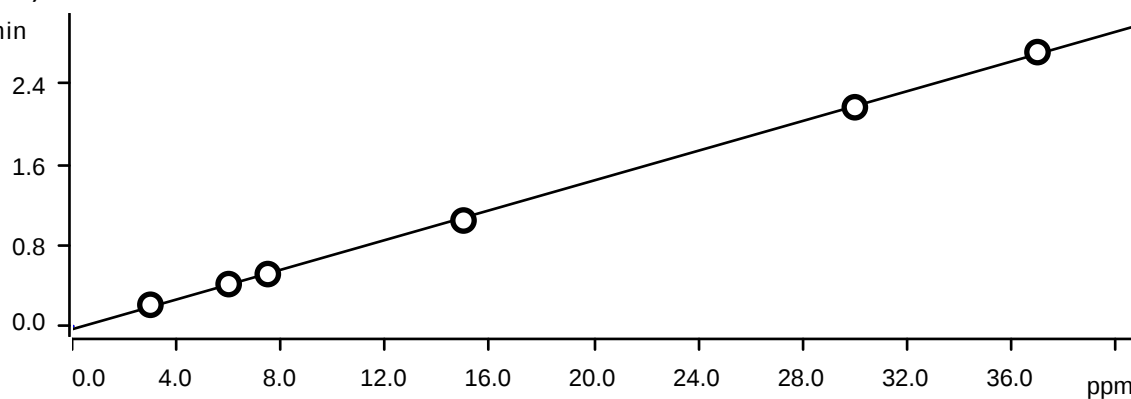
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.02035E-3 + 8.01761E-3 \times Q$

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)

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

Relative standard deviation 1.792871 %

Correlation coefficient 0.999832

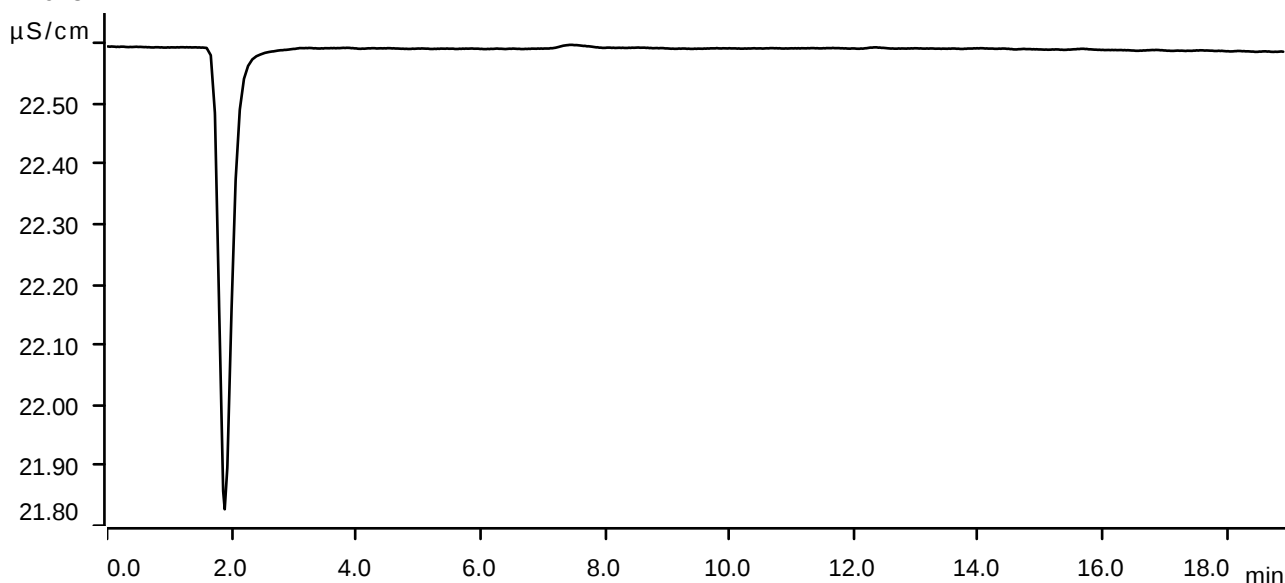
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-05-22 11:09:38 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.212	STD2	2025-05-22 11:30:53 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.417	STD3	2025-05-22 11:52:16 UTC-4	used
Standard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

Sample data

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

Anions

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

Anions

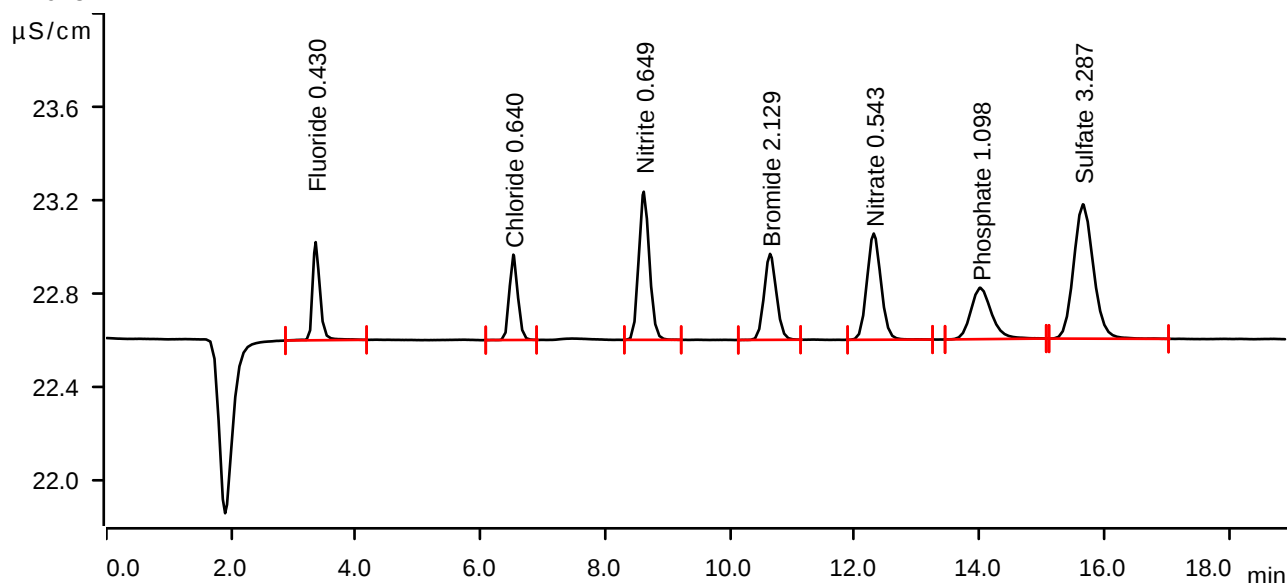
Sample data

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

Anions

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

Anions



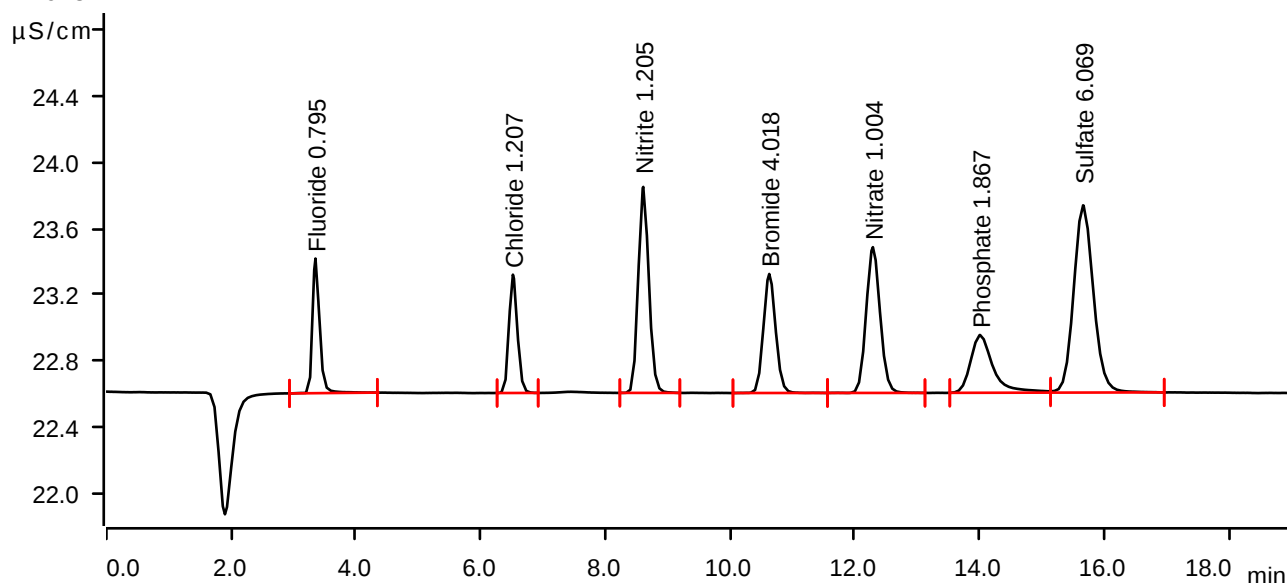
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.357	0.0572	0.421	0.430	Fluoride
2	6.525	0.0574	0.366	0.640	Chloride
3	8.617	0.1264	0.636	0.649	Nitrite
4	10.642	0.0838	0.369	2.129	Bromide
5	12.303	0.1190	0.456	0.543	Nitrate
6	14.013	0.0850	0.221	1.098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

Sample data

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

Anions

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

Anions

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

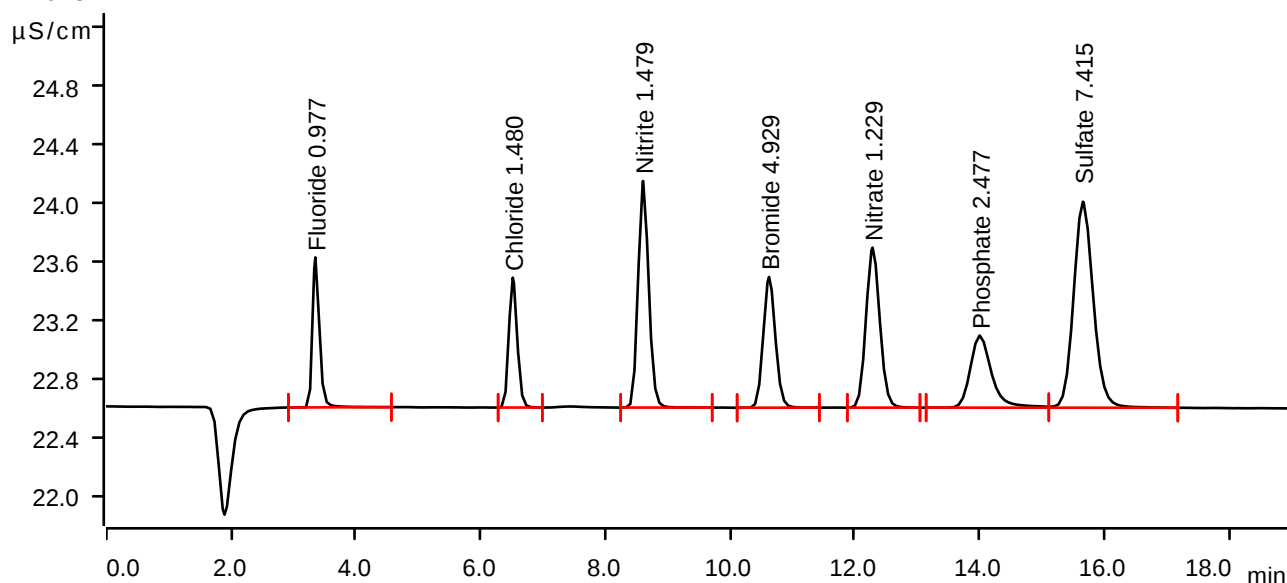
Sample data

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

Anions

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

Anions



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

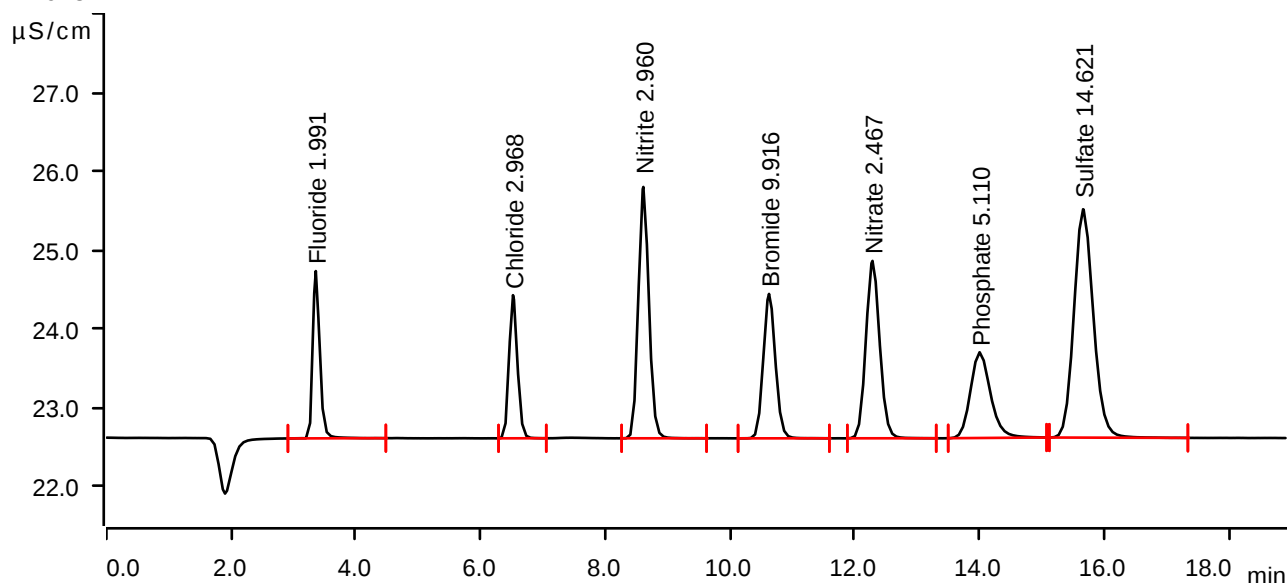
Sample data

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

Anions

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

Anions



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

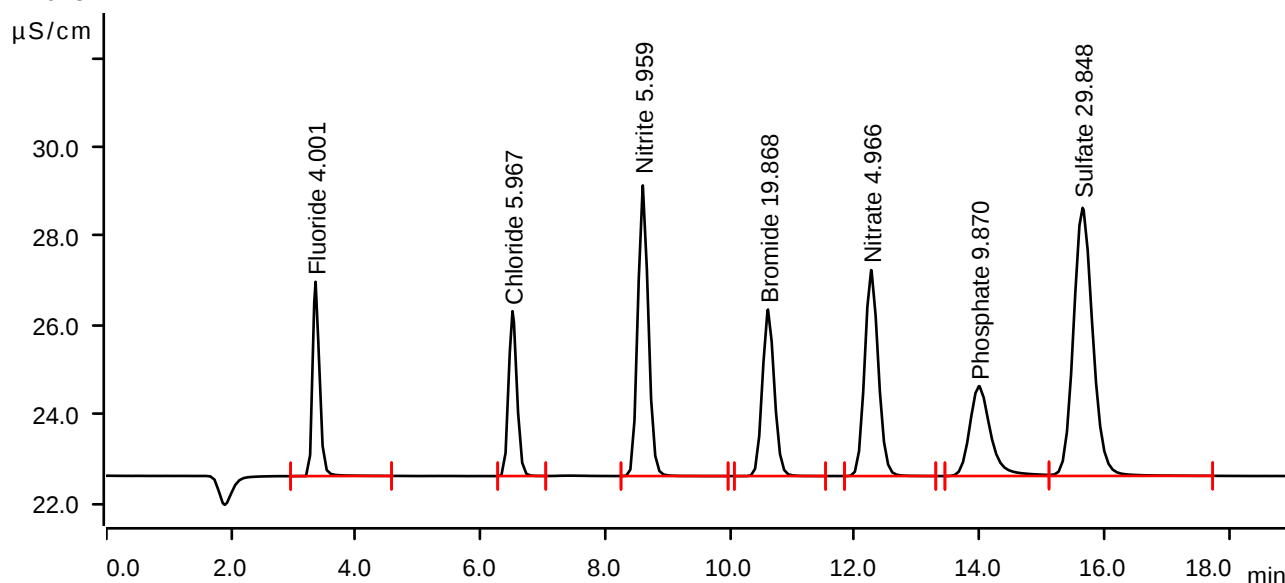
Sample data

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

Anions

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

Anions



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

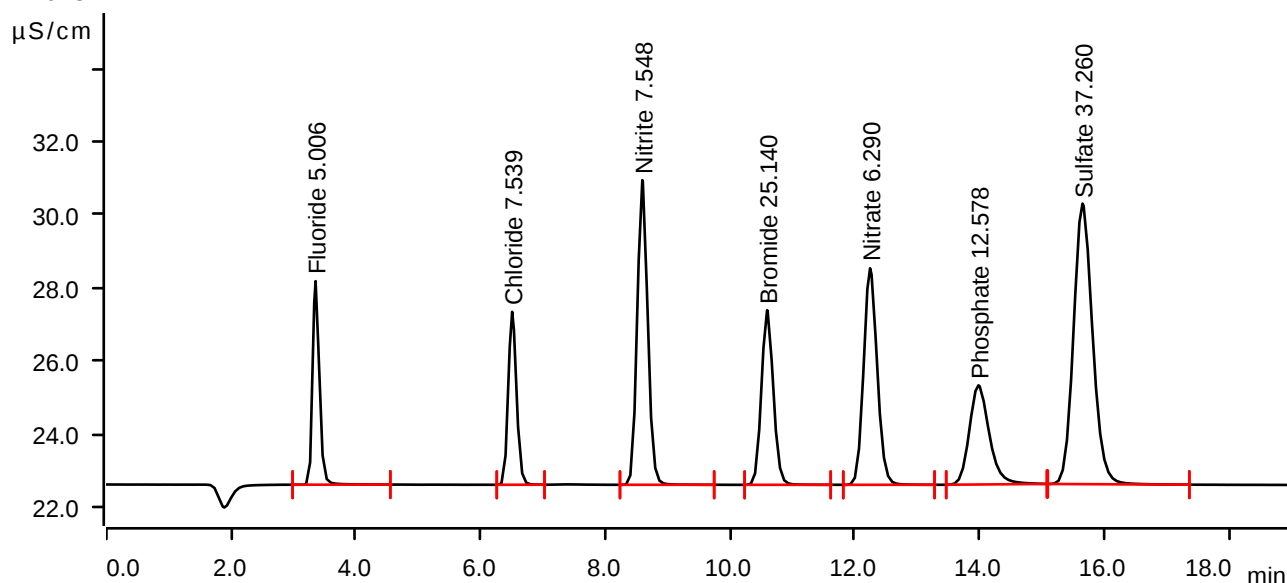
Sample data

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

Anions

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

Anions



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

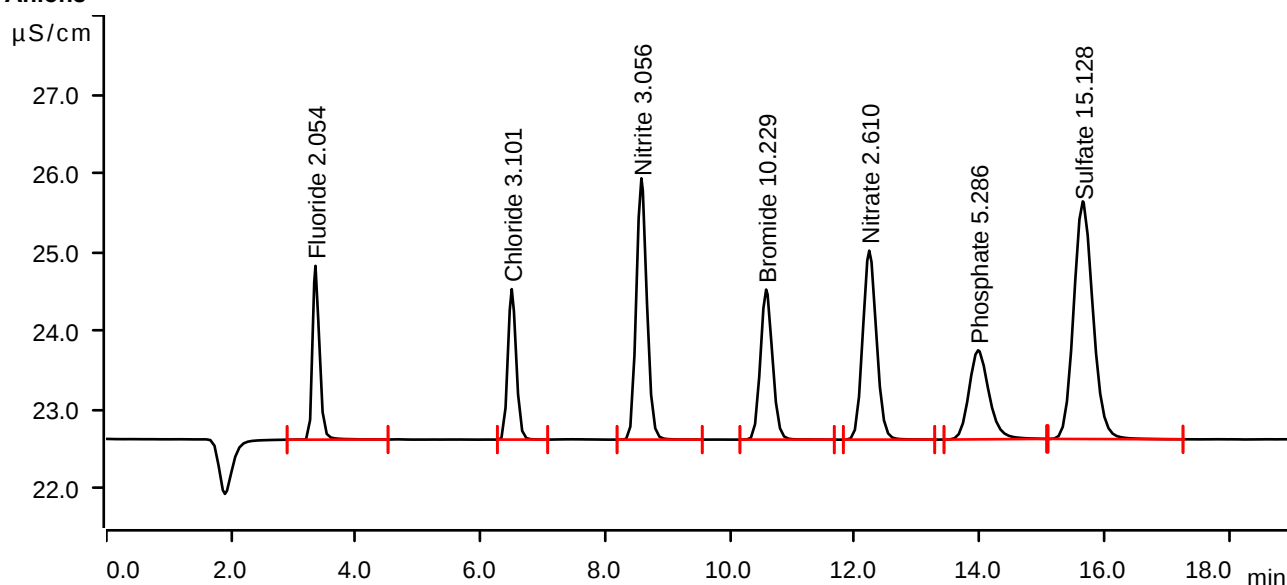
Sample data

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

Anions

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

Anions



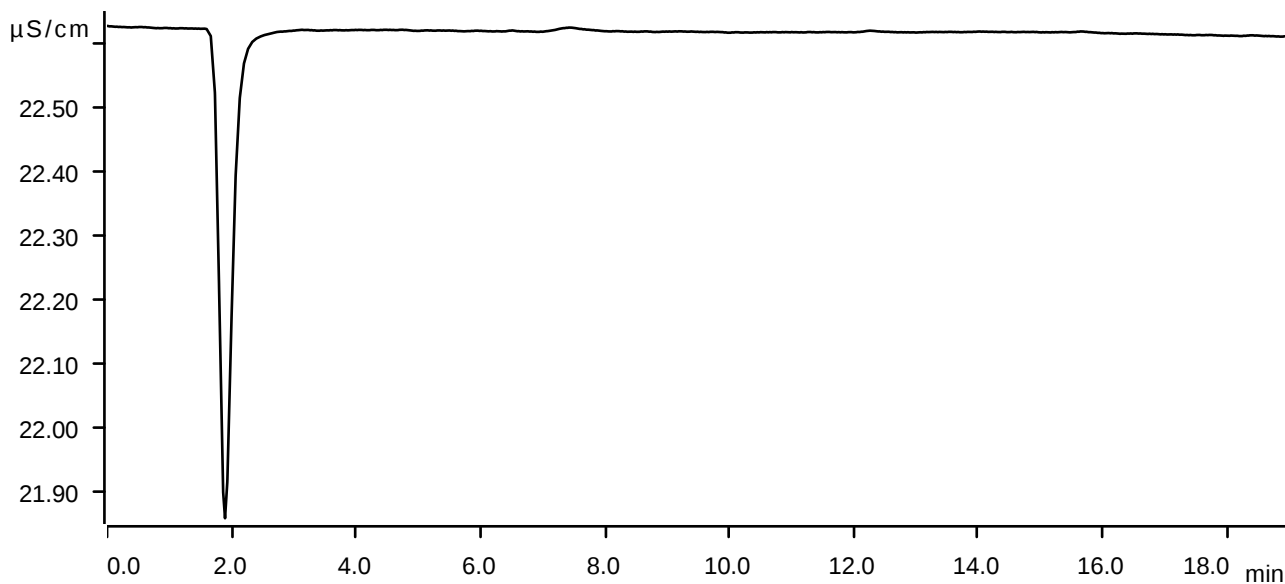
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.353	0.2837	2.205	2.054	Fluoride
2	6.500	0.2948	1.910	3.101	Chloride
3	8.578	0.6509	3.316	3.056	Nitrite
4	10.578	0.4266	1.904	10.229	Bromide
5	12.232	0.6129	2.398	2.610	Nitrate
6	13.977	0.4208	1.130	5.286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

