

Cover Page

Order ID : Q2033

Project ID : 540 Degraw St, Brooklyn, NY - E9309

Client : ENTACT

Lab Sample Number

Q2033-01

Client Sample Number

TW-WTS-08

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

Signature : _____

Date: 5/22/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

DATA REPORTING QUALIFIERS- INORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2033

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 05/22/2025

LAB CHRONICLE

OrderID:	Q2033	OrderDate:	5/13/2025 4:02:00 PM
Client:	ENTACT	Project:	540 Degraw St, Brooklyn, NY - E9309
Contact:	Jarod Stanfield	Location:	L41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2033-01	TW-WTS-08	WATER			05/12/25 15:00			05/13/25
			Anions Group2	300.0			05/14/25 12:58	
			BOD5	SM5210 B			05/14/25 14:30	
			Flash Point	1010B			05/15/25 09:10	
			Hexavalent Chromium	7196A			05/14/25 09:37	
			pH	9040C			05/15/25 08:30	
			TKN	SM4500-N Org C-11 plus NH3 B plus G-11		05/19/25	05/19/25 15:39	
			Total Nitrogen	Cal			05/19/25 16:28	
			TS	SM2540 B			05/15/25 11:00	
			TSS	SM2540 D			05/16/25 11:25	
Q2033-01DL	TW-WTS-08DL	WATER			05/12/25 15:00			05/13/25
			Anions Group2	300.0			05/14/25 14:03	
			TKN	SM4500-N Org C-11 plus NH3 B plus G-11		05/19/25	05/19/25 16:28	



SAMPLE DATA

Report of Analysis

Client:	ENTACT	Date Collected:	05/12/25 15:00
Project:	540 Degraw St, Brooklyn, NY - E9309	Date Received:	05/13/25
Client Sample ID:	TW-WTS-08	SDG No.:	Q2033
Lab Sample ID:	Q2033-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	19.3	OR	1	0.19	0.60	mg/L		05/14/25 12:58	300.0
Nitrite	0.42	J	1	0.074	0.60	mg/L		05/14/25 12:58	300.0
Nitrate	0.28	J	1	0.095	0.50	mg/L		05/14/25 12:58	300.0
BOD5	26.4		1	0.20	2.00	mg/L		05/14/25 14:30	SM 5210 B-16
Flash Point	>212		1	0	0	o F		05/15/25 09:10	1010B
Dissolved Hexavalent Chromium	0.0030	U	1	0.0030	0.010	mg/L		05/14/25 09:37	7196A
pH	12.3	H	1	0	0	pH		05/15/25 08:30	9040C
TKN	11.5	OR	1	0.11	0.50	mg/L	05/19/25 09:20	05/19/25 15:39	SM4500-N Org C-11 plus NH3 B plus G-11
Nitrogen	13.1		1	0.31	1.30	mg/L		05/19/25 16:28	SM 4500-N Org C-11 plus NH3 B plus G-11
TS	1790		1	1.00	5.00	mg/L		05/15/25 11:00	SM 2540 B-15
TSS	1.80	J	1	1.00	4.00	mg/L		05/16/25 11:25	SM 2540 D-15

Comments: Other method reference for flash point : Pensky-Martens Closed Cup Flash Point ASTM D 93 - IP 34, pH result reported at temperature

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	ENTACT	Date Collected:	05/12/25 15:00
Project:	540 Degraw St, Brooklyn, NY - E9309	Date Received:	05/13/25
Client Sample ID:	TW-WTS-08DL	SDG No.:	Q2033
Lab Sample ID:	Q2033-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	17.9	D	5	0.95	3.00	mg/L		05/14/25 14:03	300.0
TKN	12.4	D	2	0.22	1.00	mg/L	05/19/25 09:20	05/19/25 16:28	SM4500-N Org C-11 plus NH3 B plus G-11

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits



QC RESULT SUMMARY

Initial and Continuing Calibration Verification

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

RunNo.: LB135762

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	10.2	10	102	90-110	04/22/2025
Chloride	mg/L	3.1	3	103	90-110	04/22/2025
Fluoride	mg/L	2	2	100	90-110	04/22/2025
Nitrite	mg/L	3.1	3	103	90-110	04/22/2025
Nitrate	mg/L	2.6	2.5	104	90-110	04/22/2025
Sulfate	mg/L	15.1	15	101	90-110	04/22/2025
Orthophosphate as P	mg/L	5.2	5	104	90-110	04/22/2025
Sample ID: CCV1						
Bromide	mg/L	10.1	10	101	90-110	05/14/2025
Chloride	mg/L	3.1	3	103	90-110	05/14/2025
Fluoride	mg/L	2	2	100	90-110	05/14/2025
Nitrite	mg/L	3	3	100	90-110	05/14/2025
Nitrate	mg/L	2.5	2.5	100	90-110	05/14/2025
Sulfate	mg/L	14.6	15	97	90-110	05/14/2025
Orthophosphate as P	mg/L	4.9	5	98	90-110	05/14/2025
Sample ID: CCV2						
Bromide	mg/L	10	10	100	90-110	05/14/2025
Chloride	mg/L	3.1	3	103	90-110	05/14/2025
Fluoride	mg/L	2	2	100	90-110	05/14/2025
Nitrite	mg/L	3	3	100	90-110	05/14/2025
Nitrate	mg/L	2.5	2.5	100	90-110	05/14/2025
Sulfate	mg/L	14.7	15	98	90-110	05/14/2025
Orthophosphate as P	mg/L	5.1	5	102	90-110	05/14/2025

Initial and Continuing Calibration Verification

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

RunNo.: LB135773

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Hexavalent Chromium	mg/L	0.497	0.5	99	90-110	05/14/2025
Sample ID: CCV1 Hexavalent Chromium	mg/L	0.497	0.5	99	90-110	05/14/2025
Sample ID: CCV2 Hexavalent Chromium	mg/L	0.498	0.5	100	90-110	05/14/2025

Initial and Continuing Calibration Verification

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

RunNo.: LB135781

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV pH	pH	7.02	7	100	90-110	05/15/2025
Sample ID: CCV1 pH	pH	2.01	2.00	101	90-110	05/15/2025
Sample ID: CCV2 pH	pH	12.02	12.00	100	90-110	05/15/2025

Initial and Continuing Calibration Verification

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

RunNo.: LB135789

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV						
Flash Point	o F	82.1	81	101	78-84	05/15/2025

Initial and Continuing Calibration Verification

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

RunNo.: LB135830

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: TKN	ICV1	mg/L	4.9	5	98	90-110	05/19/2025
Sample ID: TKN	CCV1	mg/L	5	5	100	90-110	05/19/2025
Sample ID: TKN	CCV2	mg/L	5.1	5	102	90-110	05/19/2025
Sample ID: TKN	CCV3	mg/L	5.1	5	102	90-110	05/19/2025

Initial and Continuing Calibration Verification

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

RunNo.: LB135830

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

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

RunNo.: LB135762

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	04/22/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	04/22/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	04/22/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	04/22/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	04/22/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	04/22/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	04/22/2025
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	05/14/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	05/14/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	05/14/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	05/14/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	05/14/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	05/14/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	05/14/2025
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	05/14/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	05/14/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	05/14/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	05/14/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	05/14/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	05/14/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	05/14/2025

Initial and Continuing Calibration Blank Summary

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

RunNo.: LB135773

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	05/14/2025
Sample ID: CCB1 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	05/14/2025
Sample ID: CCB2 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	05/14/2025

Initial and Continuing Calibration Blank Summary

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

RunNo.: LB135830

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	05/19/2025
Sample ID: CCB1 TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	05/19/2025
Sample ID: CCB2 TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	05/19/2025
Sample ID: CCB3 TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	05/19/2025

Initial and Continuing Calibration Blank Summary

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

RunNo.: LB135830

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

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB135762BLW							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	05/14/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	05/14/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	05/14/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	05/14/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	05/14/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	05/14/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	05/14/2025
Sample ID: lb135773BL							
Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.003	0.01	05/14/2025
Sample ID: LB135774BL							
BOD5	mg/L	< 0.2000	0.2000	U	0.20	2.0	05/14/2025
Sample ID: LB135788BL							
TS	mg/L	< 2.5000	2.5000	U	1	5	05/15/2025
Sample ID: LB135797BL							
TSS	mg/L	1	2.0000	J	1	4	05/16/2025
Sample ID: PB168059BL							
TKN	mg/L	< 0.2500	0.2500	U	0.11	0.5	05/19/2025

Matrix Spike Summary

Client:	ENTACT	SDG No.:	Q2033
Project:	540 Degraw St, Brooklyn, NY - E9309	Sample ID:	Q2033-01
Client ID:	TW-WTS-08MS	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	11.1		0.81	J	10	1	103		05/14/2025
Chloride	mg/L	80-120	21.9	OR	19.3	OR	3	1	87		05/14/2025
Fluoride	mg/L	80-120	2.40		0.61		2	1	90		05/14/2025
Nitrite	mg/L	80-120	3.40		0.42	J	3	1	99		05/14/2025
Nitrate	mg/L	80-120	2.70		0.28	J	2.5	1	97		05/14/2025
Sulfate	mg/L	80-120	332	OR	329	OR	15	1	20	*	05/14/2025
Orthophosphate as P	mg/L	80-120	1.40		0.34	U	5	1	28	*	05/14/2025

Matrix Spike Summary

Client:	ENTACT	SDG No.:	Q2033
Project:	540 Degraw St, Brooklyn, NY - E9309	Sample ID:	Q2033-01
Client ID:	TW-WTS-08MSD	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	11.3		0.81	J	10	1	105		05/14/2025
Chloride	mg/L	80-120	22.0	OR	19.3	OR	3	1	90		05/14/2025
Fluoride	mg/L	80-120	2.50		0.61		2	1	95		05/14/2025
Nitrite	mg/L	80-120	3.50		0.42	J	3	1	103		05/14/2025
Nitrate	mg/L	80-120	2.80		0.28	J	2.5	1	101		05/14/2025
Sulfate	mg/L	80-120	332	OR	329	OR	15	1	20	*	05/14/2025
Orthophosphate as P	mg/L	80-120	1.20		0.34	U	5	1	24	*	05/14/2025

Matrix Spike Summary

Client:	ENTACT	SDG No.:	Q2033
Project:	540 Degraw St, Brooklyn, NY - E9309	Sample ID:	Q2067-01
Client ID:	303-PPR-FRACMS	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	5.70		0.92		5	1	96		05/19/2025

Matrix Spike Summary

Client:	ENTACT	SDG No.:	Q2033
Project:	540 Degraw St, Brooklyn, NY - E9309	Sample ID:	Q2067-01
Client ID:	303-PPR-FRACMSD	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	5.40		0.92		5	1	90		05/19/2025

Duplicate Sample Summary

Client: ENTACT Project: 540 Degraw St, Brooklyn, NY - E9309 Client ID: DSN003DUP	SDG No.: Q2033 Sample ID: Q2031-05 Percent Solids for Spike Sample: 0
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Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
TSS	mg/L	+/-5	5.80		5.90		1	1.71		05/16/2025

Duplicate Sample Summary

Client: ENTACT	SDG No.: Q2033
Project: 540 Degraw St, Brooklyn, NY - E9309	Sample ID: Q2033-01
Client ID: TW-WTS-08DUP	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	12.3		12.3		1	0.08		05/15/2025
TS	mg/L	+/-5	1790		1830		1	1.99		05/15/2025
Flash Point	o F	+/-2	>212.0		>212.0		1	0		05/15/2025

Duplicate Sample Summary

Client: ENTACT Project: 540 Degraw St, Brooklyn, NY - E9309 Client ID: TW-WTS-08MSD	SDG No.: Q2033 Sample ID: Q2033-01 Percent Solids for Spike Sample: 0
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Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Chloride	mg/L	+/-20	21.9	OR	22.0	OR	1	0		05/14/2025
Sulfate	mg/L	+/-20	332	OR	332	OR	1	0		05/14/2025
Orthophosphate as P	mg/L	+/-20	1.40		1.20		1	15		05/14/2025
Bromide	mg/L	+/-20	11.1		11.3		1	2		05/14/2025
Nitrite	mg/L	+/-20	3.40		3.50		1	3		05/14/2025
Fluoride	mg/L	+/-20	2.40		2.50		1	4		05/14/2025
Nitrate	mg/L	+/-20	2.70		2.80		1	4		05/14/2025

Duplicate Sample Summary

Client: ENTACT Project: 540 Degraw St, Brooklyn, NY - E9309 Client ID: COMPDUP	SDG No.: Q2033 Sample ID: Q2036-02 Percent Solids for Spike Sample: 0
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Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
BOD5	mg/L	+/-20	623		641		1	2.87		05/14/2025

Duplicate Sample Summary

Client: ENTACT Project: 540 Degraw St, Brooklyn, NY - E9309 Client ID: 3139DUP	SDG No.: Q2033 Sample ID: Q2043-05 Percent Solids for Spike Sample: 0
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Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
pH	pH	+/-20	7.01		7.02		1	0.14		05/15/2025

Duplicate Sample Summary

Client:	ENTACT	SDG No.:	Q2033
Project:	540 Degraw St, Brooklyn, NY - E9309	Sample ID:	Q2044-02
Client ID:	3859DUP	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	7.80		7.81		1	0.13		05/15/2025

Duplicate Sample Summary

Client: ENTACT Project: 540 Degraw St, Brooklyn, NY - E9309 Client ID: 303-PPR-FRACDUP	SDG No.: Q2033 Sample ID: Q2067-01 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	0.92		0.93		1	1		05/19/2025

Duplicate Sample Summary

Client:	ENTACT	SDG No.:	Q2033
Project:	540 Degraw St, Brooklyn, NY - E9309	Sample ID:	Q2067-01
Client ID:	303-PPR-FRACMSD	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	5.70		5.40		1	5		05/19/2025

Laboratory Control Sample Summary

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

Run No.: LB135762

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135762BSW							
Bromide	mg/L	10	10.1		101	1	90-110	05/14/2025
Chloride	mg/L	3	3.10		103	1	90-110	05/14/2025
Fluoride	mg/L	2	2.00		100	1	90-110	05/14/2025
Nitrite	mg/L	3	3.00		100	1	90-110	05/14/2025
Nitrate	mg/L	2.5	2.50		100	1	90-110	05/14/2025
Sulfate	mg/L	15	14.7		98	1	90-110	05/14/2025
Orthophosphate as P	mg/L	5	5.00		100	1	90-110	05/14/2025

Laboratory Control Sample Summary

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

Run No.: LB135773

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	lb135773BS							
Hexavalent Chromium	mg/L	0.5	0.50		100	1	90-111	05/14/2025

Laboratory Control Sample Summary

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

Run No.: LB135774

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135774BS							
BOD5	mg/L	198	201		102	1	84.6-115.4	05/14/2025

Laboratory Control Sample Summary

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

Run No.: LB135797

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135797BS							
TSS	mg/L	550	532		97	1	90-110	05/16/2025

Laboratory Control Sample Summary

Client: ENTACT

SDG No.: Q2033

Project: 540 Degraw St, Brooklyn, NY - E9309

Run No.: LB135830

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB168059BS							
TKN	mg/L	5	4.90		98	1	90-110	05/19/2025



RAW DATA

Clear table

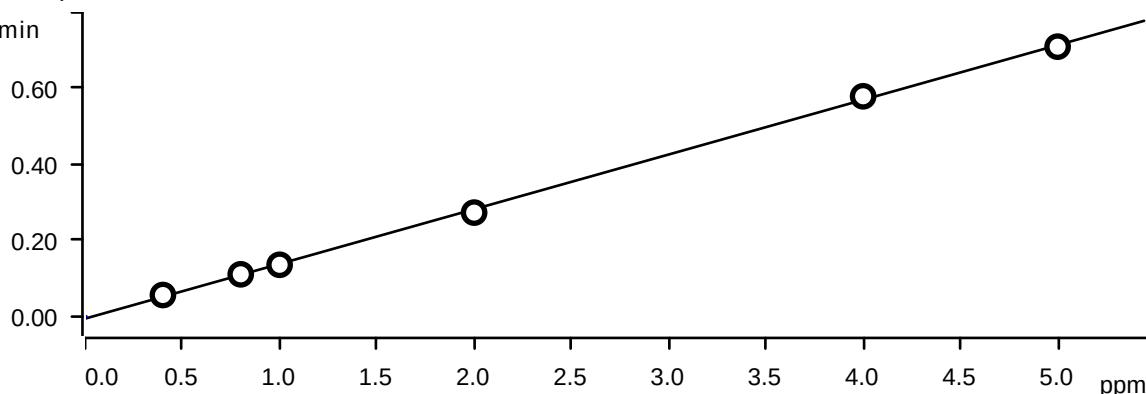
Instrument ID: IC-2 Analyst: IZ Method: 300.0 / 9056A											
ident	concentra tion F-	concentratio n CL-	concentratio on NO2	concentratio on BR-	concentratio on NO3	concentratio on HPO4	concentratio on SO4	file name	date time	Initial wt/ Final	Analyst
STD1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	IC1-042225	4/22/2025 10:37	10	NF/IZ
STD2	0.4310	0.6510	0.6550	2.1720	0.5510	1.0900	3.3660	IC1-042225	4/22/2025 10:59	10	NF/IZ
STD3	0.8100	1.2170	1.2220	4.0490	1.0110	2.0100	6.0910	IC1-042225	4/22/2025 11:20	10	NF/IZ
STD4	0.9840	1.5090	1.4980	5.0110	1.2500	2.4450	7.3690	IC1-042225	4/22/2025 11:42	10	NF/IZ
STD5	1.9380	2.9140	2.9160	9.7350	2.4240	4.8600	14.3610	IC1-042225	4/22/2025 12:03	10	NF/IZ
STD6	4.0650	5.9180	5.9150	19.7520	4.9490	10.1830	30.3800	IC1-042225	4/22/2025 12:25	10	NF/IZ
STD7	4.9720	7.5910	7.5940	25.2800	6.3160	12.4120	36.9330	IC1-042225	4/22/2025 12:46	10	NF/IZ

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

ident	Relative Error F-	Relative Error CL-	Relative Error NO2	Relative Error BR-	Relative Error NO3	Relative Error HPO4	Relative Error SO4
STD1							
STD2	7.7500	8.5000	9.1667	8.6000	10.2000	9.0000	12.2000
STD3	1.2500	1.4167	1.8333	1.2250	1.1000	0.5000	1.5167
STD4	-1.6000	0.6000	-0.1333	0.2200	0.0000	-2.2000	-1.7467
STD5	-3.1000	-2.8667	-2.8000	-2.6500	-3.0400	-2.8000	-4.2600
STD6	1.6250	-1.3667	-1.4167	-1.2400	-1.0200	1.8300	1.2667
STD7	-0.5600	1.2133	1.2533	1.1200	1.0560	-0.7040	-0.1811

Fluoride (Anions)

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



Function: $A = - 6.13443\text{E-}3 + 0.0144025 \times Q$

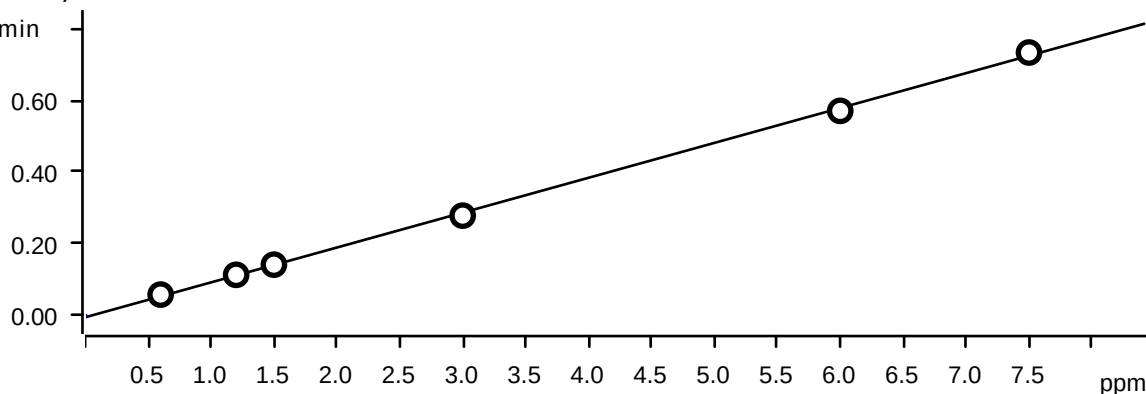
Relative standard deviation 2.337762 %

Correlation coefficient 0.999714

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	2025-04-22 10:37:58 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.056	STD2	2025-04-22 10:59:20 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.110	STD3	2025-04-22 11:20:44 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.136	STD4	2025-04-22 11:42:09 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.273	STD5	2025-04-22 12:03:34 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.579	STD6	2025-04-22 12:25:01 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.710	STD7	2025-04-22 12:46:28 UTC-4	used

