

DATA PACKAGE GENERAL CHEMISTRY

PROJECT NAME : NEWPCP SLUDGE SCREEN 13923-GE-25

AMBRIC TECHNOLOGY CORPORATION

100 Pine Street

Colwyn, PA - 19023

Phone No: 215-928-8930

ORDER ID : Q3068

ATTENTION : Dan Mulvihill



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q3068

Project ID : NEWPCP Sludge Screen 13923-GE-25

Client : Ambric Technology Corporation

Lab Sample Number

Q3068-01

Client Sample Number

AMBRIC-TECH-9-9

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: 9/15/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

Ambric Technology Corporation

Project Name: NEWPCP Sludge Screen 13923-GE-25

Project # N/A

Order ID # Q3068

Test Name: Anions Group2,pH,Phosphorus, Total,TOC

A. Number of Samples and Date of Receipt:

1 Solid sample was received on 09/10/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested:

Anions Group2,pH,Phosphorus, Total,TOC. This data package contains results for

Anions Group2,pH,Phosphorus, Total,TOC.

C. Analytical Techniques:

The analysis of pH was based on method 9045D, The analysis of Anions Group2 was based on method 9056A and The analysis of TOC was based on method 9060A, The analysis of Phosphorus, Total was based on method 365.3

D. QA/ QC Samples:

The Holding Times were met for all samples except for AMBRIC-TECH-9-9 of pH as sample was receive out of holding time.

Sample AMBRIC-TECH-9-9 was diluted due to high concentrations for Phosphorus, Total.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

The Matrix Spike (AMBRIC-TECH-9-9MS) analysis met criteria for all compounds except for Chloride and Phosphorus, Total due to sample matrix interference.

The Matrix Spike Duplicate (AMBRIC-TECH-9-9MSD) analysis met criteria for all compounds except for Chloride and Phosphorus, Total due to sample matrix interference.

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

The Calibration met the requirements.

E. Additional Comments:

Lab has used least representable sample weight for the sample Q3068-01 for TOC analysis. Therefore Lab has reported the TOC result with "OR" qualifier.

The Date and time of sampling was not listed in the COC.

The temperature of the samples at the time of receipt was 27.3°C.



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

Signature_____

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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

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q3068

MATRIX: Solid

METHOD: 365.3,9045D,9056A,9060A

	NA	NO	YES
1. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
2. Matrix Spike Duplicate Recoveries Met Criteria		✓	
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
The Blank Spike met requirements for all compounds. The Matrix Spike (AMBRIC-TECH-9-9MS) analysis met criteria for all compounds except for Chloride and Phosphorus, Total due to sample matrix interference. The Matrix Spike Duplicate (AMBRIC-TECH-9-9MSD) analysis met criteria for all compounds except for Chloride and Phosphorus, Total due to sample matrix interference.			
3. Sample Duplicate Analysis Met QC Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
4. Digestion Holding Time Met		✓	
If not met, list number of days exceeded for each sample:			
The Holding Times were met for all samples except for AMBRIC-TECH-9-9 of pH as sample was receive out of holding time.			

ADDITIONAL COMMENTS:

Lab has used least representable sample weight for the sample Q3068-01 for TOC analysis. Therefore Lab has reported the TOC result with "OR" qualifier.

The Date and time of sampling was not listed in the COC.
 The temperature of the samples at the time of receipt was 27.3°C.

 QA REVIEW

 Date

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q3068

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 Custody

✓

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: 09/15/2025

LAB CHRONICLE

OrderID:	Q3068	OrderDate:	9/10/2025 10:27:58 AM
Client:	Ambric Technology Corporation	Project:	NEWPCP Sludge Screen 13923-GE-25
Contact:	Dan Mulvihill	Location:	D31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3068-01	AMBRIC-TECH-9-9	SOIL			09/09/25 12:00			09/10/25
			pH	9045D			09/11/25 08:45	
			Phosphorus, Total	365.3		09/11/25	09/11/25 13:22	
			Anions Group2	9056A			09/10/25 12:34	
			TOC	9060A			09/10/25 13:53	
Q3068-01DL	AMBRIC-TECH-9-9DL	SOIL			09/09/25 12:00			09/10/25
			Phosphorus, Total	365.3		09/11/25	09/11/25 13:24	



SAMPLE DATA

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Report of Analysis

Client:	Ambric Technology Corporation	Date Collected:	09/09/25 00:00
Project:	NEWPCP Sludge Screen 13923-GE-25	Date Received:	09/10/25
Client Sample ID:	AMBRIC-TECH-9-9	SDG No.:	Q3068
Lab Sample ID:	Q3068-01	Matrix:	SOIL
		% Solid:	89

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Chloride	160		1	3.90	13.5	mg/Kg		09/10/25 12:34	9056A
Nitrate	2.00	U	1	2.00	11.2	mg/Kg		09/10/25 12:34	9056A
Sulfate	219		1	9.80	67.3	mg/Kg		09/10/25 12:34	9056A
pH	7.80	H	1	0	0	pH		09/11/25 08:45	9045D
Phosphorus, Total	79.5	OR	1	0.32	2.73	mg/Kg	09/11/25 10:40	09/11/25 13:22	365.3
TOC	14900	OR	1	28.9	250	mg/Kg		09/10/25 13:53	9060A

Comments: pH result reported at temperature 20.2 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Ambric Technology Corporation	Date Collected:	09/09/25 12:00
Project:	NEWPCP Sludge Screen 13923-GE-25	Date Received:	09/10/25
Client Sample ID:	AMBRIC-TECH-9-9DL	SDG No.:	Q3068
Lab Sample ID:	Q3068-01DL	Matrix:	SOIL
		% Solid:	89

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Phosphorus, Total	303	D	10	3.16	27.3	mg/Kg	09/11/25 10:40	09/11/25 13:24	365.3

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: Ambric Technology Corporation

SDG No.: Q3068

Project: NEWPCP Sludge Screen 13923-GE-25

RunNo.: LB137133

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	10	10	100	90-110	09/09/2025
Chloride	mg/L	3	3	100	90-110	09/09/2025
Fluoride	mg/L	2	2	100	90-110	09/09/2025
Nitrite	mg/L	3	3	100	90-110	09/09/2025
Nitrate	mg/L	2.5	2.5	100	90-110	09/09/2025
Sulfate	mg/L	14.8	15	99	90-110	09/09/2025
Orthophosphate as P	mg/L	5	5	100	90-110	09/09/2025
Sample ID: CCV1						
Bromide	mg/L	10	10	100	90-110	09/10/2025
Chloride	mg/L	3	3	100	90-110	09/10/2025
Fluoride	mg/L	2	2	100	90-110	09/10/2025
Nitrite	mg/L	3	3	100	90-110	09/10/2025
Nitrate	mg/L	2.4	2.5	96	90-110	09/10/2025
Sulfate	mg/L	14.9	15	99	90-110	09/10/2025
Orthophosphate as P	mg/L	5	5	100	90-110	09/10/2025
Sample ID: CCV2						
Bromide	mg/L	10	10	100	90-110	09/10/2025
Chloride	mg/L	3	3	100	90-110	09/10/2025
Fluoride	mg/L	2	2	100	90-110	09/10/2025
Nitrite	mg/L	3	3	100	90-110	09/10/2025
Nitrate	mg/L	2.4	2.5	96	90-110	09/10/2025
Sulfate	mg/L	14.8	15	99	90-110	09/10/2025
Orthophosphate as P	mg/L	5.1	5	102	90-110	09/10/2025

Initial and Continuing Calibration Verification

Client: Ambric Technology Corporation

SDG No.: Q3068

Project: NEWPCP Sludge Screen 13923-GE-25

RunNo.: LB137140

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 TOC	mg/L	968	1000	97	90-110	07/22/2025
Sample ID: CCV1 TOC	mg/L	1050	1000	105	90-110	09/10/2025
Sample ID: CCV2 TOC	mg/L	1080	1000	108	90-110	09/10/2025

Initial and Continuing Calibration Verification

Client: Ambric Technology Corporation

SDG No.: Q3068

Project: NEWPCP Sludge Screen 13923-GE-25

RunNo.: LB137148

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV pH	pH	7.02	7	100	90-110	09/11/2025
Sample ID: CCV1 pH	pH	2.01	2.00	101	90-110	09/11/2025
Sample ID: CCV2 pH	pH	12.02	12.00	100	90-110	09/11/2025

Initial and Continuing Calibration Verification

Client: Ambric Technology Corporation

SDG No.: Q3068

Project: NEWPCP Sludge Screen 13923-GE-25

RunNo.: LB137156

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Phosphorus, Total	mg/L	0.497	0.50	99	90-110	09/11/2025
Sample ID: CCV1 Phosphorus, Total	mg/L	0.491	0.50	98	90-110	09/11/2025
Sample ID: CCV2 Phosphorus, Total	mg/L	0.501	0.50	100	90-110	09/11/2025
Sample ID: CCV3 Phosphorus, Total	mg/L	0.494	0.50	99	90-110	09/11/2025

Initial and Continuing Calibration Blank Summary

Client: Ambric Technology Corporation

SDG No.: Q3068

Project: NEWPCP Sludge Screen 13923-GE-25

RunNo.: LB137133

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	09/09/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	09/09/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	09/09/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	09/09/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	09/09/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	09/09/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	09/09/2025
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	09/10/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	09/10/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	09/10/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	09/10/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	09/10/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	09/10/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	09/10/2025
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.37	2	09/10/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.19	0.6	09/10/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.11	0.4	09/10/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.074	0.6	09/10/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.095	0.5	09/10/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.46	3	09/10/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.34	1	09/10/2025

Initial and Continuing Calibration Blank Summary

Client: Ambric Technology Corporation	SDG No.: Q3068
Project: NEWPCP Sludge Screen 13923-GE-25	RunNo.: LB137140