Sample data

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

Anions

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

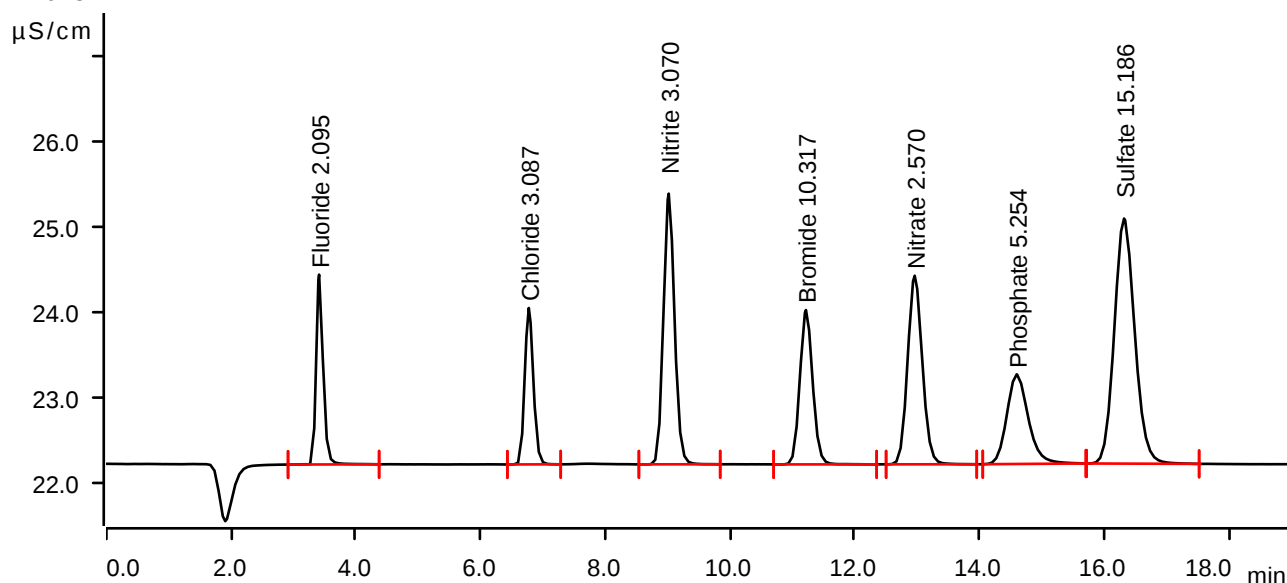
Anions

Sample data

Ident CCV
 Sample type Check standard 1
 Determination start 2025-06-11 06:43:06 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 12.89 MPa
 Maximum pressure monitored yes
 Temperature ---- °C

Anions

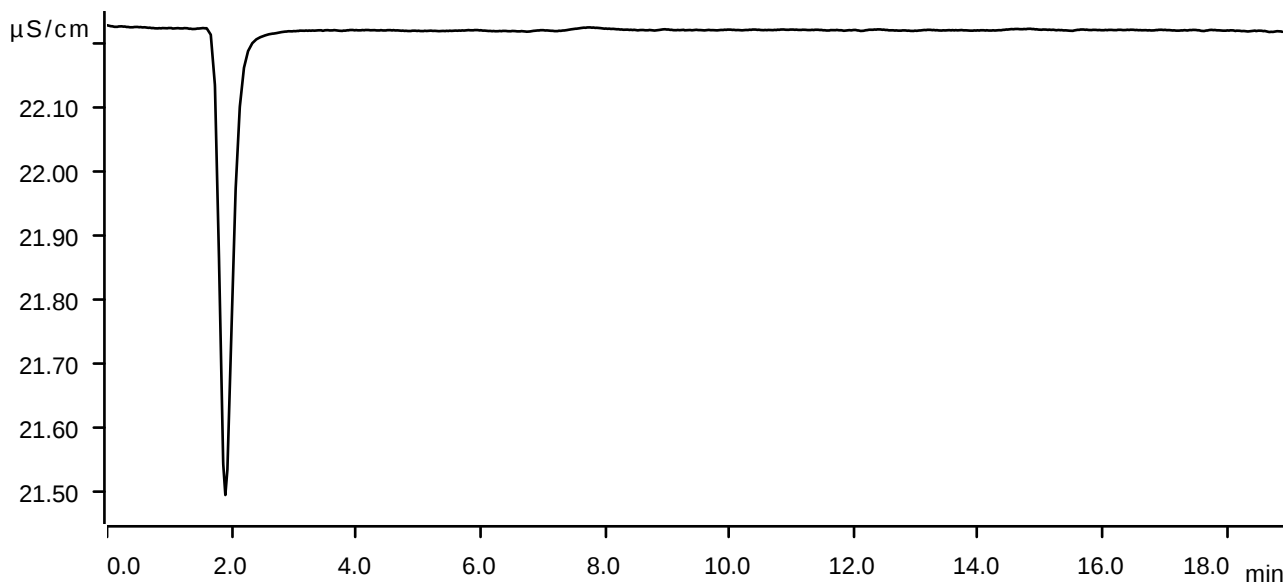
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.412	0.2895	2.223	2.095	Fluoride
2	6.773	0.2935	1.832	3.087	Chloride
3	9.017	0.6540	3.171	3.070	Nitrite
4	11.217	0.4303	1.808	10.317	Bromide
5	12.960	0.6035	2.209	2.570	Nitrate
6	14.595	0.4182	1.050	5.254	Phosphate
7	16.317	1.0893	2.871	15.186	Sulfate

Sample data

Ident CCB
Sample type Sample
Determination start 2025-06-11 07:04:36 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.89 MPa
Maximum pressure monitored yes
Temperature ---- °C

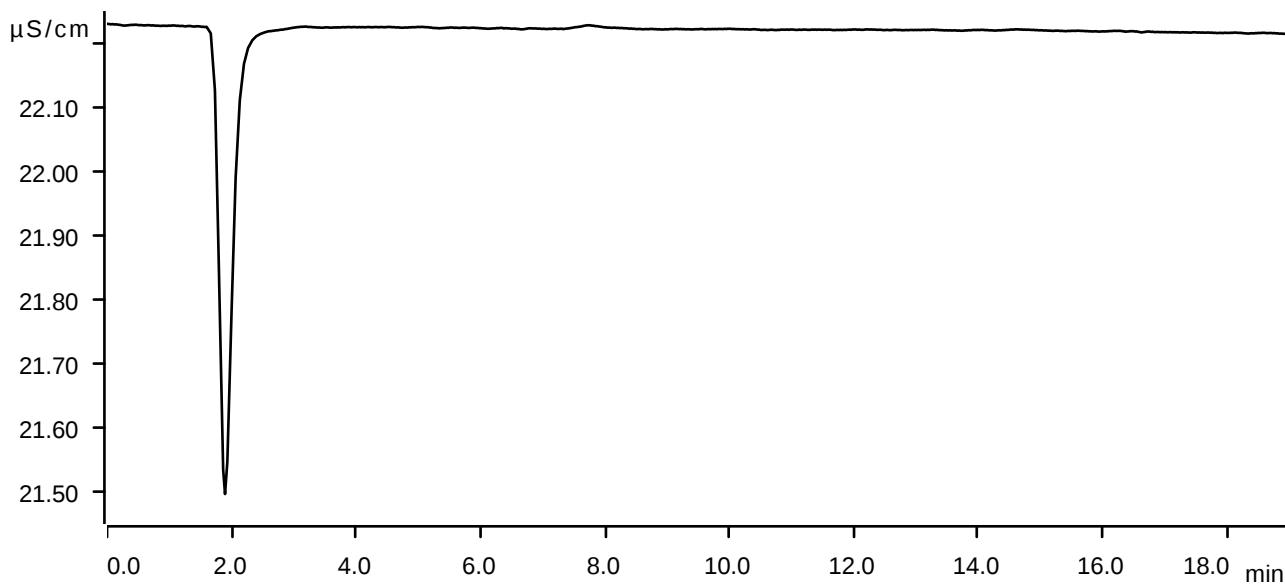
Anions

Sample data

Ident LB136120BLW
Sample type Sample
Determination start 2025-06-11 07:26:07 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

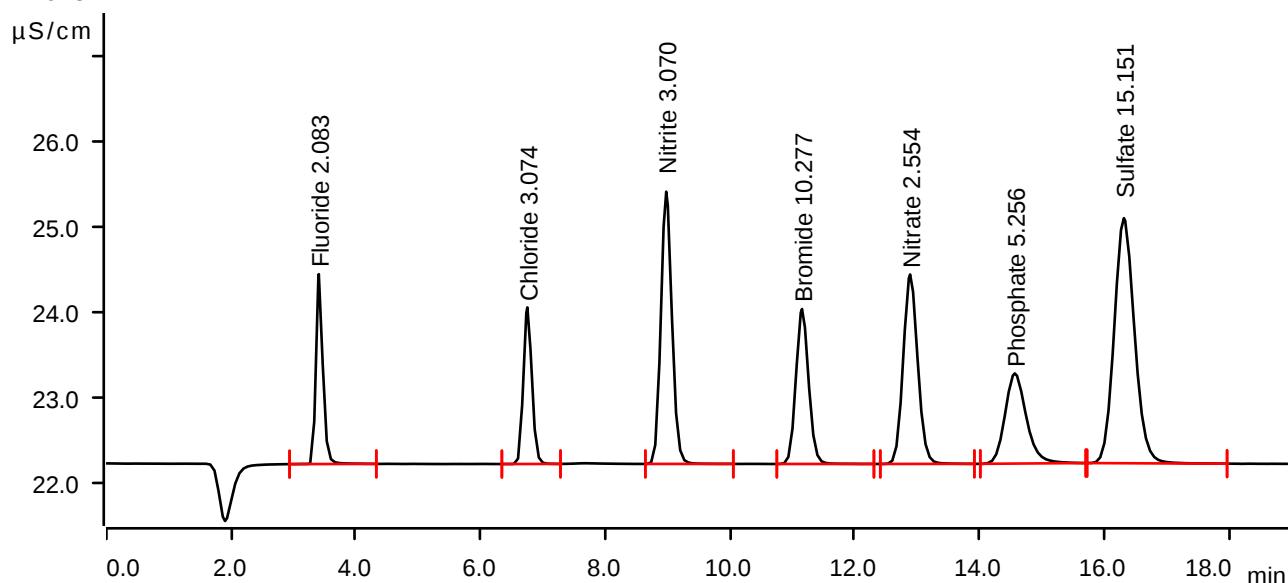
Sample data

Ident LB136120BSW
Sample type Check standard 1
Determination start 2025-06-11 07:47:38 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 12.84 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	3.407	0.2877	2.224	2.083	Fluoride
2	6.750	0.2922	1.834	3.074	Chloride
3	8.977	0.6539	3.189	3.070	Nitrite
4	11.153	0.4286	1.815	10.277	Bromide
5	12.887	0.5995	2.219	2.554	Nitrate
6	14.565	0.4184	1.056	5.256	Phosphate
7	16.313	1.0867	2.871	15.151	Sulfate

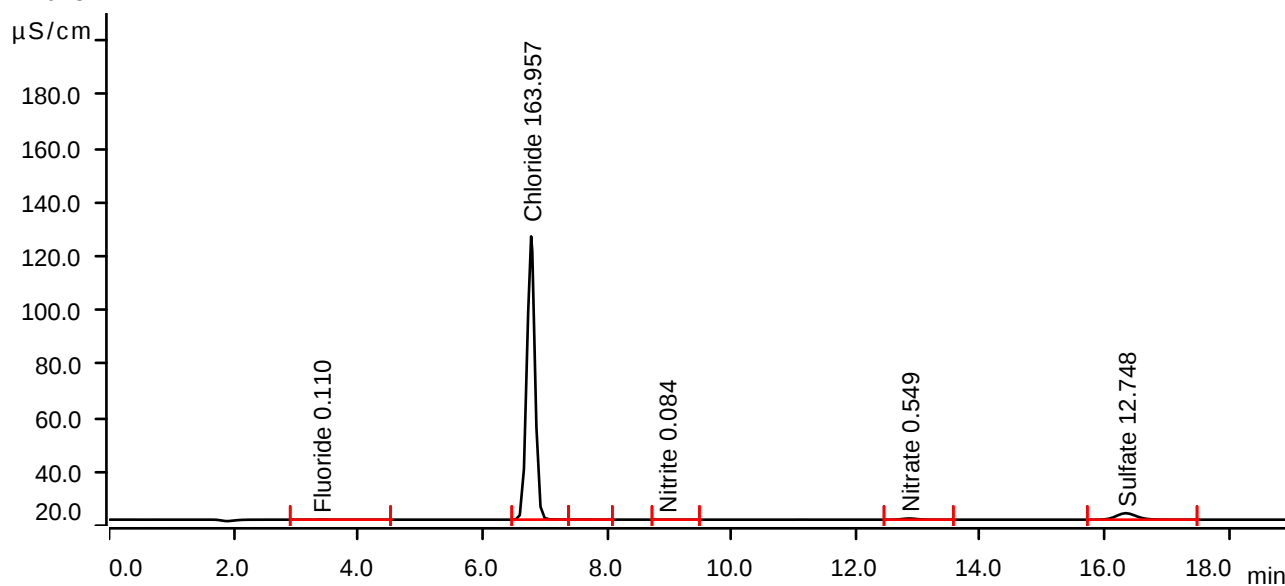
Sample data

Ident Q2289-01
Sample type Sample
Determination start 2025-06-11 08:43:15 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	3.403	0.0126	0.075	0.110	Fluoride
2	6.783	15.8122	105.065	163.957	Chloride
3	7.557	0.0045	0.012	invalid	
4	8.957	0.0033	0.015	0.084	Nitrite
5	12.860	0.1202	0.442	0.549	Nitrate
6	16.338	0.9095	2.404	12.748	Sulfate

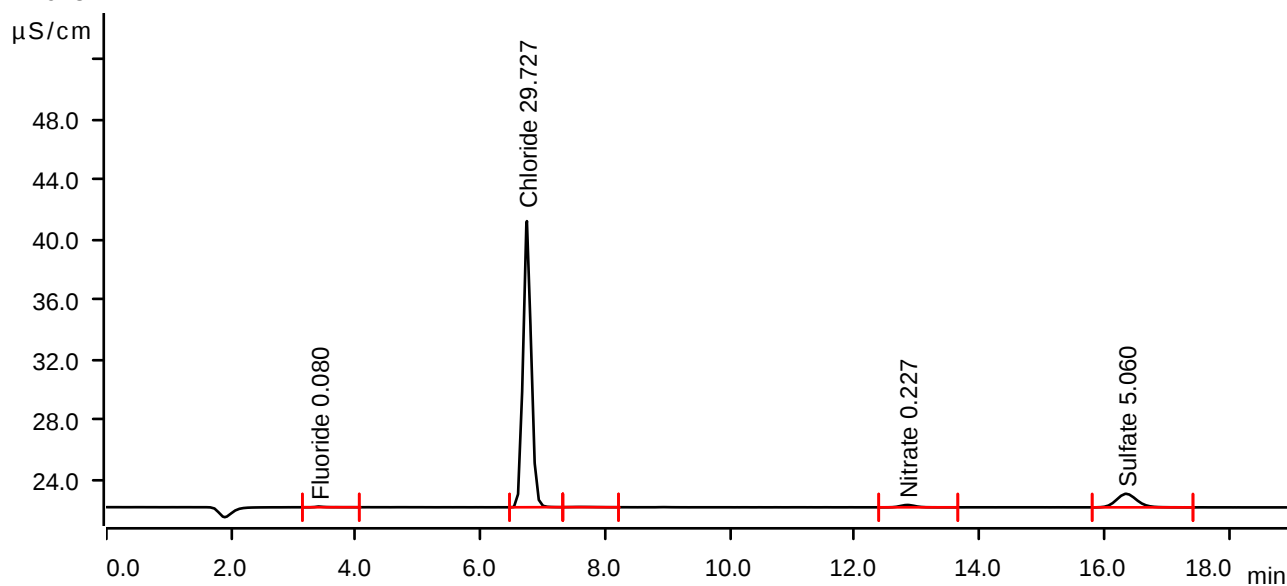
Sample data

Ident Q2289-02
Sample type Sample
Determination start 2025-06-11 09:04:40 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



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.405	0.0084	0.049	0.080	Fluoride
2	6.743	2.8633	18.989	29.727	Chloride
3	7.592	0.0068	0.016	invalid	
4	12.842	0.0434	0.157	0.227	Nitrate
5	16.350	0.3427	0.900	5.060	Sulfate

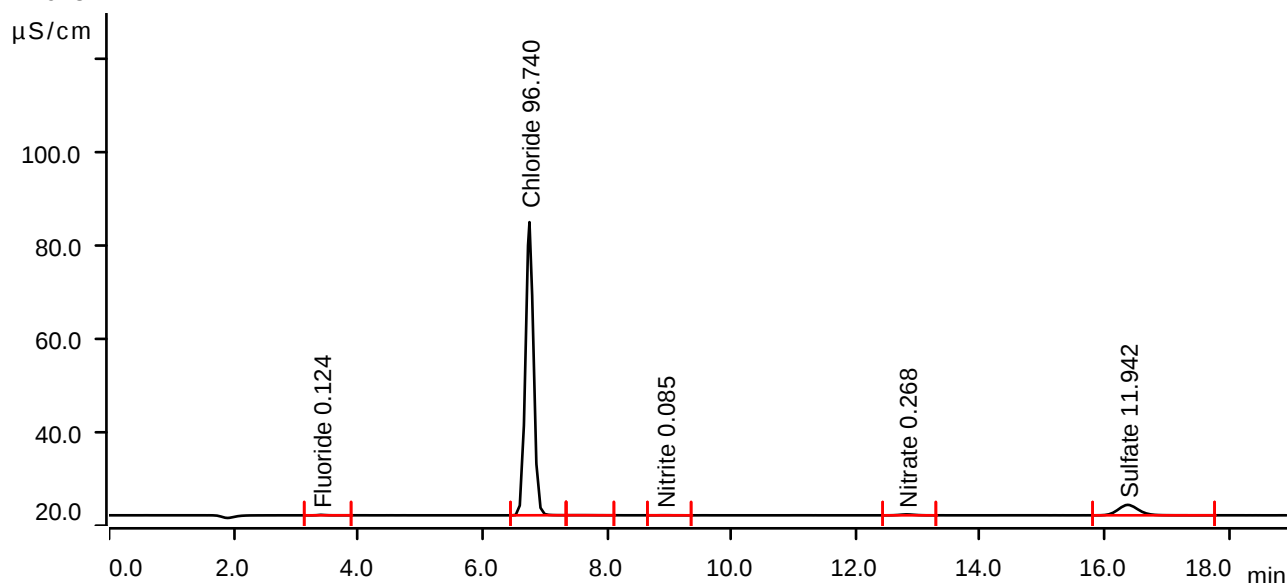
Sample data

Ident Q2289-03
Sample type Sample
Determination start 2025-06-11 09:26:13 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	3.407	0.0144	0.104	0.124	Fluoride
2	6.757	9.3279	62.950	96.740	Chloride
3	7.578	0.0063	0.017	invalid	
4	8.933	0.0035	0.016	0.085	Nitrite
5	12.820	0.0531	0.197	0.268	Nitrate
6	16.370	0.8501	2.241	11.942	Sulfate