Chloride (Anions)

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

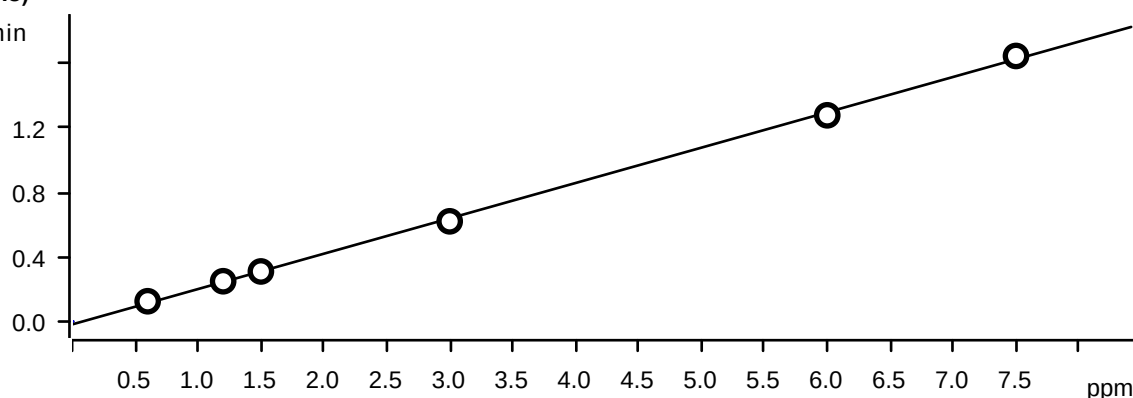


Function: $A = - 5.12446\text{E-}3 + 9.72422\text{E-}3 \times Q$

Relative standard deviation 2.452549 %

Correlation coefficient 0.999683

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	2025-04-22 10:37:58 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.058	STD2	2025-04-22 10:59:20 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.113	STD3	2025-04-22 11:20:44 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.142	STD4	2025-04-22 11:42:09 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.278	STD5	2025-04-22 12:03:34 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.570	STD6	2025-04-22 12:25:01 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.733	STD7	2025-04-22 12:46:28 UTC-4	used

Nitrite (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0187238 + 0.0219021 \times Q$

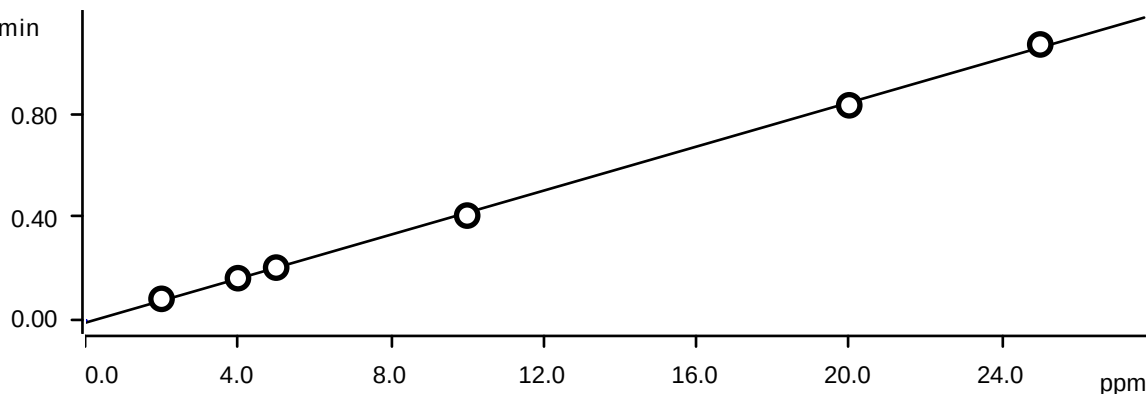
Relative standard deviation 2.531721 %

Correlation coefficient 0.999669

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	2025-04-22 10:37:58 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.125	STD2	2025-04-22 10:59:20 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.249	STD3	2025-04-22 11:20:44 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.309	STD4	2025-04-22 11:42:09 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.620	STD5	2025-04-22 12:03:34 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.277	STD6	2025-04-22 12:25:01 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.644	STD7	2025-04-22 12:46:28 UTC-4	used

Bromide (Anions)

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



Function: $A = -9.36439E-3 + 4.26318E-3 \times Q$

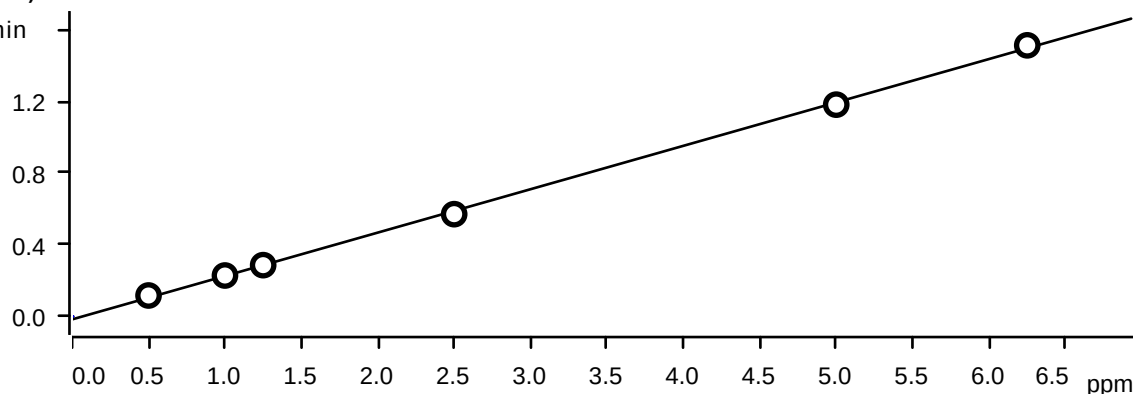
Relative standard deviation: 2.280508 %

Correlation coefficient: 0.999728

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	2025-04-22 10:37:58 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.083	STD2	2025-04-22 10:59:20 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.163	STD3	2025-04-22 11:20:44 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.204	STD4	2025-04-22 11:42:09 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.406	STD5	2025-04-22 12:03:34 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.833	STD6	2025-04-22 12:25:01 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.068	STD7	2025-04-22 12:46:28 UTC-4	used

Nitrate (Anions)

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

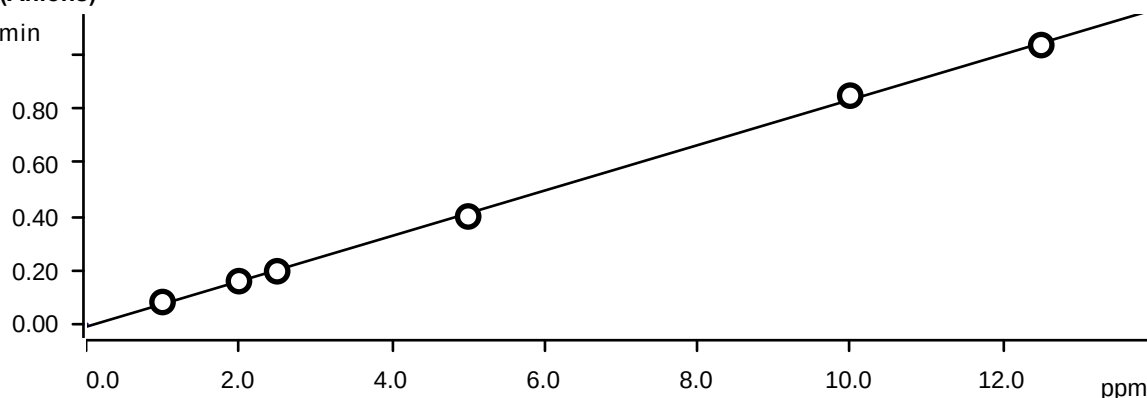


Function: $A = -0.0163950 + 0.0241967 \times Q$

Relative standard deviation: 2.309177 %

Correlation coefficient 0.999724

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	2025-04-22 10:37:58 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.117	STD2	2025-04-22 10:59:20 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.228	STD3	2025-04-22 11:20:44 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.286	STD4	2025-04-22 11:42:09 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.570	STD5	2025-04-22 12:03:34 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.181	STD6	2025-04-22 12:25:01 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.512	STD7	2025-04-22 12:46:28 UTC-4	used

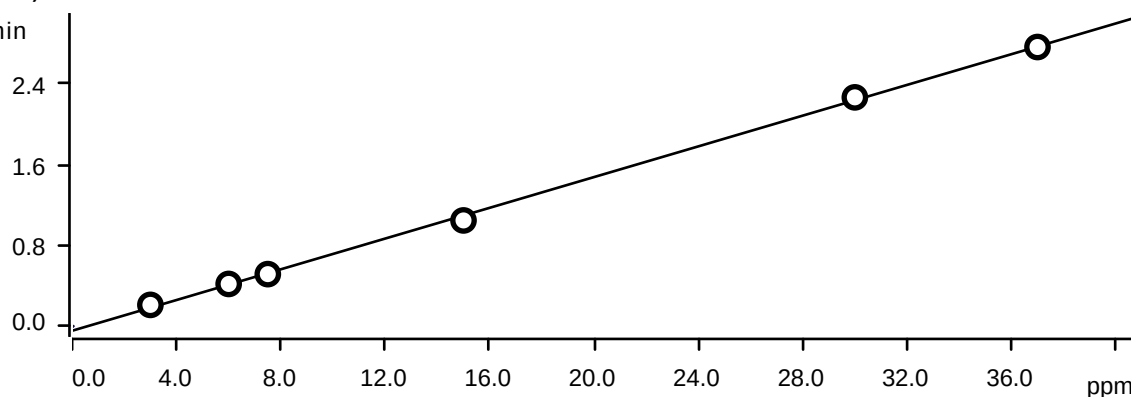
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -9.96993E-3 + 8.43655E-3 \times Q$

Relative standard deviation 2.492252 %

Correlation coefficient 0.999676

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	2025-04-22 10:37:58 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.082	STD2	2025-04-22 10:59:20 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.160	STD3	2025-04-22 11:20:44 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.196	STD4	2025-04-22 11:42:09 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.400	STD5	2025-04-22 12:03:34 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.849	STD6	2025-04-22 12:25:01 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.037	STD7	2025-04-22 12:46:28 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0453007 + 7.61540E-3 \times Q$

Relative standard deviation 2.675209 %

Correlation coefficient 0.999634

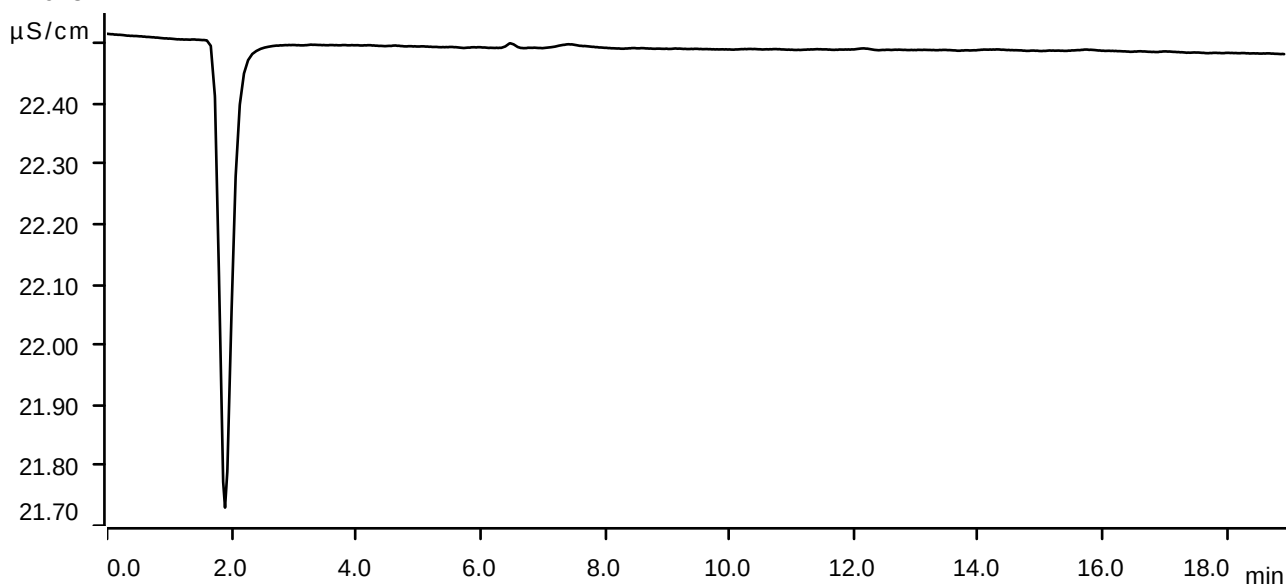
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2025-04-22 10:37:58 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.211	STD2	2025-04-22 10:59:20 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.419	STD3	2025-04-22 11:20:44 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.516	STD4	2025-04-22 11:42:09 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.048	STD5	2025-04-22 12:03:34 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.268	STD6	2025-04-22 12:25:01 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.767	STD7	2025-04-22 12:46:28 UTC-4	used

Sample data

Ident STD1
Sample type Standard 1
Determination start 2025-04-22 10:37:58 UTC-4
Method IC1-042225
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 11.32 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions

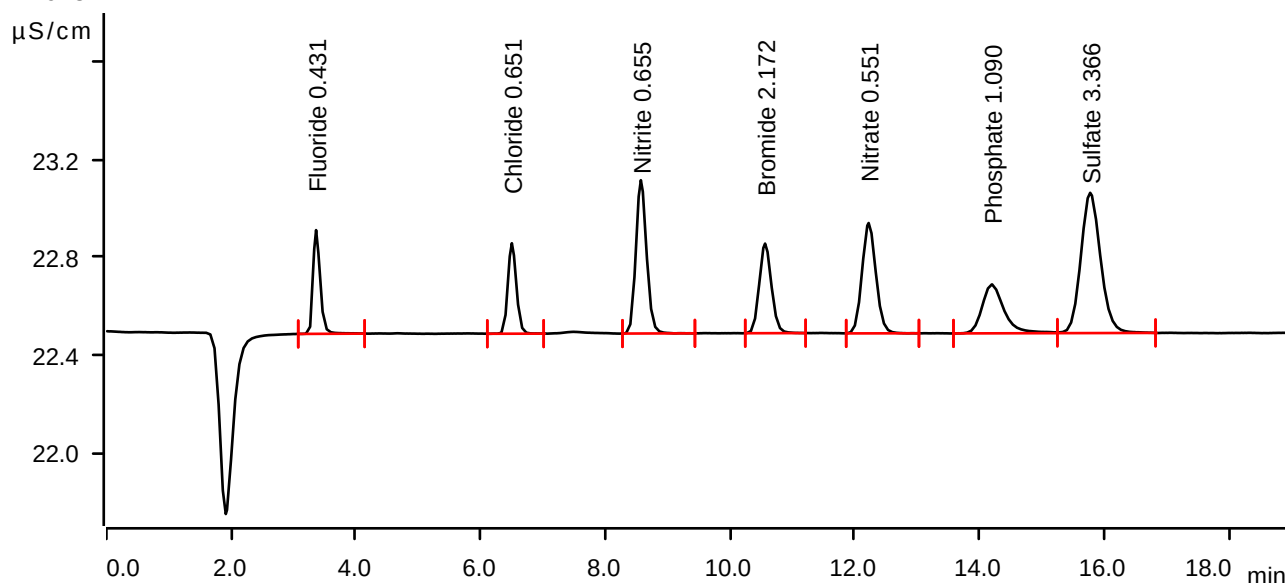
Sample data

Ident STD2
Sample type Standard 2
Determination start 2025-04-22 10:59:20 UTC-4
Method IC1-042225
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 11.26 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.363	0.0560	0.425	0.431	Fluoride
2	6.502	0.0581	0.371	0.651	Chloride
3	8.570	0.1247	0.628	0.655	Nitrite
4	10.562	0.0832	0.367	2.172	Bromide
5	12.222	0.1168	0.452	0.551	Nitrate
6	14.197	0.0820	0.201	1.090	Phosphate
7	15.773	0.2111	0.575	3.366	Sulfate

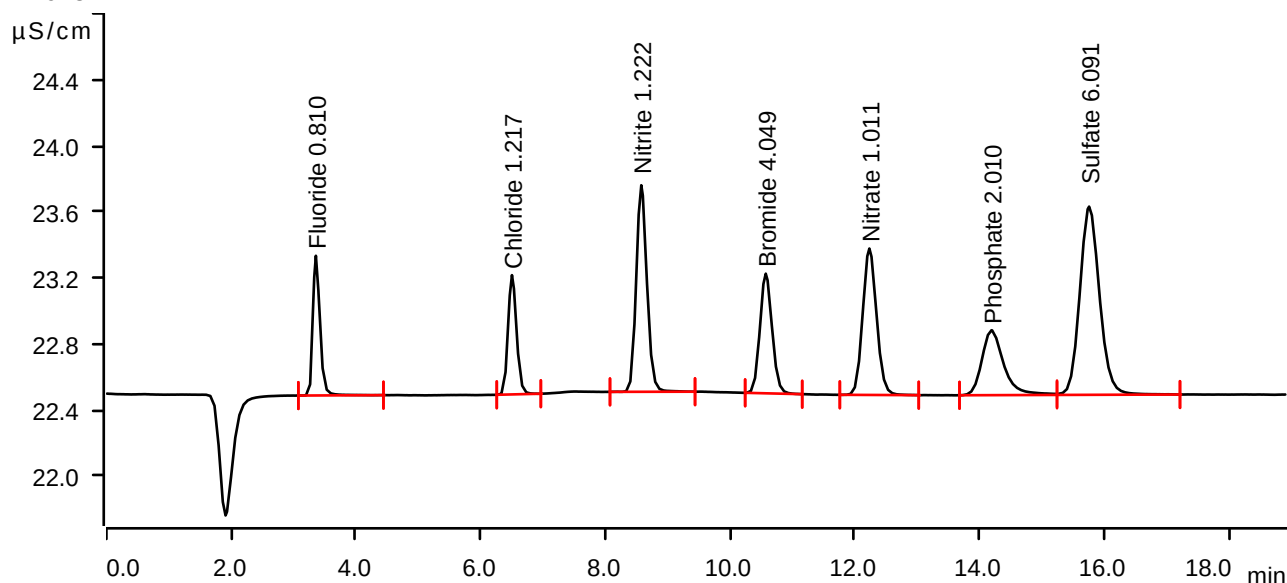
Sample data

Ident STD3
Sample type Standard 3
Determination start 2025-04-22 11:20:44 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.360	0.1105	0.845	0.810	Fluoride
2	6.503	0.1132	0.722	1.217	Chloride
3	8.577	0.2488	1.250	1.222	Nitrite
4	10.572	0.1632	0.724	4.049	Bromide
5	12.233	0.2282	0.886	1.011	Nitrate
6	14.192	0.1596	0.393	2.010	Phosphate
7	15.757	0.4185	1.139	6.091	Sulfate