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 TOC	mg/L	< 125.0000	125.0000	U	22.3	250	07/22/2025
Sample ID: CCB1 TOC	mg/L	< 125.0000	125.0000	U	22.3	250	09/10/2025
Sample ID: CCB2 TOC	mg/L	< 125.0000	125.0000	U	22.3	250	09/10/2025

Initial and Continuing Calibration Blank Summary

Client: Ambric Technology Corporation	SDG No.: Q3068
Project: NEWPCP Sludge Screen 13923-GE-25	RunNo.: LB137156

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Phosphorus, Total	mg/L	0.008	0.0250	J	0.0045	0.05	09/11/2025
Sample ID: CCB1 Phosphorus, Total	mg/L	0.007	0.0250	J	0.0045	0.05	09/11/2025
Sample ID: CCB2 Phosphorus, Total	mg/L	0.005	0.0250	J	0.0045	0.05	09/11/2025
Sample ID: CCB3 Phosphorus, Total	mg/L	0.008	0.0250	J	0.0045	0.05	09/11/2025

Preparation Blank Summary

Client: Ambric Technology Corporation

SDG No.: Q3068

Project: NEWPCP Sludge Screen 13923-GE-25

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB137133BLS							
Bromide	mg/Kg	< 20.0000	20.0000	U	7	40	09/10/2025
Chloride	mg/Kg	< 6.0000	6.0000	U	3.5	12	09/10/2025
Fluoride	mg/Kg	< 4.0000	4.0000	U	1.8	8	09/10/2025
Nitrite	mg/Kg	< 6.0000	6.0000	U	1.5	12	09/10/2025
Nitrate	mg/Kg	< 5.0000	5.0000	U	1.8	10	09/10/2025
Sulfate	mg/Kg	< 30.0000	30.0000	U	8.8	60	09/10/2025
Orthophosphate as P	mg/Kg	< 10.0000	10.0000	U	6.7	20	09/10/2025
Sample ID: LB137140BLS							
TOC	mg/Kg	< 125.0000	125.0000	U	28.9	250	09/10/2025
Sample ID: PB169664BL							
Phosphorus, Total	mg/Kg	0.5	1.2500	J	0.29	2.5	09/11/2025

Matrix Spike Summary

Client:	Ambric Technology Corporation	SDG No.:	Q3068
Project:	NEWPCP Sludge Screen 13923-GE-25	Sample ID:	Q3068-01
Client ID:	AMBRIC-TECH-9-9MS	Percent Solids for Spike Sample:	89

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/Kg	80-120	226		7.90	U	220	1	103		09/10/2025
TOC	mg/Kg	75-125	16000	OR	14900	OR	1000	1	110		09/10/2025
Phosphorus, Total	mg/Kg	90-110	326	D	303	D	26.5	10	87	*	09/11/2025
Chloride	mg/Kg	80-120	251	OR	160		67	1	136	*	09/10/2025
Fluoride	mg/Kg	80-120	45.7		3.60	J	44.7	1	94		09/10/2025
Nitrite	mg/Kg	80-120	66.7		1.70	U	67	1	100		09/10/2025
Nitrate	mg/Kg	80-120	54.9		2.00	U	55.8	1	98		09/10/2025
Sulfate	mg/Kg	80-120	572		219		340	1	104		09/10/2025
Orthophosphate as P	mg/Kg	80-120	94.4		7.50	U	110	1	86		09/10/2025

Matrix Spike Summary

Client:	Ambric Technology Corporation	SDG No.:	Q3068
Project:	NEWPCP Sludge Screen 13923-GE-25	Sample ID:	Q3068-01
Client ID:	AMBRIC-TECH-9-9MSD	Percent Solids for Spike Sample:	89

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/Kg	80-120	227		7.90	U	220	1	103		09/10/2025
TOC	mg/Kg	75-125	16100	OR	14900	OR	1000	1	120		09/10/2025
Phosphorus, Total	mg/Kg	90-110	325	D	303	D	26.5	10	83	*	09/11/2025
Chloride	mg/Kg	80-120	252	OR	160		67.3	1	137	*	09/10/2025
Fluoride	mg/Kg	80-120	46.7		3.60	J	44.9	1	96		09/10/2025
Nitrite	mg/Kg	80-120	67.3		1.70	U	67.3	1	100		09/10/2025
Nitrate	mg/Kg	80-120	55.3		2.00	U	56.1	1	99		09/10/2025
Sulfate	mg/Kg	80-120	577		219		340	1	105		09/10/2025
Orthophosphate as P	mg/Kg	80-120	108		7.50	U	110	1	98		09/10/2025

Duplicate Sample Summary

Client:	Ambric Technology Corporation	SDG No.:	Q3068
Project:	NEWPCP Sludge Screen 13923-GE-25	Sample ID:	Q3068-01
Client ID:	AMBRIC-TECH-9-9DUP	Percent Solids for Spike Sample:	89

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
pH	pH	+/-20	7.80		7.82		1	0.26		09/11/2025

Duplicate Sample Summary

Client:	Ambric Technology Corporation	SDG No.:	Q3068
Project:	NEWPCP Sludge Screen 13923-GE-25	Sample ID:	Q3068-01DL
Client ID:	AMBRIC-TECH-9-9DUP	Percent Solids for Spike Sample:	89

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Phosphorus, Total	mg/Kg	+/-20	303	D	297	D	10	2		09/11/2025

Duplicate Sample Summary

Client: Ambric Technology Corporation	SDG No.: Q3068
Project: NEWPCP Sludge Screen 13923-GE-25	Sample ID: Q3068-01
Client ID: AMBRIC-TECH-9-9MSD	Percent Solids for Spike Sample: 89

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Bromide	mg/Kg	+/-15	226		227		1	0		09/10/2025
Chloride	mg/Kg	+/-15	251	OR	252	OR	1	0		09/10/2025
Nitrate	mg/Kg	+/-15	54.9		55.3		1	1		09/10/2025
Nitrite	mg/Kg	+/-15	66.7		67.3		1	1		09/10/2025
Sulfate	mg/Kg	+/-15	572		577		1	1		09/10/2025
Orthophosphate as P	mg/Kg	+/-15	94.4		108		1	13		09/10/2025
Fluoride	mg/Kg	+/-15	45.7		46.7		1	2		09/10/2025
TOC	mg/Kg	+/-20	16000	OR	16100	OR	1	1		09/10/2025
Phosphorus, Total	mg/Kg	+/-20	326	D	325	D	10	0.31		09/11/2025

Laboratory Control Sample Summary

Client:	Ambric Technology Corporation	SDG No.:	Q3068
Project:	NEWPCP Sludge Screen 13923-GE-25	Run No.:	LB137133

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137133BSS							
Bromide	mg/Kg	200	200		100	1	90-110	09/10/2025
Chloride	mg/Kg	60	59.0		98	1	90-110	09/10/2025
Fluoride	mg/Kg	40	40.3		101	1	90-110	09/10/2025
Nitrite	mg/Kg	60	59.3		99	1	90-110	09/10/2025
Nitrate	mg/Kg	50	48.5		97	1	90-110	09/10/2025
Sulfate	mg/Kg	300	297		99	1	90-110	09/10/2025
Orthophosphate as P	mg/Kg	100	100		100	1	90-110	09/10/2025

Laboratory Control Sample Summary

Client:	Ambric Technology Corporation	SDG No.:	Q3068
Project:	NEWPCP Sludge Screen 13923-GE-25	Run No.:	LB137140

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137140BSS							
TOC	mg/Kg	1000	1040		104	1	90-110	09/10/2025

Laboratory Control Sample Summary

Client:	Ambric Technology Corporation	SDG No.:	Q3068
Project:	NEWPCP Sludge Screen 13923-GE-25	Run No.:	LB137156

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB169664BS							
Phosphorus, Total	mg/Kg	25.0	25.0		100	1	90-110	09/11/2025