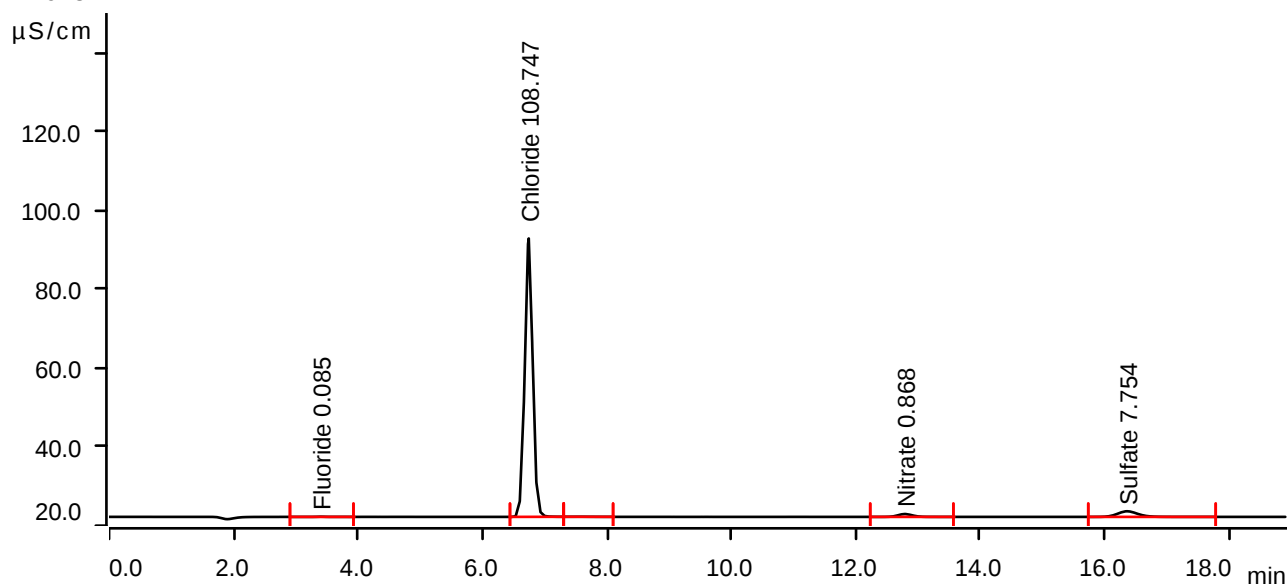
Sample data

Ident Q2290-01
Sample type Sample
Determination start 2025-06-11 09:47:47 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	3.402	0.0091	0.057	0.085	Fluoride
2	6.745	10.4862	70.650	108.747	Chloride
3	7.558	0.0063	0.017	invalid	
4	12.788	0.1966	0.730	0.868	Nitrate
5	16.360	0.5414	1.427	7.754	Sulfate

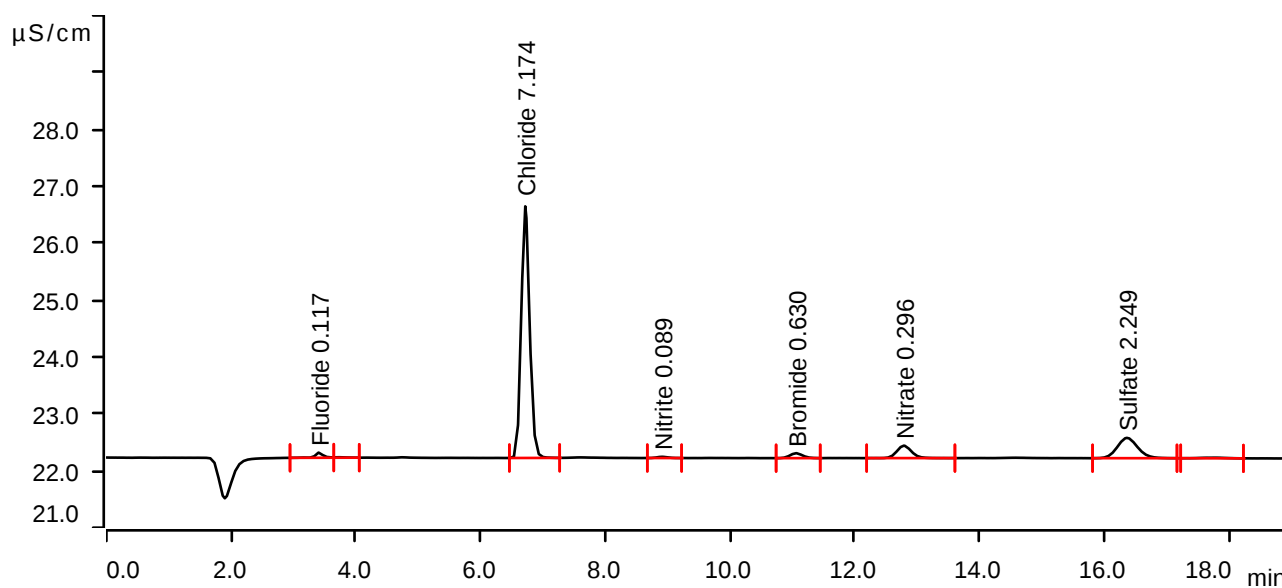
Sample data

Ident Q2292-01
Sample type Sample
Determination start 2025-06-11 10:09:19 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.50 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	0.0135	0.090	0.117	Fluoride
2	3.730	0.0018	0.009	invalid	
3	6.717	0.6877	4.421	7.174	Chloride
4	8.912	0.0044	0.021	0.089	Nitrite
5	11.058	0.0204	0.087	0.630	Bromide
6	12.785	0.0598	0.219	0.296	Nitrate
7	16.362	0.1355	0.357	2.249	Sulfate
8	17.750	0.0049	0.010	invalid	

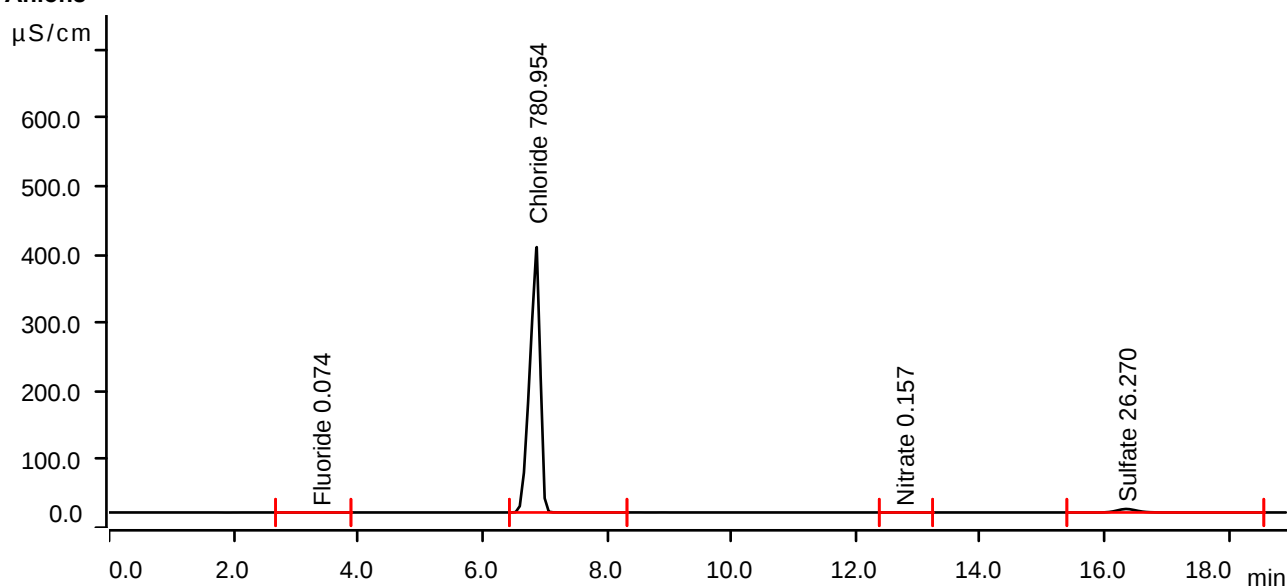
Sample data

Ident Q2292-02
Sample type Sample
Determination start 2025-06-11 10:30:54 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.44 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.398	0.0075	0.044	0.074	Fluoride
2	6.873	75.3322	388.496	780.954	Chloride
3	12.770	0.0266	0.098	0.157	Nitrate
4	16.345	1.9065	5.102	26.270	Sulfate

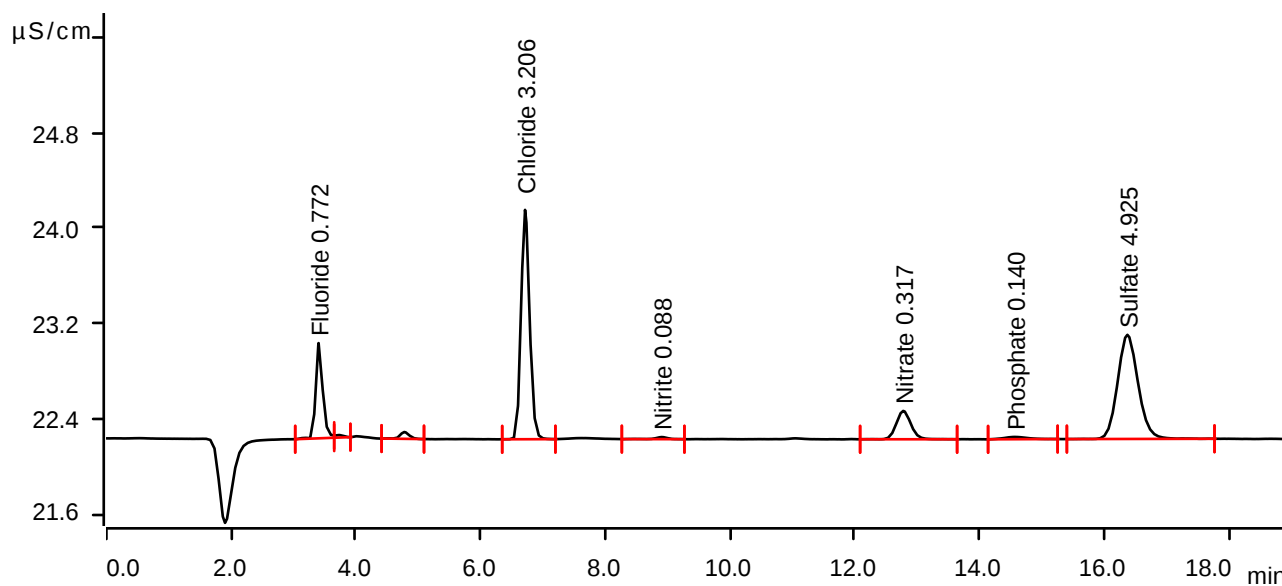
Sample data

Ident Q2293-01
Sample type Sample
Determination start 2025-06-11 10:52:29 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 ($\mu\text{S/cm}$) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.403	0.1049	0.799	0.772	Fluoride
2	3.733	0.0033	0.021	invalid	
3	4.777	0.0097	0.057	invalid	
4	6.713	0.3049	1.925	3.206	Chloride
5	8.902	0.0041	0.017	0.088	Nitrite
6	12.777	0.0647	0.238	0.317	Nitrate
7	14.567	0.0082	0.019	0.140	Phosphate
8	16.370	0.3328	0.874	4.925	Sulfate

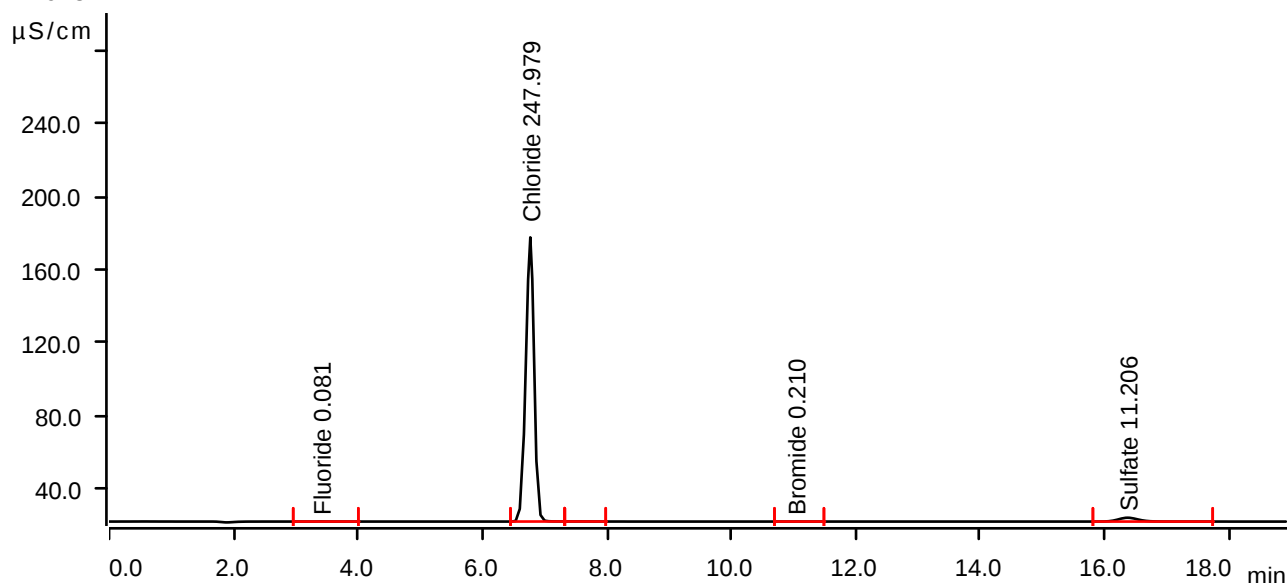
Sample data

Ident Q2290-02
Sample type Sample
Determination start 2025-06-11 11:14:03 UTC-4
Method IC1-052225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.402	0.0084	0.059	0.081	Fluoride
2	6.770	23.9175	155.325	247.979	Chloride
3	7.543	0.0063	0.021	invalid	
4	11.032	0.0026	0.010	0.210	Bromide
5	16.368	0.7958	2.112	11.206	Sulfate

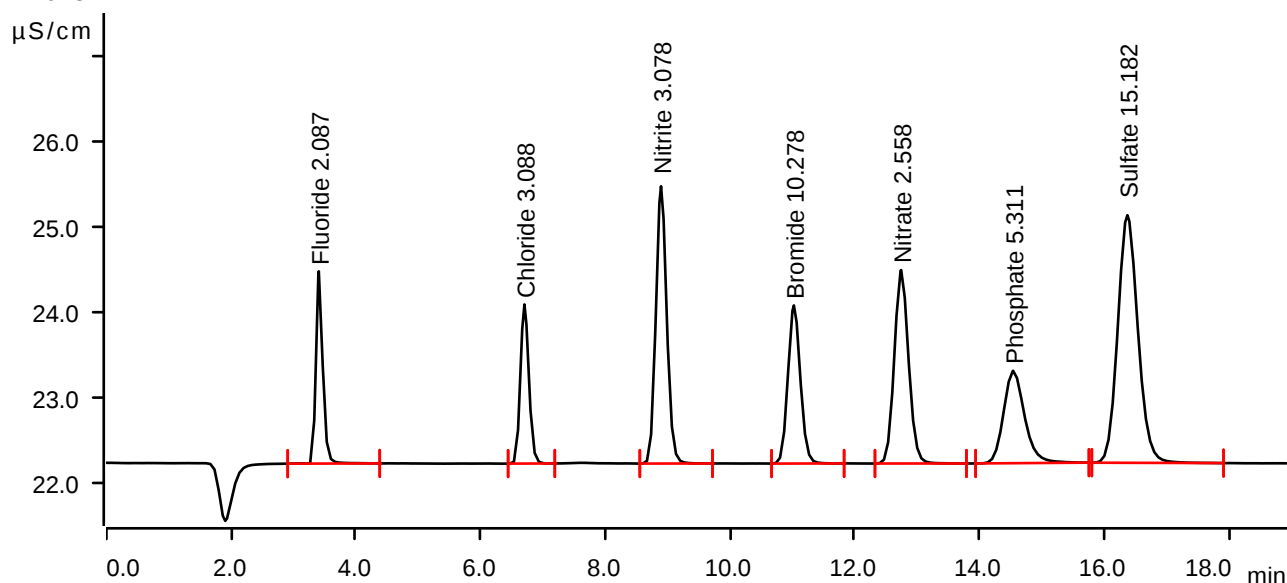
Sample data

Ident CCV
 Sample type Check standard 1
 Determination start 2025-06-11 11:35:36 UTC-4
 Method IC1-052225
 Operator

Anions

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

Anions



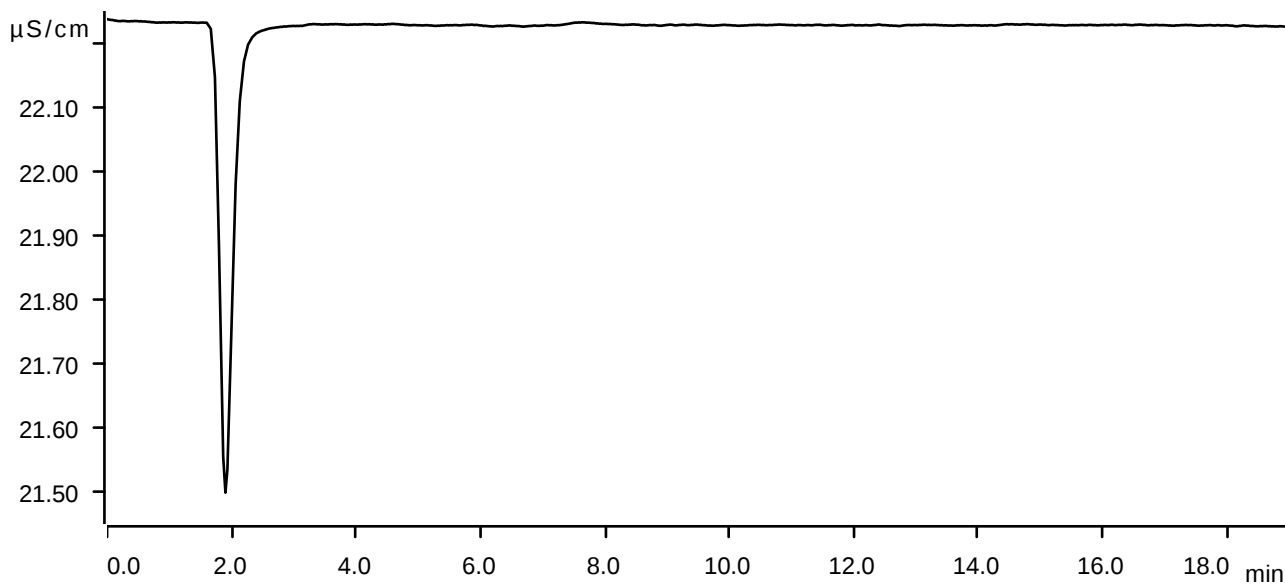
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.407	0.2883	2.251	2.087	Fluoride
2	6.703	0.2936	1.864	3.088	Chloride
3	8.893	0.6556	3.248	3.078	Nitrite
4	11.023	0.4286	1.852	10.278	Bromide
5	12.743	0.6007	2.266	2.558	Nitrate
6	14.538	0.4228	1.082	5.311	Phosphate
7	16.370	1.0890	2.900	15.182	Sulfate

Sample data

Ident CCB
Sample type Sample
Determination start 2025-06-11 11:57:06 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 12.39 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions

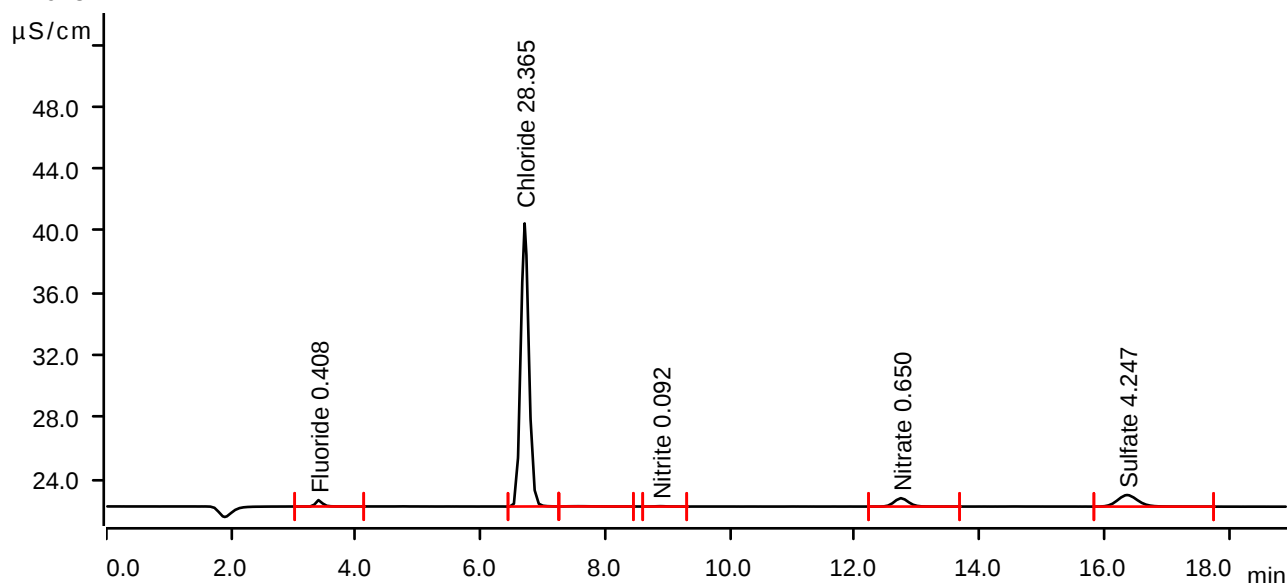
Sample data

Ident Q2291-01
Sample type Sample
Determination start 2025-06-11 12:18:36 UTC-4
Method IC1-052225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.39 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	3.400	0.0541	0.410	0.408	Fluoride
2	6.707	2.7320	18.233	28.365	Chloride
3	7.563	0.0061	0.015	invalid	
4	8.880	0.0050	0.023	0.092	Nitrite
5	12.742	0.1444	0.538	0.650	Nitrate
6	16.365	0.2828	0.744	4.247	Sulfate