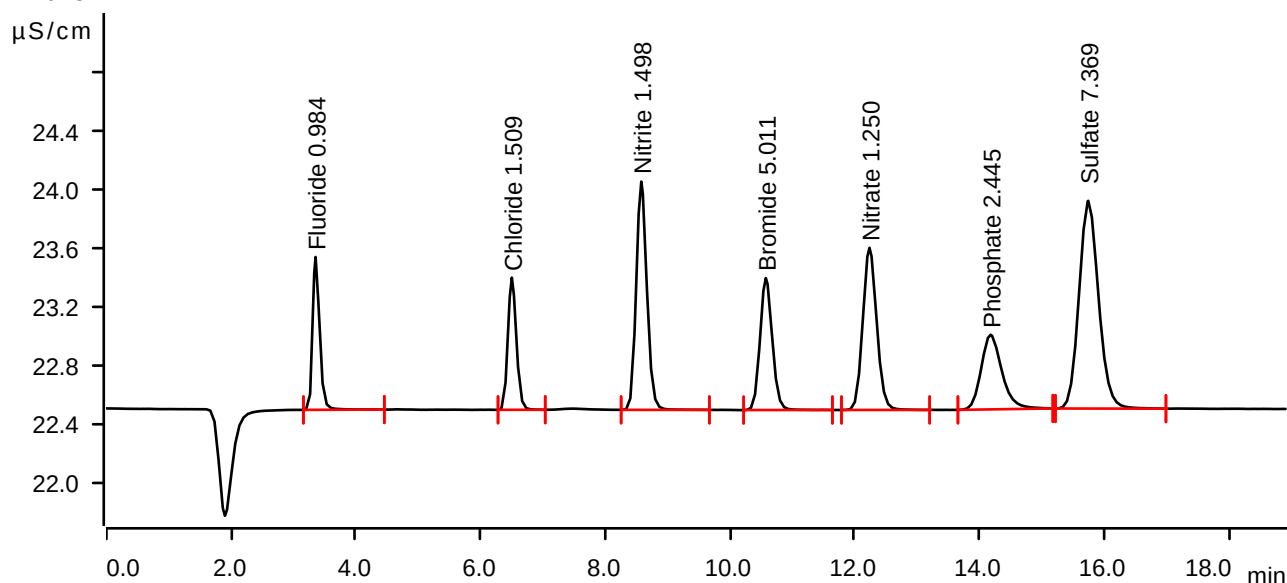
Sample data

Ident STD4
Sample type Standard 4
Determination start 2025-04-22 11:42:09 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.355	0.1356	1.044	0.984	Fluoride
2	6.502	0.1416	0.903	1.509	Chloride
3	8.577	0.3094	1.559	1.498	Nitrite
4	10.573	0.2043	0.902	5.011	Bromide
5	12.235	0.2860	1.108	1.250	Nitrate
6	14.177	0.1963	0.510	2.445	Phosphate
7	15.743	0.5159	1.419	7.369	Sulfate

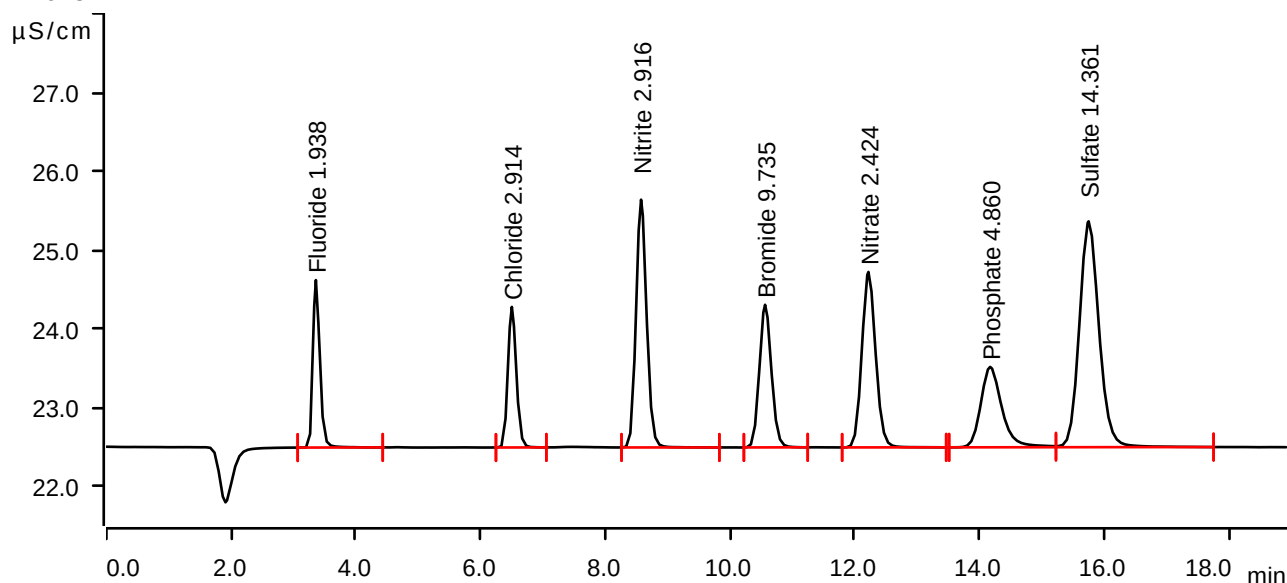
Sample data

Ident STD5
Sample type Standard 5
Determination start 2025-04-22 12:03:34 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.360	0.2730	2.125	1.938	Fluoride
2	6.502	0.2783	1.784	2.914	Chloride
3	8.573	0.6200	3.144	2.916	Nitrite
4	10.562	0.4057	1.810	9.735	Bromide
5	12.218	0.5702	2.226	2.424	Nitrate
6	14.170	0.4000	1.020	4.860	Phosphate
7	15.748	1.0484	2.866	14.361	Sulfate

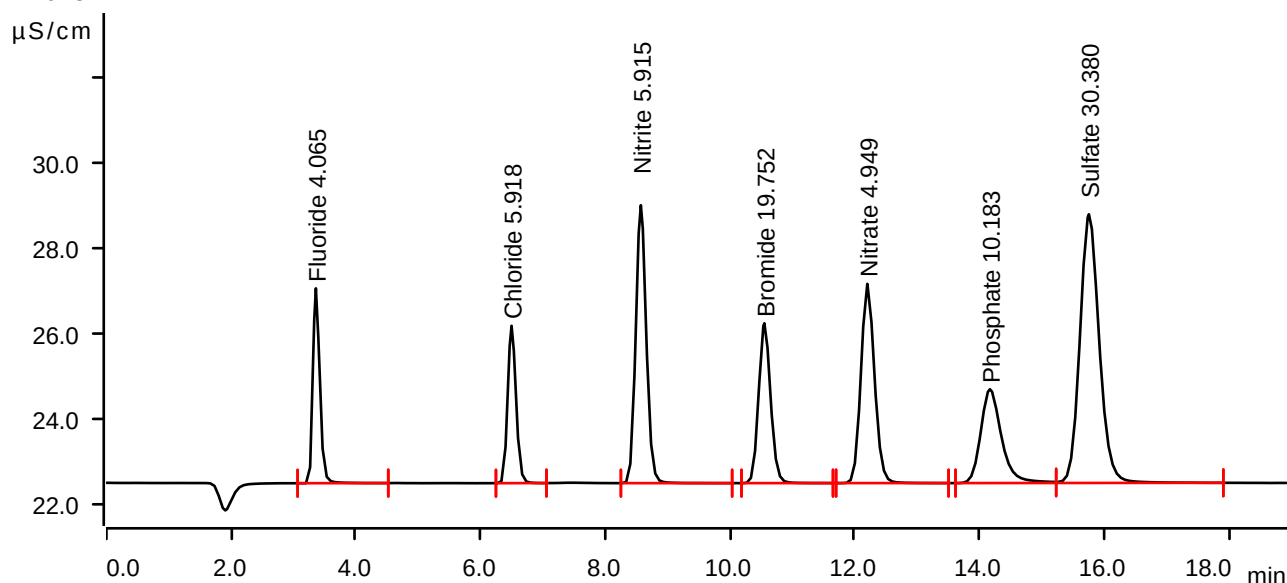
Sample data

Ident STD6
Sample type Standard 6
Determination start 2025-04-22 12:25:01 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.360	0.5793	4.564	4.065	Fluoride
2	6.497	0.5704	3.686	5.918	Chloride
3	8.570	1.2768	6.510	5.915	Nitrite
4	10.550	0.8327	3.746	19.752	Bromide
5	12.202	1.1810	4.667	4.949	Nitrate
6	14.167	0.8491	2.199	10.183	Phosphate
7	15.753	2.2683	6.294	30.380	Sulfate

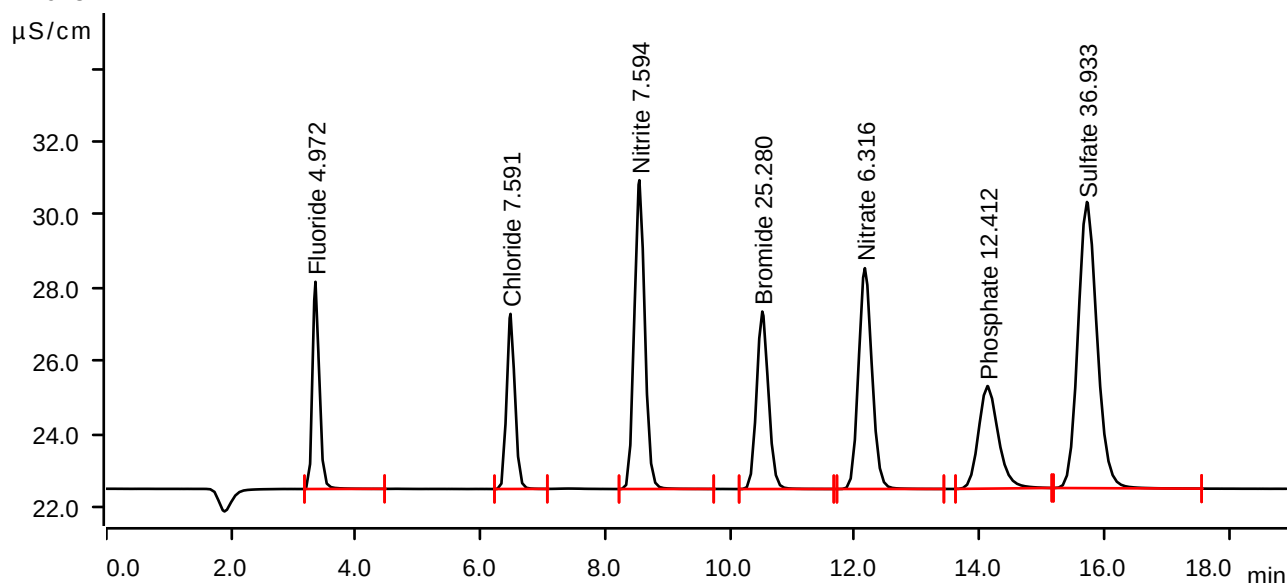
Sample data

Ident STD7
Sample type Standard 7
Determination start 2025-04-22 12:46:28 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.353	0.7100	5.662	4.972	Fluoride
2	6.480	0.7331	4.785	7.591	Chloride
3	8.547	1.6445	8.440	7.594	Nitrite
4	10.517	1.0684	4.850	25.280	Bromide
5	12.162	1.5118	6.035	6.316	Nitrate
6	14.127	1.0372	2.803	12.412	Phosphate
7	15.722	2.7673	7.822	36.933	Sulfate

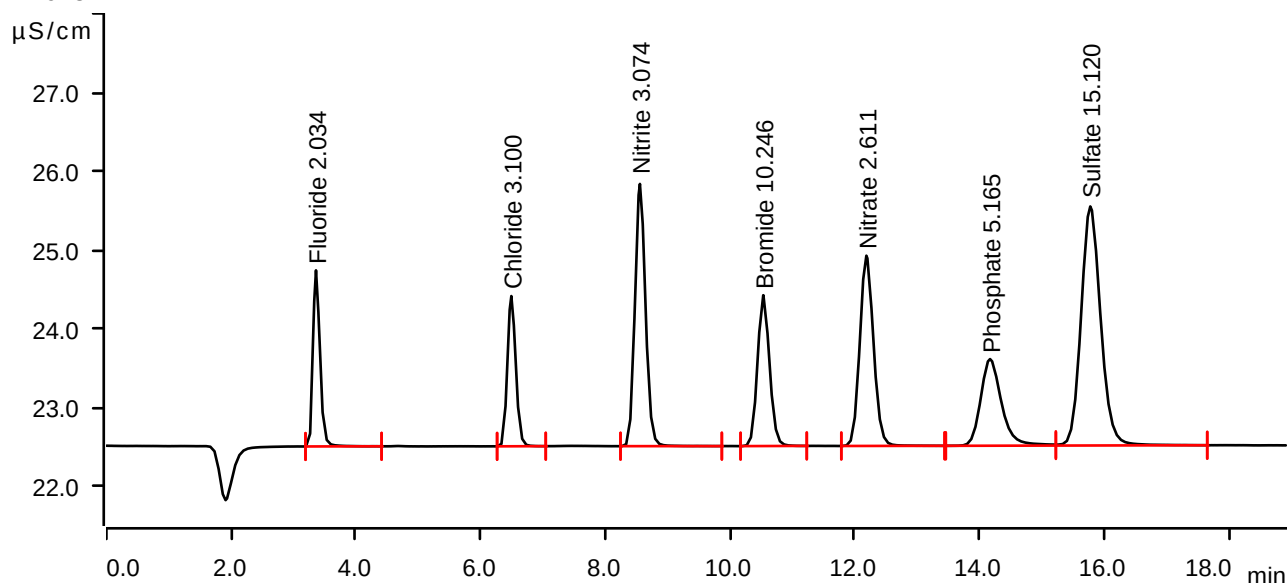
Sample data

Ident ICV
Sample type Check standard 1
Determination start 2025-04-22 13:07:56 UTC-4
Method IC1-042225
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	3.362	0.2867	2.234	2.034	Fluoride
2	6.493	0.2963	1.906	3.100	Chloride
3	8.555	0.6546	3.328	3.074	Nitrite
4	10.532	0.4274	1.914	10.246	Bromide
5	12.185	0.6154	2.414	2.611	Nitrate
6	14.168	0.4257	1.100	5.165	Phosphate
7	15.775	1.1062	3.034	15.120	Sulfate

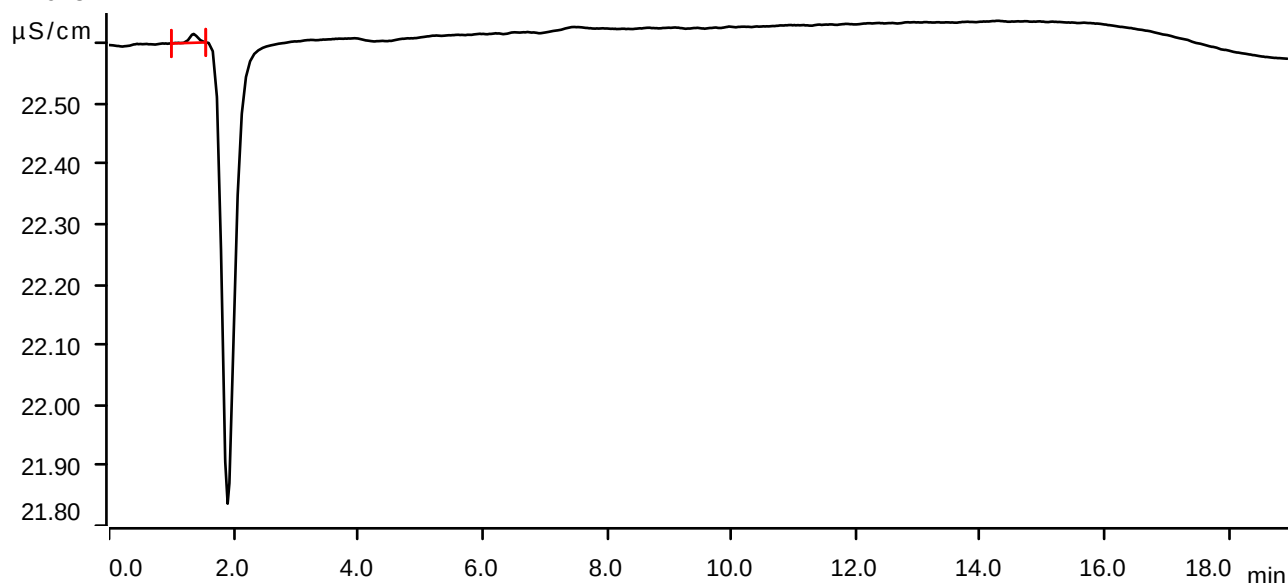
Sample data

Ident ICB
Sample type Sample
Determination start 2025-04-22 13:58:31 UTC-4
Method IC1-042225
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 11.32 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	1.362	0.0024	0.015	invalid	

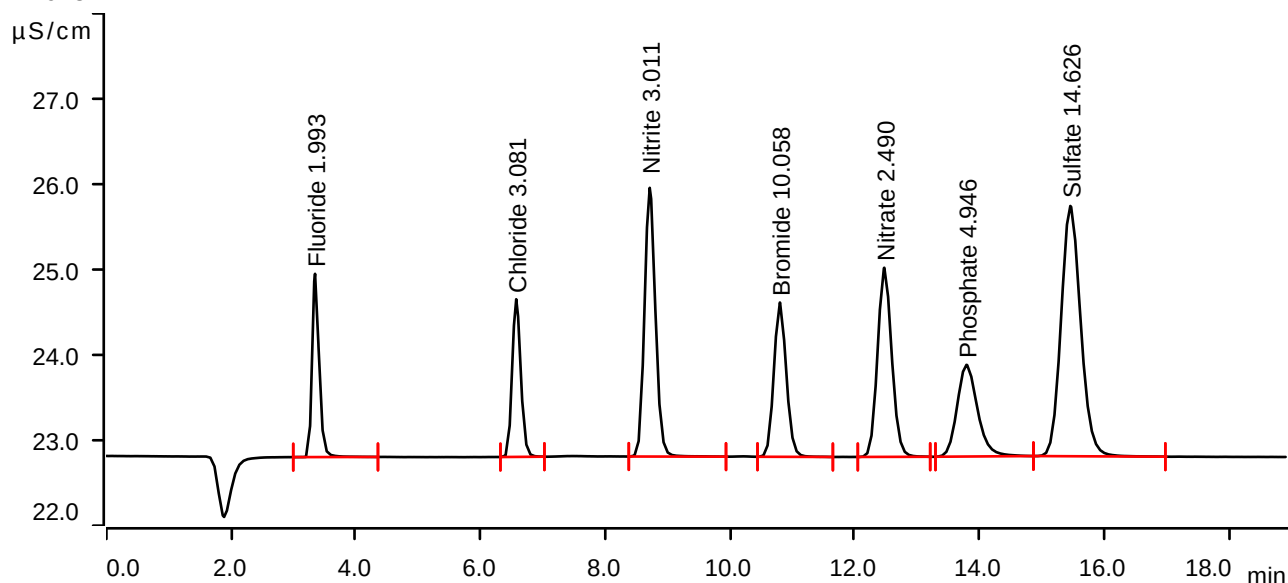
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-05-14 11:32:48 UTC-4
Method IC1-042225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.33 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.347	0.2809	2.146	1.993	Fluoride
2	6.572	0.2945	1.847	3.081	Chloride
3	8.712	0.6407	3.148	3.011	Nitrite
4	10.798	0.4194	1.808	10.058	Bromide
5	12.473	0.5860	2.215	2.490	Nitrate
6	13.790	0.4073	1.074	4.946	Phosphate
7	15.455	1.0685	2.932	14.626	Sulfate