RAW DATA

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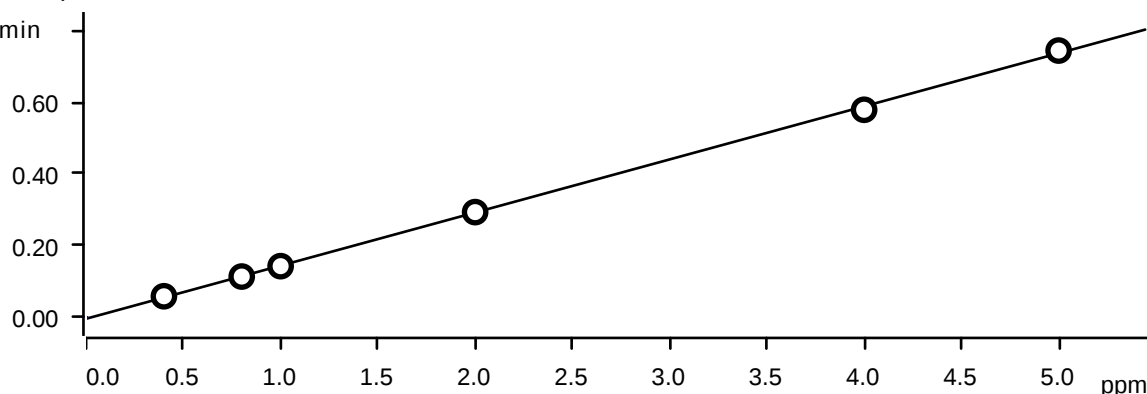
Instrument IC-1				Analyst: RM	Method: 300.0 / 9056A						
Ident	Con F-	Con CL-	Con NO2	Con BR-	Con NO:	Con HPO	Con SO4	Method name	date time	Initial wt/Final Vo	Analyst
STD1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-090925	9/9/2025 10:21		10 RM/IZ
STD2	0.423	0.641	0.632	2.091	0.529	1.063	3.237	IC1-090925	9/9/2025 10:42		10 RM/IZ
STD3	0.794	1.189	1.197	3.984	0.997	2.006	6.010	IC1-090925	9/9/2025 11:25		10 RM/IZ
STD4	0.990	1.475	1.473	4.920	1.228	2.461	7.371	IC1-090925	9/9/2025 11:47		10 RM/IZ
STD5	2.008	3.012	3.027	10.105	2.514	4.978	15.047	IC1-090925	9/9/2025 13:36		10 RM/IZ
STD6	3.935	5.921	5.894	19.658	4.924	9.905	29.203	IC1-090925	9/9/2025 13:58		10 RM/IZ
STD7	5.050	7.561	7.577	25.243	6.308	12.587	37.633	IC1-090925	9/9/2025 14:41		10 RM/IZ
ICV	2.001	2.995	2.988	9.985	2.483	5.041	14.797	IC1-090925	9/9/2025 15:02		10 RM/IZ
ICB	0.000	0.063	0.000	0.000	0.000	0.000	0.000	IC1-090925	9/9/2025 15:45		10 RM/IZ
CCV	2.020	2.953	2.971	10.000	2.429	5.000	14.859	IC1-090925	9/10/2025 11:08		10 RM/IZ
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-090925	9/10/2025 11:29		10 RM/IZ
LB137133BLS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-090925	9/10/2025 11:51	5.00g/100mL	RM/IZ
LB137133BSS	2.014	2.948	2.967	9.980	2.424	5.009	14.856	IC1-090925	9/10/2025 12:12	5.00g/100mL	RM/IZ
Q3068-01	0.161	7.147	0.000	0.000	0.000	0.000	9.761	IC1-090925	9/10/2025 12:34	5.01g/100mL	RM/IZ
Q3068-01MS	2.048	11.236	2.985	10.099	2.456	4.227	25.602	IC1-090925	9/10/2025 12:55	5.03g/100mL	RM/IZ
Q3068-01MSD	2.081	11.238	3.002	10.124	2.464	4.813	25.746	IC1-090925	9/10/2025 13:17	5.01g/100mL	RM/IZ
CCV	2.012	2.955	2.976	9.990	2.427	5.085	14.777	IC1-090925	9/10/2025 13:38		10 RM/IZ
CCB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-090925	9/10/2025 14:00		10 RM/IZ

Clear table

Instrument ID: IC-2 Analyst: IZ Method: 300.0 / 9056A											
ident	concentra tion F-	concentratio n CL-	concentrati on NO2	concentrati on BR-	concentrati on NO3	concentratio n HPO4	concentrati on SO4	file name	date time	Initial wt/ Final	Analyst
STD1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	IC1-090925	9/9/2025 10:21	10	RM/IZ
STD2	0.4230	0.6410	0.6320	2.0910	0.5290	1.0630	3.2370	IC1-090925	9/9/2025 10:42	10	RM/IZ
STD3	0.7940	1.1890	1.1970	3.9840	0.9970	2.0060	6.0100	IC1-090925	9/9/2025 11:25	10	RM/IZ
STD4	0.9900	1.4750	1.4730	4.9200	1.2280	2.4610	7.3710	IC1-090925	9/9/2025 11:47	10	RM/IZ
STD5	2.0080	3.0120	3.0270	10.1050	2.5140	4.9780	15.0470	IC1-090925	9/9/2025 13:36	10	RM/IZ
STD6	3.9350	5.9210	5.8940	19.6580	4.9240	9.9050	29.2030	IC1-090925	9/9/2025 13:58	10	RM/IZ
STD7	5.0500	7.5610	7.5770	25.2430	6.3080	12.5870	37.6330	IC1-090925	9/9/2025 14:41	10	RM/IZ
ident	True Value F-	True Value CL-	True Value NO2	True Value BR-	True Value NO3	True Value HPO4	True Value SO4				
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	5.7500	6.8333	5.3333	4.5500	5.8000	6.3000	7.9000				
STD3	-0.7500	-0.9167	-0.2500	-0.4000	-0.3000	0.3000	0.1667				
STD4	-1.0000	-1.6667	-1.8000	-1.6000	-1.7600	-1.5600	-1.7200				
STD5	0.4000	0.4000	0.9000	1.0500	0.5600	-0.4400	0.3133				
STD6	-1.6250	-1.3167	-1.7667	-1.7100	-1.5200	-0.9500	-2.6567				
STD7	1.0000	0.8133	1.0267	0.9720	0.9280	0.6960	1.7108				

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Fluoride (Anions)

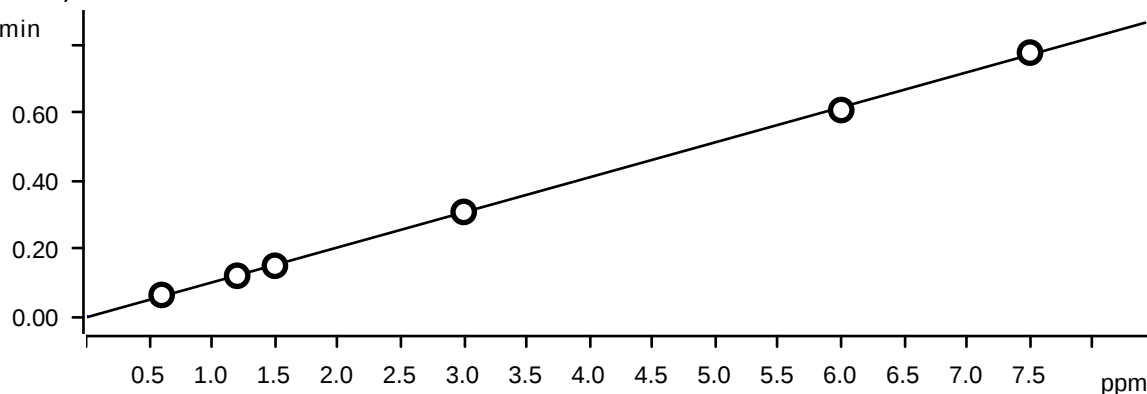
 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -3.91674E-3 + 0.0148053 \times Q$

Relative standard deviation 1.985504 %

Correlation coefficient 0.999790

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	2025-09-09 10:21:26 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.059	STD2	2025-09-09 10:42:49 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.114	STD3	2025-09-09 11:25:44 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.143	STD4	2025-09-09 11:47:10 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.293	STD5	2025-09-09 13:36:36 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.579	STD6	2025-09-09 13:58:07 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.744	STD7	2025-09-09 14:41:06 UTC-4	used

Chloride (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -2.97735E-3 + 0.0103068 \times Q$

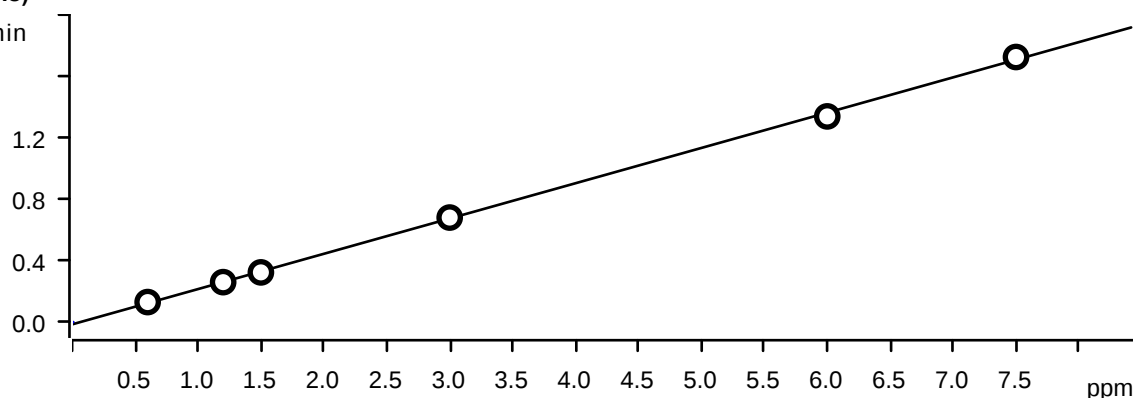
Relative standard deviation 1.712968 %

Correlation coefficient 0.999843

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	2025-09-09 10:21:26 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.063	STD2	2025-09-09 10:42:49 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.120	STD3	2025-09-09 11:25:44 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.149	STD4	2025-09-09 11:47:10 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.307	STD5	2025-09-09 13:36:36 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.607	STD6	2025-09-09 13:58:07 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.776	STD7	2025-09-09 14:41:06 UTC-4	used

Nitrite (Anions)

(μS/cm) x min

Function: $A = -0.0143669 + 0.0229543 \times Q$

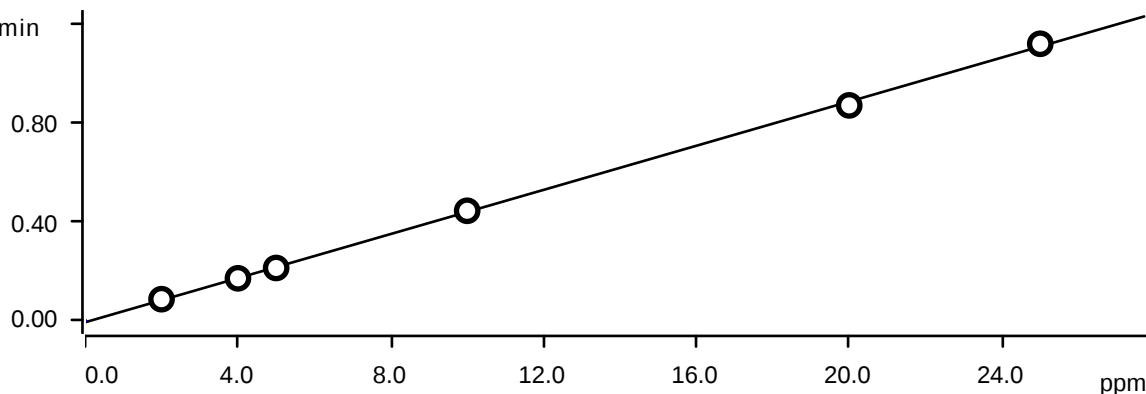
Relative standard deviation 2.170764 %

Correlation coefficient 0.999753

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	2025-09-09 10:21:26 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.131	STD2	2025-09-09 10:42:49 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.260	STD3	2025-09-09 11:25:44 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.324	STD4	2025-09-09 11:47:10 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.681	STD5	2025-09-09 13:36:36 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.339	STD6	2025-09-09 13:58:07 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.725	STD7	2025-09-09 14:41:06 UTC-4	used