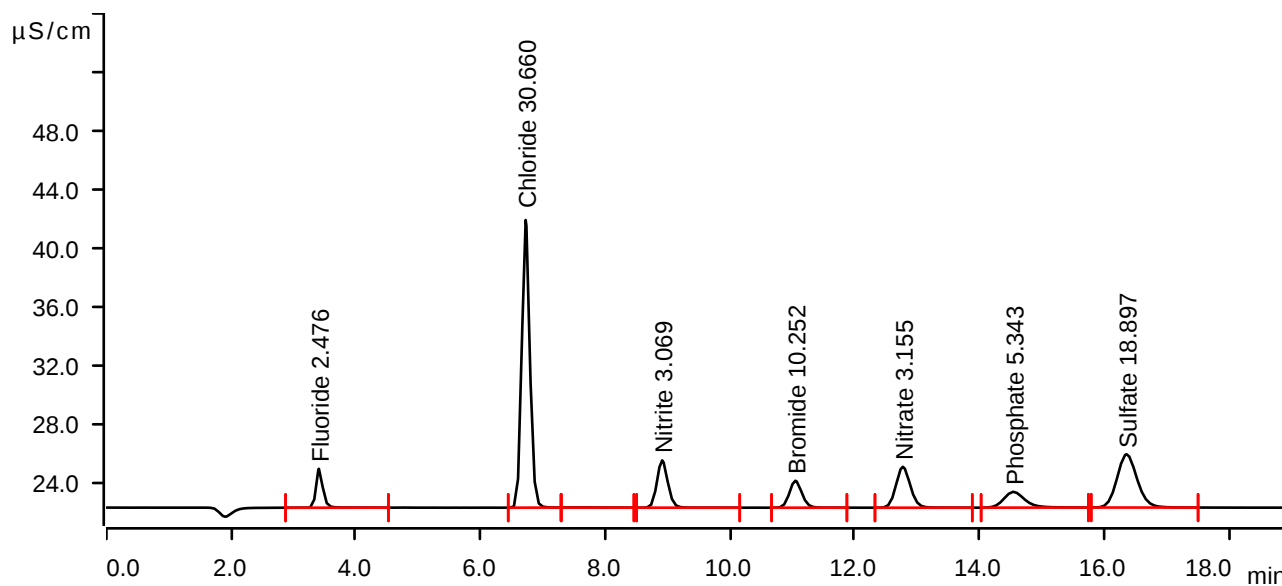
Sample data

Ident Q2291-01MS
Sample type Sample
Determination start 2025-06-11 12:40:09 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 12.39 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	0.3426	2.657	2.476	Fluoride
2	6.723	2.9534	19.652	30.660	Chloride
3	7.572	0.0068	0.015	invalid	
4	8.912	0.6536	3.232	3.069	Nitrite
5	11.047	0.4276	1.840	10.252	Bromide
6	12.770	0.7431	2.794	3.155	Nitrate
7	14.543	0.4253	1.079	5.343	Phosphate
8	16.357	1.3629	3.643	18.897	Sulfate

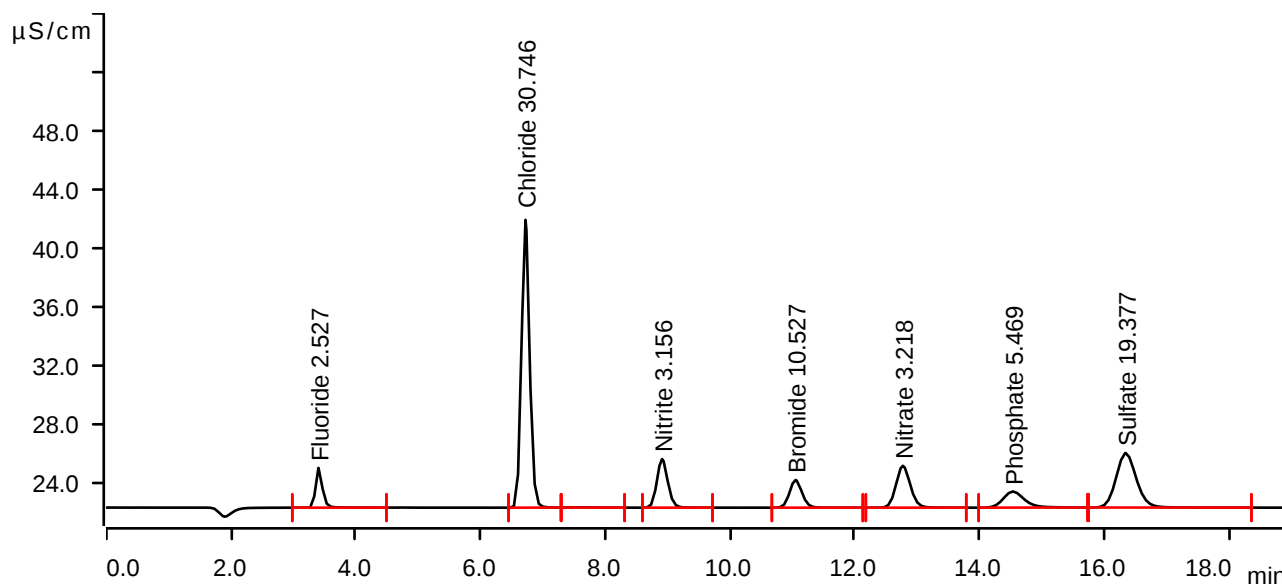
Sample data

Ident Q2291-01MSD
Sample type Sample
Determination start 2025-06-11 13:01:40 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 ($\mu\text{S/cm}$) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.402	0.3497	2.714	2.527	Fluoride
2	6.720	2.9616	19.661	30.746	Chloride
3	7.575	0.0068	0.015	invalid	
4	8.910	0.6725	3.321	3.156	Nitrite
5	11.050	0.4392	1.890	10.527	Bromide
6	12.770	0.7584	2.860	3.218	Nitrate
7	14.533	0.4355	1.102	5.469	Phosphate
8	16.343	1.3983	3.724	19.377	Sulfate

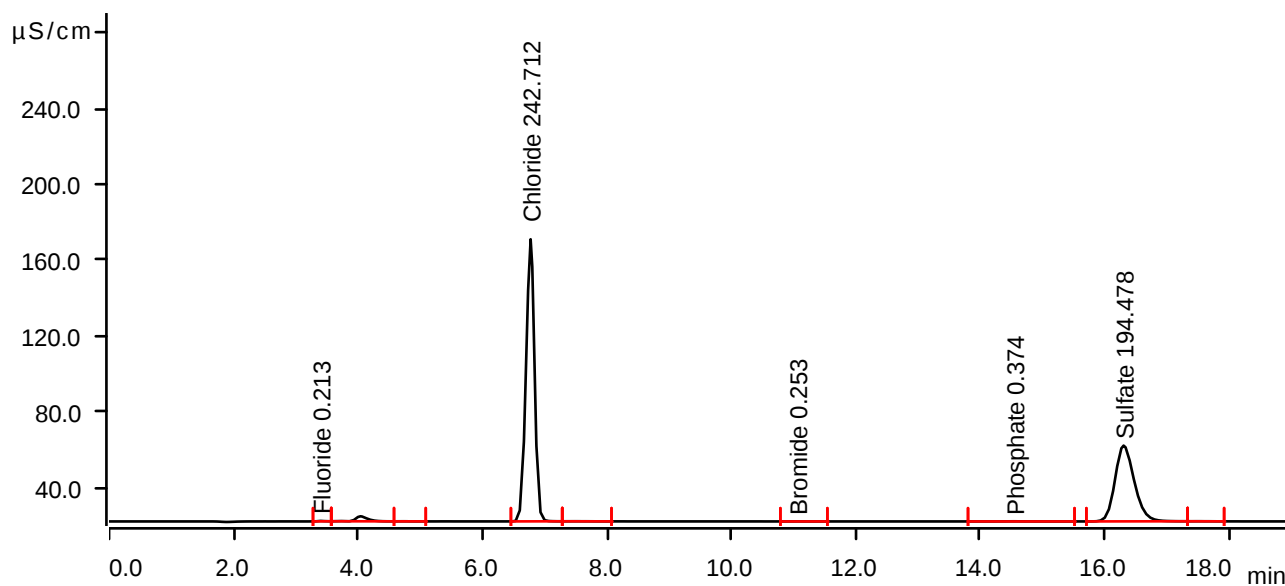
Sample data

Ident Q2286-03
Sample type Sample
Determination start 2025-06-11 13:23:10 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 12.44 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	3.403	0.0269	0.227	0.213	Fluoride
2	4.042	0.5902	2.654	invalid	
3	4.723	0.0092	0.045	invalid	
4	6.775	23.4094	148.694	242.712	Chloride
5	7.505	0.0135	0.036	invalid	
6	11.058	0.0045	0.018	0.253	Bromide
7	14.545	0.0270	0.063	0.374	Phosphate
8	16.303	14.3084	39.948	194.478	Sulfate
9	17.497	0.0076	0.019	invalid	

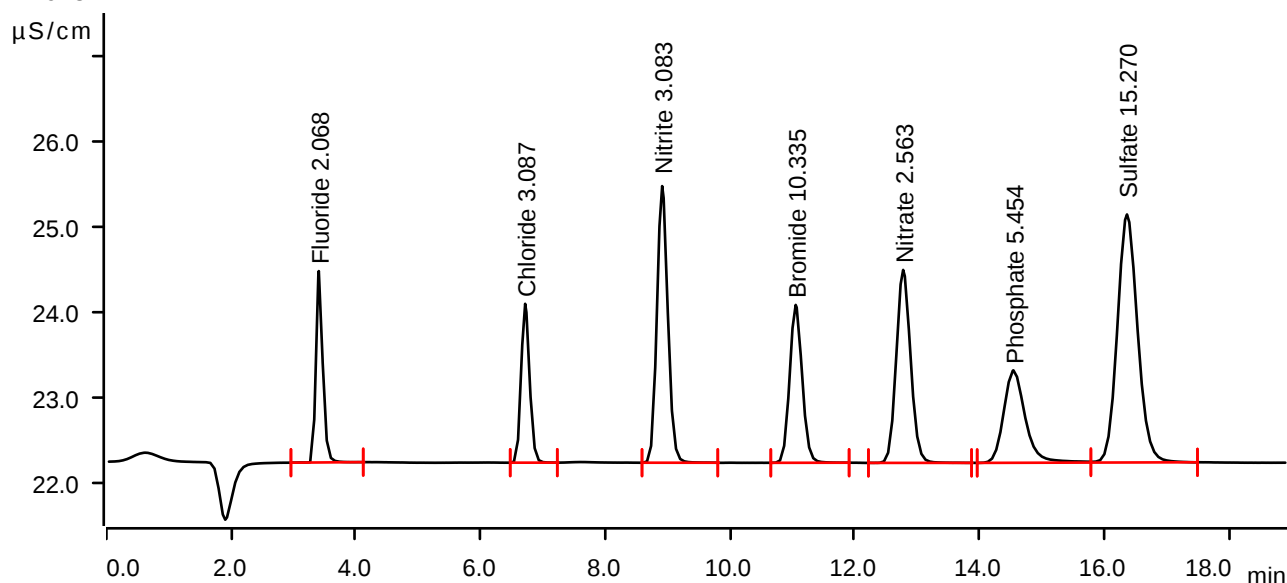
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-06-11 13:44:40 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



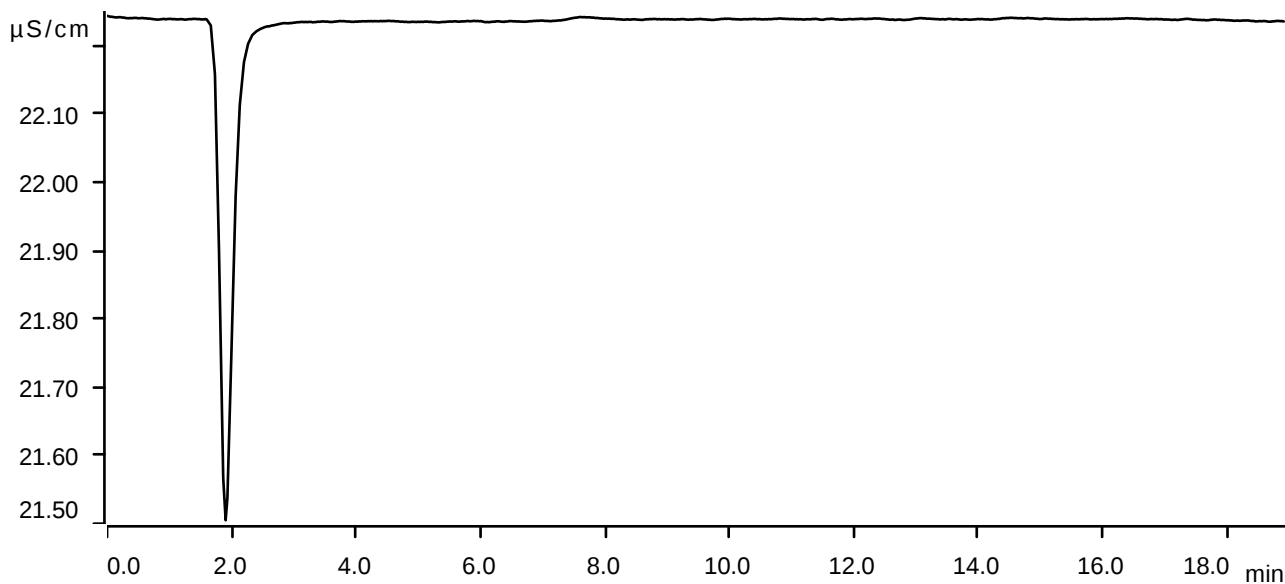
Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.407	0.2857	2.241	2.068	Fluoride
2	6.715	0.2935	1.861	3.087	Chloride
3	8.912	0.6567	3.240	3.083	Nitrite
4	11.052	0.4310	1.849	10.335	Bromide
5	12.775	0.6017	2.260	2.563	Nitrate
6	14.543	0.4343	1.083	5.454	Phosphate
7	16.363	1.0955	2.905	15.270	Sulfate

Sample data

Ident CCB
Sample type Sample
Determination start 2025-06-11 14:06:10 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 12.44 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions

Analytical Summary Report

Analysis Method: 9040C

Analyst By : jignesh

Parameter: pH

Supervisor Review By : Iwona

Run Number: LB136131

Slope : 99.2

pH Meter ID : WC PH METER-1

Calibration Standards	Chemtech Log#
PH 4 BUFFER SOLUTION	W3178
BUFFER PH 7.00 GREEN 1PINT PK6	W3093
PH 10.01 BUFFER, COLOR CD 475ML	W3191
buffer solution pH 7 yellow	W3071
Buffer Solution, PH2 (500ml)	W3161
pH 12.00 Buffer	W3200

True Value of ICV = 7.00 Control Limits[+/- 0.05].

True Value of CCV1 = 2.00 Control Limits[+/- 0.05].

True Value of CCV2 = 12.00 Control Limits[+/- 0.05].

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.2	4.01	06/12/2025	08:15
2	CAL2	1	Water	NA	NA	20.2	7.00	06/12/2025	08:16
3	CAL3	1	Water	NA	NA	20.1	10.02	06/12/2025	08:20
4	ICV	1	Water	NA	NA	20.2	7.02	06/12/2025	08:25
5	CCV1	1	Water	NA	NA	20.2	2.01	06/12/2025	08:33
6	Q2289-01	1	Water	NA	NA	20.6	7.59	06/12/2025	08:40
7	Q2289-01DUP	1	Water	NA	NA	20.8	7.61	06/12/2025	08:42
8	Q2289-02	1	Water	NA	NA	20.7	7.34	06/12/2025	08:46
9	Q2289-03	1	Water	NA	NA	20.8	7.78	06/12/2025	08:50
10	Q2290-01	1	Water	NA	NA	20.5	6.92	06/12/2025	09:00
11	Q2290-02	1	Water	NA	NA	20.1	7.09	06/12/2025	09:10
12	Q2291-01	1	Water	NA	NA	20.3	7.21	06/12/2025	09:15
13	Q2292-01	1	Water	NA	NA	20.1	7.17	06/12/2025	09:25
14	Q2292-02	1	Water	NA	NA	20.8	8.69	06/12/2025	09:30
15	Q2293-01	1	Water	NA	NA	20.3	7.31	06/12/2025	09:40
16	CCV2	1	Water	NA	NA	20.2	12.02	06/12/2025	09:47

WORKLIST(Hardcopy Internal Chain)

13133

WorkList Name : PH S Q2291 WorkList ID : 190120 Department : Wet-Chemistry Date : 06-12-2025 07:59:33

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2289-01	SP-1	Water	pH	Cool 4 deg C	ATGG01	A11	06/10/2025	9040C
Q2289-02	SP-2	Water	pH	Cool 4 deg C	ATGG01	A11	06/10/2025	9040C
Q2289-03	SP-3	Water	pH	Cool 4 deg C	ATGG01	A11	06/10/2025	9040C
Q2290-01	Outfall 1	Water	pH	Cool 4 deg C	ATGG01	A11	06/10/2025	9040C
Q2290-02	Outfall 2	Water	pH	Cool 4 deg C	ATGG01	A11	06/10/2025	9040C
Q2291-01	Outfall 001	Water	pH	Cool 4 deg C	ATGG01	A11	06/10/2025	9040C
Q2292-01	SW-1	Water	pH	Cool 4 deg C	ATGG01	A12	06/10/2025	9040C
Q2292-02	SW-2	Water	pH	Cool 4 deg C	ATGG01	A12	06/10/2025	9040C
Q2293-01	SW-3	Water	pH	Cool 4 deg C	ATGG01	A12	06/10/2025	9040C

Date/Time 06/12/25 08:10
 Raw Sample Received by: SP WC
 Raw Sample Relinquished by: CP SM

Date/Time 06-12-25 13:30
 Raw Sample Received by: CP SM
 Raw Sample Relinquished by: SP WC

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Iwona

Parameter: COD

SUPERVISOR REVIEW BY: jignesh

Run Number: LB136134

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	W3128
COD CCV std, 50ppm	WP113445
COD ICV-LCS std, 50ppm	WP113446
RL CHECK	WP113448

Temp In (C): 148	Date In: 06/12/2025	Time In: 10:30
Temp Out (C): 151	Date Out: 06/12/2025	Time Out: 12:30

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: jignesh

Run Number: LB136134

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	50.000	49.946	06/12/2025	14:15
4	CCB1		NA	NA	1	Water	1.000	0.185	06/12/2025	14:15
5	RL Check	10	NA	NA	1	Water	9.000	8.309	06/12/2025	14:16
6	LB136134BL		NA	NA	1	Water	0.000	-0.831	06/12/2025	14:16
7	LB136134BS	50	NA	NA	1	Water	48.000	47.915	06/12/2025	14:17
8	Q2276-01		NA	NA	100	Water	96.000	96.661	06/12/2025	14:17
9	Q2286-03		NA	NA	100	Water	37.000	36.744	06/12/2025	14:18
10	Q2289-01		NA	NA	5	Water	46.000	45.884	06/12/2025	14:18
11	Q2289-02		NA	NA	1	Water	130.000	131.189	06/12/2025	14:19
12	Q2289-03		NA	NA	10	Water	77.000	77.366	06/12/2025	14:19
13	Q2290-01		NA	NA	1	Water	78.000	78.381	06/12/2025	14:20
14	Q2290-02		NA	NA	1	Water	70.000	70.257	06/12/2025	14:20
15	Q2291-01		NA	NA	1	Water	123.000	124.081	06/12/2025	14:21
16	CCV2	50	NA	NA	1	Water	49.000	48.931	06/12/2025	14:21
17	CCB2		NA	NA	1	Water	1.000	0.185	06/12/2025	14:22
18	Q2292-01		NA	NA	1	Water	22.000	21.511	06/12/2025	14:22
19	Q2292-02		NA	NA	1	Water	39.000	38.775	06/12/2025	14:23
20	Q2293-01		NA	NA	1	Water	41.000	40.806	06/12/2025	14:23
21	Q2294-01		NA	NA	1	Water	19.000	18.465	06/12/2025	14:24
22	Q2294-01DUP		NA	NA	1	Water	20.000	19.480	06/12/2025	14:24
23	Q2294-01MS	50	NA	NA	1	Water	64.000	64.164	06/12/2025	14:25
24	Q2294-01MSD	50	NA	NA	1	Water	64.000	64.164	06/12/2025	14:25
25	CCV3	50	NA	NA	1	Water	51.000	50.962	06/12/2025	14:26
26	CCB3		NA	NA	1	Water	1.000	0.185	06/12/2025	14:26