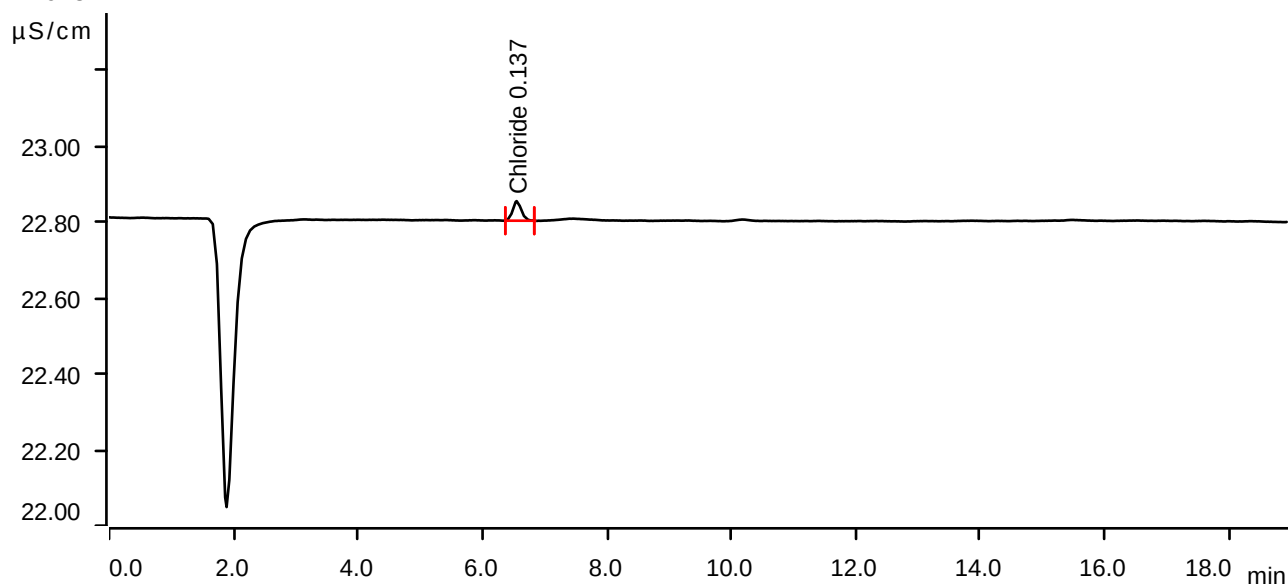
Sample data

Ident CCB
Sample type Sample
Determination start 2025-05-14 11:54:18 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	6.550	0.0082	0.052	0.137	Chloride

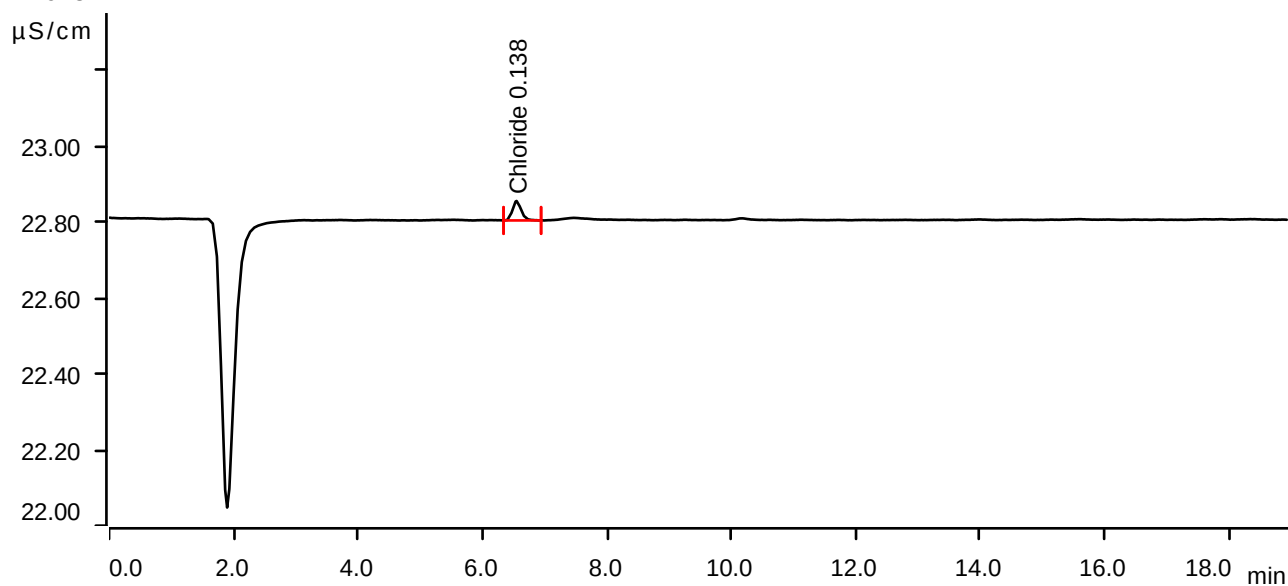
Sample data

Ident LB135762BLW
Sample type Sample
Determination start 2025-05-14 12:15:49 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area ($\mu\text{S/cm}$) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	6.550	0.0083	0.051	0.138	Chloride

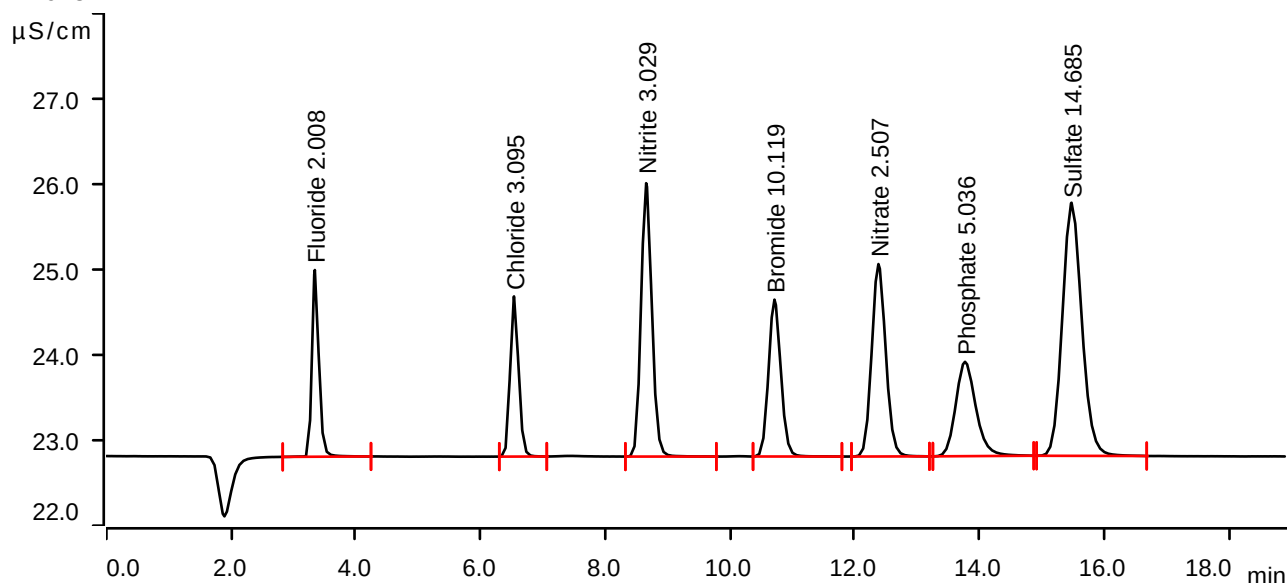
Sample data

Ident LB135762BSW
Sample type Check standard 1
Determination start 2025-05-14 12:37:20 UTC-4
Method IC1-042225
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.05 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.343	0.2831	2.187	2.008	Fluoride
2	6.537	0.2958	1.876	3.095	Chloride
3	8.655	0.6447	3.202	3.029	Nitrite
4	10.712	0.4220	1.838	10.119	Bromide
5	12.378	0.5902	2.254	2.507	Nitrate
6	13.767	0.4149	1.106	5.036	Phosphate
7	15.475	1.0730	2.965	14.685	Sulfate

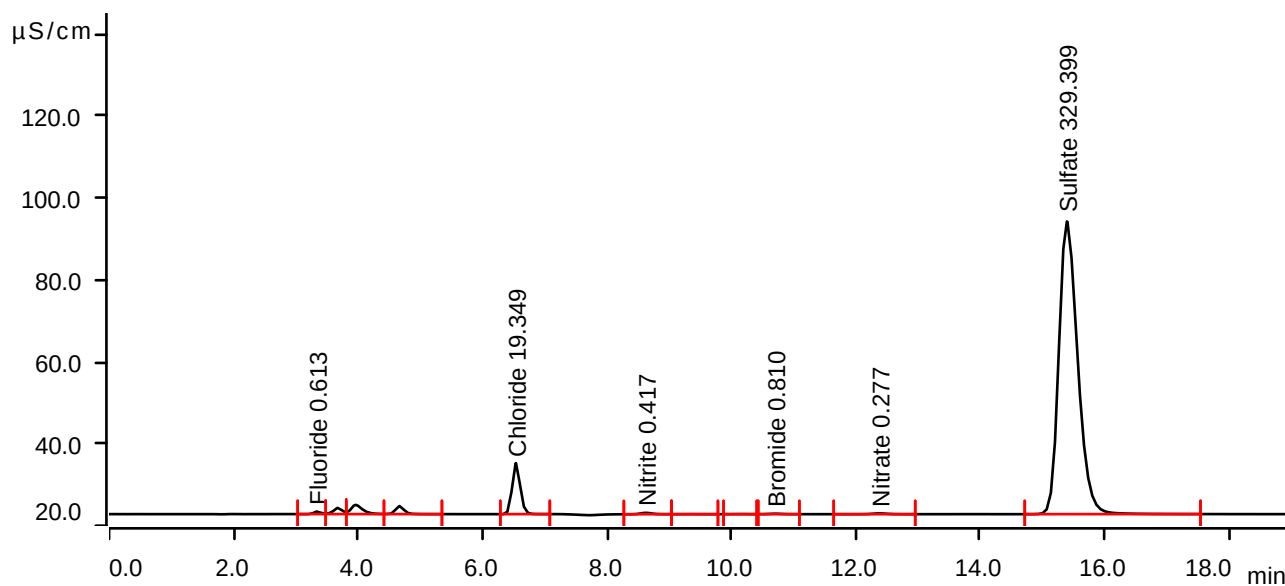
Sample data

Ident Q2033-01
Sample type Sample
Determination start 2025-05-14 12:58:52 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.338	0.0822	0.618	0.613	Fluoride
2	3.675	0.2528	1.509	invalid	
3	3.963	0.4969	2.257	invalid	
4	4.665	0.3183	1.968	invalid	
5	6.540	1.8764	12.451	19.349	Chloride
6	8.627	0.0726	0.341	0.417	Nitrite
7	9.367	0.0043	0.017	invalid	
8	10.152	0.0059	0.026	invalid	
9	10.707	0.0252	0.112	0.810	Bromide
10	12.378	0.0507	0.191	0.277	Nitrate
11	15.392	25.0397	71.435	329.399	Sulfate

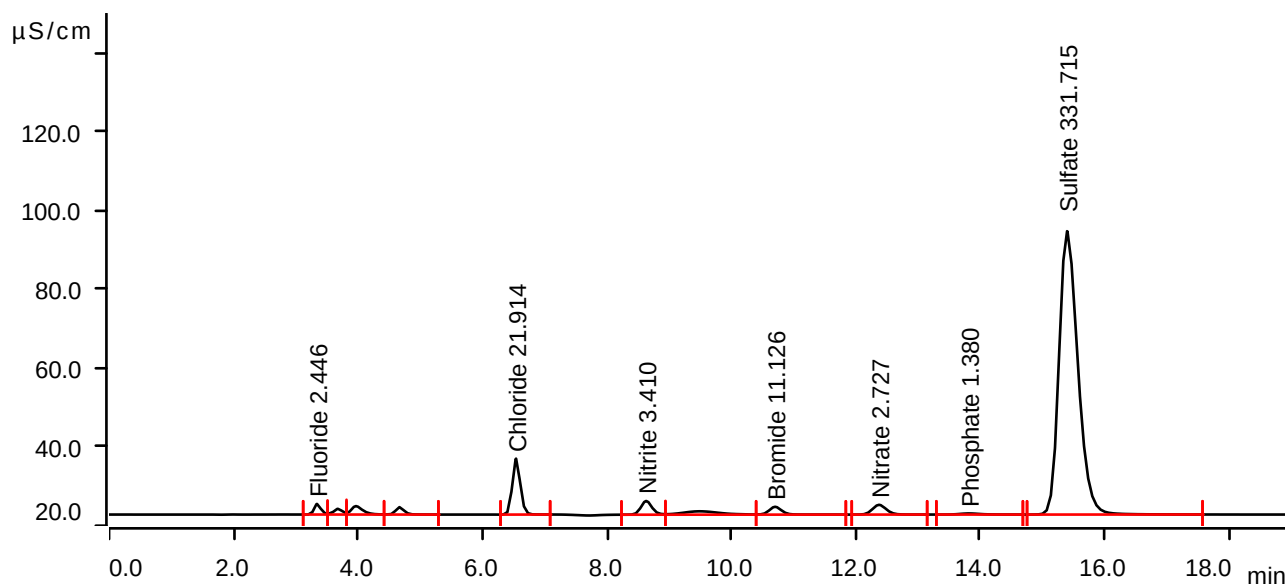
Sample data

Ident Q2033-01MS
Sample type Sample
Determination start 2025-05-14 13:20:25 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area ($\mu\text{S/cm}$) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.343	0.3461	2.685	2.446	Fluoride
2	3.678	0.2424	1.445	invalid	
3	3.968	0.4714	2.145	invalid	
4	4.668	0.3016	1.875	invalid	
5	6.542	2.1258	14.196	21.914	Chloride
6	8.632	0.7282	3.491	3.410	Nitrite
7	9.490	0.5828	0.852	invalid	
8	10.703	0.4650	1.991	11.126	Bromide
9	12.373	0.6435	2.478	2.727	Nitrate
10	13.818	0.1065	0.281	1.380	Phosphate
11	15.395	25.2162	71.919	331.715	Sulfate

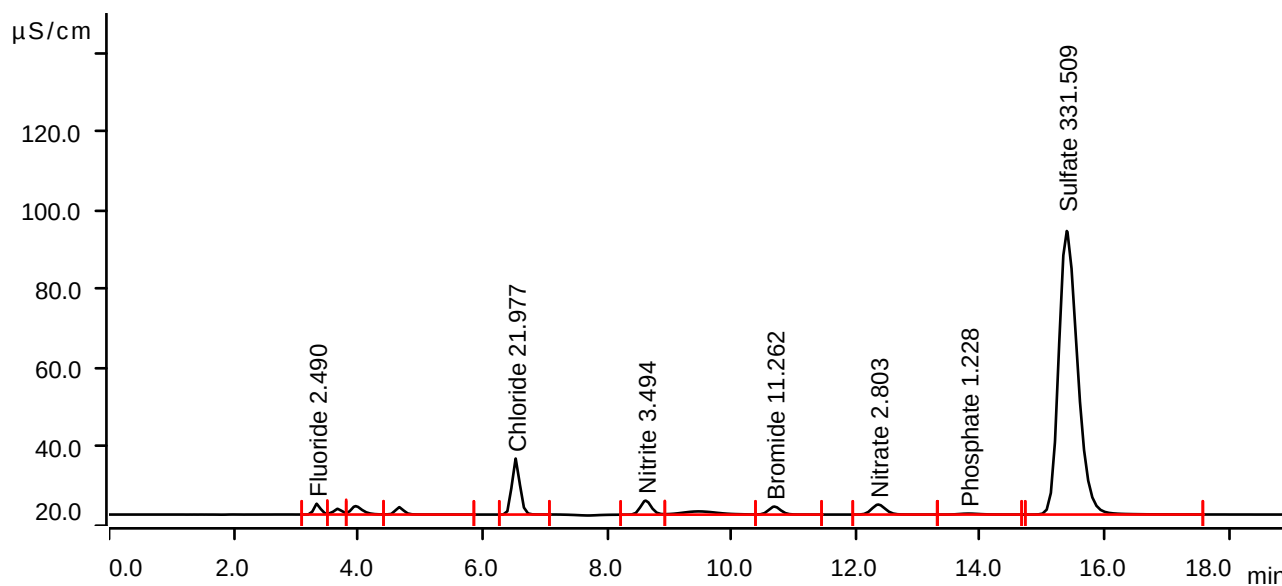
Sample data

Ident Q2033-01MSD
Sample type Sample
Determination start 2025-05-14 13:41:59 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area ($\mu\text{S/cm}$) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.338	0.3525	2.729	2.490	Fluoride
2	3.675	0.2412	1.441	invalid	
3	3.963	0.4707	2.137	invalid	
4	4.663	0.3039	1.869	invalid	
5	6.535	2.1320	14.209	21.977	Chloride
6	8.623	0.7465	3.576	3.494	Nitrite
7	9.473	0.5618	0.820	invalid	
8	10.692	0.4707	2.038	11.262	Bromide
9	12.362	0.6618	2.546	2.803	Nitrate
10	13.810	0.0936	0.246	1.228	Phosphate
11	15.390	25.2004	71.968	331.509	Sulfate

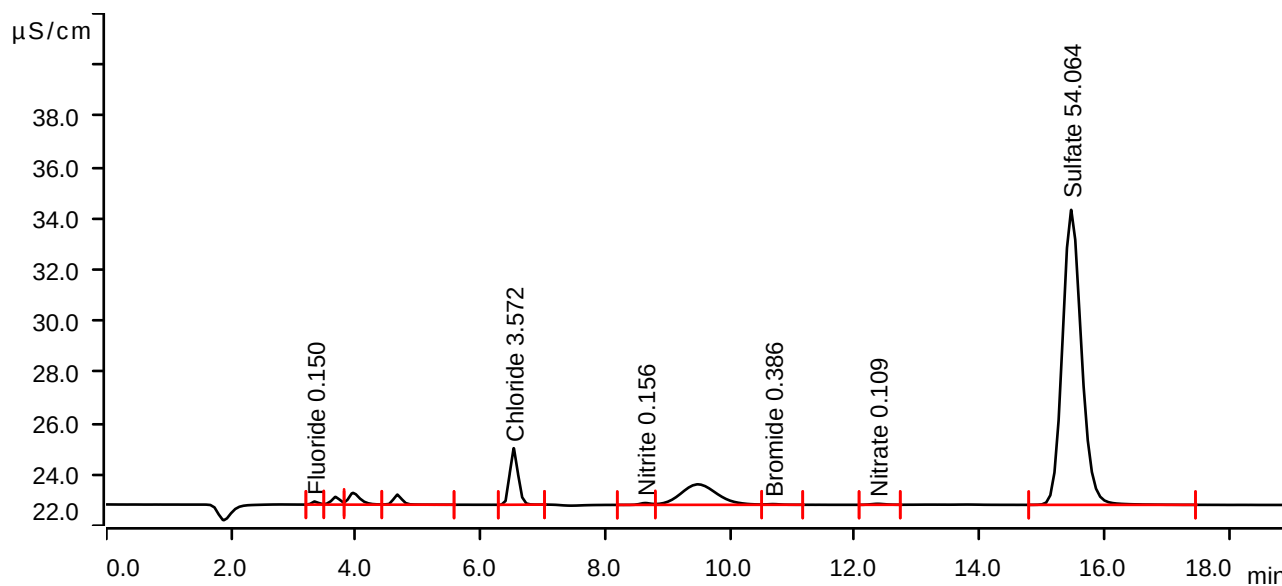
Sample data

Ident Q2033-01DLX5
Sample type Sample
Determination start 2025-05-14 14:03:34 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.340	0.0155	0.120	0.150	Fluoride
2	3.677	0.0493	0.302	invalid	
3	3.957	0.1004	0.460	invalid	
4	4.663	0.0640	0.393	invalid	
5	6.530	0.3422	2.208	3.572	Chloride
6	8.638	0.0155	0.072	0.156	Nitrite
7	9.485	0.5405	0.801	invalid	
8	10.687	0.0071	0.027	0.386	Bromide
9	12.363	0.0099	0.038	0.109	Nitrate
10	15.470	4.0719	11.518	54.064	Sulfate