Bromide (Anions)

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



Function: $A = -5.68247E-3 + 4.44287E-3 \times Q$

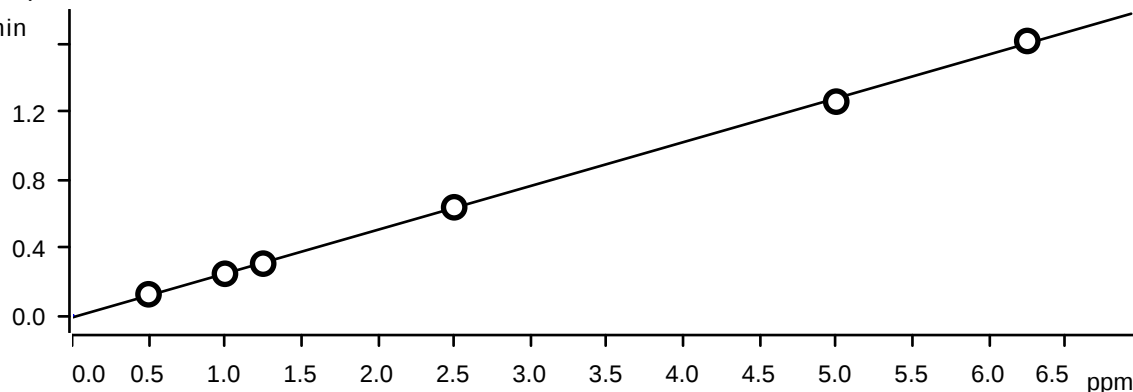
Relative standard deviation: 2.066849 %

Correlation coefficient: 0.999773

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	2025-09-09 10:21:26 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.087	STD2	2025-09-09 10:42:49 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.171	STD3	2025-09-09 11:25:44 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.213	STD4	2025-09-09 11:47:10 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.443	STD5	2025-09-09 13:36:36 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.868	STD6	2025-09-09 13:58:07 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.116	STD7	2025-09-09 14:41:06 UTC-4	used

Nitrate (Anions)

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

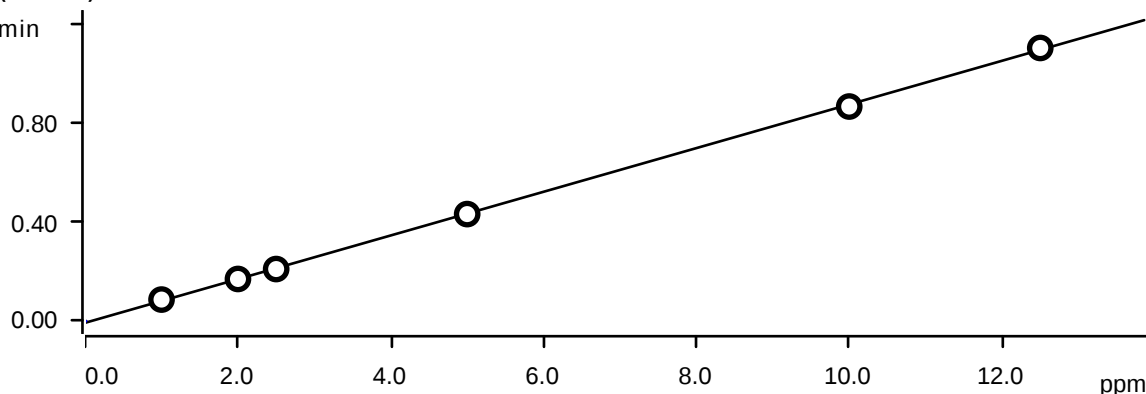


Function: $A = -0.0122982 + 0.0258010 \times Q$

Relative standard deviation: 1.914251 %

Correlation coefficient 0.999807

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	2025-09-09 10:21:26 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.124	STD2	2025-09-09 10:42:49 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.245	STD3	2025-09-09 11:25:44 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.305	STD4	2025-09-09 11:47:10 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.636	STD5	2025-09-09 13:36:36 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.258	STD6	2025-09-09 13:58:07 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.615	STD7	2025-09-09 14:41:06 UTC-4	used

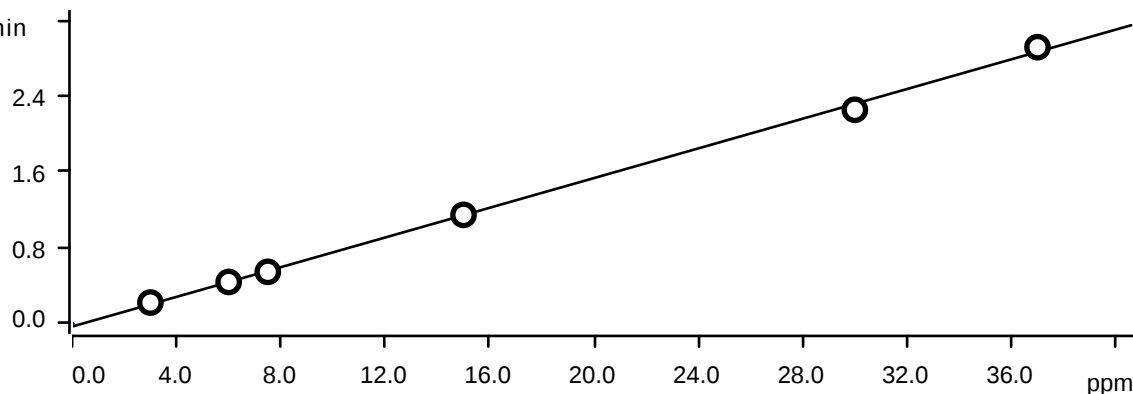
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -6.72192E-3 + 8.79335E-3 \times Q$

Relative standard deviation 1.384046 %

Correlation coefficient 0.999898

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	2025-09-09 10:21:26 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.087	STD2	2025-09-09 10:42:49 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.170	STD3	2025-09-09 11:25:44 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.210	STD4	2025-09-09 11:47:10 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.431	STD5	2025-09-09 13:36:36 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.864	STD6	2025-09-09 13:58:07 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.100	STD7	2025-09-09 14:41:06 UTC-4	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -0.0295615 + 7.81954E-3 \times Q$

Relative standard deviation 3.285067 %

Correlation coefficient 0.999433

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	2025-09-09 10:21:26 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.224	STD2	2025-09-09 10:42:49 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.440	STD3	2025-09-09 11:25:44 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.547	STD4	2025-09-09 11:47:10 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.147	STD5	2025-09-09 13:36:36 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.254	STD6	2025-09-09 13:58:07 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.913	STD7	2025-09-09 14:41:06 UTC-4	used

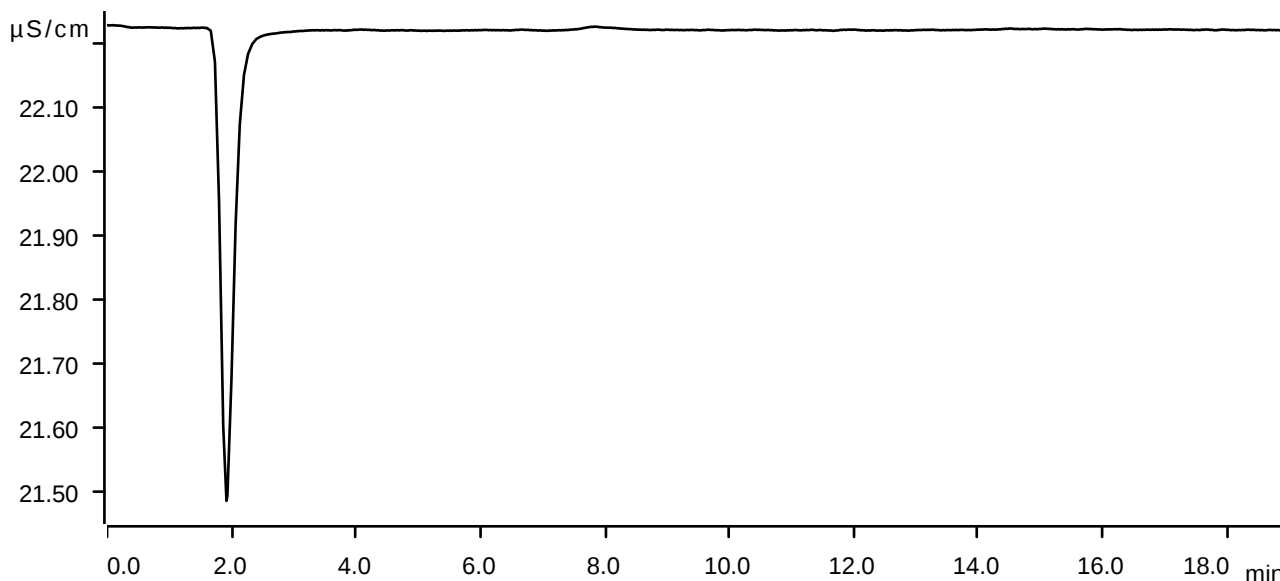
Sample data

Ident STD1
Sample type Standard 1
Determination start 2025-09-09 10:21:26 UTC-4
Method IC1-090925
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 13.06 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