WORKLIST(Hardcopy Internal Chain)

LB13 6134

WorkList Name : COD-061225

WorkList ID : 190138

Department : Wet-Chemistry

Date : 06-12-2025 09:56:34

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2276-01	MIH-6-10-2025	Water	COD	Conc H2SO4 to pH < 2	EURO03	D31	06/10/2025	SM5220 D
Q2286-03	LAW-25-0084	Water	COD	Conc H2SO4 to pH < 2	PSEG03	D41	06/10/2025	SM5220 D
Q2289-01	SP-1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2289-02	SP-2	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2289-03	SP-3	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2290-01	Outfall 1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2290-02	Outfall 2	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2291-01	Outfall 001	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2292-01	SW-1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2292-02	SW-2	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	SM5220 D
Q2293-01	SW-3	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	SM5220 D
Q2294-01	Outfall 1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	SM5220 D

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

06/12/25 10:00
12(50)
28(60)

06/12/25 10:45
28(60)
12(50)

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 06/12/2025

Run Number: LB136145

BalanceID: WC SC-6

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 06/12/2025 14:00 **TEMP1 OUT:** 104 °C 06/12/2025 15:00
TEMP2 IN: 103 °C 06/12/2025 15:30 **TEMP2 OUT:** 104 °C 06/12/2025 16:30
TEMP3 IN: 104 °C 06/13/2025 10:00 **TEMP3 OUT:** 103 °C 06/13/2025 11:30
TEMP4 IN: 103 °C 06/13/2025 12:00 **TEMP4 OUT:** 104 °C 06/13/2025 13:35

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Sample Volume (ml)	1st Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	2nd Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Final Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Weight (g)	Result mg/L
1	LB136145BL	LB136145BL	1.3523	1.3523	100	1.3524	1.3524	1.3524	0.0001	1
2	LB136145BS	LB136145BS	1.4931	1.4931	100	1.5463	1.5463	1.5463	0.0532	532
3	Q2276-01	MH-6-10-2025	1.4832	1.4832	100	1.7147	1.7147	1.7147	0.2315	2315
4	Q2286-03	LAW-25-0084	1.4881	1.4881	100	1.8323	1.8323	1.8323	0.3442	3442
5	Q2289-01	SP-1	1.4981	1.4981	50	1.5281	1.5281	1.5281	0.0300	600
6	Q2289-02	SP-2	1.4829	1.4829	100	1.5134	1.5134	1.5134	0.0305	305
7	Q2289-03	SP-3	1.4805	1.4805	50	1.5327	1.5327	1.5327	0.0522	1044
8	Q2290-01	Outfall 1	1.4777	1.4777	500	1.4955	1.4955	1.4955	0.0178	35.6
9	Q2290-02	Outfall 2	1.4759	1.4759	700	1.4917	1.4917	1.4917	0.0158	22.6
10	Q2291-01	Outfall 001	1.4022	1.4022	100	1.4624	1.4624	1.4624	0.0602	602
11	Q2292-01	SW-1	1.3915	1.3915	500	1.4302	1.4302	1.4302	0.0387	77.4
12	Q2292-02	SW-2	1.4054	1.4054	1000	1.4487	1.4487	1.4487	0.0433	43.3
13	Q2293-01	SW-3	1.3996	1.3996	400	1.4934	1.4934	1.4934	0.0938	234.5
14	Q2293-01DUP	SW-3DUP	1.4901	1.4901	400	1.5842	1.5842	1.5842	0.0941	235.3
15	Q2300-02	COMP	1.4980	1.4980	100	1.5789	1.5789	1.5789	0.0809	809

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 06/12/2025

Run Number: LB136145

BalanceID: WC SC-6

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 06/12/2025 14:00 **TEMP1 OUT:** 104 °C 06/12/2025 15:00
TEMP2 IN: 103 °C 06/12/2025 15:30 **TEMP2 OUT:** 104 °C 06/12/2025 16:30
TEMP3 IN: 104 °C 06/13/2025 10:00 **TEMP3 OUT:** 103 °C 06/13/2025 11:30
TEMP4 IN: 103 °C 06/13/2025 12:00 **TEMP4 OUT:** 104 °C 06/13/2025 13:35

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Sample Volume (ml)	1st Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	2nd Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Final Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Weight (g)	Result mg/L
16	Q2309-01	EFFLUENT	1.4834	1.4834	20	1.5331	1.5331	1.5331	0.0497	2485
17	Q2309-04	AERATION	1.4981	1.4981	20	1.6252	1.6252	1.6252	0.1271	6355

A = Sample Volume (ml)
 B = Final Empty Dish Weight (g)
 C = Final Empty Dish + Sample weight after 1.5 hr drying @105°C(g)
 D = Weight (g)

Weight (g) = C - B

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

WORKLIST(Hardcopy Internal Chain)

UB 136145

WorkList Name : TSS Q2276 WorkList ID : 190170 Department : Wet-Chemistry Date : 06-13-2025 07:49:33

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2276-01	D MH-6-10-2025	Water	TSS	Cool 4 deg C	EURO03	D31	06/10/2025	SM2540 D
Q2286-03	L LAW-25-0084	Water	TSS	Cool 4 deg C	PSEG03	D41	06/10/2025	SM2540 D
Q2289-01	D SP-1	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2289-02	D SP-2	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2289-03	D SP-3	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2290-01	D Outfall 1	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2290-02	D Outfall 2	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2291-01	D Outfall 001	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2292-01	D SW-1	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2292-02	D SW-2	Water	TSS	Cool 4 deg C	ATGG01	A12	06/10/2025	SM2540 D
Q2293-01	D SW-3	Water	TSS	Cool 4 deg C	ATGG01	A12	06/10/2025	SM2540 D
Q2300-02	B COMP	Water	TSS	Cool 4 deg C	ATGG01	A12	06/10/2025	SM2540 D
Q2309-04	D EFFLUENT	Water	TSS	Cool 4 deg C	ARAM01	D41	06/11/2025	SM2540 D
Q2309-04	AERATION	Water	TSS	Cool 4 deg C	HOLL01	D51	06/12/2025	SM2540 D
					HOLL01	D51	06/12/2025	SM2540 D

Date/Time 06/13/25 08:00

Raw Sample Received by: SD wpc

Raw Sample Relinquished by: SD wpc

Date/Time 06/13/25

Raw Sample Received by: SD wpc

Raw Sample Relinquished by: SD wpc

Analysis Method: 365.3
Parameter: Phosphorus-Total
Run Number: LB136153

ANALYST: Iwona
SUPERVISOR REVIEW BY: jignesh

Reagent/Standard	Lot/Log #
calibration std. phosphate 1 ppm	WP113522
calibration std. phosphate 0.5 ppm	WP113521
calibration std. phosphate 0.3 ppm	WP113520
calibration std. phosphate 0.1 ppm	WP113519
calibration std. phosphate 0.05 ppm	WP113518
calibration std. 0 ppm	WP113517
phosphate CCV std.	WP113523
5N sulfuric acid	WP112831
Combined reagent	WP113528
Phenolphthalein indicator	WP113378
Sodium hydroxide, 1N	WP111323
Phosphate ICV-LCS Std	WP113524
Phosphate LOD-MDL Std 0.025ppm	WP113526

Intercept: -0.0034 Slope: 0.6565 Regression: 0.99966

Seq	Lab ID	True Value (mg/L)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	%D	AnalDate	AnalTime
1	CAL1	0.00	1	50	50	0.000	0.005		06/13/2025	13:15
2	CAL2	0.05	1	50	50	0.033	0.055	10	06/13/2025	13:15
3	CAL3	0.10	1	50	50	0.066	0.106	6	06/13/2025	13:16
4	CAL4	0.30	1	50	50	0.182	0.282	-6	06/13/2025	13:16
5	CAL5	0.50	1	50	50	0.321	0.494	-1.2	06/13/2025	13:17
6	CAL6	1.00	1	50	50	0.658	1.007	0.7	06/13/2025	13:17

Analytical Summary Report

Analysis Method: 365.3

ANALYST: Iwona

Parameter: Phosphorus-Total

SUPERVISOR REVIEW BY: jignesh

Run Number: LB136153

Seq	Lab ID	True Value (mg/l)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	AnalDate	AnalTime
1	ICV	0.50	1	50	50	0.321	0.494	06/13/2025	13:18
2	ICB		1	50	50	0.002	0.008	06/13/2025	13:18
3	CCV1	0.50	1	50	50	0.334	0.514	06/13/2025	13:19
4	CCB1		1	50	50	0.003	0.010	06/13/2025	13:19
5	RL Check	0.05	1	50	50	0.030	0.051	06/13/2025	13:20
6	PB168478BL		1	50	50	0.001	0.007	06/13/2025	13:20
7	PB168478BS	0.50	1	50	50	0.318	0.490	06/13/2025	13:21
8	Q2126-09		1	50	50	0.014	0.027	06/13/2025	13:21
9	Q2289-01		1	50	50	0.027	0.046	06/13/2025	13:22
10	Q2289-01DUP		1	50	50	0.027	0.046	06/13/2025	13:22
11	Q2289-01MS	0.50	1	50	50	0.332	0.511	06/13/2025	13:23
12	Q2289-01MSD	0.50	1	50	50	0.328	0.505	06/13/2025	13:24
13	Q2289-02		1	50	50	0.037	0.062	06/13/2025	13:24
14	Q2289-03		1	50	50	0.058	0.094	06/13/2025	13:25
15	Q2290-01		1	50	50	0.060	0.097	06/13/2025	13:25
16	CCV2	0.50	1	50	50	0.322	0.496	06/13/2025	13:26
17	CCB2		1	50	50	0.003	0.010	06/13/2025	13:26
18	Q2290-02		1	50	50	0.077	0.122	06/13/2025	13:27
19	Q2291-01		1	50	50	0.045	0.074	06/13/2025	13:27
20	Q2292-01		1	50	50	0.103	0.162	06/13/2025	13:28
21	Q2292-02		1	50	50	0.074	0.118	06/13/2025	13:28
22	Q2293-01		1	50	50	0.135	0.211	06/13/2025	13:29
23	Q2309-01		1	50	50	0.086	0.136	06/13/2025	13:29
24	CCV3	0.50	1	50	50	0.326	0.502	06/13/2025	13:30
25	CCB3		1	50	50	0.002	0.008	06/13/2025	13:30

LB136167

Test results

Aquakem 7.2AQ1

Page:

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

Reviewed by : 12

Instrument ID : Konelab

6/16/2025 16:34

Test: TKN-NH3

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	4.788	0.0	1.024	
ICB1	0.029	0.0	0.064	
CCV1	5.132	0.0	1.094	
CCB1	0.029	0.0	0.064	
RL CHECK	0.485	0.0	0.156	
PB168445BL	0.033	0.0	0.065	
PB168445BS	4.944	0.0	1.056	
Q2126-09	0.255	0.0	0.110	
Q2286-03	21.803	0.0	4.457	
Q2286-03DUP	23.008	0.0	4.700	Init abs., Test limit hig
Q2286-03MS	23.429	0.0	4.785	Init abs., Test limit hig
Q2286-03MSD	23.047	0.0	4.708	Init abs., Test limit hig
Q2289-01	2.523	0.0	0.567	Init abs., Test limit hig
Q2289-02	1.532	0.0	0.368	
CCV2	4.928	0.0	1.053	
CCB2	0.044	0.0	0.067	
Q2289-03	5.494	0.0	1.167	
Q2290-01	1.037	0.0	0.268	
Q2290-02	1.294	0.0	0.320	
Q2291-01	2.116	0.0	0.485	
Q2292-01	1.611	0.0	0.384	
Q2292-02	1.311	0.0	0.323	
Q2293-01	1.133	0.0	0.287	
PB168451BL	0.030	0.0	0.065	
PB168451BS	5.002	0.0	1.067	
Q2126-03	0.253	0.0	0.110	
CCV3	5.049	0.0	1.077	
CCB3	0.043	0.0	0.067	
Q2286-03DLX5	5.166	0.0	1.101	
Q2286-03DUPDLX5	5.164	0.0	1.100	
CCV4	5.217	0.0	1.111	
CCB4	0.030	0.0	0.064	

97% (50-150)

12 6/16/25

Init abs., Test limit hig
Init abs., Test limit hig
Init abs., Test limit hig
Init abs., Test limit hig

N 32
Mean 4.874
SD 7.1974
CV% 147.67

Aquakem v. 7.2AQ1

Results from time period:

Mon Jun 16 14:49:57 2025

Mon Jun 16 16:29:55 2025

Sample Id	Sam/Ctr/c	Test short r	Test type	Result	Result unit	Result date and time
0.0PPM	A	TKN-NH3	P	0.0432	mg/l	6/16/2025 14:49:57
0.5PPM	A	TKN-NH3	P	0.5078	mg/l	6/16/2025 14:49:58
1.0PPM	A	TKN-NH3	P	1.0082	mg/l	6/16/2025 14:49:59
2.5PPM	A	TKN-NH3	P	2.5163	mg/l	6/16/2025 14:50:00
5.0PPM	A	TKN-NH3	P	4.872	mg/l	6/16/2025 14:50:01
6.7PPM	A	TKN-NH3	P	6.6482	mg/l	6/16/2025 14:50:02
10.0PPM	A	TKN-NH3	P	10.071	mg/l	6/16/2025 14:50:03
ICV1	S	TKN-NH3	P	4.7875	mg/l	6/16/2025 15:29:11
ICB1	S	TKN-NH3	P	0.0293	mg/l	6/16/2025 15:29:12
CCV1	S	TKN-NH3	P	5.1325	mg/l	6/16/2025 15:29:15
CCB1	S	TKN-NH3	P	0.0291	mg/l	6/16/2025 15:29:16
RL CHECK	S	TKN-NH3	P	0.4847	mg/l	6/16/2025 15:29:19
PB168445BL	S	TKN-NH3	P	0.0331	mg/l	6/16/2025 15:29:20
PB168445BS	S	TKN-NH3	P	4.9437	mg/l	6/16/2025 15:42:52
Q2126-09	S	TKN-NH3	P	0.2553	mg/l	6/16/2025 15:42:53
Q2286-03	S	TKN-NH3	P	21.8029	mg/l	6/16/2025 15:42:55
Q2286-03DUP	S	TKN-NH3	P	23.0083	mg/l	6/16/2025 15:42:56
Q2286-03MS	S	TKN-NH3	P	23.4287	mg/l	6/16/2025 15:42:57
Q2286-03MSD	S	TKN-NH3	P	23.0473	mg/l	6/16/2025 15:42:58
Q2289-01	S	TKN-NH3	P	2.5228	mg/l	6/16/2025 15:42:59
Q2289-02	S	TKN-NH3	P	1.5323	mg/l	6/16/2025 15:43:00
CCV2	S	TKN-NH3	P	4.9284	mg/l	6/16/2025 15:43:01
CCB2	S	TKN-NH3	P	0.0444	mg/l	6/16/2025 15:43:02
Q2289-03	S	TKN-NH3	P	5.4937	mg/l	6/16/2025 15:43:03
Q2290-01	S	TKN-NH3	P	1.0369	mg/l	6/16/2025 15:53:33
Q2290-02	S	TKN-NH3	P	1.2942	mg/l	6/16/2025 15:53:34
Q2291-01	S	TKN-NH3	P	2.1161	mg/l	6/16/2025 15:53:35
Q2292-01	S	TKN-NH3	P	1.6114	mg/l	6/16/2025 15:53:36
Q2292-02	S	TKN-NH3	P	1.3114	mg/l	6/16/2025 15:53:37
Q2293-01	S	TKN-NH3	P	1.1327	mg/l	6/16/2025 15:53:38
PB168451BL	S	TKN-NH3	P	0.0304	mg/l	6/16/2025 15:53:39
PB168451BS	S	TKN-NH3	P	5.0021	mg/l	6/16/2025 15:53:40
Q2126-03	S	TKN-NH3	P	0.2534	mg/l	6/16/2025 15:53:41
CCV3	S	TKN-NH3	P	5.0493	mg/l	6/16/2025 15:53:42
CCB3	S	TKN-NH3	P	0.0435	mg/l	6/16/2025 15:53:43
Q2286-03DLX5	S	TKN-NH3	P	5.166	mg/l	6/16/2025 16:29:50
Q2286-03DUPDLX5	S	TKN-NH3	P	5.1636	mg/l	6/16/2025 16:29:51
CCV4	S	TKN-NH3	P	5.2172	mg/l	6/16/2025 16:29:52
CCB4	S	TKN-NH3	P	0.0297	mg/l	6/16/2025 16:29:55

Calibration results

Aquakem 7.2AQ1

Page:

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

Reviewed by : 12

Instrument ID : Konelab

6/16/2025 14:55

Test TKN-NH3

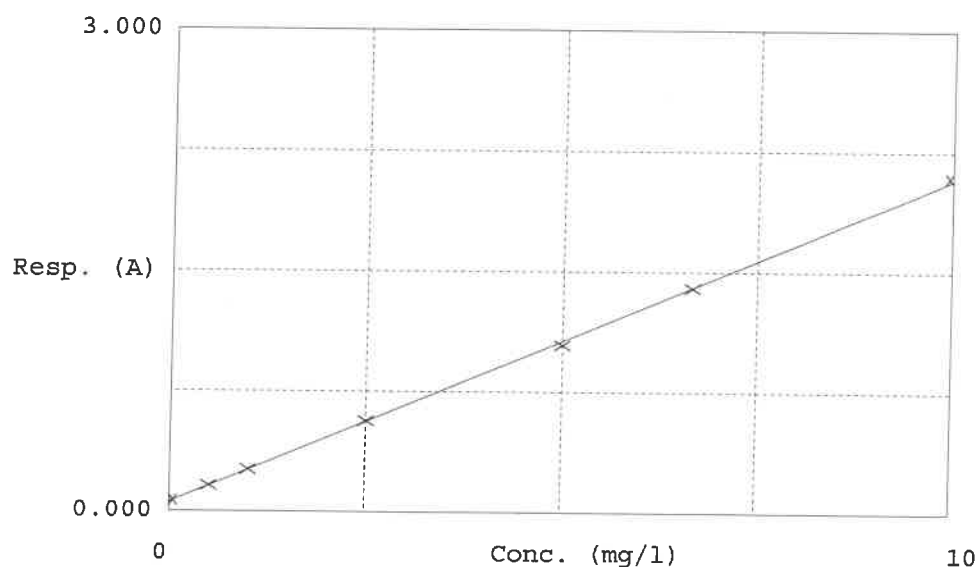
Accepted 6/16/2025 14:53

Factor 4.957

Bias 0.058

Coeff. of det. 0.999710

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.00PPM	0.067	0.0432	0.0000	-
2	TKN-10	0.161	0.5078	0.5000	1.6
3	TKN-10	0.262	1.0082	1.0000	0.8
4	TKN-10	0.566	2.5163	2.5000	0.7
5	TKN-10	1.041	4.8720	5.0000	-2.6
6	TKN-10	1.400	6.6482	6.6667	-0.8
7	TKN-10	2.090	10.0710	10.0000	0.7

12
6/16/25

Extraction and Analytical Summary Report

Analysis Method: 1664A

Test: Oil and Grease

Run Number: LB136172

Analysis Date: 06/17/2025

BalanceID: WC SC-6

OvenID: EXT OVEN-3

ANALYST: jignesh

REVIEWED BY: Iwona

Extraction Date: 06/17/2025

Extraction IN Time: 08:10

Extraction OUT Time: 08:35

Thermometer ID: EXT OVEN#3

Dish #	Lab ID	Client ID	Matrix	pH	Sample Vol (ml)	Final Volume (ml)	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Silica Gel Weight (g)	Weight After Drying (g)	Final Weight After Drying (g)	Change Weight (g)	Result in ppm
1	LB136172BL	LB136172BL	WATER	1.3	1000	100	2.7856	2.7856	0	2.7857	2.7857	0.0001	0.1
2	LB136172BS	LB136172BS	WATER	1.3	1000	100	3.1402	3.1402	0	3.1572	3.1572	0.0170	17
3	LB136172BSD	LB136172BSD	WATER	1.3	1000	100	2.7041	2.7041	0	2.7213	2.7213	0.0172	17.2
4	Q2289-01	SP-1	WATER	1.3	1000	100	3.0709	3.0709	0	3.0766	3.0766	0.0057	5.7
5	Q2289-02	SP-2	WATER	1.3	1000	100	3.0560	3.0560	0	3.0638	3.0638	0.0078	7.8
6	Q2289-03	SP-3	WATER	1.3	1000	100	3.0111	3.0111	0	3.0224	3.0224	0.0113	11.3
7	Q2290-01	Outfall 1	WATER	1.6	1000	100	3.0717	3.0717	0	3.0725	3.0725	0.0008	0.8
8	Q2290-02	Outfall 2	WATER	1.3	1000	100	3.0410	3.0410	0	3.0413	3.0413	0.0003	0.3
9	Q2291-01	Outfall 001	WATER	1.6	1000	100	3.0512	3.0512	0	3.0531	3.0531	0.0019	1.9
10	Q2292-01	SW-1	WATER	1.6	1000	100	3.0269	3.0269	0	3.0319	3.0319	0.0050	5
11	Q2292-02	SW-2	WATER	1.6	1000	100	3.0691	3.0691	0	3.0695	3.0695	0.0004	0.4
12	Q2293-01	SW-3	WATER	1.6	1000	100	3.0440	3.0440	0	3.0443	3.0443	0.0003	0.3