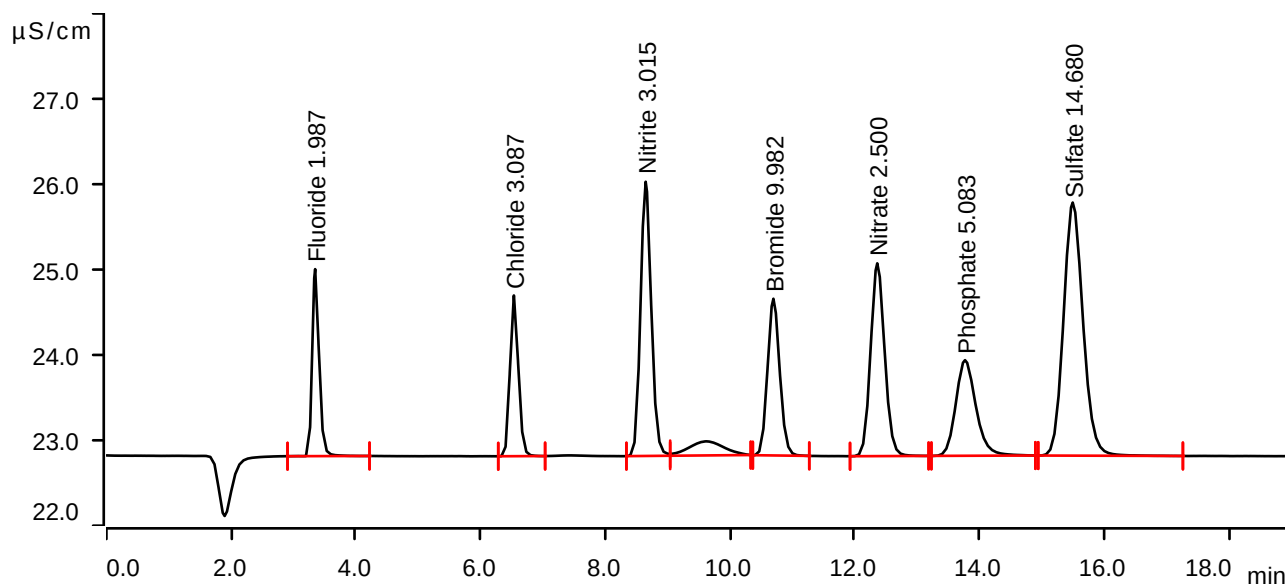
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-05-14 14:25:09 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.348	0.2801	2.190	1.987	Fluoride
2	6.535	0.2951	1.883	3.087	Chloride
3	8.647	0.6416	3.212	3.015	Nitrite
4	9.622	0.1073	0.165	invalid	
5	10.695	0.4162	1.836	9.982	Bromide
6	12.360	0.5886	2.258	2.500	Nitrate
7	13.767	0.4189	1.120	5.083	Phosphate
8	15.493	1.0727	2.965	14.680	Sulfate

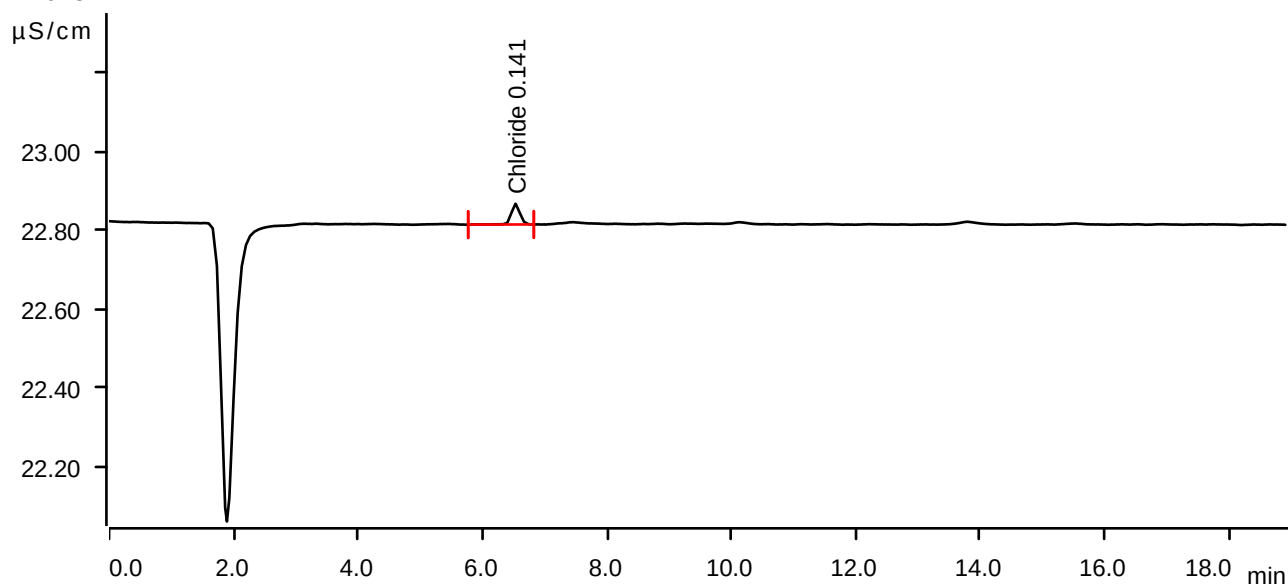
Sample data

Ident CCB
Sample type Sample
Determination start 2025-05-14 14:46:39 UTC-4
Method IC1-042225
Operator

Anions

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

Anions



Peak number	Retention time min	Area ($\mu\text{S/cm}$) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	6.532	0.0086	0.053	0.141	Chloride

Analytical Summary Report

Analysis Method: 7196A

ANALYST: rubina

Parameter: ~~Hexavalent Chromium~~

SUPERVISOR REVIEW BY: Iwona

Run Number: LB135773

pH Meter ID: WC pH Meter-1

Reagent/Standard	Lot/Log #
Calibration Std. hexchrome 0.1 ppm	WP113079
Calibration Std. hexchrome 0.05 ppm	WP113078
calibration std. hexchrome 0.01 ppm	WP113076
calibration std. hexchrome 0 ppm	WP113075
hexavalent chromium color reagent	WP113083
5N sulfuric acid	WP112831
Calibration Std Hexachrome 0.025 ppm	WP113077
Hexavalent Chromium ICV-LCS Std	WP113082
Calibration and CCV std HexChrome 0.5PPM	WP113080
Calibration std HexChrome 1.0PPM	WP113081

Intercept: 0.0005

Slope: 0.7844

Regression: 0.99999

Seq	Lab ID	True Value (mg/l)	DF	Initial Vol (ml)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at 540nm		Absorbance Difference	Result (mg/L)	%D	Anal Date	Anal Time
								Backgrnd	Color					
1	CAL1	0	1	100	100		1.88	0.000	0.000	0.000	-0.00		05/14/2025	09:30
2	CAL2	0.01	1	100	100		1.90	0.000	0.007	0.007	0.008	-20	05/14/2025	09:30
3	CAL3	0.025	1	100	100		1.94	0.000	0.019	0.019	0.023	-8	05/14/2025	09:31
4	CAL4	0.05	1	100	100		1.98	0.000	0.040	0.040	0.050	0	05/14/2025	09:31
5	CAL5	0.1	1	100	100		1.90	0.000	0.081	0.081	0.102	2	05/14/2025	09:32
6	CAL6	0.5	1	100	100		1.86	0.000	0.394	0.394	0.501	0.2	05/14/2025	09:32
7	CAL7	1	1	100	100		2.01	0.000	0.784	0.784	0.998	-0.2	05/14/2025	09:33

Analytical Summary Report

Analysis Method: 7196A

ANALYST:rubina

Parameter: Hexavalent Chromium

SUPERVISOR REVIEW BY:Iwona

Run Number: LB135773

pH Meter ID:WC pH Meter-1

Seq	Lab ID	True Value	DF	Initial Vol (ml/gm)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at540nm		Absorbance Difference	Intermediate Result (mg/L)	Anal Date	Anal Time
								Backgrnd	Color				
1	ICV	0.5	1	100	100		1.88	0.000	0.390	0.390	0.497	05/14/2025	09:33
2	ICB		1	100	100		1.74	0.000	0.001	0.001	0.001	05/14/2025	09:34
3	CCV1	0.5	1	100	100		1.92	0.000	0.390	0.390	0.497	05/14/2025	09:34
4	CCB1		1	100	100		1.79	0.000	0.000	0.000	-0.001	05/14/2025	09:35
5	RL Check	0.01	1	100	100		1.90	0.000	0.008	0.008	0.010	05/14/2025	09:35
6	lb135773BL		1	100	100		1.81	0.000	0.000	0.000	-0.001	05/14/2025	09:36
7	lb135773BS	0.5	1	100	100		2.00	0.000	0.394	0.394	0.502	05/14/2025	09:36
8	Q2033-01		1	100	100		2.11	0.000	0.000	0.000	-0.001	05/14/2025	09:37
9	CCV2	0.5	1	100	100		1.99	0.000	0.391	0.391	0.498	05/14/2025	09:37
10	CCB2		1	100	100		1.84	0.000	0.001	0.001	0.001	05/14/2025	09:38

WORKLIST(Hardcopy Internal Chain)

6135773

WorkList Name : hex-5-14 WorkList ID : 189516 Department : Wet-Chemistry Date : 05-14-2025 08:12:52

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2033-01	TW-WTS-08	Water	Hexavalent Chromium	Ammonium sulfate buffer	ENTA05	L41	05/12/2025	7196A

Date/Time 05/14/2025 08:15
 Raw Sample Received by: R14 CWS
 Raw Sample Relinquished by: R14 CWS

Date/Time 05/14/2025 10:08
 Raw Sample Received by: R14 CWS
 Raw Sample Relinquished by: R14 CWS

BOD5 LOG

ANALYST: rubin

SUPERVISOR: Iwona

Analysis Date: 05/14/2025

MANGANOUS SULFATE SOLUTION: W3103

Alkaline Iodide Azide: W3109

Sodium Thiosulfate, 0.025N: W3105

NaOH, 1N: WP111323

IncubatorID: INCUBATOR #3

GuageID: 0511064

Zero DO: WP112724

QC BATCH ID: LB135774

BOD Water: WP113071

Starch: W3149

Sulfuric acid, 1N: WP112832

POLYSEED: WP113073

GGA: WP113072

Chlorine Strips: W3155

pH Strips: W3140

Lab SampleID	Client ID	Bottle No.	VOL. ML	Initial Reading (ML)	Final Reading (ML)	Difference	Average
WINKLER 1	WINKLER 1	1	300	0.0	9.6	9.6	9.6
WINKLER 2	WINKLER 2	2	300	9.8	19.4	9.6	9.6

Meter Calibration1: 9.24 Zero DO Reading1: 0.14 mg/L (<=0.2 Criteria)

Barometric Pressure1: 760 mmHg DO Meter BOD fluid reading for winkler comparison: 9.68

After Incubation

Meter Calibration2: 9.24 Zero DO Reading2: 0.10 mg/L (<=0.2 Criteria)

Barometric Pressure2: 755 mmHg

QC BATCH ID: LB135774

INCUBATOR TEMP IN (C): 20.0

INCUBATOR TEMP OUT (C): 19.9

TIME IN: 14:30

TIME OUT: 14:45

DATE IN: 05/14/2025

DATE OUT: 05/19/2025

Lab SampleID	Bottle No.	Check CL	Initial PH	Final PH	Temp °C	Sam Vol. (mL)	D.O.1 Initial	D.O.2 Final	Depletion	BOD Result (mg/L)	Avg Result (mg/L)	Comment
LB135774BL	1	No	6.59	N/A	20.90	300	9.68	9.66	0.02	0.02	0.02	
POLYSEED	1					10	9.55	6.37	3.18	0.64	0.67	
POLYSEED	2					15	9.50	4.19	5.31	0.71		
POLYSEED	3					20	9.49	2.97	6.52	0.65		
GGA	1					6	9.64	5.02	4.62	197.5	201	
GGA	2					6	9.62	4.97	4.65	199		
GGA	3					6	9.62	4.82	4.8	206.5		
Q2031-01	1	No	6.51	N/A	20.20	5	9.54	7.78	-	0	33.44	
Q2031-01	2					20	9.50	6.42	3.08	36.15		
Q2031-01	3					50	9.37	3.58	5.79	30.72		
Q2031-01	4					150	8.74	0.38	-	0		
Q2031-03	1	No	6.65	N/A	20.20	5	9.53	8.56	-	0	17.2	
Q2031-03	2					20	9.52	7.50	2.02	20.25		
Q2031-03	3					50	9.52	6.17	3.35	16.08		
Q2031-03	4					150	9.48	1.18	8.3	15.26		
Q2031-05	1	No	6.67	N/A	20.30	5	9.54	8.55	-	0	9.78	
Q2031-05	2					20	9.53	7.97	-	0		
Q2031-05	3					50	9.49	7.75	-	0		
Q2031-05	4					150	9.45	3.89	5.56	9.78		
Q2033-01	1	No	12.52	7.19	20.60	5	9.65	7.98	-	0	26.4	pH Adjusted
Q2033-01	2					20	9.62	7.19	2.43	26.4		
Q2033-01	3					50	9.59	0.59	-	0		
Q2033-01	4					150	9.55	0.38	-	0		
Q2036-02	1	No	10.15	7.40	20.60	5	9.66	7.45	2.21	924	622.88	pH Adjusted
Q2036-02	2					10	9.62	7.08	2.54	561		
Q2036-02	3					20	9.57	5.03	4.54	580.5		
Q2036-02	4					30	9.50	4.57	4.93	426		
Q2036-02DUP	1	No	10.15	7.40	20.60	5	9.65	7.33	2.32	990	641	pH Adjusted
Q2036-02DUP	2					10	9.62	7.00	2.62	585		
Q2036-02DUP	3					20	9.55	5.14	4.41	561		
Q2036-02DUP	4					30	9.50	4.55	4.95	428		

NOTE: 2ml POLYSEED added to GGA and all the Samples, but not in Blank.

NOTE (For, CBOD5): 0.16 g Nitrification Inhibitor added to GGA and all the Samples, but not in Blank.

WORKLIST(Hardcopy Internal Chain)

6135774

WorkList Name : BOD5-5-14

WorkList ID : 189507

Department : Wet-Chemistry

Date : 05-14-2025 09:40:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2031-01	DSN002	Water	BOD5	Cool 4 deg C	PSEG04	L41	05/13/2025	SM5210 B
Q2031-03	DSN001	Water	BOD5	Cool 4 deg C	PSEG04	L41	05/13/2025	SM5210 B
Q2031-05	DSN003	Water	BOD5	Cool 4 deg C	PSEG04	L41	05/13/2025	SM5210 B
Q2033-01	TW-WTS-08	Water	BOD5	Cool 4 deg C	ENTA05	L41	05/12/2025	SM5210 B

Date/Time 05/14/2025 12:00
Raw Sample Received by: RM wsg
Raw Sample Relinquished by: Mader

Date/Time 05/14/2025 14:3
Raw Sample Received by: J. Coles
Raw Sample Relinquished by: RM wsg

LB135774

WORKLIST(Hardcopy Internal Chain)

WorkList Name : bod5-14

WorkList ID : 189632

Department : Wet-Chemistry

Date : 05-14-2025 12:33:42

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2036-02	COMP	Water	BOD5	Cool 4 deg C	ARAM01	L41	05/14/2025	SM5210 B

Date/Time 05/14/2025 13:00
Raw Sample Received by: RM (wg)
Raw Sample Relinquished by: [Signature]

Date/Time 05/14/2025 14:30
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: RM (wg)

Analytical Summary Report

Analysis Method: 9040C

Analyst By : jignesh

Parameter: pH

Supervisor Review By : Iwona

Run Number: LB135781

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
Buffer Solution, PH12 (500ml)	W3072

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	05/15/2025	08:15
2	CAL2	1	Water	NA	NA	20.2	7.00	05/15/2025	08:16
3	CAL3	1	Water	NA	NA	20.2	10.02	05/15/2025	08:18
4	ICV	1	Water	NA	NA	20.2	7.02	05/15/2025	08:20
5	CCV1	1	Water	NA	NA	20.1	2.01	05/15/2025	08:22
6	Q2033-01	1	Water	NA	NA	21.4	12.32	05/15/2025	08:30
7	Q2033-01DUP	1	Water	NA	NA	21.5	12.33	05/15/2025	08:31
8	Q2043-05	1	Water	NA	NA	21.7	7.01	05/15/2025	08:45
9	Q2043-05DUP	1	Water	NA	NA	21.8	7.02	05/15/2025	08:46
10	Q2044-02	1	Water	NA	NA	21.7	7.80	05/15/2025	08:55
11	Q2044-02DUP	1	Water	NA	NA	21.8	7.81	05/15/2025	08:56
12	CCV2	1	Water	NA	NA	20.2	12.02	05/15/2025	09:00

WORKLIST(Hardcopy Internal Chain)

LB 135481

WorkList Name : PH W Q2044

WorkList ID : 189525

Department : Wet-Chemistry

Date : 05-15-2025 07:59:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2033-01	D TW-WTS-08	Water	pH	Cool 4 deg C	ENTA05	L41	05/12/2025	9040C
Q2043-05	C 3139	Water	pH	Cool 4 deg C	PSEG03	L21	05/14/2025	9040C
Q2044-02	A 3859	Water	pH	Cool 4 deg C	PSEG03	L31	05/14/2025	9040C

Date/Time 05-15-25 08:10

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 05-15-25 11:30

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

TOTAL SOLIDS - SM2540B

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 05/15/2025

Run Number: LB135788

BalanceID: WC SC-6

OvenID: WC OVEN-1

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 05/15/2025 11:00 **TEMP1 OUT:** 103 °C 05/15/2025 12:00
TEMP2 IN: 104 °C 05/15/2025 12:30 **TEMP2 OUT:** 103 °C 05/15/2025 13:30
TEMP3 IN: 104 °C 05/15/2025 15:40 **TEMP3 OUT:** 103 °C 05/16/2025 07:30
TEMP4 IN: 104 °C 05/16/2025 08:00 **TEMP4 OUT:** 103 °C 05/16/2025 10:00

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Sample Vol (ml)	Original weight 1st Dish+Sample weight after Drying @103-@105°C (g)	Constant weight 2nd Dish+Sample weight after Drying @103-@105°C (g)	Final Constant weight Final Dish+Sample weight after Drying @103-@105°C (g)	Weight (g)	Result (mg/L)
1	LB135788BL	LB135788BL	85.9635	85.9635	100	85.9635	85.9635	85.9635	0.0000	0
2	Q2033-01	TW-WTS-08	110.2082	110.2082	100	110.3871	110.3871	110.3870	0.1789	1789
3	Q2033-01DUP	TW-WTS-08DUP	106.1354	106.1354	100	106.3179	106.3179	106.3180	0.1825	1825

A = Sample Volume (ml)

B = Final Empty Dish Weight (g)

C = Final Dish+Sample weight after Drying @103-@105°C (g)

$$\text{Result mg/L} = ((C - B) / A) * 1000 * 1000$$

WORKLIST(Hardcopy Internal Chain)

LB 135788

WorkList Name : TS Q2033

WorkList ID : 189542

Department : Wet-Chemistry

Date : 05-15-2025 11:38:02

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2033-01	D	TW-WTS-08	Water	TS	Cool 4 deg C	ENTA05 L41	05/12/2025	SM2540 B

Date/Time 05/15/25 12:30

Raw Sample Received by: SB wpc

Raw Sample Relinquished by: Chen

Date/Time 05/15/25

Raw Sample Received by: ap

Raw Sample Relinquished by: SB Chen

16:00

ap

SB Chen

Analytical Summary Report

Analysis Method: 1010B

Reviewed By: Iwona

Parameter: Flash Point

Supervisor Review By: jignesh

Run Number: LB135789

Ambient Barometric Pressure (mmHg): 765.00

Thermometer ID: Flashpoint

Barometric Scale ID: 0511064

Reagent/Standard	Lot/Log #
p-xylene (ICV)	W3193

Seq	LabID	True Value °F	DL	Initial Sample °C	Celsius °C	Result °F	Final Result °F	Anal Date	Anal Time
1	ICV	81	1	8	28.00	82.4	82.1	05/15/2025	08:40
2	Q2033-01		1	12	100.00	>212.0	>212.0	05/15/2025	09:10
3	Q2033-01DUP		1	12	100.00	>212.0	>212.0	05/15/2025	09:40
4	Q2043-05		1	11	100.00	>212.0	>212.0	05/15/2025	10:10
5	Q2044-02		1	14	100.00	>212.0	>212.0	05/15/2025	10:40