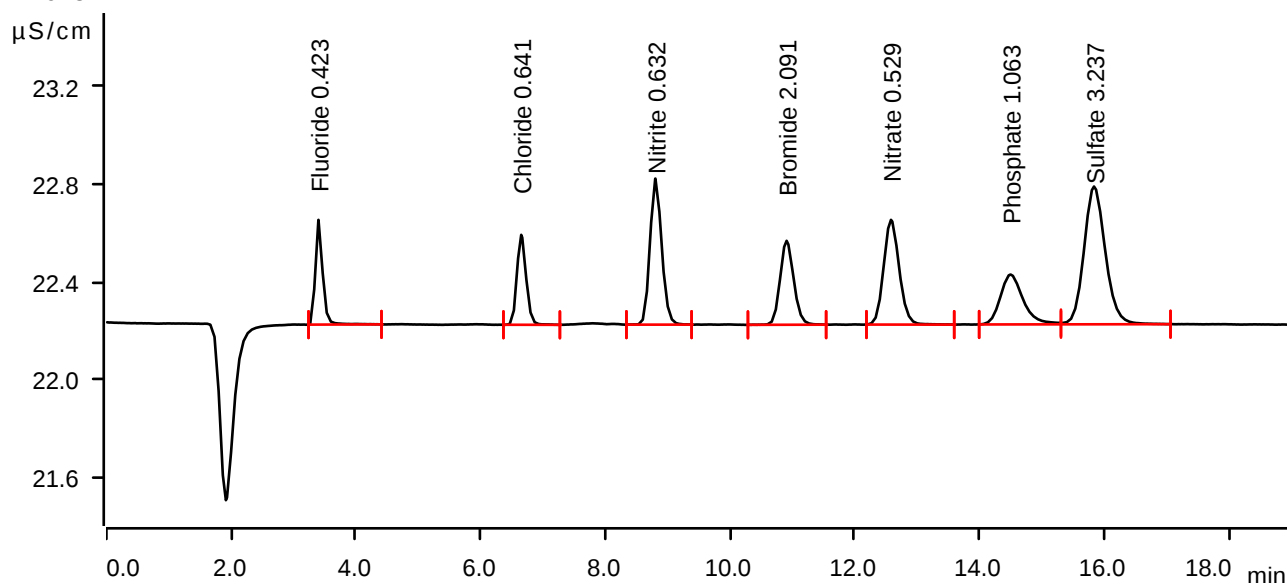
Sample data

Ident STD2
Sample type Standard 2
Determination start 2025-09-09 10:42:49 UTC-4
Method IC1-090925
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.84 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.400	0.0587	0.429	0.423	Fluoride
2	6.652	0.0631	0.369	0.641	Chloride
3	8.803	0.1306	0.599	0.632	Nitrite
4	10.907	0.0872	0.344	2.091	Bromide
5	12.580	0.1242	0.430	0.529	Nitrate
6	14.497	0.0867	0.205	1.063	Phosphate
7	15.835	0.2236	0.565	3.237	Sulfate

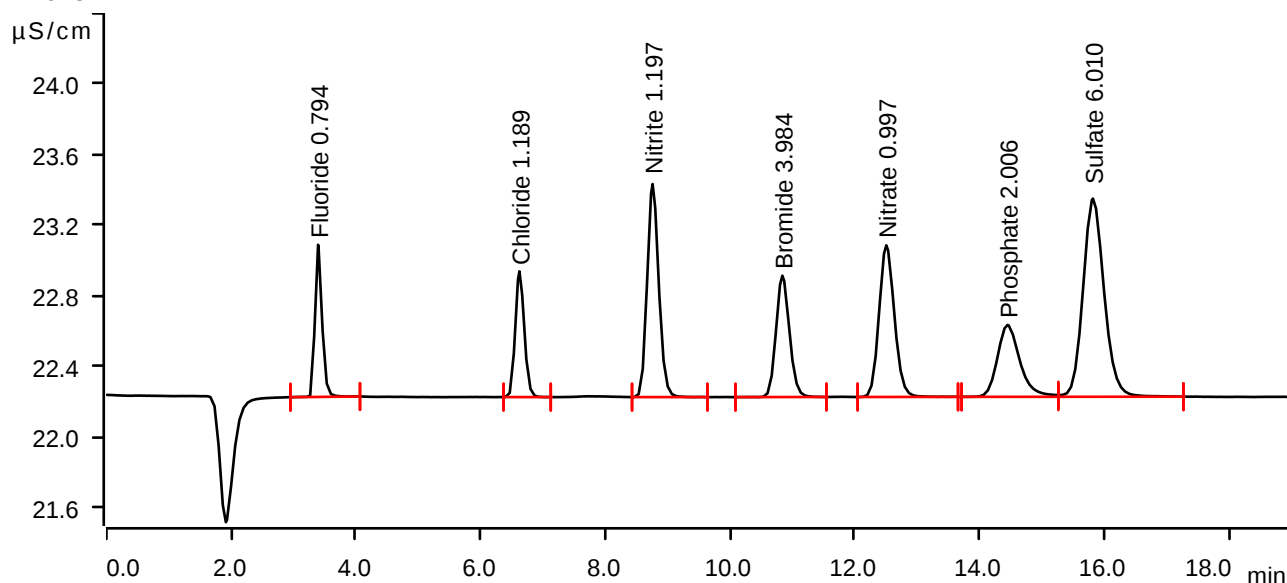
Sample data

Ident STD3
Sample type Standard 3
Determination start 2025-09-09 11:25:44 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.395	0.1137	0.861	0.794	Fluoride
2	6.623	0.1196	0.712	1.189	Chloride
3	8.758	0.2603	1.206	1.197	Nitrite
4	10.838	0.1713	0.687	3.984	Bromide
5	12.505	0.2450	0.859	0.997	Nitrate
6	14.448	0.1697	0.407	2.006	Phosphate
7	15.818	0.4404	1.122	6.010	Sulfate

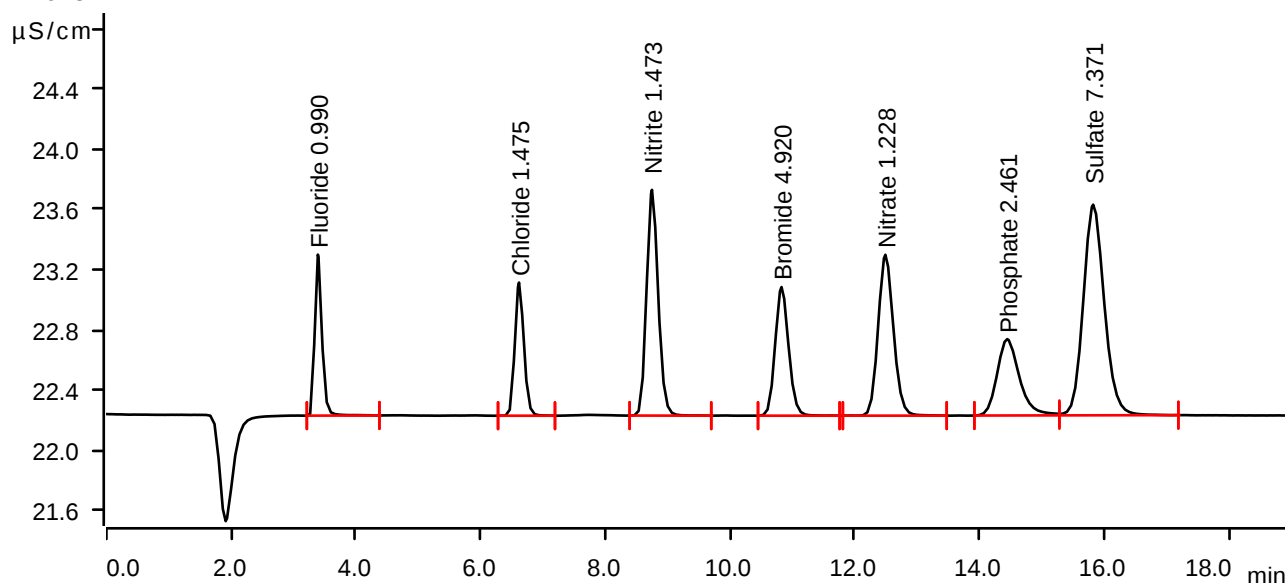
Sample data

Ident STD4
Sample type Standard 4
Determination start 2025-09-09 11:47:10 UTC-4
Method IC1-090925
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.61 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.392	0.1426	1.068	0.990	Fluoride
2	6.617	0.1490	0.884	1.475	Chloride
3	8.748	0.3238	1.499	1.473	Nitrite
4	10.825	0.2129	0.854	4.920	Bromide
5	12.490	0.3046	1.068	1.228	Nitrate
6	14.443	0.2097	0.507	2.461	Phosphate
7	15.822	0.5468	1.398	7.371	Sulfate