WORKLIST(Hardcopy Internal Chain)

LB 136172

WorkList Name : OIL & GREASE Q2290

WorkList ID : 190221

Department : Wet-Chemistry

Date : 06-17-2025 07:50:45

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2289-01	SP-1	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	1664A
Q2289-02	SP-2	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	1664A
Q2289-03	SP-3	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	1664A
Q2290-01	Outfall 1	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	1664A
Q2290-02	Outfall 2	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	1664A
Q2291-01	Outfall 001	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	1664A
Q2292-01	SW-1	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	1664A
Q2292-02	SW-2	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	1664A
Q2293-01	SW-3	Water	Oil and Grease	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	1664A

Date/Time 06/17/25 08:00

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 06/17/25

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

SOP ID : MSM4500-N Org C-TKN-11

SDG No : N/A

Start Digest Date: 06/12/2025 Time : 08:50 Temp : 380 °C

Matrix : WATER

End Digest Date: 06/12/2025 Time : 10:20 Temp : 385 °C

Pipette ID : WC

Start Distillation Date: 06/12/2025 Time : 10:55 Temp : 150 °C

Balance ID : N/A

End Distillation Date: 06/12/2025 Time : 11:55 Temp : 160 °C

Hood ID : HOOD#2&3

Digestion tube ID : M5595

Block Thermometer ID : Therm#2(2179)

Block ID : WC-DIST-BLOCK-1

Filter paper ID : N/A

Prep Technician Signature: RM

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature: 12

Standard Name	MLS USED	STD REF. # FROM LOG
TKN CAL STD	50.0ML	WP113503
TKN CCV STD	50.0ML	WP113504
TKN ICV STD	50.0ML	WP113505
TKN LCS STD	50.0ML	WP113506
MS/MSD SPIKE SOL.	0.25ML	WP112611

Chemical Used	ML/SAMPLE USED	Lot Number
TKN DIGESTION FLUID	10.0ML	WP113135
TKN DISTILLATION BUFFER	10.0ML	WP112079
H2SO4 0.04N	5.0ML	WP112828
pH Paper 0-14	N/A	W3215
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

RL CHECK 10ML FROM WP113504 ,MDL WP113507, ALL GLASSWEAR ARE STEAMED OUT AND THERE WERE NO TRACE OF AMMONIA USING NESLER REAGENT WP111604.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
06/12/2025 13:55	RM (WC)	12 (WC)
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB168445BL	PBW445	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
PB168445BS	LCS445	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2126-09	MDL-WATER-03-QT2-2025	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2286-03	LAW-25-0084	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2286-03DUP	LAW-25-0084DUP	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2286-03MS	LAW-25-0084MS	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2286-03MSD	LAW-25-0084MSD	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2289-01	SP-1	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2289-02	SP-2	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2289-03	SP-3	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2290-01	OUTFALL 1	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2290-02	OUTFALL 2	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2291-01	OUTFALL 001	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2292-01	SW-1	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2292-02	SW-2	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2293-01	SW-3	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TKN-06-12

WorkList ID : 190154

Department : Distillation

Date : 06-12-2025 08:20:47

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2126-09	MDL-WATER-03-QT2-2025	Water	TKN	Conc H2SO4 to pH < 2	ALLI03	QA OI	05/23/2025	SM4500 N Org
Q2286-03	LAW-25-0084	Water	TKN	Conc H2SO4 to pH < 2	PSEG03	D41	06/10/2025	SM4500 N Org
Q2289-01	SP-1	Water	TKN	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM4500 N Org
Q2289-02	SP-2	Water	TKN	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM4500 N Org
Q2289-03	SP-3	Water	TKN	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM4500 N Org
Q2290-01	Outfall 1	Water	TKN	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM4500 N Org
Q2290-02	Outfall 2	Water	TKN	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM4500 N Org
Q2291-01	Outfall 001	Water	TKN	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM4500 N Org
Q2292-01	SW-1	Water	TKN	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	SM4500 N Org
Q2292-02	SW-2	Water	TKN	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	SM4500 N Org
Q2293-01	SW-3	Water	TKN	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	SM4500 N Org

Date/Time 06/12/2025 08:25
 Raw Sample Received by: RM LWG
 Raw Sample Relinquished by: RM LWG

Date/Time 06/12/2025 12:35
 Raw Sample Received by: JRCX
 Raw Sample Relinquished by: RM LWG

SOP ID : M365.3 & SM4500-P E-18

SDG No : N/A

Matrix : WATER

Pipette ID : WC

Balance ID : N/A

Hood ID : HOOD#3

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

Weigh By : IZ

Start Digest Date: 06/13/2025 Time : 09:45 Temp : 95 °C

End Digest Date: 06/13/2025 Time : 10:45 Temp : 96 °C

1 vol 30ml 06/13/25 11:00 96°C
06/13/25 12:00 97°C

Digestion tube ID : M5595

Block Thermometer ID : WC-BLOCK#1

Filter paper ID : 400213

Prep Technician Signature: *12*

pH Meter ID : N/A

Supervisor Signature: *JP*

Standard Name	MLS USED	STD REF. # FROM LOG
LCSW	0.5ML	WP112914
MS/MSD SPIKE SOL.	0.5ML	WP112913
PBW	50.ML	W3112
LOD	50.0ML	WP113526
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
11N H2SO4	1ML	WP112615
AMMONIUM PERSULFATE	0.4g	W3035
pH Paper 0-14	N/A	W3140
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
CAL1	CAL1	50.0ML	WP113517
CAL2	CAL2	50.0ML	WP113518
CAL3	CAL3	50.0ML	WP113519
CAL4	CAL4	50.0ML	WP113520
CAL5	CAL5	50.0ML	WP113521
CAL6	CAL6	50.0ML	WP113522
ICV	ICV	50.0ML	WP113524
ICB	ICB	50.0ML	W3112
CCV	CCV	50.0ML	WP113523
CCB	CCB	50.0ML	W3112

Extraction Conformance/Non-Conformance Comments:

N/A

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

12 6/13/25

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB168478BL	PBW478	50	50	<2	N/A	N/A	N/A	N/A	N/A
PB168478BS	LCS478	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2126-09	MDL-WATER-03-QT2-2025	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2289-01	SP-1	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2289-01DUP	SP-1DUP	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2289-01MS	SP-1MS	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2289-01MSD	SP-1MSD	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2289-02	SP-2	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2289-03	SP-3	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2290-01	OUTFALL 1	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2290-02	OUTFALL 2	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2291-01	OUTFALL 001	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2292-01	SW-1	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2292-02	SW-2	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2293-01	SW-3	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2309-01	EFFLUENT	50	50	<2	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TotalPhos-061225 WorkList ID : 190139 Department : Distillation Date : 06-12-2025 10:56:47

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2126-09	MDL-WATER-03-QT2-2025	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ALLI03	QA Of	05/23/2025	365.3
Q2289-01	SP-1	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01		06/10/2025	365.3
Q2289-02	SP-2	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	365.3
Q2289-03	SP-3	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	365.3
Q2290-01	Outfall 1	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	365.3
Q2290-02	Outfall 2	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	365.3
Q2291-01	Outfall 001	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	365.3
Q2292-01	SW-1	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	365.3
Q2292-02	SW-2	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	365.3
Q2293-01	SW-3	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	365.3
Q2309-01	EFFLUENT	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	HOLL01	D51	06/12/2025	365.3

Date/Time 06/13/25 09:25
 Raw Sample Received by: 126209
 Raw Sample Relinquished by: 206009

Date/Time 06/13/25 10:30
 Raw Sample Received by: 206009
 Raw Sample Relinquished by: 126209

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136120

Review By	Iwona	Review On	6/13/2025 10:36:32 AM
Supervise By	Sohil	Supervise On	6/13/2025 10:38:06 AM
SubDirectory	LB136120	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP113186,WP113187,WP113188,WP113189,WP113190,WP113191,WP113192		
ICV Standard	WP113193		
CCV Standard	WP113465		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113466		
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	06/11/25 06:43		NF/IZ	OK
11	CCB1	CCB1	CCB	06/11/25 07:04		NF/IZ	OK
12	LB136120BLW	LB136120BLW	MB	06/11/25 07:26		NF/IZ	OK
13	LB136120BSW	LB136120BSW	LCS	06/11/25 07:47		NF/IZ	OK
14	Q2289-01	SP-1	SAM	06/11/25 08:43		NF/IZ	OK
15	Q2289-02	SP-2	SAM	06/11/25 09:04		NF/IZ	OK
16	Q2289-03	SP-3	SAM	06/11/25 09:26		NF/IZ	OK
17	Q2290-01	Outfall 1	SAM	06/11/25 09:47		NF/IZ	OK
18	Q2292-01	SW-1	SAM	06/11/25 10:09		NF/IZ	OK

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136120

Review By	Iwona	Review On	6/13/2025 10:36:32 AM
Supervise By	Sohil	Supervise On	6/13/2025 10:38:06 AM
SubDirectory	LB136120	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP113186,WP113187,WP113188,WP113189,WP113190,WP113191,WP113192		
ICV Standard	WP113193		
CCV Standard	WP113465		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113466		
Chk Standard	WP113194,WP113195		

19	Q2292-02	SW-2	SAM	06/11/25 10:30		NF/IZ	OK
20	Q2293-01	SW-3	SAM	06/11/25 10:52		NF/IZ	OK
21	Q2290-02	Outfall 2	SAM	06/11/25 11:14		NF/IZ	OK
22	CCV2	CCV2	CCV	06/11/25 11:35		NF/IZ	OK
23	CCB2	CCB2	CCB	06/11/25 11:57		NF/IZ	OK
24	Q2291-01	Outfall 001	SAM	06/11/25 12:18		NF/IZ	OK
25	Q2291-01MS	Outfall 001MS	MS	06/11/25 12:40	9.5ml of sample, 0.5mL W3092	NF/IZ	OK
26	Q2291-01MSD	Outfall 001MSD	MSD	06/11/25 13:01	9.5ml of sample, 0.5mL W3092	NF/IZ	OK
27	Q2286-03	LAW-25-0084	SAM	06/11/25 13:23		NF/IZ	OK
28	CCV3	CCV3	CCV	06/11/25 13:44		NF/IZ	OK
29	CCB3	CCB3	CCB	06/11/25 14:06		NF/IZ	OK

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136131

Review By	jignesh	Review On	6/12/2025 2:56:35 PM
Supervise By	Iwona	Supervise On	6/12/2025 3:55:15 PM
SubDirectory	LB136131	Test	pH
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	W3178,W3093,W3191,W3071,W3161,W3200		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	06/12/25 08:15		jignesh	OK
2	CAL2	CAL2	CAL	06/12/25 08:16		jignesh	OK
3	CAL3	CAL3	CAL	06/12/25 08:20		jignesh	OK
4	ICV	ICV	ICV	06/12/25 08:25		jignesh	OK
5	CCV1	CCV1	CCV	06/12/25 08:33		jignesh	OK
6	Q2289-01	SP-1	SAM	06/12/25 08:40		jignesh	OK
7	Q2289-01DUP	SP-1DUP	DUP	06/12/25 08:42		jignesh	OK
8	Q2289-02	SP-2	SAM	06/12/25 08:46		jignesh	OK
9	Q2289-03	SP-3	SAM	06/12/25 08:50		jignesh	OK
10	Q2290-01	Outfall 1	SAM	06/12/25 09:00		jignesh	OK
11	Q2290-02	Outfall 2	SAM	06/12/25 09:10		jignesh	OK
12	Q2291-01	Outfall 001	SAM	06/12/25 09:15		jignesh	OK
13	Q2292-01	SW-1	SAM	06/12/25 09:25		jignesh	OK
14	Q2292-02	SW-2	SAM	06/12/25 09:30		jignesh	OK
15	Q2293-01	SW-3	SAM	06/12/25 09:40		jignesh	OK
16	CCV2	CCV2	CCV	06/12/25 09:47		jignesh	OK

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB136134

Review By	Iwona	Review On	6/12/2025 4:52:37 PM
Supervise By	jignesh	Supervise On	6/12/2025 4:54:41 PM
SubDirectory	LB136134	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,W3128,WP113445,WP113446,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	06/12/25 14:15		Iwona	OK
10	CCB1	CCB1	CCB	06/12/25 14:15		Iwona	OK
11	RL Check	RL Check	SAM	06/12/25 14:16		Iwona	OK
12	LB136134BL	LB136134BL	MB	06/12/25 14:16		Iwona	OK
13	LB136134BS	LB136134BS	LCS	06/12/25 14:17		Iwona	OK
14	Q2276-01	MH-6-10-2025	SAM	06/12/25 14:17		Iwona	OK
15	Q2286-03	LAW-25-0084	SAM	06/12/25 14:18		Iwona	OK
16	Q2289-01	SP-1	SAM	06/12/25 14:18		Iwona	OK
17	Q2289-02	SP-2	SAM	06/12/25 14:19		Iwona	OK
18	Q2289-03	SP-3	SAM	06/12/25 14:19		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB136134

Review By	Iwona	Review On	6/12/2025 4:52:37 PM
Supervise By	jignesh	Supervise On	6/12/2025 4:54:41 PM
SubDirectory	LB136134	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,W3128,WP113445,WP113446,WP1		

19	Q2290-01	Outfall 1	SAM	06/12/25 14:20		Iwona	OK
20	Q2290-02	Outfall 2	SAM	06/12/25 14:20		Iwona	OK
21	Q2291-01	Outfall 001	SAM	06/12/25 14:21		Iwona	OK
22	CCV2	CCV2	CCV	06/12/25 14:21		Iwona	OK
23	CCB2	CCB2	CCB	06/12/25 14:22		Iwona	OK
24	Q2292-01	SW-1	SAM	06/12/25 14:22		Iwona	OK
25	Q2292-02	SW-2	SAM	06/12/25 14:23		Iwona	OK
26	Q2293-01	SW-3	SAM	06/12/25 14:23		Iwona	OK
27	Q2294-01	Outfall 1	SAM	06/12/25 14:24		Iwona	OK
28	Q2294-01DUP	Outfall 1DUP	DUP	06/12/25 14:24		Iwona	OK
29	Q2294-01MS	Outfall 1MS	MS	06/12/25 14:25		Iwona	OK
30	Q2294-01MSD	Outfall 1MSD	MSD	06/12/25 14:25		Iwona	OK
31	CCV3	CCV3	CCV	06/12/25 14:26		Iwona	OK
32	CCB3	CCB3	CCB	06/12/25 14:26		Iwona	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB136145

Review By	jignesh	Review On	6/13/2025 12:19:03 PM
Supervise By	Iwona	Supervise On	6/13/2025 12:24:22 PM
SubDirectory	LB136145	Test	TSS
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB136145BL	LB136145BL	MB	06/13/25 10:00		jignesh	OK
2	LB136145BS	LB136145BS	LCS	06/13/25 10:00		jignesh	OK
3	Q2276-01	MH-6-10-2025	SAM	06/13/25 10:00		jignesh	OK
4	Q2286-03	LAW-25-0084	SAM	06/13/25 10:00		jignesh	OK
5	Q2289-01	SP-1	SAM	06/13/25 10:00		jignesh	OK
6	Q2289-02	SP-2	SAM	06/13/25 10:00		jignesh	OK
7	Q2289-03	SP-3	SAM	06/13/25 10:00		jignesh	OK
8	Q2290-01	Outfall 1	SAM	06/13/25 10:00		jignesh	OK
9	Q2290-02	Outfall 2	SAM	06/13/25 10:00		jignesh	OK
10	Q2291-01	Outfall 001	SAM	06/13/25 10:00		jignesh	OK
11	Q2292-01	SW-1	SAM	06/13/25 10:00		jignesh	OK
12	Q2292-02	SW-2	SAM	06/13/25 10:00		jignesh	OK
13	Q2293-01	SW-3	SAM	06/13/25 10:00		jignesh	OK
14	Q2293-01DUP	SW-3DUP	DUP	06/13/25 10:00		jignesh	OK
15	Q2300-02	COMP	SAM	06/13/25 10:00		jignesh	OK
16	Q2309-01	EFFLUENT	SAM	06/13/25 10:00		jignesh	OK
17	Q2309-04	AERATION	SAM	06/13/25 10:00		jignesh	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136153

Review By	Iwona	Review On	6/13/2025 3:30:38 PM
Supervise By	jignesh	Supervise On	6/13/2025 3:34:15 PM
SubDirectory	LB136153	Test	Phosphorus-Total
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	WP113522,WP113521,WP113520,WP113519,WP113518,WP113517,WP113523,WP112831,WP113528,WP113378,V		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	06/13/25 13:15		Iwona	OK
2	CAL2	CAL2	CAL	06/13/25 13:15		Iwona	OK
3	CAL3	CAL3	CAL	06/13/25 13:16		Iwona	OK
4	CAL4	CAL4	CAL	06/13/25 13:16		Iwona	OK
5	CAL5	CAL5	CAL	06/13/25 13:17		Iwona	OK
6	CAL6	CAL6	CAL	06/13/25 13:17		Iwona	OK
7	ICV	ICV	ICV	06/13/25 13:18		Iwona	OK
8	ICB	ICB	ICB	06/13/25 13:18		Iwona	OK
9	CCV1	CCV1	CCV	06/13/25 13:19		Iwona	OK
10	CCB1	CCB1	CCB	06/13/25 13:19		Iwona	OK
11	RL Check	RL Check	SAM	06/13/25 13:20		Iwona	OK
12	PB168478BL	PB168478BL	MB	06/13/25 13:20		Iwona	OK
13	PB168478BS	PB168478BS	LCS	06/13/25 13:21		Iwona	OK
14	Q2126-09	MDL-WATER-03-QT2	SAM	06/13/25 13:21		Iwona	OK
15	Q2289-01	SP-1	SAM	06/13/25 13:22		Iwona	OK
16	Q2289-01DUP	SP-1DUP	DUP	06/13/25 13:22		Iwona	OK
17	Q2289-01MS	SP-1MS	MS	06/13/25 13:23		Iwona	OK
18	Q2289-01MSD	SP-1MSD	MSD	06/13/25 13:24		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136153

Review By	Iwona	Review On	6/13/2025 3:30:38 PM
Supervise By	jignesh	Supervise On	6/13/2025 3:34:15 PM
SubDirectory	LB136153	Test	Phosphorus-Total
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	WP113522,WP113521,WP113520,WP113519,WP113518,WP113517,WP113523,WP112831,WP113528,WP113378,V		

19	Q2289-02	SP-2	SAM	06/13/25 13:24		Iwona	OK
20	Q2289-03	SP-3	SAM	06/13/25 13:25		Iwona	OK
21	Q2290-01	Outfall 1	SAM	06/13/25 13:25		Iwona	OK
22	CCV2	CCV2	CCV	06/13/25 13:26		Iwona	OK
23	CCB2	CCB2	CCB	06/13/25 13:26		Iwona	OK
24	Q2290-02	Outfall 2	SAM	06/13/25 13:27		Iwona	OK
25	Q2291-01	Outfall 001	SAM	06/13/25 13:27		Iwona	OK
26	Q2292-01	SW-1	SAM	06/13/25 13:28		Iwona	OK
27	Q2292-02	SW-2	SAM	06/13/25 13:28		Iwona	OK
28	Q2293-01	SW-3	SAM	06/13/25 13:29		Iwona	OK
29	Q2309-01	EFFLUENT	SAM	06/13/25 13:29		Iwona	OK
30	CCV3	CCV3	CCV	06/13/25 13:30		Iwona	OK
31	CCB3	CCB3	CCB	06/13/25 13:30		Iwona	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB136167

Review By	Iwona	Review On	6/17/2025 2:10:18 PM
Supervise By	Sohil	Supervise On	6/17/2025 4:57:49 PM
SubDirectory	LB136167	Test	TKN
STD. NAME	STD REF.#		
ICAL Standard	WP113503		
ICV Standard	WP113505		
CCV Standard	WP113504		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113506		
Chk Standard	WP113429,WP111745,WP111385,WP111660,WP113507		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	06/16/25 14:49		Iwona	OK
2	0.5PPM	0.5PPM	CAL2	06/16/25 14:49		Iwona	OK
3	1.0PPM	1.0PPM	CAL3	06/16/25 14:49		Iwona	OK
4	2.5PPM	2.5PPM	CAL4	06/16/25 14:50		Iwona	OK
5	5.0PPM	5.0PPM	CAL5	06/16/25 14:50		Iwona	OK
6	6.7PPM	6.7PPM	CAL6	06/16/25 14:50		Iwona	OK
7	10.0PPM	10.0PPM	CAL7	06/16/25 14:50		Iwona	OK
8	ICV1	ICV1	ICV	06/16/25 15:29		Iwona	OK
9	ICB1	ICB1	ICB	06/16/25 15:29		Iwona	OK
10	CCV1	CCV1	CCV	06/16/25 15:29		Iwona	OK
11	CCB1	CCB1	CCB	06/16/25 15:29		Iwona	OK
12	RL	RL	LOQ	06/16/25 15:29		Iwona	OK
13	PB168445BL	PB168445BL	MB	06/16/25 15:29		Iwona	OK
14	PB168445BS	PB168445BS	LCS	06/16/25 15:42		Iwona	OK
15	Q2126-09	MDL-WATER-03-QT2	SAM	06/16/25 15:42		Iwona	OK
16	Q2286-03	LAW-25-0084	SAM	06/16/25 15:42	High	Iwona	Dilution
17	Q2286-03DUP	LAW-25-0084DUP	DUP	06/16/25 15:42	High	Iwona	Dilution
18	Q2286-03MS	LAW-25-0084MS	MS	06/16/25 15:42		Iwona	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB136167