Result = (Celsius * 1.8) + 32

Final Result = Result + (760 - Ambient Barometric Pressure) * 0.06

WORKLIST(Hardcopy Internal Chain)

LB135789

WorkList Name : fp-05-15

WorkList ID : 189533

Department : Wet-Chemistry

Date : 05-15-2025 08:20:20

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2033-01	TW-WTS-08	Water	Flash Point	Cool 4 deg C	ENTA05	L41	05/12/2025	1010B
Q2043-05	3139	Water	Flash Point	Cool 4 deg C	PSEG03	L21	05/14/2025	1010B
Q2044-02	3859	Water	Flash Point	Cool 4 deg C	PSEG03	L31	05/14/2025	1010B

Date/Time 05/15/25 08:30
Raw Sample Received by: 12(wc)
Raw Sample Relinquished by: [Signature]

Date/Time 05/15/25 11:20
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: 12(wc)

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 05/15/2025

Run Number: LB135797

BalanceID: WC SC-6

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 05/15/2025 15:00 **TEMP1 OUT:** 104 °C 05/15/2025 16:00
TEMP2 IN: 103 °C 05/15/2025 16:30 **TEMP2 OUT:** 104 °C 05/15/2025 17:30
TEMP3 IN: 104 °C 05/16/2025 11:25 **TEMP3 OUT:** 103 °C 05/16/2025 12:30
TEMP4 IN: 104 °C 05/16/2025 13:00 **TEMP4 OUT:** 103 °C 05/16/2025 14:35

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	LB135797BL	LB135797BL	1.5693	1.5693	100	1.5694	1.5694	1.5694	0.0001	1
2	LB135797BS	LB135797BS	1.6033	1.6033	100	1.6565	1.6565	1.6565	0.0532	532
3	Q2026-01	001-WILLETTS-PT-BLVD (MAY)	1.4869	1.4869	100	1.5037	1.5037	1.5037	0.0168	168
4	Q2026-02	002-35TH-AVE (MAY)	1.4877	1.4877	100	1.5075	1.5075	1.5075	0.0198	198
5	Q2029-01	TOWER-1	1.4731	1.4731	1000	1.4834	1.4834	1.4834	0.0103	10.3
6	Q2029-02	TOWER-2	1.4875	1.4875	200	1.4926	1.4926	1.4926	0.0051	25.5
7	Q2030-01	402-PSD	1.4505	1.4505	1000	1.4525	1.4525	1.4525	0.0020	2
8	Q2030-02	AHW-PSD	1.4819	1.4819	1000	1.4846	1.4846	1.4846	0.0027	2.7
9	Q2031-01	DSN002	1.4864	1.4864	1000	1.5009	1.5009	1.5009	0.0145	14.5
10	Q2031-03	DSN001	1.3654	1.3654	2000	1.3932	1.3932	1.3932	0.0278	13.9
11	Q2031-05	DSN003	1.4860	1.4860	1500	1.4947	1.4947	1.4947	0.0087	5.8
12	Q2031-05DUP	DSN003DUP	1.4656	1.4656	1500	1.4744	1.4744	1.4744	0.0088	5.9
13	Q2033-01	TW-WTS-08	1.4965	1.4965	500	1.4974	1.4974	1.4974	0.0009	1.8
14	Q2036-02	COMP	1.4992	1.4992	100	1.5178	1.5178	1.5178	0.0186	186
15	Q2058-01	EFFLUENT	1.4747	1.4747	30	1.5341	1.5341	1.5341	0.0594	1980

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 05/15/2025

Run Number: LB135797

BalanceID: WC SC-6

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 05/15/2025 15:00 **TEMP1 OUT:** 104 °C 05/15/2025 16:00
TEMP2 IN: 103 °C 05/15/2025 16:30 **TEMP2 OUT:** 104 °C 05/15/2025 17:30
TEMP3 IN: 104 °C 05/16/2025 11:25 **TEMP3 OUT:** 103 °C 05/16/2025 12:30
TEMP4 IN: 104 °C 05/16/2025 13:00 **TEMP4 OUT:** 103 °C 05/16/2025 14:35

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	Q2058-04	AERATION-TK1	1.4829	1.4829	30	1.5311	1.5311	1.5311	0.0482	1606.7

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)

835897

WorkList Name : TSS Q2058

WorkList ID : 189556

Department : Wet-Chemistry

Date : 05-16-2025 09:18:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2026-01	B 001-WILLETS-PT-BLVD(MAY)	Water	TSS	Cool 4 deg C	TULL01	L41	05/12/2025	SM2540 D
Q2026-02	B 002-35TH-AVE(MAY)	Water	TSS	Cool 4 deg C	TULL01	L41	05/12/2025	SM2540 D
Q2029-01	B TOWER-1	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2029-02	B TOWER-2	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2030-01	A 402-PSD	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2030-02	A AHW-PSD	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2031-01	A DSN002	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2031-03	DE DSN001	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2031-05	DSN003 A,D,E,	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2033-01	E TW-WTS-08	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2036-02	A COMP	Water	TSS	Cool 4 deg C	ENTA05	L41	05/12/2025	SM2540 D
Q2058-01	D EFFLUENT	Water	TSS	Cool 4 deg C	ARAM01	L41	05/14/2025	SM2540 D
Q2058-04	AERATION-TK1	Water	TSS	Cool 4 deg C	HOLL01	L41	05/15/2025	SM2540 D
					HOLL01	L41	05/15/2025	SM2540 D

Date/Time 05-16-25 09:25
 Raw Sample Received by: 88 WOC
 Raw Sample Relinquished by: JTCsm

Date/Time 05-16-25 15:30
 Raw Sample Received by: JTCsm
 Raw Sample Relinquished by: 88 WOC

LB13583

Test results

Aquakem 7.2AQ1

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

Reviewed by : RM

Instrument ID : Konelab

5/19/2025 16:48

Test: TKN-NH3

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	4.937	0.0	1.049	
ICB1	0.057	0.0	0.023	
CCV1	4.969	0.0	1.056	
CCB1	0.049	0.0	0.021	
RL CHECK	0.497	0.0	0.116	
PB168059BL	0.052	0.0	0.022	
PB168059BS	4.896	0.0	1.040	
Q2033-01	11.513	0.0	2.432	
Q2065-01	3.989	0.0	0.850	
Q2067-01	0.921	0.0	0.205	
Q2067-01DUP	0.929	0.0	0.206	
Q2067-01MS	5.733	0.0	1.216	
Q2067-01MSD	5.428	0.0	1.152	
Q2068-03	8.031	0.0	1.700	
CCV2	5.108	0.0	1.085	
CCB2	0.070	0.0	0.026	
Q2033-01DLX2	6.203	0.0	1.315	
CCV3	5.147	0.0	1.093	
CCB3	0.064	0.0	0.025	

99% CSO-1607
05/19/2025
RM
Test limit high

N 19
Mean 3.610
SD 3.2806
CV% 90.87

Aquakem v. 7.2AQ1

Results from time period:

Mon May 19 14:07:42 2025

Mon May 19 16:47:37 2025

Sample Id	Sam/Ctr/c/	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	TKN-NH3	P	0.0592	mg/l	5/19/2025 14:07:42	
0.5PPM	A	TKN-NH3	P	0.5606	mg/l	5/19/2025 14:07:43	
1.0PPM	A	TKN-NH3	P	0.9865	mg/l	5/19/2025 14:07:44	
2.5PPM	A	TKN-NH3	P	2.4514	mg/l	5/19/2025 14:07:45	
5.0PPM	A	TKN-NH3	P	4.8906	mg/l	5/19/2025 14:07:46	
6.7PPM	A	TKN-NH3	P	6.6264	mg/l	5/19/2025 14:07:47	
10.0PPM	A	TKN-NH3	P	10.092	mg/l	5/19/2025 14:07:48	
ICV1	S	TKN-NH3	P	4.9374	mg/l	5/19/2025 15:29:04	
ICB1	S	TKN-NH3	P	0.057	mg/l	5/19/2025 15:29:07	
CCV1	S	TKN-NH3	P	4.9686	mg/l	5/19/2025 15:29:09	
CCB1	S	TKN-NH3	P	0.0494	mg/l	5/19/2025 15:29:11	
RL CHECK	S	TKN-NH3	P	0.4966	mg/l	5/19/2025 15:29:12	
PB168059BL	S	TKN-NH3	P	0.0521	mg/l	5/19/2025 15:29:14	
PB168059BS	S	TKN-NH3	P	4.896	mg/l	5/19/2025 15:39:47	
Q2033-01	S	TKN-NH3	P	11.5128	mg/l	5/19/2025 15:39:48	
Q2065-01	S	TKN-NH3	P	3.989	mg/l	5/19/2025 15:39:56	
Q2067-01	S	TKN-NH3	P	0.9214	mg/l	5/19/2025 16:22:14	
Q2067-01DUP	S	TKN-NH3	P	0.9289	mg/l	5/19/2025 16:22:17	
Q2067-01MS	S	TKN-NH3	P	5.733	mg/l	5/19/2025 16:22:18	
Q2067-01MSD	S	TKN-NH3	P	5.4277	mg/l	5/19/2025 16:22:19	
Q2068-03	S	TKN-NH3	P	8.031	mg/l	5/19/2025 16:22:20	
CCV2	S	TKN-NH3	P	5.1078	mg/l	5/19/2025 16:28:18	
CCB2	S	TKN-NH3	P	0.0698	mg/l	5/19/2025 16:28:19	
Q2033-01DLX2	S	TKN-NH3	P	6.2027	mg/l	5/19/2025 16:28:21	
CCV3	S	TKN-NH3	P	5.1472	mg/l	5/19/2025 16:47:35	
CCB3	S	TKN-NH3	P	0.0639	mg/l	5/19/2025 16:47:37	

Calibration results

Aquakem 7.2AQ1

Page: 1

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

Reviewed by : RM

Instrument ID : Konelab

5/19/2025 14:15

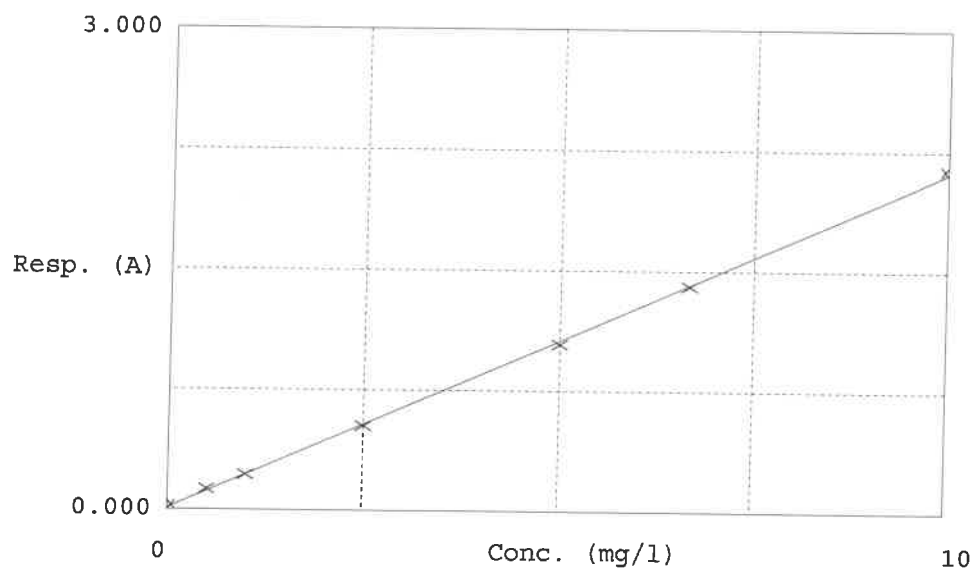
Test TKN-NH3

Accepted 5/19/2025 14:15

Factor 4.756
Bias 0.011

Coeff. of det. 0.999617

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.00PPM	0.024	0.0592	0.0000	-
2	TKN-10	0.129	0.5606	0.5000	-12.1
3	TKN-10	0.219	0.9865	1.0000	-1.4
4	TKN-10	0.527	2.4514	2.5000	-1.4
5	TKN-10	1.039	4.8906	5.0000	-2.2
6	TKN-10	1.404	6.6264	6.6667	-1.1
7	TKN-10	2.133	10.0920	10.0000	0.9

05/19/2025
12:14

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

SDG No : N/A

Start Digest Date: 05/19/2025 Time : 09:20 Temp : 380 °C

Matrix : WATER

End Digest Date: 05/19/2025 Time : 10:50 Temp : 385 °C

Pipette ID : WC

Start Distillation Date: 05/19/2025 Time : 11:45 Temp : 150 °C

Balance ID : N/A

End Distillation Date: 05/19/2025 Time : 12:45 Temp : 158 °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	WP113126
TKN CCV STD	50.0ML	WP113127
TKN ICV STD	50.0ML	WP113128
TKN LCS STD	50.0ML	WP113129
MS/MSD SPIKE SOL.	0.25ML	WP112611

Chemical Used	ML/SAMPLE USED	Lot Number
TKN DIGESTION FLUID	10.0ML	WP111319
TKN DISTILLATION BUFFER	10.0ML	WP112079
H2SO4 0.04N	5.0ML	WP112828
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

Extraction Conformance/Non-Conformance Comments:

RL CHECK 10ML FROM WP113027 ,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
05/19/2025 12:55	RM (WLC)	RM (WLC)
05/19/2025 14:30	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB168059BL	PBW059	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
PB168059BS	LCS059	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2033-01	TW-WTS-08	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2065-01	VACTRUCK-728068	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2067-01	303-PPR-FRAC	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2067-01DUP	303-PPR-FRACDUP	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2067-01MS	303-PPR-FRACMS	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2067-01MSD	303-PPR-FRACMSD	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q2068-03	LAW-25-0074	50	50	<2	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135762

Review By	rubina	Review On	5/15/2025 3:55:23 PM
Supervise By	Iwona	Supervise On	5/15/2025 4:02:08 PM
SubDirectory	LB135762	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP112787,WP112788,WP112789,WP112790,WP112791,WP112792,WP112793		
ICV Standard	WP112794		
CCV Standard	WP113061		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113062		
Chk Standard	WP112798,WP112800		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	STD1	STD1	CAL1	04/22/25 10:37	All standards, samples, and	NF/IZ	OK
2	STD2	STD2	CAL2	04/22/25 10:59	QC are filtered through	NF/IZ	OK
3	STD3	STD3	CAL3	04/22/25 11:20	0.45um, filter lot W3160	NF/IZ	OK
4	STD4	STD4	CAL4	04/22/25 11:42		NF/IZ	OK
5	STD5	STD5	CAL5	04/22/25 12:03		NF/IZ	OK
6	STD6	STD6	CAL6	04/22/25 12:25		NF/IZ	OK
7	STD7	STD7	CAL7	04/22/25 12:46		NF/IZ	OK
8	ICV1	ICV1	ICV	04/22/25 13:07		NF/IZ	OK
9	ICB1	ICB1	ICB	04/22/25 13:58		NF/IZ	OK
10	CCV1	CCV1	CCV	05/14/25 11:32		NF/IZ	OK
11	CCB1	CCB1	CCB	05/14/25 11:54		NF/IZ	OK
12	LB135762BLW	LB135762BLW	MB	05/14/25 12:15		NF/IZ	OK
13	LB135762BSW	LB135762BSW	LCS	05/14/25 12:37		NF/IZ	OK
14	Q2033-01	TW-WTS-08	SAM	05/14/25 12:58	Cl is high	NF/IZ	Dilution
15	Q2033-01MS	TW-WTS-08MS	MS	05/14/25 13:20	9.5ml of sample, 0.5mL W3092	NF/IZ	OK
16	Q2033-01MSD	TW-WTS-08MSD	MSD	05/14/25 13:41	9.5ml of sample, 0.5mL W3092	NF/IZ	OK
17	Q2033-01DL	TW-WTS-08DL	SAM	05/14/25 14:03	5X for Cl	NF/IZ	Confirms
18	CCV2	CCV2	CCV	05/14/25 14:25		NF/IZ	OK

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135762

Review By	rubina	Review On	5/15/2025 3:55:23 PM
Supervise By	Iwona	Supervise On	5/15/2025 4:02:08 PM
SubDirectory	LB135762	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP112787,WP112788,WP112789,WP112790,WP112791,WP112792,WP112793		
ICV Standard	WP112794		
CCV Standard	WP113061		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113062		
Chk Standard	WP112798,WP112800		

19	CCB2	CCB2	CCB	05/14/25 14:46		NF/IZ	OK
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Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135773

Review By	rubina	Review On	5/15/2025 8:43:00 AM
Supervise By	Iwona	Supervise On	5/15/2025 10:04:22 AM
SubDirectory	LB135773	Test	Hexavalent Chromium
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP113079,WP113078,WP113076,WP113075,WP113083,WP112831,WP113077,WP113082,WP113080,WP113081		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	05/14/25 09:30		rubina	OK
2	CAL2	CAL2	CAL	05/14/25 09:30		rubina	OK
3	CAL3	CAL3	CAL	05/14/25 09:31		rubina	OK
4	CAL4	CAL4	CAL	05/14/25 09:31		rubina	OK
5	CAL5	CAL5	CAL	05/14/25 09:32		rubina	OK
6	CAL6	CAL6	CAL	05/14/25 09:32		rubina	OK
7	CAL7	CAL7	CAL	05/14/25 09:33		rubina	OK
8	ICV	ICV	ICV	05/14/25 09:33		rubina	OK
9	ICB	ICB	ICB	05/14/25 09:34		rubina	OK
10	CCV1	CCV1	CCV	05/14/25 09:34		rubina	OK
11	CCB1	CCB1	CCB	05/14/25 09:35		rubina	OK
12	RL Check	RL Check	SAM	05/14/25 09:35		rubina	OK
13	Ib135773BL	Ib135773BL	MB	05/14/25 09:36		rubina	OK
14	Ib135773BS	Ib135773BS	LCS	05/14/25 09:36		rubina	OK
15	Q2033-01	TW-WTS-08	SAM	05/14/25 09:37		rubina	OK
16	CCV2	CCV2	CCV	05/14/25 09:37		rubina	OK
17	CCB2	CCB2	CCB	05/14/25 09:38		rubina	OK

Instrument ID: DO METER

Daily Analysis Runlog For Sequence/QC Batch ID # LB135774

Review By	rubina	Review On	5/20/2025 11:43:18 AM
Supervise By	Iwona	Supervise On	5/20/2025 11:43:45 AM
SubDirectory	LB135774	Test	BOD5
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	WP113071,W3149,WP112832,W3103,W3109,W3105,WP113073,WP113072,WP111323		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB135774BL	LB135774BL	MB	05/14/25 14:30		rubina	OK
2	LB135774BS	LB135774BS	LCS	05/14/25 14:30		rubina	OK
3	Q2031-01	DSN002	SAM	05/14/25 14:30		rubina	OK
4	Q2031-03	DSN001	SAM	05/14/25 14:30		rubina	OK
5	Q2031-05	DSN003	SAM	05/14/25 14:30		rubina	OK
6	Q2033-01	TW-WTS-08	SAM	05/14/25 14:30		rubina	OK
7	Q2036-02	COMP	SAM	05/14/25 14:30		rubina	OK
8	Q2036-02DUP	COMPDUP	DUP	05/14/25 14:30		rubina	OK

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135781

Review By	jignesh	Review On	5/15/2025 9:14:09 AM
Supervise By	Iwona	Supervise On	5/15/2025 12:04:41 PM
SubDirectory	LB135781	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,W3072		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	05/15/25 08:15		jignesh	OK
2	CAL2	CAL2	CAL	05/15/25 08:16		jignesh	OK
3	CAL3	CAL3	CAL	05/15/25 08:18		jignesh	OK
4	ICV	ICV	ICV	05/15/25 08:20		jignesh	OK
5	CCV1	CCV1	CCV	05/15/25 08:22		jignesh	OK
6	Q2033-01	TW-WTS-08	SAM	05/15/25 08:30		jignesh	OK
7	Q2033-01DUP	TW-WTS-08DUP	DUP	05/15/25 08:31		jignesh	OK
8	Q2043-05	3139	SAM	05/15/25 08:45		jignesh	OK
9	Q2043-05DUP	3139DUP	DUP	05/15/25 08:46		jignesh	OK
10	Q2044-02	3859	SAM	05/15/25 08:55		jignesh	OK
11	Q2044-02DUP	3859DUP	DUP	05/15/25 08:56		jignesh	OK
12	CCV2	CCV2	CCV	05/15/25 09:00		jignesh	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB135788