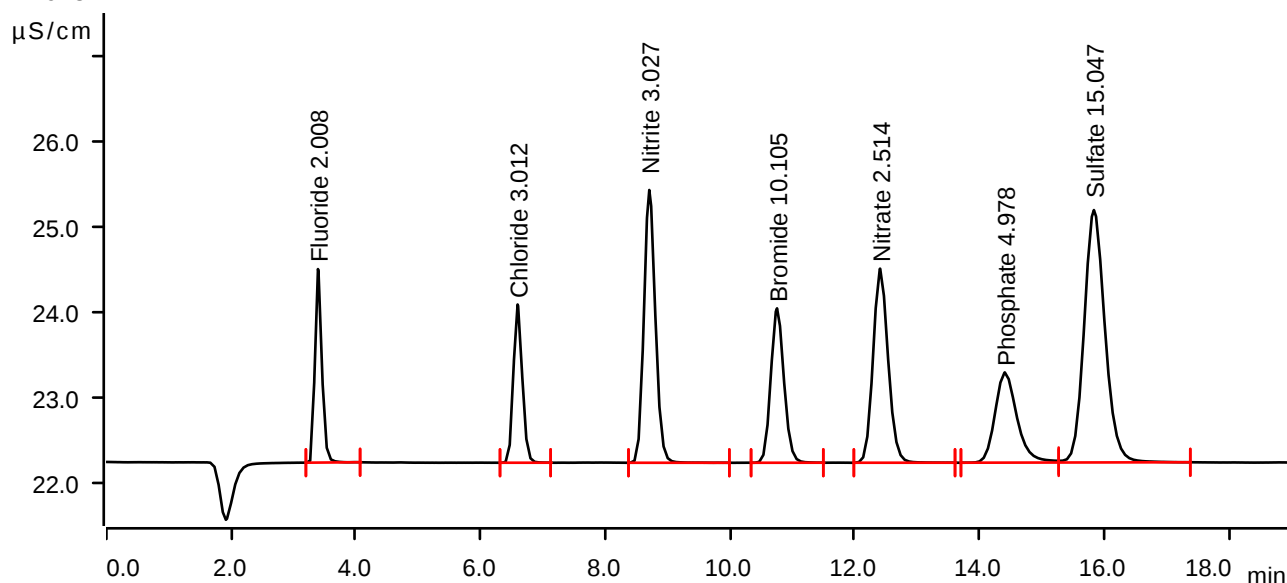
Sample data

Ident STD5
Sample type Standard 5
Determination start 2025-09-09 13:36:36 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.393	0.2933	2.266	2.008	Fluoride
2	6.593	0.3075	1.854	3.012	Chloride
3	8.705	0.6805	3.195	3.027	Nitrite
4	10.753	0.4432	1.809	10.105	Bromide
5	12.407	0.6363	2.273	2.514	Nitrate
6	14.405	0.4310	1.057	4.978	Phosphate
7	15.833	1.1470	2.956	15.047	Sulfate

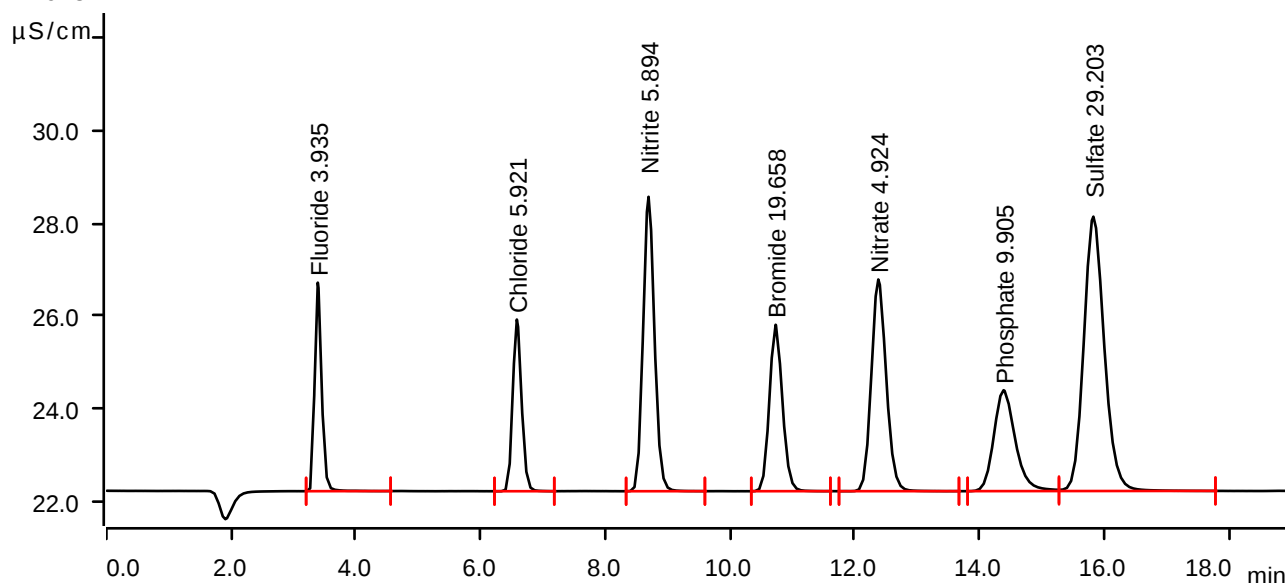
Sample data

Ident STD6
Sample type Standard 6
Determination start 2025-09-09 13:58:07 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.390	0.5787	4.477	3.935	Fluoride
2	6.582	0.6073	3.687	5.921	Chloride
3	8.693	1.3385	6.323	5.894	Nitrite
4	10.730	0.8677	3.574	19.658	Bromide
5	12.377	1.2581	4.546	4.924	Nitrate
6	14.385	0.8642	2.167	9.905	Phosphate
7	15.825	2.2540	5.893	29.203	Sulfate

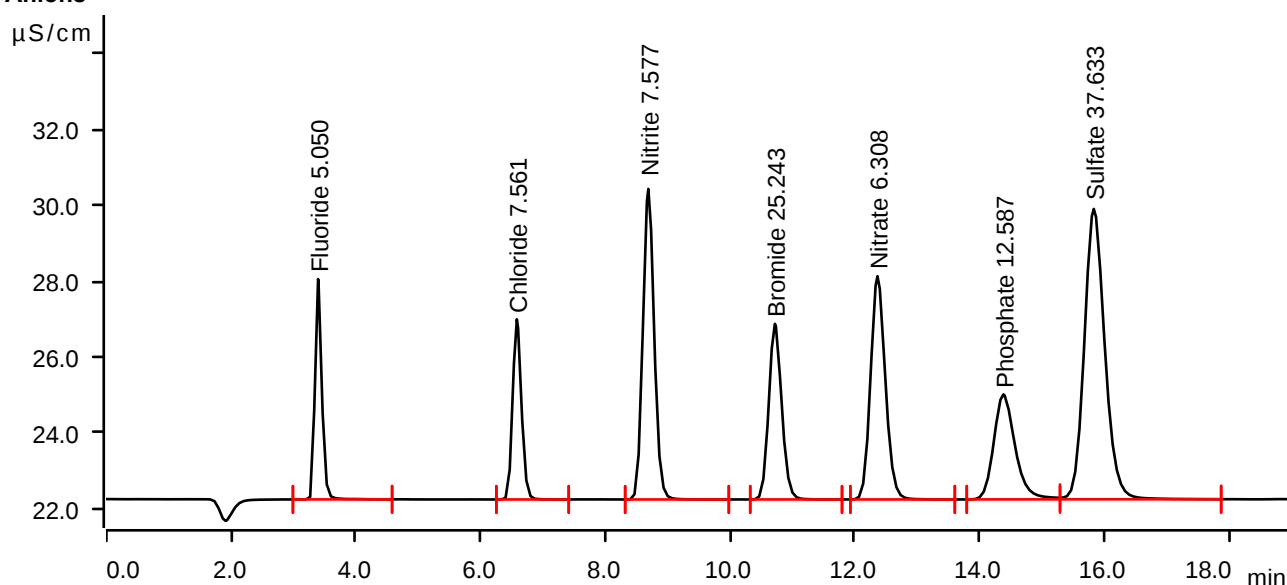
Sample data

Ident STD7
Sample type Standard 7
Determination start 2025-09-09 14:41:06 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.395	0.7438	5.806	5.050	Fluoride
2	6.582	0.7764	4.748	7.561	Chloride
3	8.690	1.7250	8.184	7.577	Nitrite
4	10.718	1.1158	4.629	25.243	Bromide
5	12.363	1.6152	5.884	6.308	Nitrate
6	14.382	1.1001	2.766	12.587	Phosphate
7	15.832	2.9131	7.654	37.633	Sulfate

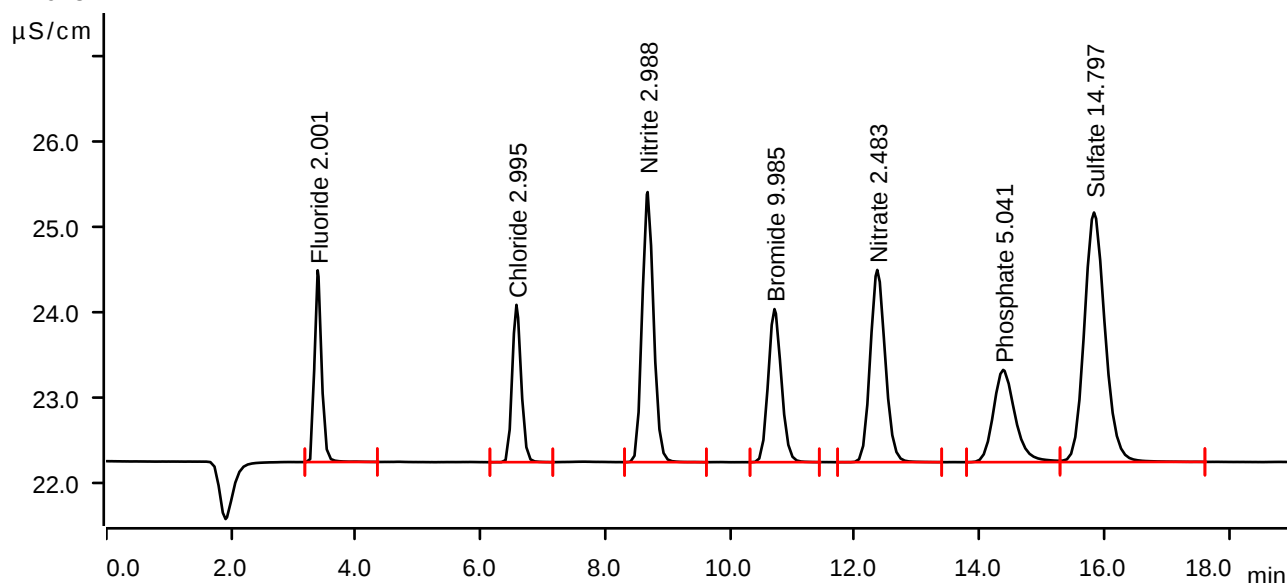
Sample data

Ident ICV
Sample type Check standard 1
Determination start 2025-09-09 15:02:34 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.388	0.2923	2.246	2.001	Fluoride
2	6.575	0.3057	1.843	2.995	Chloride
3	8.678	0.6715	3.164	2.988	Nitrite
4	10.712	0.4379	1.793	9.985	Bromide
5	12.360	0.6282	2.252	2.483	Nitrate
6	14.378	0.4365	1.080	5.041	Phosphate
7	15.835	1.1275	2.923	14.797	Sulfate