Review By	Iwona	Review On	6/17/2025 2:10:18 PM
Supervise By	Sohil	Supervise On	6/17/2025 4:57:49 PM
SubDirectory	LB136167	Test	TKN
STD. NAME	STD REF.#		
ICAL Standard	WP113503		
ICV Standard	WP113505		
CCV Standard	WP113504		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113506		
Chk Standard	WP113429,WP111745,WP111385,WP111660,WP113507		

19	Q2286-03MSD	LAW-25-0084MSD	MSD	06/16/25 15:42		Iwona	OK
20	Q2289-01	SP-1	SAM	06/16/25 15:42		Iwona	OK
21	Q2289-02	SP-2	SAM	06/16/25 15:43		Iwona	OK
22	CCV2	CCV2	CCV	06/16/25 15:43		Iwona	OK
23	CCB2	CCB2	CCB	06/16/25 15:43		Iwona	OK
24	Q2289-03	SP-3	SAM	06/16/25 15:43		Iwona	OK
25	Q2290-01	Outfall 1	SAM	06/16/25 15:53		Iwona	OK
26	Q2290-02	Outfall 2	SAM	06/16/25 15:53		Iwona	OK
27	Q2291-01	Outfall 001	SAM	06/16/25 15:53		Iwona	OK
28	Q2292-01	SW-1	SAM	06/16/25 15:53		Iwona	OK
29	Q2292-02	SW-2	SAM	06/16/25 15:53		Iwona	OK
30	Q2293-01	SW-3	SAM	06/16/25 15:53		Iwona	OK
31	PB168451BL	PB168451BL	MB	06/16/25 15:53		Iwona	OK
32	PB168451BS	PB168451BS	LCS	06/16/25 15:53		Iwona	OK
33	Q2126-03	MDL-SOIL-03-QT2-20	SAM	06/16/25 15:53		Iwona	OK
34	CCV3	CCV3	CCV	06/16/25 15:53		Iwona	OK
35	CCB3	CCB3	CCB	06/16/25 15:53		Iwona	OK
36	Q2286-03DL	LAW-25-0084DL	SAM	06/16/25 16:29	Report 5X	Iwona	Confirms
37	Q2286-03DUPDL	LAW-25-0084DUPDL	DUP	06/16/25 16:29	Report 5X	Iwona	Confirms
38	CCV4	CCV4	CCV	06/16/25 16:29		Iwona	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB136167

Review By	Iwona	Review On	6/17/2025 2:10:18 PM
Supervise By	Sohil	Supervise On	6/17/2025 4:57:49 PM
SubDirectory	LB136167	Test	TKN
STD. NAME	STD REF.#		
ICAL Standard	WP113503		
ICV Standard	WP113505		
CCV Standard	WP113504		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113506		
Chk Standard	WP113429,WP111745,WP111385,WP111660,WP113507		

39	CCB4	CCB4	CCB	06/16/25 16:29		Iwona	OK
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Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB136172

Review By	jignesh	Review On	6/17/2025 2:14:28 PM
Supervise By	Iwona	Supervise On	6/17/2025 2:16:37 PM
SubDirectory	LB136172	Test	Oil and Grease
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	W3204,M6069,EP2622,WP112782,NA,NA,WP112783,NA,WO112784		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB136172BL	LB136172BL	MB	06/17/25 09:30		jignesh	OK
2	LB136172BS	LB136172BS	LCS	06/17/25 09:30		jignesh	OK
3	LB136172BSD	LB136172BSD	LCSD	06/17/25 09:30		jignesh	OK
4	Q2289-01	SP-1	SAM	06/17/25 09:30		jignesh	OK
5	Q2289-02	SP-2	SAM	06/17/25 09:30		jignesh	OK
6	Q2289-03	SP-3	SAM	06/17/25 09:30		jignesh	OK
7	Q2290-01	Outfall 1	SAM	06/17/25 09:30		jignesh	OK
8	Q2290-02	Outfall 2	SAM	06/17/25 09:30		jignesh	OK
9	Q2291-01	Outfall 001	SAM	06/17/25 09:30		jignesh	OK
10	Q2292-01	SW-1	SAM	06/17/25 09:30		jignesh	OK
11	Q2292-02	SW-2	SAM	06/17/25 09:30		jignesh	OK
12	Q2293-01	SW-3	SAM	06/17/25 09:30		jignesh	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2293

Test : Anions Group1,COD,Oil and Grease,pH,Phosphorus-Total,TKN,TSS

Prepbatch ID : PB168445,PB168478,

Sequence ID/Qc Batch ID: LB136120,LB136131,LB136134,LB136145,LB136153,LB136167,LB136172,

Standard ID :

EP2622,WP111323,WP111385,WP111660,WP111745,WP112079,WP112611,WP112612,WP112615,WP112782,WP112783,WP112796,WP112828,WP112831,WP112913,WP112914,WP113112,WP113113,WP113135,WP113186,WP113187,WP113188,WP113189,WP113190,WP113191,WP113192,WP113193,WP113194,WP113195,WP113231,WP113232,WP113233,WP113234,WP113235,WP113236,WP113237,WP113238,WP113240,WP113378,WP113429,WP113443,WP113444,WP113445,WP113446,WP113448,WP113450,WP113465,WP113466,WP113503,WP113504,WP113505,WP113506,WP113507,WP113517,WP113518,WP113519,WP113520,WP113521,WP113522,WP113523,WP113524,WP113525,WP113526,WP113527,WP113528,

Chemical ID :

E3551,E3917,M6041,M6069,M6151,W2306,W2647,W2650,W2664,W2666,W2784,W2788,W2817,W2858,W2871,W2983,W3035,W3071,W3074,W3093,W3112,W3113,W3128,W3132,W3140,W3148,W3161,W3163,W3169,W3174,W3178,W3180,W3191,W3195,W3196,W3197,W3198,W3199,W3200,W3204,W3206,W3215,WO 112784,

Extractions 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>
3923	Baked Sodium Sulfate	EP2622	06/13/2025	12/04/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 06/16/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

<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>
1571	Sodium hydroxide, 1N	WP111323	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 01/09/2025

FROM 4.00000gram of W3113 + 96.00000ml 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>
290	Phenol reagent for Ammonia	WP111385	01/13/2025	07/13/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 01/13/2025
<u>FROM</u> 3.20000gram of W3113 + 8.30000gram of W2858 + 88.80000ml of W3112 = Final Quantity: 100.000 ml								

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

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>
289	Sodium Hypochlorite for Ammonia	WP111745	02/03/2025	07/31/2025	Rubina Mughal	None	None	Iwona Zarych
								02/03/2025

FROM 50.00000ml of W3112 + 50.00000ml of W3174 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1338	TKN DISTILLING BUFFER	WP112079	02/27/2025	08/27/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych
								02/27/2025

FROM 0.47500L of W3112 + 25.00000gram of W3148 + 500.00000gram of W3113 = Final Quantity: 1.000 L



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
153	Ammonia Stock Std. (1000 ppm)	WP112611	04/07/2025	10/07/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 04/07/2025
<u>FROM</u> 3.81900gram of W3196 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml								

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

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>
1211	11 N sulfuric acid	WP112615	04/03/2025	10/07/2025	Niha Farheen Shaik	None	None	Iwona Zarych
								04/07/2025

FROM 306.00000ml of M6041 + 694.00000ml of W3112 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
229	1:1 HCL	WP112782	04/22/2025	08/18/2025	Jignesh Parikh	None	None	Iwona Zarych
								04/22/2025

FROM 500.00000ml of M6151 + 500.00000ml of W3112 = Final Quantity: 1.000 L



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2470	1664A SPIKING SOLN	WP112783	04/22/2025	10/03/2025	Jignesh Parikh	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 04/22/2025
<u>FROM</u>	1000.00000ml of E3917 + 4.00000gram of W2817 + 4.00000gram of W2871 = Final Quantity: 1000.000 ml							

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



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1597	0.04 N H2SO4	WP112828	04/25/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 04/25/2025
<u>FROM</u> 1.00000ml of M6041 + 999.00000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
126	5N sulfuric acid	WP112831	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych 04/25/2025
<u>FROM</u> 140.00000ml of M6041 + 860.00000ml of W3112 = Final Quantity: 1.000 L								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
115	Phosphate Stock Std. (50 ppm)	WP112913	05/01/2025	11/01/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 05/06/2025
<u>FROM</u> 0.11000gram of W3198 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
2790	Phosphate Stock std, 50PPM-SS	WP112914	05/01/2025	11/01/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 05/06/2025
<u>FROM</u> 0.11000gram of W3206 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
648	Ammonium molybdate solution	WP113112	05/16/2025	11/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 05/16/2025
<u>FROM</u>	20.00000gram of W2664 + 480.00000ml of W3112 = Final Quantity: 500.000 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>
588	Potassium Antimonyl Tartrate	WP113113	05/16/2025	11/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 05/16/2025
<u>FROM</u>	1.37150gram of W2306 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
619	TKN digestion solution	WP113135	05/20/2025	11/20/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 05/20/2025
<u>FROM</u>	134.00000gram of W2983 + 134.00000ml of M6041 + 7.30000gram of W3199 + 725.00000ml of W3112 = Final Quantity: 1000.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2487	Anions 300/9056 calibration standard 1	WP113186	05/22/2025	05/23/2025	Iwona Zarych	None	WETCHEM_PIPETTE_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								

Wet Chemistry STANDARD PREPARATION LOG

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

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

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

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

Wet Chemistry STANDARD PREPARATION LOG

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

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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_SCALE_5 (WCS-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								



<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_PIPETTE_3	Jignesh Parikh
(WC) 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_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u>	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 (WC)	Jignesh Parikh 05/28/2025
<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								



<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>
1213	Phenolphthalein indicator	WP113378	06/04/2025	12/04/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh
<u>FROM</u> 0.10000gram of W2650 + 50.00000ml of W2788 + 50.00000ml 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>
740	sodium nitroferricyanide for ammonia	WP113429	06/06/2025	07/06/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 06/06/2025
<u>FROM</u> 0.05000gram of W2666 + 99.95000ml of W3112 = Final Quantity: 100.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2456	COD Stock std, 1000ppm	WP113443	06/09/2025	06/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh
<u>FROM</u> 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	WP113444	06/09/2025	06/16/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 06/11/2025
<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	WP113445	06/09/2025	06/16/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/11/2025
<u>FROM</u>	9.50000ml of W3112 + 0.50000ml of WP113443 = 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	WP113446	06/09/2025	06/16/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/11/2025
<u>FROM</u> 9.50000ml of W3112 + 0.50000ml of WP113444 = 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>
4162	RL CHECK	WP113448	06/09/2025	06/16/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3	Jignesh Parikh
FROM		9.90000ml of W3112 + 0.10000ml of WP113443 = 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>
1322	Ammonia Intermediate Std, 50PPM	WP113450	06/09/2025	07/09/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 06/10/2025
<u>FROM</u> 95.00000ml of W3112 + 5.00000ml of WP112611 = Final Quantity: 100.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

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3680	Anions 300/9056 calibration standard 5-CCV	WP113465	06/11/2025	06/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/11/2025
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	WP113466	06/11/2025	06/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/11/2025
FROM 45.00000ml of W3112 + 5.00000ml of W3197 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
295	TKN Calibration Std (10 ppm)	WP113503	06/12/2025	06/19/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Jignesh Parikh
(WC) FROM 49.50000ml of W3112 + 0.50000ml of WP112611 = 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>
297	TKN CCV STD 5 ppm	WP113504	06/12/2025	06/19/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/13/2025
<u>FROM</u> 49.75000ml of W3112 + 0.25000ml of WP112611 = 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>
296	TKN ICV STD 5 ppm	WP113505	06/12/2025	06/19/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/13/2025

FROM 49.75000ml of W3112 + 0.25000ml of WP112612 = 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>
298	TKN LCS STD 5 ppm	WP113506	06/12/2025	06/19/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/13/2025

FROM 49.75000ml of W3112 + 0.25000ml of WP112612 = 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>
3590	TKN LOD-MDL 0.25PPM	WP113507	06/12/2025	06/19/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/13/2025

FROM 99.50000ml of W3112 + 0.50000ml of WP113450 = 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>
122	calibration std. 0 ppm	WP113517	06/13/2025	06/20/2025	Iwona Zarych	None	None	Jignesh Parikh 06/13/2025

FROM 100.00000ml of W3112 = Final Quantity: 100.000 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>
121	calibration std. phosphate 0.05 ppm	WP113518	06/13/2025	06/20/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/13/2025
FROM 99.90000ml of W3112 + 0.10000ml of WP112913 = 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>
120	calibration std. phosphate 0.1 ppm	WP113519	06/13/2025	06/20/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/13/2025
FROM 99.80000ml of W3112 + 0.20000ml of WP112913 = 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>
119	calibration std. phosphate 0.3 ppm	WP113520	06/13/2025	06/20/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/13/2025
<u>FROM</u> 99.40000ml of W3112 + 0.60000ml of WP112913 = 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>
118	calibration std. phosphate 0.5 ppm	WP113521	06/13/2025	06/20/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/13/2025
<u>FROM</u> 99.00000ml of W3112 + 1.00000ml of WP112913 = Final Quantity: 100.000 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>
117	calibration std. phosphate 1 ppm	WP113522	06/13/2025	06/20/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/13/2025
FROM 98.00000ml of W3112 + 2.00000ml of WP112913 = 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>
124	phosphate CCV std.	WP113523	06/13/2025	06/20/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/13/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112913 = Final Quantity: 100.000 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>
3805	Phosphate ICV-LCS Std	WP113524	06/13/2025	06/20/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/13/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112914 = 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>
3907	Phosphate MDL-LOD-LOQ spike solution, 5ppm	WP113525	06/13/2025	06/20/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/13/2025
FROM 9.00000ml of W3112 + 1.00000ml of WP112913 = 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>
3814	Phosphate LOD-MDL Std 0.025ppm	WP113526	06/13/2025	06/20/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 06/13/2025

FROM 99.50000ml of W3112 + 0.50000ml of WP113525 = 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>
590	Ascorbic Acid	WP113527	06/13/2025	06/14/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 06/13/2025

FROM 0.52800gram of W3074 + 30.00000ml of W3112 = Final Quantity: 30.000 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>
658	Combined reagent	WP113528	06/13/2025	06/14/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 06/13/2025
<u>FROM</u> 15.00000ml of WP113112 + 30.00000ml of WP113527 + 5.00000ml of WP113113 + 50.00000ml of WP112831 = Final Quantity: 100.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	12/04/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	10/03/2025	04/03/2025 / Rajesh	03/31/2025 / Rajesh	E3917

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.	140440 / TEST PAPERS,PH,0-2.5,.2SENSI, 100PK	80A0441	02/29/2028	09/03/2024 / jignesh	08/19/2024 / Jaswal	M6069

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A1561-500GM / POTASSIUM ANTIMONY TARTRATE TRIHYDRATE, 500G	2GH0057	12/11/2027	12/11/2017 / apatel	12/11/2017 / apatel	W2306

CHEMICAL RECEIPT LOG BOOK

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.	J2870-1 / PHENOLPHTHALEIN, INDICATOR F/TITRATION, 500G	0000235350	06/04/2025	01/31/2020 / AMANDEEP	01/20/2020 / apatel	W2650

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J07716-1 / Ammonium Molybdate 500G	0000234410	02/11/2026	02/10/2020 / AMANDEEP	01/31/2020 / apatel	W2664

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	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.	PC16721-3 / Isopropanol, 99%	C20F23007	06/23/2025	12/30/2020 / apatel	12/30/2020 / apatel	W2788

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A12244 / Stearic acid, 98%, 100 g	U20E006	04/02/2026	04/02/2021 / apatel	04/02/2021 / apatel	W2817

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	H223-57 / Hexadecane, 99.0%	0000266903	05/04/2027	09/07/2021 / apatel	08/26/2021 / apatel	W2871

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3278-5 / Potassium Sulfate, 2.5 Kgs	SLCM9788	11/21/2027	11/21/2022 / lwona	11/21/2022 / lwona	W2983

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	BDH0214-500G / Ammonium Persulfate Crystal, 500g	MKCR9319	06/30/2028	03/05/2024 / lwona	06/06/2023 / lwona	W3035

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0938-7 / Ascorbic Acid, 500 gms	MKCS4627	09/30/2025	01/16/2024 / lwona	01/16/2024 / lwona	W3074

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	566002 / BUFFER PH 7.00 GREEN 1PINT PK6	44001f99	12/31/2025	04/03/2024 / jignesh	04/02/2024 / jignesh	W3093

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Environmental Express LTD	B1010 / COD Digestion Vials Low Level 0-150Mg/L	13821	10/31/2027	05/20/2025 / lwona	07/25/2024 / lwona	W3128

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140444 / TEST PAPERS,PH 0-14,.5 SENSI,100PK	10D0142	09/17/2029	09/17/2024 / lwona	09/17/2024 / lwona	W3140

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3946-1 / Sodium Thiosulfate Pentahydrate, 500 gms	MKCW3077	07/31/2029	10/07/2024 / lwona	10/07/2024 / lwona	W3148

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL13850-1 / Buffer Solution, PH2 (500ml)	2411E26	10/31/2026	12/09/2024 / lwona	12/09/2024 / lwona	W3161

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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14055-3 / PH 4 BUFFER SOLUTION	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 / lwona	01/27/2025 / lwona	W3180

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	1601-1 / PH 10.01 BUFFER,COLOR CD 475ML	2410F80	03/31/2026	04/01/2025 / JIGNESH	03/13/2025 / jignesh	W3191

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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRYST, ACS, 500G	MKWCW6723	10/31/2028	04/11/2025 / lwona	04/11/2025 / lwona	W3198

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	0330-500G / Cupric Sulfate Pentahydrate	24H0956271	05/31/2027	04/11/2025 / lwona	04/11/2025 / lwona	W3199

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
RICCA CHEMICAL COMPANY	1615-16 / pH 12.00 Buffer	2504F20	09/30/2026	04/11/2025 / lwona	04/11/2025 / lwona	W3200

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	25c0362005	04/30/2026	04/22/2025 / jignesh	04/18/2025 / jignesh	W3204

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRYST, ACS, 500G	MKCCX1379	01/31/2029	04/29/2025 / lwona	04/29/2025 / lwona	W3206

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140444 / TEST PAPERS,PH 0-14,.5 SENS,100PK	10D3242	12/31/2028	06/09/2025 / lwona	06/09/2025 / lwona	W3215



CERTIFICATE OF ANALYSIS

Printed: 12/8/2017

Page 1 of 1

Customer No : 30017
Order Number : 3008126
Catalog : A1561

Customer : PCI SCIENTIFIC
Delivery # : 58495347
Potassium Antimony Tartrate Trihydrate,
Reagent, ACS

Customer PO : 6035343

Lot : 2GH0057

Chemical Formula : $C_8H_4K_2O_{12}Sb_2 \cdot 3H_2O$
CAS# : 28300-74-5

Formula Weight : 667.87

W2306
received
12/11/17
AB

Test

Limit
Min. Max.

Results

ASSAY ($C_8H_4K_2O_{12}Sb_2 \cdot 3HO$)	99.0 - 103.0 %	101.0 %
TITRATABLE ACID OR BASE	-- 0.020 meq/g	<0.020 meq/g
LOSS ON DRYING	-- 2.7 %	<2.7 %
ARSENIC (As)	-- 0.015 %	<0.015 %
APPEARANCE		WHITE POWDER
DATE OF MANUFACTURE		29-DEC-2015

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

Read and understand label and MSDS/SDS before handling any chemical. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. The customer must ensure to provide its users adequate hazardous material training and appropriate protective gears before handling our chemicals.