Review By	jignesh	Review On	5/16/2025 11:36:30 AM
Supervise By	Iwona	Supervise On	5/16/2025 1:31:42 PM
SubDirectory	LB135788	Test	TS
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	LB135788BL	LB135788BL	MB	05/15/25 11:00		jignesh	OK
2	Q2033-01	TW-WTS-08	SAM	05/15/25 11:00		jignesh	OK
3	Q2033-01DUP	TW-WTS-08DUP	DUP	05/15/25 11:00		jignesh	OK

Instrument ID: IGN-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135789

Review By	Iwona	Review On	5/15/2025 1:06:07 PM
Supervise By	jignesh	Supervise On	5/15/2025 3:43:31 PM
SubDirectory	LB135789	Test	Flash Point
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	W3193		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	ICV	ICV	ICV	05/15/25 08:40		Iwona	OK
2	Q2033-01	TW-WTS-08	SAM	05/15/25 09:10		Iwona	OK
3	Q2033-01DUP	TW-WTS-08DUP	DUP	05/15/25 09:40		Iwona	OK
4	Q2043-05	3139	SAM	05/15/25 10:10		Iwona	OK
5	Q2044-02	3859	SAM	05/15/25 10:40		Iwona	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB135797

Review By	jignesh	Review On	5/19/2025 11:31:49 AM
Supervise By	Iwona	Supervise On	5/19/2025 1:21:25 PM
SubDirectory	LB135797	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	LB135797BL	LB135797BL	MB	05/16/25 11:25		jignesh	OK
2	LB135797BS	LB135797BS	LCS	05/16/25 11:25		jignesh	OK
3	Q2026-01	001-WILLETS-PT-BL	SAM	05/16/25 11:25		jignesh	OK
4	Q2026-02	002-35TH-AVE(MAY)	SAM	05/16/25 11:25		jignesh	OK
5	Q2029-01	TOWER-1	SAM	05/16/25 11:25		jignesh	OK
6	Q2029-02	TOWER-2	SAM	05/16/25 11:25		jignesh	OK
7	Q2030-01	402-PSD	SAM	05/16/25 11:25		jignesh	OK
8	Q2030-02	AHW-PSD	SAM	05/16/25 11:25		jignesh	OK
9	Q2031-01	DSN002	SAM	05/16/25 11:25		jignesh	OK
10	Q2031-03	DSN001	SAM	05/16/25 11:25		jignesh	OK
11	Q2031-05	DSN003	SAM	05/16/25 11:25		jignesh	OK
12	Q2031-05DUP	DSN003DUP	DUP	05/16/25 11:25		jignesh	OK
13	Q2033-01	TW-WTS-08	SAM	05/16/25 11:25		jignesh	OK
14	Q2036-02	COMP	SAM	05/16/25 11:25		jignesh	OK
15	Q2058-01	EFFLUENT	SAM	05/16/25 11:25		jignesh	OK
16	Q2058-04	AERATION-TK1	SAM	05/16/25 11:25		jignesh	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135830

Review By	rubina	Review On	5/20/2025 10:53:31 AM
Supervise By	Iwona	Supervise On	5/20/2025 11:23:03 AM
SubDirectory	LB135830	Test	TKN
STD. NAME	STD REF.#		
ICAL Standard	WP113126		
ICV Standard	WP113128		
CCV Standard	WP113127		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113129		
Chk Standard	WP112897,WP111745,WP111385,WP111660		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	05/19/25 14:07		rubina	OK
2	0.5PPM	0.5PPM	CAL2	05/19/25 14:07		rubina	OK
3	1.0PPM	1.0PPM	CAL3	05/19/25 14:07		rubina	OK
4	2.5PPM	2.5PPM	CAL4	05/19/25 14:07		rubina	OK
5	5.0PPM	5.0PPM	CAL5	05/19/25 14:07		rubina	OK
6	6.7PPM	6.7PPM	CAL6	05/19/25 14:07		rubina	OK
7	10.0PPM	10.0PPM	CAL7	05/19/25 14:07		rubina	OK
8	ICV1	ICV1	ICV	05/19/25 15:29		rubina	OK
9	ICB1	ICB1	ICB	05/19/25 15:29		rubina	OK
10	CCV1	CCV1	CCV	05/19/25 15:29		rubina	OK
11	CCB1	CCB1	CCB	05/19/25 15:29		rubina	OK
12	RL	RL	LOQ	05/19/25 15:29		rubina	OK
13	PB168059BL	PB168059BL	MB	05/19/25 15:29		rubina	OK
14	PB168059BS	PB168059BS	LCS	05/19/25 15:39		rubina	OK
15	Q2033-01	TW-WTS-08	SAM	05/19/25 15:39	TKN is high	rubina	Dilution
16	Q2065-01	VACTRUCK-728068	SAM	05/19/25 15:39		rubina	OK
17	Q2067-01	303-PPR-FRAC	SAM	05/19/25 16:22		rubina	OK
18	Q2067-01DUP	303-PPR-FRACDUP	DUP	05/19/25 16:22		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135830

Review By	rubina	Review On	5/20/2025 10:53:31 AM
Supervise By	Iwona	Supervise On	5/20/2025 11:23:03 AM
SubDirectory	LB135830	Test	TKN
STD. NAME	STD REF.#		
ICAL Standard	WP113126		
ICV Standard	WP113128		
CCV Standard	WP113127		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP113129		
Chk Standard	WP112897,WP111745,WP111385,WP111660		

19	Q2067-01MS	303-PPR-FRACMS	MS	05/19/25 16:22		rubina	OK
20	Q2067-01MSD	303-PPR-FRACMSD	MSD	05/19/25 16:22		rubina	OK
21	Q2068-03	LAW-25-0074	SAM	05/19/25 16:22		rubina	OK
22	CCV2	CCV2	CCV	05/19/25 16:28		rubina	OK
23	CCB2	CCB2	CCB	05/19/25 16:28		rubina	OK
24	Q2033-01DL	TW-WTS-08DL	SAM	05/19/25 16:28	2X For TKN	rubina	Confirms
25	CCV3	CCV3	CCV	05/19/25 16:47		rubina	OK
26	CCB3	CCB3	CCB	05/19/25 16:47		rubina	OK



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

Instrument ID:

Daily Analysis Runlog For Sequence/QC Batch ID #

Review By	Review On
Supervise By	Supervise On

STD. NAME	STD REF.#
ICAL Standard ICV Standard CCV Standard ICSA Standard CRI Standard LCS Standard Chk Standard	

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status

Prep Standard - Chemical Standard Summary

Order ID : Q2033

Test : Anions Group2,BOD5,Flash Point,Hexavalent Chromium,pH,TKN,Total Nitrogen,TS,TSS

Prepbatch ID : PB168059,

Sequence ID/Qc Batch ID: LB135762, LB135773, LB135774, LB135781, LB135788, LB135789, LB135797, LB135830, LB135854,

Standard ID :

WP111315, WP111316, WP111319, WP111323, WP111385, WP111660, WP111745, WP112079, WP112611, WP112612, WP112787, WP112788, WP112789, WP112790, WP112791, WP112792, WP112793, WP112794, WP112796, WP112798, WP112800, WP112828, WP112831, WP112832, WP112897, WP113061, WP113062, WP113071, WP113072, WP113073, WP113074, WP113075, WP113076, WP113077, WP113078, WP113079, WP113080, WP113081, WP113082, WP113083, WP113126, WP113127, WP113128, WP113129,

Chemical ID :

E3932, M6041, W2647, W2651, W2652, W2653, W2654, W2666, W2697, W2858, W2979, W2983, W3059, W3071, W3072, W3093, W3103, W3105, W3109, W3112, W3113, W3132, W3140, W3144, W3148, W3149, W3161, W3163, W3174, W3178, W3180, W3191, W3193, W3195, W3196, W3197, W3205,



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

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



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
619	TKN digestion solution	WP111319	01/09/2025	04/23/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 01/09/2025
<u>FROM</u>	134.00000gram of W2983 + 134.00000ml of M6041 + 7.30000gram of W2697 + 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>
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
<u>FROM</u> 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_SCALE_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>
2487	Anions 300/9056 calibration standard 1	WP112787	04/22/2025	04/23/2025	Iwona Zarych	None	None	Jignesh Parikh 04/22/2025

FROM 10.00000ml of W3112 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
24	Anions 300/9056 calibration standard 2	WP112788	04/22/2025	04/23/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 04/22/2025

FROM 0.20000ml of W3180 + 9.80000ml of W3112 = Final Quantity: 10.000 ml

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
25	Anions 300/9056 calibration standard 3	WP112789	04/22/2025	04/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 04/22/2025
FROM 0.40000ml of W3180 + 9.60000ml of W3112 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
26	Anions 300/9056 calibration standard 4	WP112790	04/22/2025	04/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 04/22/2025
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	WP112791	04/22/2025	04/23/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3	Jignesh Parikh
<u>FROM</u>		(WC)						
45.00000ml of W3112 + 5.00000ml of W3180 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3679	Anions 300/9056 calibration standard 6	WP112792	04/22/2025	04/23/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 04/22/2025
<u>FROM</u> 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	WP112793	04/22/2025	04/23/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 04/22/2025
<u>FROM</u> 2.50000ml of W3180 + 7.50000ml of W3112 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
83	TCLP Fluid#1	WP112794	04/22/2025	10/22/2025	Jignesh Parikh	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 04/22/2025
FROM 114.00000ml of W3205 + 19834.56000ml of W3112 + 45.00000ml of W3112 + 5.00000ml of W3197 + 51.44000gram of W3113 = 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	WP112794	04/22/2025	04/23/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 04/22/2025
<u>FROM</u> 114.00000ml of W3205 + 19834.56000ml of W3112 + 45.00000ml of W3112 + 5.00000ml of W3197 + 51.44000gram of W3113 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4035	IC ELUENT CONCENTRATE FOR IC-1	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								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4036	IC ELUENT FOR IC-1	WP112798	04/22/2025	05/22/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 04/22/2025

FROM 1980.00000ml of W3112 + 20.00000ml of WP112796 = Final Quantity: 2000.000 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>
4037	IC H2SO4 FOR IC-1	WP112800	04/22/2025	05/22/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 04/22/2025

FROM 5.60000ml of M6041 + 994.40000ml 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>
1597	0.04 N H2SO4	WP112828	04/25/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 04/25/2025

FROM 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

FROM 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>
1841	Sulfuric Acid, 1N	WP112832	04/25/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 04/25/2025
<u>FROM</u>	2.80000ml of M6041 + 97.20000ml 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	WP112897	04/30/2025	05/30/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 05/01/2025
<u>FROM</u>	0.05000gram of W2666 + 99.95000ml 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>
3680	Anions 300/9056 calibration standard 5-CCV	WP113061	05/14/2025	05/15/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/14/2025
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>
3233	Anions 300/9056 ICV-LCS std	WP113062	05/14/2025	05/15/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/14/2025
FROM 45.00000ml of W3112 + 5.00000ml of W3180 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
127	BOD Dilution fluid	WP113071	05/14/2025	05/15/2025	Rubina Mughal	None	None	Iwona Zarych
								05/15/2025

FROM 18.00000L of W3112 + 3.00000PILLOW of W3144 = Final Quantity: 18.000 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>
129	Glutamic acid-glucose mix for BOD	WP113072	05/14/2025	05/15/2025	Rubina Mughal	WETCHEM_SCALE_7 (WC SC-6)	None	Iwona Zarych
								05/15/2025

FROM 0.15000gram of W2653 + 0.15000gram of W2654 + 1000.00000ml 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>
128	polyseed seed control	WP113073	05/14/2025	05/15/2025	Rubina Mughal	None	None	Iwona Zarych
								05/15/2025

FROM 1.00000PILLOW of W3059 + 300.00000ml of WP113071 = Final Quantity: 300.000 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>
1103	HEX CHROME INTERMEDIATE STD SOURCE 1 (5PPM)	WP113074	05/14/2025	05/15/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych
								05/15/2025

FROM 9.00000ml of W3112 + 1.00000ml of WP111315 = 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>
110	calibration std. hexchrome 0 ppm	WP113075	05/14/2025	05/15/2025	Rubina Mughal	None	None	Iwona Zarych
								05/15/2025

FROM 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>
109	calibration std. hexchrome 0.01 ppm	WP113076	05/14/2025	05/15/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych
								05/15/2025

FROM 99.80000ml of W3112 + 0.20000ml of WP113074 = 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>
3800	Calibration Std Hexachrome 0.025 ppm	WP113077	05/14/2025	05/15/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 05/15/2025
FROM 99.50000ml of W3112 + 0.50000ml of WP113074 = 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>
108	Calibration Std. hexchrome 0.05 ppm	WP113078	05/14/2025	05/15/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 05/15/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP113074 = 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>
107	Calibration Std. hexchrome 0.1 ppm	WP113079	05/14/2025	05/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC) FROM 99.80000ml of W3112 + 0.20000ml of WP111315 = 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>
3808	Calibration and CCV std HexChrome 0.5PPM	WP113080	05/14/2025	05/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych 05/15/2025
<u>FROM</u> 99.00000ml of W3112 + 1.00000ml of WP111315 = 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>
3809	Calibration std HexChrome 1.0PPM	WP113081	05/14/2025	05/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/15/2025
<u>FROM</u> 98.00000ml of W3112 + 2.00000ml of WP111315 = 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>
3804	Hexavalent Chromium ICV-LCS Std	WP113082	05/14/2025	05/15/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/15/2025
<u>FROM</u> 99.00000ml of W3112 + 1.00000ml of WP111316 = Final Quantity: 100.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
114	hexavalent chromium color reagent	WP113083	05/14/2025	05/21/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych 05/15/2025
<u>FROM</u> 0.25000gram of W2979 + 50.00000ml of E3932 = 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)	WP113126	05/19/2025	05/26/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/20/2025
<u>FROM</u> 49.50000ml of W3112 + 0.50000ml 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>
297	TKN CCV STD 5 ppm	WP113127	05/19/2025	05/26/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 05/20/2025
FROM 49.75000ml of W3112 + 0.25000ml 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>
296	TKN ICV STD 5 ppm	WP113128	05/19/2025	05/26/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 05/20/2025
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	WP113129	05/19/2025	05/26/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/20/2025
<u>FROM</u> 49.75000ml of W3112 + 0.25000ml of WP112612 = Final Quantity: 50.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	11/05/2025	05/05/2025 / RUPESH	04/23/2025 / RUPESH	E3932

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

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AC156212500 / GLUTAMIC ACID BIOCHEM REG, 250G	A0405990	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2653

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	D16-500 / DEXTROSE ANHYDROUS ACS REAGENT, 500G(New)	186122A	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2654

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.	0330-500G / Cupric Sulfate Pentahydrate	CPECG2635	04/23/2025	04/23/2020 / apatel	04/23/2020 / apatel	W2697

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

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	136742-80 / POLYSEED	152305	05/30/2025	02/15/2024 / Rubina	10/18/2023 / Iwona	W3059

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14940-1 / Buffer Solution, PH12 (500ml)	2310P21	04/30/2025	01/02/2024 / JIGNESH	12/07/2023 / Iwona	W3072

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 #
PCI Scientific Supply, Inc.	4620-32 / MANGANOUS SULFATE SOLUTION-364	2403J02	03/31/2026	04/22/2024 / Iwona	04/22/2024 / Iwona	W3103

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL69870-8 / SODIUM THIOSULFATE,0.025N,4LITRE	4403S13	09/30/2025	04/22/2024 / Iwona	04/22/2024 / Iwona	W3105

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL04100-4 / Alkaline Iodide Azide, 1 L	1405D67	04/30/2026	05/23/2024 / Iwona	05/23/2024 / Iwona	W3109

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

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

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

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 / Iwona	09/17/2024 / Iwona	W3140

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
HACH	1486266 / BOD Nutrient Buffer Pillows, 6 mL concentrate to make 6 L, 50/pk	A4169	06/30/2029	11/20/2024 / rubina	10/01/2024 / Iwona	W3144

CHEMICAL RECEIPT LOG BOOK

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 / Iwona	10/07/2024 / Iwona	W3148

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL70850-8 / Starch Solution, 4L	4408P62	08/31/2026	10/16/2024 / Iwona	10/16/2024 / Iwona	W3149

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 / Iwona	12/09/2024 / Iwona	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 / Iwona	12/10/2024 / Iwona	W3163

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	300-CAL-A-500ML / 300.0 Calibration Standard, 500 ml	V2-MEB742616	02/19/2026	02/19/2025 / Iwona	01/27/2025 / Iwona	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.	TCX0014-500ML / p-xylene	C6PEN	03/19/2029	03/21/2025 / rubina	03/19/2025 / Iwona	W3193

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 / Iwona	03/19/2025 / Iwona	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 / Iwona	03/19/2025 / Iwona	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 / Iwona	04/08/2025 / Iwona	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.	PC01050-3 / ACETIC ACID, GLACIAL, ACS, 2.5L	540404	04/30/2026	04/22/2025 / jignesh	04/17/2025 / jignesh	W3205

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

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

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

(sodium hydrogen carbonate)



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

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

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

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

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


Jamie Ethier
Vice President Global Quality

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

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%

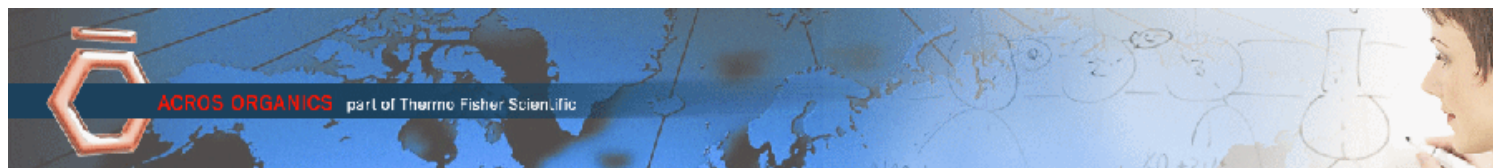
Lot No.: W12F013

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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ACROS
ORGANICS

Version 0
Molecular weight 147.13
Molecular formula C₅ H₉ N O₄
CAS No 56-86-0
Linear formula HO₂CCH₂CH₂CH(NH₂)CO₂H
Flash point (°C)

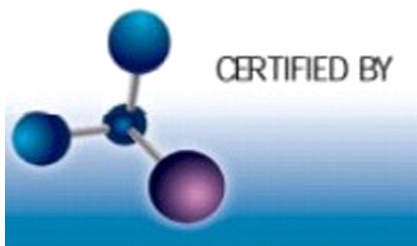
Certificate of Analysis

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Catalog Number	15621	Quality Test / Release Date	13 March 2019
Lot Number	A0405990	Suggested Retest Date	March 2022
Description	L(+)-Glutamic acid, 99%		
Country of Origin	CHINA		
Declaration of Origin	plant		

Origin Comment	The product is made by fermentation of sugar molasses
-----------------------	---

Result Name	Specifications	Test Value
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Infrared spectrum	Conforms	Conforms
Titration with NaOH	98.5 to 100.5 % (On dried substance)	99.32 % (On dried substance)
Loss on drying	=<0.5 % (105°C, 3 hrs)	0.002 % (105°C, 3 hrs)
Heavy metals (as Pb)	=<10 ppm	=<10 ppm
Sulfated ash	=<0.1 %	0.08 %
Other amino acids	not detectable	not detectable
Specific optical rotation	+30.5° to +32.5° (20°C, 589 nm) (on dried substance)	+32° (20°C, 589 nm) (on dried substance)
Specific optical rotation	(c=10, 2N HCl)	(c=10, 2N HCl)
Chloride (Cl)	=<200 ppm	=<200 ppm
Iron (Fe)	=<30 ppm	=<10 ppm
Sulfate (SO ₄)	=<300 ppm	=<200 ppm
Ammonium (NH ₄)	=<200 ppm	=<200 ppm
Arsenic oxide (As ₂ O ₃)	=<1 ppm	=<1 ppm



L. Van den Broek, QA Manager

Issued: 24 January 2020

Acros Organics

ENA23, zone 1, nr 1350, Janssen Pharmaceuticaaan 3a, B-2440 Geel, Belgium

Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: <http://www.acros.com>

1 Reagent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

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

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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.