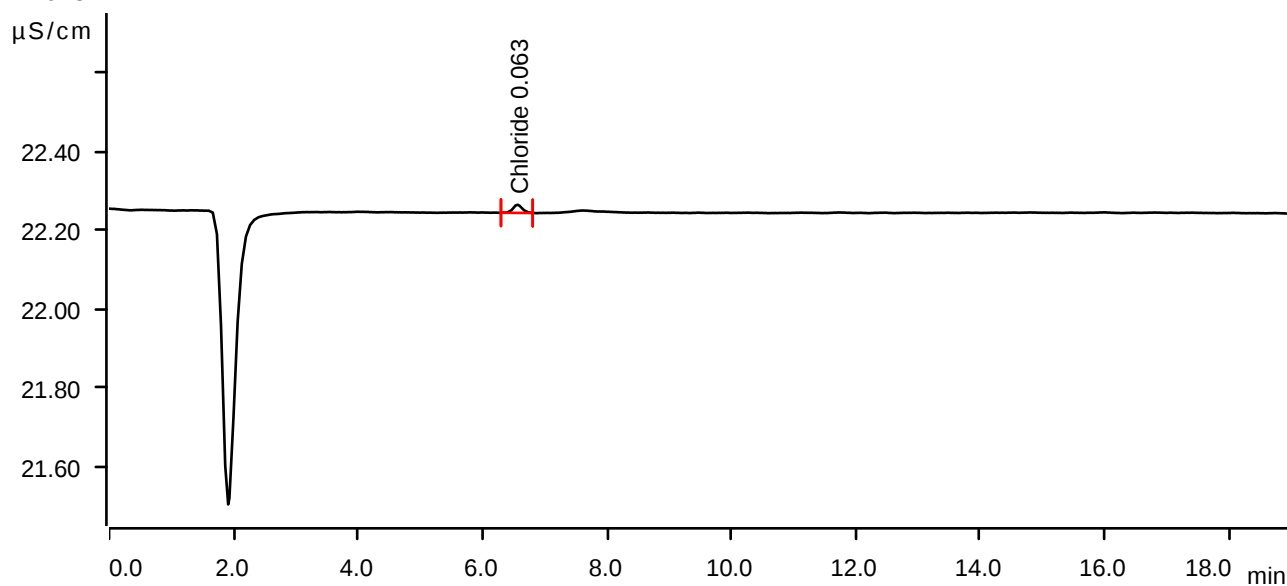
Sample data

Ident ICB
Sample type Sample
Determination start 2025-09-09 15:45:30 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	6.568	0.0036	0.021	0.063	Chloride

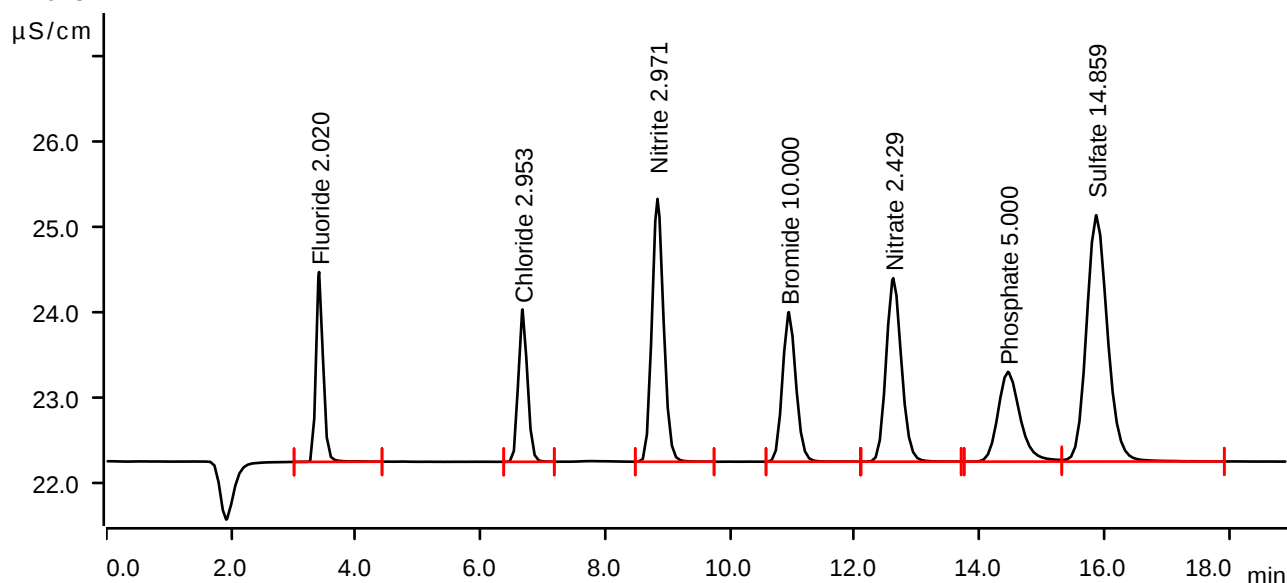
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-09-10 11:08:11 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.412	0.2951	2.224	2.020	Fluoride
2	6.673	0.3014	1.785	2.953	Chloride
3	8.837	0.6676	3.079	2.971	Nitrite
4	10.942	0.4386	1.752	10.000	Bromide
5	12.617	0.6145	2.150	2.429	Nitrate
6	14.455	0.4330	1.051	5.000	Phosphate
7	15.872	1.1323	2.886	14.859	Sulfate

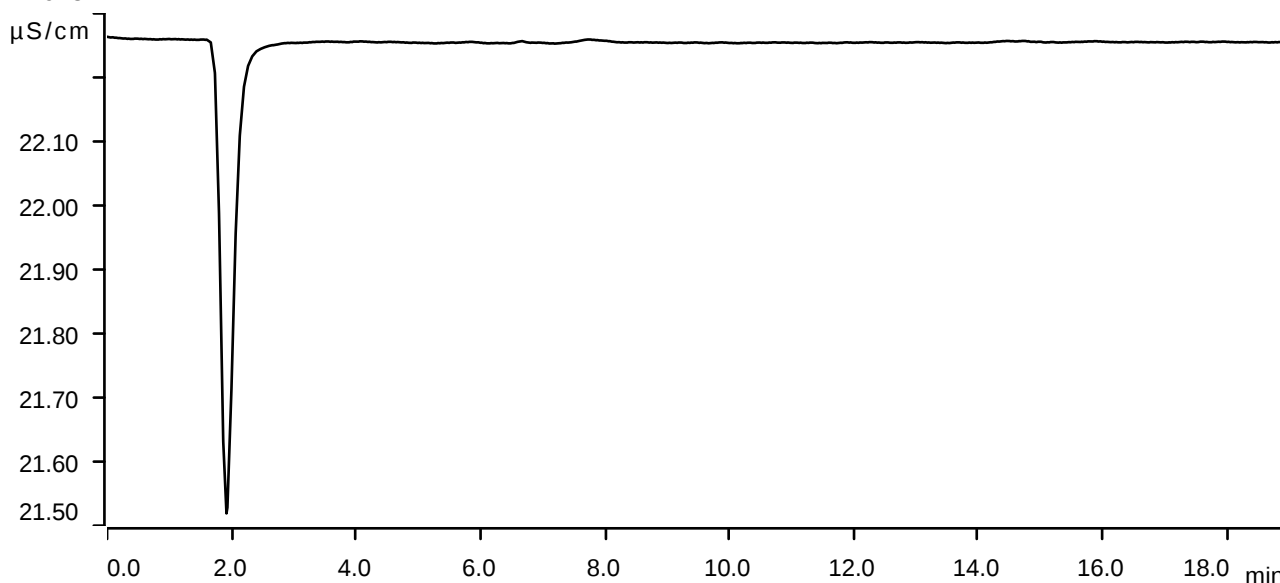
Sample data

Ident CCB
Sample type Sample
Determination start 2025-09-10 11:29:42 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