Certificate of Analysis Results Certified By:

Ammonium Molybdate, 4-Hydrate, Crystal
BAKER ANALYZED® A.C.S. Reagent

(ammonium heptamolybdate, tetrahydrate)



Material No.: 0716-01
Batch No.: 0000234410
Manufactured Date: 2019/02/13
Retest Date: 2026/02/11
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (as MoO ₃)	81.0 – 83.0 %	81.4
ACS – Insoluble Matter	<= 0.005 %	< 0.001
Chloride (Cl)	<= 0.002 %	< 0.002
Nitrate (NO ₃)	Passes Test	PT
Arsenate, Phosphate and Silicate (as SiO ₂)	<= 0.001 %	< 0.001
ACS – Phosphate (PO ₄)	<= 5 ppm	< 5
Sulfate (SO ₄)	<= 0.02 %	< 0.02
Heavy Metals (as Pb)	<= 0.001 %	< 0.001
Magnesium (Mg)	<= 0.005 %	< 0.001
Potassium (K)	<= 0.01 %	< 0.01
Sodium (Na)	<= 0.01 %	< 0.001

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

Phenolphthalein, Powder
BAKER ANALYZED® A.C.S. Reagent



Material No.: 2870-01
Batch No.: 0000235350
Manufactured Date: 2018/06/06
Retest Date: 2025/06/04
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
ACS – Clarity of Solution	Passes Test	PT
Visual Transition Interval – pH...8.0 (Colorless)	Passes Test	PT
Visual Transition Interval – pH...10.0 (Red)	Passes Test	PT

For Laboratory, Research or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality

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

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

Hexadecane, 99.0%



Material No.: H223-57
Batch No.: 0000266903
Manufactured Date: 2020/05/05
Retest Date: 2027/05/04
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay ($\text{CH}_3(\text{CH}_2)_{14}\text{CH}_3$) (by GC)	$\geq 99.0 \%$	99.3
Infrared Spectrum	Passes Test	PT

For Laboratory, Research or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality

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

W2858 Received by AP on 07/07/2021

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

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

Retest date: January 7, 2026

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W2666 Recived on 02/10/2020 by AP

Product No.: 87683

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

Lot No.: W12F013

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

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W2817

REC. 04/02/2021

Product Name: Stearic acid, 98%, Thermo Scientific Chemicals
Catalog Number: A12244.14

CAS Number: 57-11-4
Molecular Formula: C₁₈H₃₆O₂
Molecular Weight: 284.48
InChI Key: QIQXTHQIDYTRH-UHFFFAOYSA-N
SMILES: CCCCCCCCCCCCCCCC(O)=O
Synonym: stearic acid acide stearique hydrofol acid 1855 hydrofol acid 1655 industrene 5016
stearic acid, ion(1-) (8Cl) glycon TP glycon DP acidum stearinicum hydrofol acid 150

Product Specification

Appearance (Color): White
Form: Crystals or powder or crystalline powder or flakes or waxy solid
Assay (Silylated GC): ≥97.5%
Melting Point (clear melt): 67.0-74.0°C

Date Of Print: 11/30/2023

Product Specifications are subject to amendment and may change over time. Data contained is accurate as of the date printed.



CERTIFICATE OF ANALYSIS

Product Name ISOPROPYL ALCOHOL, 99%
Grade Meets ACS/USP/NF Monographs
Catalog # 231000099, zp231000099
Lot # C20F23007
Date of Manufacture: 06/23/20 **W2788 Received on 12/30/2020 by AP**
Recommended Retest Date: Five Years from Date of Manufacture

TEST	MONO GRAPH	SPECIFICATION	RESULT
Assay (corrected for water)	USP	99.0% min	99.92%
Assay (corrected for water)	ACS	99.5% min	
Solubility in water	ACS ⁺	To Pass Test	Pass
Appearance	ACS ⁺	Clear, colorless liquid	Pass
Color, APHA	ACS	10 max	1
Limit of Nonvolatile Residue	USP ⁺	NMT 2.5 mg (0.005%)	0.1 mg
Residue after Evaporation	ACS ⁺	0.001% max	< 0.001%
Specific Gravity	USP	0.783 - 0.787 @25°C	0.783
Identification A - Infrared Absorption	USP	To Pass Test	Pass
Identification B	USP	To Pass Test	Pass
Refractive Index @ 20°C	USP	1.376-1.378	1.377
Acidity	USP ⁺	NMT 0.70 ml of 0.020N NaOH is required	0.30 mL
Titration Acid or Base	ACS ⁺	0.0001 meq/g max	0.0001 meq/g
Carbonyl Compounds	ACS	Propionaldehyde 0.002% max	< 0.002%
		Acetone 0.002% max	None Detected
Limit of Volatile Impurities	USP	Diethyl Ether NMT 0.1%	< 0.1%
		Acetone NMT 0.1%	None Detected
		Diisopropyl Ether NMT 0.1%	< 0.1%
		n-Propyl Alcohol NMT 0.1%	< 0.1%
		2-Butanol NMT 0.1%	< 0.1%
		Total NMT 1.0%	< 0.1%
Water, wt%	ACS	NMT 0.2%	0.05%
Water Determination	USP	NMT 0.5%	

⁺This test is performed quarterly

Certification and Compliance Statements

This lot of Isopropyl Alcohol complies with all of the current requirements listed in the United States Pharmacopeia, American Chemical Society monographs and the National Formulary.

No chemicals whatsoever are used as solvents at any point in the manufacture, processing or packaging of Isopropyl Alcohol. Only Class 2 and Class 3 residual solvents may appear as impurities / related substances / low level contaminants in IPA. Concentration of Class 2 Option 1 and Class 3 residual solvents is below limits in the current USP/NF General Chapter <467>.

This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.

This product is for further commercial manufacturing, laboratory or research use, and may be used as an excipient or a process solvent for pharmaceutical purposes. It is not intended for use as an active ingredient in drug manufacturing nor as a medical device or disinfectant. Appropriate/legal use of this product is the responsibility of the user.

Approved by: D. Simoncelli, Quality Control Chemist

Date of Approval: 06/23/2020



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.

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

~~112778~~ W2983
Rec. 11/21/22 12

Product Name:

Certificate of Analysis**Potassium sulfate - ReagentPlus® , ≥99.0%**

Product Number: P0772
Batch Number: SLCM9788
Brand: SIGALD
CAS Number: 7778-80-5
MDL Number: MFCD00011388
Formula: K₂O₄S
Formula Weight: 174.26 g/mol
Quality Release Date: 03 MAR 2022



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity)	Clear	Clear
10 g plus 150 mL, H ₂ O		
Titration with NaOH	≥ 99.0 %	99.2 %



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

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

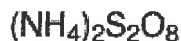


W 3035
rec. 6/6/23 12

Product Name:

Certificate of AnalysisAmmonium persulfate - ACS reagent, $\geq 98.0\%$

Product Number: 248614
Batch Number: MKCR9319
Brand: SIGALD
CAS Number: 7727-54-0
MDL Number: MFCD00003390
Formula Weight: 228.20 g/mol
Quality Release Date: 13 OCT 2022



Test	Specification	Result
Appearance (Color)	White to Off White	White
Appearance (Form)	Powder or Crystals or Granules or Chunks	Crystals
ICP Major Analysis	Confirmed	Confirmed
Confirms Sulfur Component		
Titration by KMNO ₄	$\geq 98.0 \%$	100.0 %
Residue on ignition (Ash)	$\leq 0.05 \%$	$< 0.05 \%$
Insoluble Matter	$\leq 0.005 \%$	0.002 %
c = 10 %; In Water		
Chloride and Chlorate (as Cl)	$\leq 0.001 \%$	$< 0.001 \%$
Iron (Fe)	$\leq 0.001 \%$	$< 0.001 \%$
Heavy Metal	$\leq 0.005 \%$	$< 0.001 \%$
as Lead		
Manganese (Mn)	$\leq 0.5 \text{ ppm}$	$< 0.1 \text{ ppm}$
Titrateable Acid (meq/g)	≤ 0.04	< 0.04
Meets ACS Requirements	Current ACS Specification	Conforms


Larry Coers, Director
Quality Control
Milwaukee, WI US

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



Certificate of Analysis

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.



**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3

Acetone

BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	<= 0.3	0.2
Titration Base (μeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 03/31/25

E3917

Jamie Croak
Director Quality Operations, Bioscience Production

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

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

avantor™



M 6041-4b
MS

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

Certificate of Analysis

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

>>> Continued on page 2 >>>

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

 **avantor™**

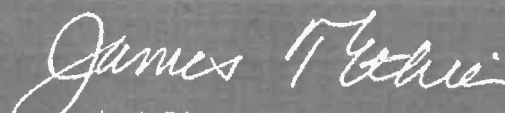


Material No.: 9673-33
Batch No.: 23D2462010

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

For Laboratory, Research, or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality



Certificate of Analysis

Product information

Product	pH-Fix 0.3-2.3
REF	92180
LOT	80A0441
Expiration date:	29.02.2028
Date of examination:	23.01.2024
Gradation:	pH 0.3-0.7-1.0-1.3-1.6-1.9-2.3

Confirmation

Hereby we confirm, that the above mentioned product has successfully passed our quality control system in accordance with ISO 9001 and meets the specific quality criteria.

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



MACHEREY-NAGEL GmbH & Co. KG
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52355 Düren · Germany
www.mn-net.com

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FR Tel.: +33 388 68 22 68 sales-fr@mn-net.com
US Tel.: +1 888 321 62 24 sales-us@mn-net.com

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

 **avantor™**



M6151

R → 11/15/25

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

Certificate of Analysis

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

>>> Continued on page 2 >>>

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

 **avantorsm**



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

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

>>> Continued on page 3 >>>

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



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

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

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

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

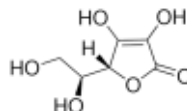
W3074 Rec. on 01/16/24 by IZ

Certificate of Analysis

Product Name:

L-Ascorbic acid - ACS reagent, ≥99%

Product Number: 255564
Batch Number: MKCS4627
Brand: SIAL
CAS Number: 50-81-7
MDL Number: MFCD00064328
Formula: C₆H₈O₆
Formula Weight: 176.12 g/mol
Quality Release Date: 21 NOV 2022
Recommended Retest Date: SEP 2025



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Conforms to Requirements	Powder
Powder, Crystals, Crystalline Powder, Granules and/or Chunks		
Infrared Spectrum	Conforms to Structure	Conforms
Optical Rotation (+); c = 10%; Water	20.5 - 21.5 deg	20.7 deg
Titration by Iodine	≥ 99.0 %	99.4 %
Residue on Ignition	≤ 0.10 %	0.03 %
Iron (Fe)	≤ 0.001 %	< 0.001 %
Heavy Metals by ICP-OES	≤ 0.002 %	0.001 %
Recommended Retest Period 3 Years	-----	-----
Meets ACS Requirements	Current ACS Specification	Conforms

Larry Coers, Director
Quality Control
Milwaukee, WI US

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



**RICCA CHEMICAL COMPANY®**1490 Lammers Pike
Batesville, IN 47006<http://www.riccachemical.com>

1-888-GO-RICCA

customerservice@riccachemical.com

Certificate of Analysis

W3093
004121
04/03/2024
16

Buffer, Reference Standard, pH 7.00 ± 0.01 at 25°C (Color Coded Yellow)**Lot Number:** 4401F99**Product Number:** 1551**Manufacture Date:** JAN 08, 2024**Expiration Date:** DEC 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	

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.004	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)
1551-1	4 L natural poly	24 months
1551-1CT	4 L Cubitainer®	24 months
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 (01/08/2024)

Production Manager

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

This product was tested in an ISO 17025 Accredited Laboratory

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



Certificate of Analysis



Sodium Hydroxide (Pellets)

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

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

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

Storage: Room Temperature

Pellets

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

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.



Sodium Hydroxide (Pellets)

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

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

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

Storage: Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.

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

Item Number	ED150	Lot Number	2ND0156
Item	Edetate Disodium, Dihydrate, USP	CAS Number	6381-92-6
Molecular Formula	C ₁₀ H ₁₄ N ₂ Na ₂ O ₈ •2H ₂ O	Molecular Weight	372.24

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

Certificate of Analysis Results Entered By:

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

Certificate of Analysis Results Approved By:

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

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ



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

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

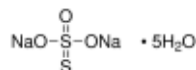
The Elemental Impurities standards implemented by USP and other Pharmaceutical Compendia reflect a growing understanding of the toxicology of trace levels of elemental impurities that can remain in drug substances originating from either raw materials or manufacturing processes. Identifying and quantifying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

Certificate of Analysis

Product Name:

Sodium thiosulfate pentahydrate - ACS reagent, ≥99.5%

Product Number: 217247
Batch Number: MKCW3077
Brand: SIGALD
CAS Number: 10102-17-7
MDL Number: MFCD00149186
Formula: Na₂O₃S₂ · 5H₂O
Formula Weight: 248.18 g/mol
Quality Release Date: 12 JUL 2024
Recommended Retest Date: JUL 2029



Test	Specification	Result
Appearance (Color)	Colorless or White	White
Appearance (Form)	Powder or Crystals or Pellets	Crystals
ICP Major Analysis	Confirmed	Confirmed
Confirms Sodium and Sulfur Components		
Titration by Iodine	99.5 - 101.0 %	100.2 %
pH	6.0 - 8.4	6.1
c = 5%; Water; At 25 Deg C		
Insoluble Matter	≤ 0.005 %	< 0.001 %
c = 10%; Water		
Nitrogen Compounds	≤ 0.002 %	< 0.002 %
Sulfate & Sulfite (as SO ₄)	≤ 0.1 %	< 0.1 %
Sulfide	Pass	Pass
Meets ACS Requirements	Current ACS Specification	Conforms
Recommended Retest Period	-----	-----
5 Years		



Larry Coers, Director
Quality Control
Milwaukee, WI US

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





Certificate of Analysis

Buffer, Reference Standard, pH 2.00 ± 0.01 at 25°C**Lot Number:** 2411E26**Product Number:** 1493**Manufacture Date:** NOV 11, 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	10	15	20	25	30	35	40	45	50
pH	1.93	1.98	1.98	2.00	2.01	2.03	2.03	2.04	2.04

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Chloride	7447-40-7	ACS
Hydrochloric Acid	7647-01-0	ACS

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	1.994	0.02	185i, 186-I-g, 186-II-g

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)
1493-1	4 L natural poly	24 months
1493-16	500 mL natural poly	24 months
1493-1CT	4 L Cubitainer®	24 months
1493-2.5	10 L Cubitainer®	24 months
1493-32	1 L natural poly	24 months

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



Jose Pena (11/11/2024)
Operations Manager

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.



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 Na_2CO_3
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	$\leq 0.03 \%$	0.003 %
Chloride	$\leq 0.001 \%$	0.0003 %
Heavy Metals (as Pb)	$\leq 0.0005 \%$	0.0001 %
Insolubles	$\leq 0.01 \%$	0.001 %
Iron	$\leq 0.0005 \%$	0.0001 %
Loss on Heating	$\leq 1.0 \%$	0.03 %
Magnesium	$\leq 0.005 \%$	0.001 %
Phosphate	$\leq 0.001 \%$	0.001 %
Potassium	$\leq 0.005 \%$	0.003 %
Purity	$\geq 99.5 \%$	100.0 %
Silica	$\leq 0.005 \%$	0.001 %
Sulfur Compounds	$\leq 0.003 \%$	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.

Certificate of Analysis

Sodium Hypochlorite Solution, 5% available Chlorine

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

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

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

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

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

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

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

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

Jose Pena (01/17/2025)
Operations Manager

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

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](https://www.inorganicventures.com); info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 02, 2024

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

11.2 Lot Expiration Date

- **April 02, 2029**

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Thomas Kozikowski
Stock VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
<http://www.riccachemical.com>
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Buffer, Reference Standard, pH 10.00 ± 0.01 at 25°C (Color Coded Blue)

Lot Number: 2410F80

Product Number: 1601

Manufacture Date: OCT 09, 2024

Expiration Date: MAR 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	50
pH	10.31	10.23	10.17	10.11	10.05	10.00	9.95	9.91	9.87	9.81

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Carbonate	497-19-8	ACS
Sodium Bicarbonate	144-55-8	ACS
Sodium Hydroxide	1310-73-2	Reagent
Preservative	Proprietary	
Blue Dye	Proprietary	

Test	Specification	Result
Appearance	Blue liquid	Passed

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	10.009	0.02	186-I-g, 186-II-g, 191d

Specification	Reference
Commercial Buffer Solutions	
Buffer C	ASTM (D 1293 B)
Buffer C	ASTM (D 5464)
	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)
1601-1	4 L natural poly	18 months
1601-16	500 mL natural poly	18 months
1601-1CT	4 L Cubitainer®	18 months
1601-2.5	10 L Cubitainer®	18 months
1601-32	1 L natural poly	18 months
1601-5	20 L Cubitainer®	18 months

Version: 1.3

Lot Number: 2410F80

Product Number: 1601

Page 1 of 2

Certificate of Analysis



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

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

Internal ID #: 710

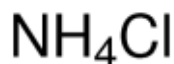
Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA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

W3196 Received on 03/19/2025 by IZ

Certificate of Analysis

Product Name:

Ammonium chloride - ACS reagent, ≥99.5%



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

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



Larry Coers, Director

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



Certificate of Analysis

Product Number: 213330
Batch Number: MKCV1009

Quality Control
Milwaukee, WI US

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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	

W3198 Received on 4/11/2025 by IZ

3050 Spruce Street, Saint Louis, MO 63103, USA

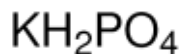
Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:

Potassium phosphate monobasic - ACS reagent, ≥99.0%

Product Number: P0662
Batch Number: MKCW6723
Brand: SIGALD
CAS Number: 7778-77-0
MDL Number: MFCD00011401
Formula: H₂KO₄P
Formula Weight: 136.09 g/mol
Quality Release Date: 16 OCT 2024
Recommended Retest Date: OCT 2028



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Crystals
Assay	≥ 99.0 %	99.8 %
Insoluble Matter	≤ 0.01 %	< 0.01 %
Loss on Drying	≤ 0.2 %	< 0.1 %
At 105°C		
pH	4.1 - 4.5	4.5
(c = 5%, 25 deg C)		
Chloride Content	≤ 0.001 %	< 0.001 %
Sulfate (SO ₄)	≤ 0.003 %	< 0.003 %
Heavy Metals	≤ 0.001 %	< 0.001 %
by ICP		
Iron (Fe)	≤ 0.002 %	< 0.001 %
Sodium (Na)	≤ 0.005 %	< 0.001 %
Recommended Retest Period	-----	-----
4 Years		



Larry Coers, Director
Quality Control
Milwaukee, WI US

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Material
Material Description
Grade

BDH9312-2.5KG
COPPER SULFATE CRYST 2500GM
U S P REAGENT (ACS GRADE)

Batch
Reassay Date
CAS Number
Molecular Formula
Molecular Mass

24H0956271
05/31/2027
7758-99-8
CuSO₄.5H₂O
249.68

Date of Manufacture
Storage

05/01/2024
Room Temperature

Characteristics	Specifications	Measured Values
Appearance	Blue crystals	Blue crystals
Calcium	<= 0.005 %	0.003 %
Chloride	<= 0.001 %	0.0001 %
Insolubles	<= 0.005 %	0.001 %
Iron	<= 0.003 %	0.001 %
Nickel	<= 0.005 %	0.003 %
Nitrogen Compounds (as N)	<= 0.002 %	0.001 %
Potassium	<= 0.01 %	0.0004 %
Purity	98.0 - 102.0 %	99.7 %
Sodium	<= 0.02 %	0.003 %

Extra Description: Meets Reagent Specifications for testing USP/NF monographs

CUSTOMER PART# BDH9312-2.5KG

Internal ID #: 793

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



Certificate of Analysis

Buffer, Reference Standard, pH 12.00 ± 0.01 at 25°C**Lot Number:** 2504F20**Product Number:** 1615**Manufacture Date:** APR 08, 2025**Expiration Date:** SEP 2026

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

°C	15	20	25	30	35	40
pH	12.35	12.17	11.99	11.78	11.62	11.46

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Chloride	7447-40-7	ACS
Sodium Hydroxide	1310-73-2	Reagent (from ACS)

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	12.009	0.02	186-I-g, 186-II-g, 191d

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)
1615-1	4 L natural poly	18 months
1615-16	500 mL clear PET-G	18 months
1615-5	20 L Cubitainer®	18 months

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



Jose Pena (04/08/2025)
Operations Manager

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.

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

avantor™



W3204
084K: 09/22/2025
38

Material No.: 9262-03
Batch No.: 25C0362005
Manufactured Date: 2025-01-29
Expiration Date: 2026-04-30
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	≤ 5	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	100 %
Color (APHA)	≤ 10	10
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	$< 0.01 \%$

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

J. Croak

Jamie Croak
Director Quality Operations, Bioscience Production

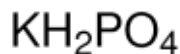
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Certificate of Analysis

Product Name:

Potassium phosphate monobasic - ACS reagent, ≥99.0%

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



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



Larry Coers, Director
Quality Control
Milwaukee, WI US

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





SHIPPING DOCUMENTS



284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 788-9222
www.chemtech.net

CHAIN OF CUSTODY RECORD

Alliance Project Number: AEC-2025-0013

COC Number:

CLIENT INFORMATION

COMPANY: Durham School Services
ADDRESS: 82 Nathans Lane
CITY: Madison STATE: CT ZIP:
ATTENTION: daniel.maalouf@alliancetg.com
PHONE: FAX:

PROJECT INFORMATION

PROJECT NAME: CSC 4016 Madison
PROJECT #: AEC-2025-0013 LOCATION: Madison
PROJECT MANAGER:
E-MAIL:
PHONE: 864-704-7984 FAX:

BILLING INFORMATION

BILL TO: candice.caviness@alliancetg.com PO#
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: DAYS*
HARD COPY: DAYS*
EDD: DAYS*
* TO BE APPROVED BY ALLIANCE
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESEULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other _____
☐ EDD Format _____

ANALYSIS

COD	Total OG	pH	TSS	Total Phos	TKN	Nitrate as Nitrogen	Cu, pb, zn
1	2	3	4	5	6	7	8
1	2	3	4	5	6	7	8

PRESERVATIVES

COMMENTS

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP GRAB	SAMPLE COLLECTION DATE TIME	# of Bottles	1	2	3	4	5	6	7	8	9
1.	SW-3	SW	X	6/10/25 12:05	5	1	1	1	1	1	1	1	1	
2.														
3.														
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	RECEIVED BY
1. Daniel Maalouf ATG		1.
RELINQUISHED BY	DATE/TIME	RECEIVED BY
2.	6/11/25 7:55	2. <i>yg</i>
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY
3.		3. <i>yg</i>

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 3.0
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?: _____
Comments:

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
ALLIANCE: ☐ Picked Up ☐ Overnight

Shipment Complete
☐ YES ☐ NO

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

Laboratory Certification

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