CERTIFICATE OF ANALYSIS

PO BOX 130549 Spring, TX 77393
Phone: (281) 298-9410 Fax: (281) 298-9411

W 3059
REC. 10/18/23 12

FINISHED PRODUCT, LOT NUMBER, MFG. /EXP DATE:

PolySeed® • Part No. P-110 • Lot 152305 • Mfg. Date: 05/2023 • Exp. Date: 05/2025

FORMULATION:

The formulation for this product contains a range of naturally occurring microorganisms, which are known to be non-pathogenic to man or animals.

VIABLE COUNT, FINAL TEST RESULT:

The product has been fully tested in accordance with Finished Product Specifications and contains a minimum viable count of 4.00×10^9 cfu/g.

GLUCOSE/GLUTAMIC-ACID RESULTS:

Tested results within acceptable range 198 ± 30.5 mg/L (167.5 - 228.5 mg/L). GGA Lot# L257-09 – Average Test Result: 203.4

See www.polyseed.com for details.

SEED CONTROL FACTOR:

Tested results within acceptable range 0.6 – 1.0 see www.polyseed.com for details

SALMONELLA TEST RESULT:

The product has been shown to be Salmonella negative using procedures recommended in the Microbiology Laboratory Guidebook, published by the USDA Food Safety and Inspection Service.

The purpose of this document is to assure that the Finished Product conforms to the above specification.

Signature: _____

Quality Control Department

Date: 05/15/2023

POLYSEED.Ref.1.19

Revised Jan 23

InterLab®
International Laboratory Supply





RICCA CHEMICAL COMPANY®

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

W 3072
REC. 12/01/23
12

Certificate of Analysis

Buffer, Reference Standard, pH 12.00 ± 0.01 at 25°C

Lot Number: 2310P21

Product Number: 1615

Manufacture Date: OCT 24, 2023

Expiration Date: APR 2025

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

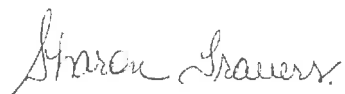
*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	12.005	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
1615-32	1 L natural poly	18 months
1615-5	20 L Cubitainer®	18 months

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



Sharon Travers (10/24/2023)

Operations Manager

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This product was tested in an ISO 17025 Accredited Laboratory

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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	D16	Quality Test / Release Date	03/19/2019
Lot Number	186122A		
Description	DEXTROSE, ANHYDROUS, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Mar/2022
Chemical Origin	Organic - Plant		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	White, granular powder
TITRATABLE ACID	MEQ/G	<= 0.002	<0.002
STARCH		= PASS TEST	pass test
SPECIFIC ROTATION @ 25 C	DEGREES (+ OR -)	Inclusive Between +52.5 - +53.0	53.0
SULFATE & SULFITE	%	<= 0.005	<0.005
IRON (Fe)	ppm	<= 5	<5
CHLORIDE	%	<= 0.01	<0.01
IGNITION RESIDUE	%	<= 0.02	<0.02
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
HEAVY METALS (as Pb)	ppm	<= 5	<5
LOSS ON DRYING @ 105 C	%	<= 0.2	<0.2
INSOLUBLE MATTER	%	<= 0.005	0.002

Jerisa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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

*Based on suggested storage condition.



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Catalog Number	P188	Quality Test / Release Date	08/12/2019
Lot Number	194664		
Description	POTASSIUM DICHROMATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Aug/2024
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		
Chemical Comment			

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

Jerusa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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

*Based on suggested storage condition.

Allan Chemical Corporation

235 Margaret King Avenue
Ringwood NJ 07456

Telephone: 973-962-4014
Fax: 973-962-6820
E-Mail: allanchem@allanchem.com

ATTN: ALLAN CHEMICAL - QC DEPT.
DATE: September 20, 2021
P.O. #: 14410
PART #: N/A
LOT #: CPECG2635

W2697

CERTIFICATE OF ANALYSIS CUPRIC SULFATE CRYSTAL – ACS GRADE

<u>ASSAY:</u>	102.0 %
<u>LEAD:</u>	< 0.0001 %
<u>NITROGEN COMPOUNDS:</u>	< 0.001 %
<u>ZINC:</u>	< 0.0001 %
<u>INSOLUBLE MATTER:</u>	< 0.001 %
<u>CHLORIDE:</u>	< 0.001 %
<u>CHROMIUM:</u>	< 0.00002 %
<u>IRON:</u>	0.0003 %
<u>NICKEL:</u>	< 0.0001 %
<u>CADMIUM:</u>	< 0.0001 %
<u>MANGANESE:</u>	< 0.0001 %
<u>CALCIUM:</u>	< 0.005 %
<u>POTASSIUM:</u>	< 0.001 %
<u>SODIUM:</u>	< 0.001 %

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

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

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

RS

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3932

Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC

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

avantor™



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™**

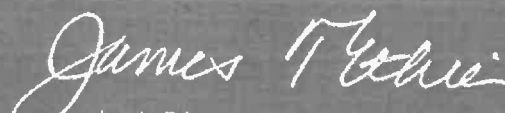


Material No.: 9673-33
Batch No.: 23D2462010

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

W 2979

Rec: 12/09/22

exp. 12/09/27

Product Name:

1,5-Diphenylcarbazide - ACS reagent

Product Number:

259225

Batch Number:

MKCR6636

Brand:

SIAL

CAS Number:

140-22-7

MDL Number:

MFCD00003013

Formula:

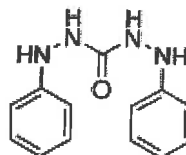
C₁₃H₁₄N₄O

Formula Weight:

242.28 g/mol

Quality Release Date:

02 JUN 2022



Certificate of Analysis

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



Larry Coers, Director
Quality Control
Milwaukee, WI US

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



**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

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Certificate of Analysis

Manganous Sulfate Solution, 364 g/L**Lot Number:** 2403J02**Product Number:** 4620**Manufacture Date:** MAR 15, 2024**Expiration Date:** MAR 2026

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Manganous Sulfate Monohydrate	10034-96-5	Reagent
Sulfuric Acid	7664-93-9	ACS

Test	Specification	Result
Appearance	Pink liquid	Passed
Assay (by Refractive Index)	360-368 g/L	367 g/L

Specification	Reference
Manganous Sulfate Solution	ASTM (D 888 A)
Manganous Sulfate Solution	ASTM (D 888 A)
Manganous Sulfate Solution	APHA (4500-O E)
Manganous Sulfate Solution	APHA (4500-O F)
Manganous Sulfate Solution	APHA (4500-O D)
Manganous Sulfate Solution	APHA (4500-O E)
Manganous Sulfate Solution	APHA (4500-O F)
Manganous Sulfate Solution	APHA (4500-O D)
Manganous Sulfate Solution	APHA (4500-O C)
Manganous Sulfate Solution	APHA (4500-O C)
Manganous Sulfate Solution	EPA (360.2)
Manganous Sulfate Solution	EPA (360.2)

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)
4620-32	1 L natural poly	24 months

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



Jose Pena (03/15/2024)

Operations Manager

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Contents of Certificates and Labels."

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Certificate of Analysis

Sodium Thiosulfate, 0.0250 Normal (N/40)

Lot Number: 4403S13

Product Number: 7900

Manufacture Date: MAR 29, 2024

Expiration Date: SEP 2025

This product is specially formulated to increase its stability. A preservative is added to prevent bacterial contamination. However, all Sodium Thiosulfate solutions are subject to slow chemical deterioration and should be restandardized periodically.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Thiosulfate Pentahydrate	10102-17-7	ACS
Organic Preservative	Proprietary	
Sodium Carbonate	497-19-8	ACS

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Potassium Iodate/Starch)	0.02499-0.02501 N at 20°C	0.02501 N at 20°C	136

Specification	Reference
Standard Sodium Thiosulfate Solution, 0.0250 N	APHA (4500-S2- F)
Standard Sodium Thiosulfate Titrant	APHA (4500-O D)
Standard Sodium Thiosulfate Titrant	APHA (4500-O E)
Standard Sodium Thiosulfate Titrant	APHA (4500-O F)
Standard Sodium Thiosulfate Titrant, 0.025 N	APHA (4500-CI B)
Standard Sodium Thiosulfate Titrant	APHA (4500-O C)
Standard Sodium Thiosulfate Titrant, 0.025 M	APHA (5530 C)
Standard Sodium Thiosulfate Solution (0.025 N)	EPA (SW-846) (9031)
Standard Sodium Thiosulfate solution (0.025 N)	EPA (SW-846) (9034)

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)
7900-1	4 L natural poly	18 months
7900-16	500 mL natural poly	18 months
7900-1CT	4 L Cubitainer®	18 months
7900-32	1 L natural poly	18 months

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



Paul Brandon (03/29/2024)

Production Manager

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Certificate of Analysis

Alkaline-Iodide-Azide, Pomeroy Formulation for Dissolved Oxygen (DO) Analysis

Lot Number: 1405D67

Product Number: 535

Manufacture Date: APR 05, 2024

Expiration Date: APR 2026

This solution is intended for use with samples with high Dissolved Oxygen content (above 15 mg/L) and for samples with high concentrations of organic material.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Iodide	7681-82-5	ACS
Sodium Hydroxide	1310-73-2	ACS
Sodium Azide	26628-22-8	Reagent

Test	Specification	Result
Appearance	Colorless liquid	Passed
Free Iodine	To Pass Test	Passed

Specification	Reference
Alkaline Iodide-Sodium Azide Solution II	ASTM (D 888 A)
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)
535-32	1 L natural poly	24 months

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



Heidi J Green (04/05/2024)
Operations Manager

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Certificate of Analysis



Sodium Hydroxide (Pellets)

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

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

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

Storage: Room Temperature

Pellets

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

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.



Sodium Hydroxide (Pellets)

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

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

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

Storage: Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.

Item Number	ED150	Lot Number	2ND0156
Item	Edetate Disodium, Dihydrate, USP	CAS Number	6381-92-6
Molecular Formula	C ₁₀ H ₁₄ N 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.



An ISO 9001 Certified Company

Loveland, CO 80539

(970) 669-3050

Certificate of Analysis

This is a Component of 1486266 / LOT A4169

PRODUCT: BOD Nutrient Buffer Pillows

PRODUCT NUMBER: 1486227

LOT NUMBER: A4169

MANUFACTURE DATE: 06/24/2024

DATE OF ANALYSIS: 07/03/2024

TEST	SPECIFICATIONS	RESULTS
Calcium Concentration of a diluted pillow	0.93 to 1.29 ppm	0.960 ppm
Magnesium Concentration of a diluted pillow	0.35 to 0.48 ppm	0.390 ppm
pH in a 6 L of DI water	7.1 to 7.6	7.37
Ammonia Concentration of a diluted pillow	0.57 to 0.79 ppm	0.593 ppm
Iron Concentration of a diluted pillow	0.27 to 0.36 ppm	0.311 ppm
Sterility	To Pass	Passed
Phosphorus Concentration of a diluted pillow	7.6 to 10.3 ppm	8.32 ppm
Five Day Change in Dissolved Oxygen Concentration	-0.2 to 0.2 ppm	0.03 ppm

The expiration date is Jun 2029

Certified by: *Scott Als*

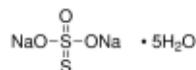
Analytical Services Chemist

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

Starch Indicator, 0.5% (w/v), Mercury Free, for Iodometric Titrations

Lot Number: 4408P62

Product Number: 8000

Manufacture Date: AUG 28, 2024

Expiration Date: AUG 2026

This product is Mercury-free.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Starch, soluble	9005-84-9	ACS
Salicylic Acid	69-72-7	ACS

Test	Specification	Result
Appearance	White translucent liquid	Passed
Suitability for Use	Colorless (Iodine absent) - Blue (Iodine present)	Passed

Specification	Reference
Starch Solution	APHA (4500-S2- F)
Starch Indicator Solution	APHA (4500-CI B)
Starch Indicator	APHA (4500-SO32- B)
Starch indicator solution	APHA (2350 B)
Starch indicator solution	APHA (2350 E)
Starch Solution	APHA (510 B)
Starch Solution	APHA (5530 C)
Starch Indicator	APHA (4500-CI C)
Starch Indicator	EPA (345.1)

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)
8000-1	4 L natural poly	24 months
8000-16	500 mL natural poly	24 months
8000-32	1 L natural poly	24 months

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

A handwritten signature in blue ink that reads "Paul Brandon". The signature is fluid and cursive, with the first name "Paul" and last name "Brandon" clearly distinguishable.

Paul Brandon (08/28/2024)
Production Manager

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



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

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W3163 Rec. on 12/10/24 by IZ

Certificate of Analysis



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

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

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

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

Internal ID #: 710

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

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

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**RICCA CHEMICAL COMPANY®**

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

Certificate of Analysis

W21758 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

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

1.0 ACCREDITATION / REGISTRATION

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



2.0 PRODUCT DESCRIPTION

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

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

Assay Information:

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

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

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

5.0 CHROMATOGRAM

N/A

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 02, 2024

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

11.2 Lot Expiration Date

- **April 02, 2029**

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Thomas Kozikowski
Stock VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





RICCA CHEMICAL COMPANY®

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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



W3193, W3194 Received on 03/19/2025 by IZ

Certificate of Analysis

03/19/2025(JST)

TOKYO CHEMICAL INDUSTRY CO.,LTD.

T-PLUS Nihonbashi-Kodemmacho

16-12 Nihonbashi-kodemmacho, Chuo-ku, Tokyo 103-0001, Japan

Chemical Name: p-Xylene		
Product Number: X0014 CAS RN: 106-42-3	Lot: C6PEN	

Tests	Results	Specifications
Appearance	Colorless clear liquid	Colorless to Almost colorless clear liquid
Purity(GC)	99.7 %	min. 99.0 %

TCI Lot numbers are 4-5 characters in length. Characters listed after the first 4-5 characters are control numbers for internal purpose only.

The contents of the specifications are subject to change without advance notice. The specification values displayed here are the most up to date values. There may be cases where the product labels display a different specification, however, the product quality still meets the latest specification.

Customer Service:

TCI AMERICA

Tel: +1-800-423-8616 / +1-503-283-1681

Fax: +1-888-520-1075 / +1-503-283-1987

E-mail: Sales-US@TCIchemicals.com

Takuya Nishioka
Quality Assurance Department Manager



W3195 Received on 03/19/2025 by IZ

Certificate of Analysis



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

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

Internal ID #: 710

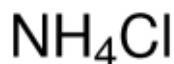
Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA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

W3196 Received on 03/19/2025 by IZ

Certificate of Analysis

Product Name:

Ammonium chloride - ACS reagent, ≥99.5%



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

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



Larry Coers, Director

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



Certificate of Analysis

Product Number: 213330
Batch Number: MKCV1009

Quality Control
Milwaukee, WI US

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



Ident	Instrument IC-1				Analyst: NF		Method: 300.0 / 9056A		Initial Analyst		
	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO4	Con SO4				
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	

CORCO CHEMICAL CORPORATION

Manufacturers of ACS Reagents and Semiconductor Grade Chemicals

W3205
0942

04/22/25

CERTIFICATE OF ANALYSIS

Date: 4/4/2024

80

Lot No. 540404

Acetic Acid, Glacial (ACS) Reagent Grade

<u>TEST</u>	<u>MAXIMUM LIMITS</u>	<u>RESULT</u>
Appearance	Colorless and free from suspended matter or sediment	Pass
Assay	99.7 min.	99.99%
Color (APHA)	10	5
Dilution Test	Passes Test	Pass
Residue after evaporation	0.001%	0.0003%
Acetic Anhydride	0.01%	0.00%
Chloride (cl)	1 ppm	<1 ppm
Sulfate (SO ₄)	1 ppm	<1 ppm
Heavy Metals (as Pb)	0.5ppm	<0.02 ppm
Iron (Fe)	0.2ppm	<0.1 ppm
Sub. Red. Dichromate	Passes Test	Pass
Sub. Red. Permanganate	Passes Test	Pass
Titratable Base	0.0004meq/g	<0.0002 meq/g

DATE OF MFG: 4/2024
RETEST DATE: 4/2026



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:

Q2033

COC Number:

Page 1 of 1

CLIENT INFORMATION		PROJECT INFORMATION		BILLING INFORMATION																																							
COMPANY: ENTACT, LLC		PROJECT NAME: 540 Degraw St Brooklyn, NY		BILL TO: ENTACT, LLC					PO# E9309																																		
ADDRESS: 150 Bay Street, Suite 806		PROJECT #: E9309 LOCATION: Brooklyn, NY		ADDRESS: 999 Oakmont Plaza Drive, Suite 300																																							
CITY: Jersey City STATE: NJ ZIP: 07302		PROJECT-MANAGER: Austin Farmerie		CITY: Westmont					STATE: IL ZIP: 60559																																		
ATTENTION: Austin Farmerie		E-MAIL: afarmerie@entact.com		ATTENTION: Wendy Murray					PHONE: 800-936-8228																																		
PHONE: 412-716-1366 FAX:		PHONE: 412-716-1366 FAX:																																									
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		ANALYSIS																																							
FAX: 5 DAYS*		☐ RESULTS ONLY ☐ USEPA C1		<table border="1"><thead><tr><th>SVOC-TCL</th><th>Flash Point</th><th>PCB</th><th>BOD5</th><th>TSS</th><th>VOC-TCLVOC-A</th><th>Metals ICP-TAL</th><th></th><th></th><th></th></tr><tr><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th></th></tr></thead><tbody><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td></td></tr></tbody></table>										SVOC-TCL	Flash Point	PCB	BOD5	TSS	VOC-TCLVOC-A	Metals ICP-TAL				1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
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HARD COPY: 5 DAYS*		☐ RESULTS + QC ☐ New York B"																																									
EDD 5 DAYS*		☐ New Jersey REDUCED ☐ New York State ASP "A"																																									
* TO BE APPROVED BY ALLIANCE		☐ New Jersey CLP ☐ Other																																									
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS		☐ EDD Format																																									
CHEMTECH SAMPLE ID		PROJECT SAMPLE IDENTIFICATION		SAMPLE MATRIX		SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles		PRESERVATIVES								COMMENTS																							
						COMP GRAB		DATE TIME				E E E E E A B								<-- Specify Preservatives																							
												1 2 3 4 5 6 7 8 9								A-HCl B-HNO3																							
												X X X X X X X								C-H2SO4 D-NaOH																							
																				E-ICE F-Other																							
1. TW-WTS-08		Surface Water		X		5/12 15:00		7												pH 1.0																							
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SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY																																											
RELINQUISHED BY SAMPLER		DATE/TIME		RECEIVED BY		Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 3.1°C																																					
1. Austin Farmerie		05/12/25 15:00		1. [Signature]		Comments: 1547 X Ice in Cooler?: yes																																					
RELINQUISHED BY		DATE/TIME		RECEIVED BY		If Cool #1																																					
2.				2.																																							
RELINQUISHED BY		DATE/TIME		RECEIVED FOR LAB BY		SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight																																					
3. [Signature]		5-13-2025 1800		3.		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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2033	ENTA05	Order Date : 5/13/2025 4:02:00 PM	Project Mgr :
Client Name : ENTACT		Project Name : 540 Degraw St, Brooklyn, N	Report Type : Level 1
Client Contact : Jarod Stanfield		Receive DateTime : 5/13/2025 12:00:00 AM	EDD Type : Excel NJ
Invoice Name : ENTACT		Purchase Order : 18:00	Hard Copy Date :
Invoice Contact : Jarod Stanfield			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2033-01	TW-WTS-08	Water	05/12/2025	15:00	VOCMS Group4		8260-Low		5 Bus. Days

Relinquished By :

Date / Time :


5/14/25 0940

Received By :

Date / Time :


05/14/25 9:40 

Storage Area : VOA Refridgerator Room