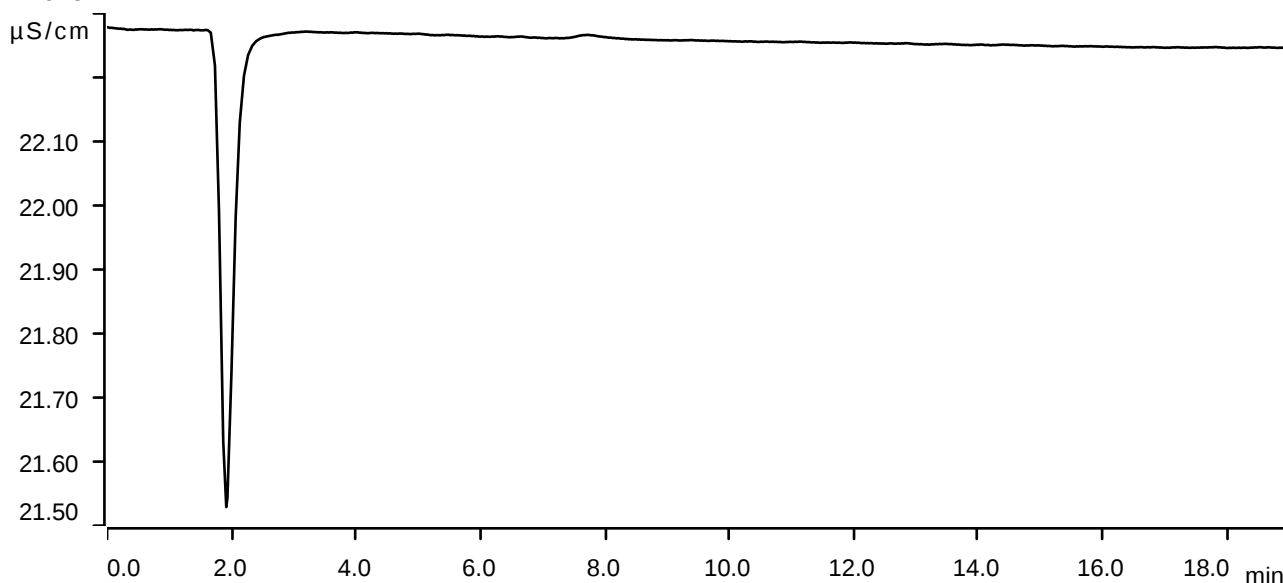
Sample data

Ident LB137133BLS
Sample type Sample
Determination start 2025-09-10 11:51:12 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



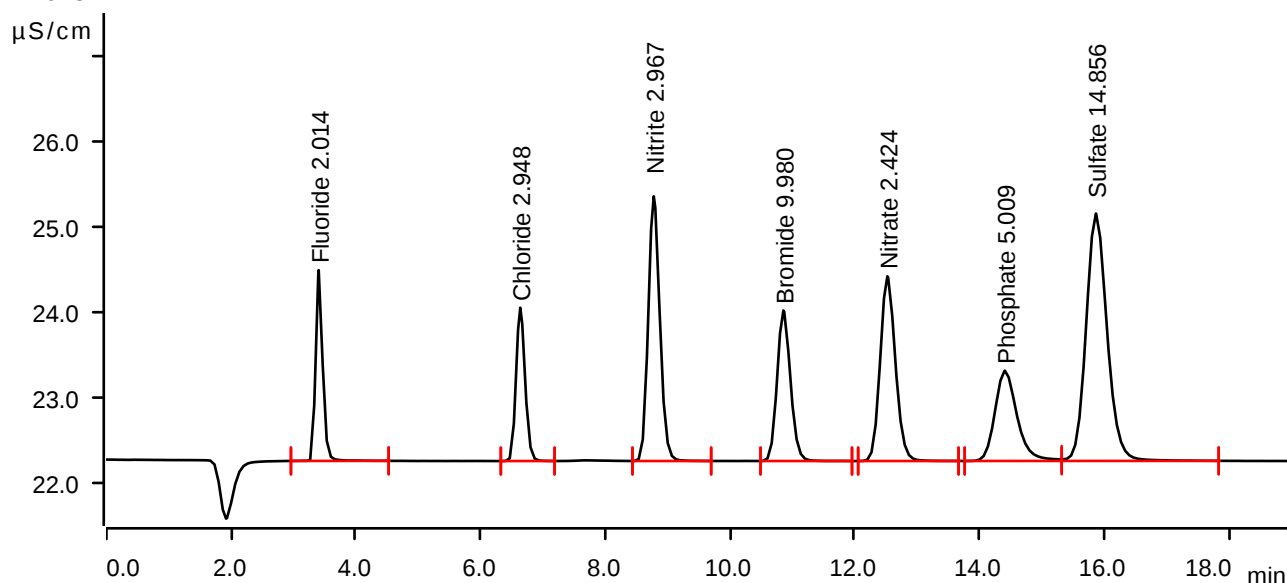
Sample data

Ident LB137133BSS
Sample type Check standard 1
Determination start 2025-09-10 12:12:43 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.405	0.2943	2.234	2.014	Fluoride
2	6.637	0.3009	1.795	2.948	Chloride
3	8.777	0.6666	3.101	2.967	Nitrite
4	10.855	0.4377	1.764	9.980	Bromide
5	12.522	0.6132	2.164	2.424	Nitrate
6	14.407	0.4338	1.057	5.009	Phosphate
7	15.865	1.1321	2.898	14.856	Sulfate

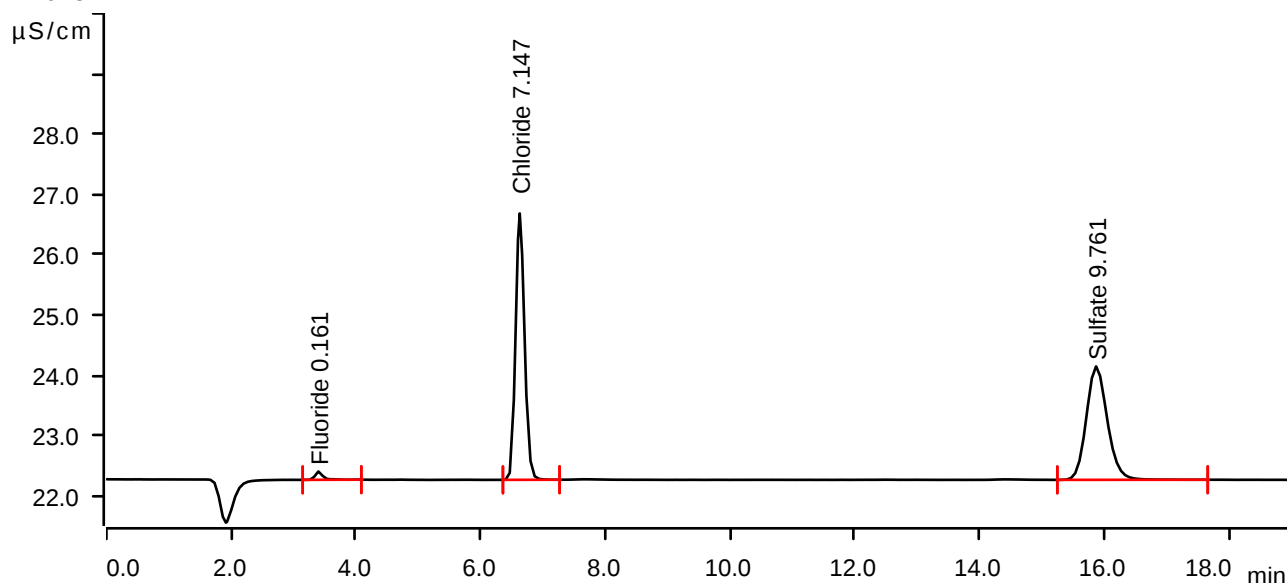
Sample data

Ident Q3068-01
Sample type Sample
Determination start 2025-09-10 12:34:16 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.398	0.0199	0.137	0.161	Fluoride
2	6.628	0.7336	4.420	7.147	Chloride
3	15.870	0.7337	1.882	9.761	Sulfate

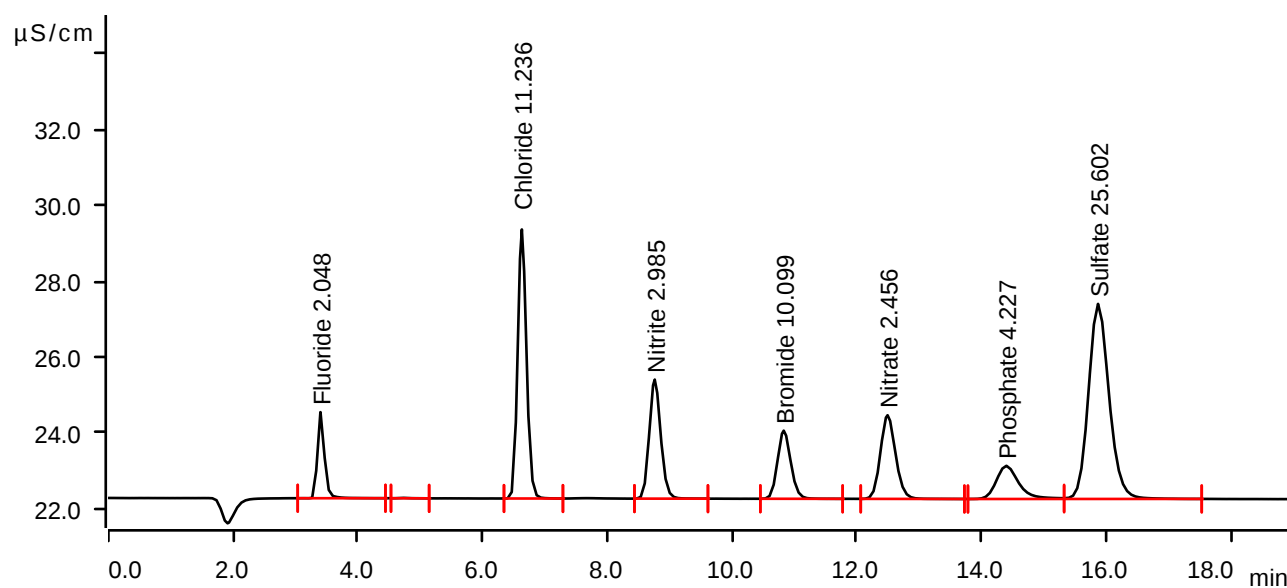
Sample data

Ident Q3068-01MS
Sample type Sample
Determination start 2025-09-10 12:55:49 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area ($\mu\text{S/cm}$) x min	Height $\mu\text{S/cm}$	Concentration ppm	Component name
1	3.402	0.2992	2.268	2.048	Fluoride
2	4.733	0.0020	0.011	invalid	
3	6.630	1.1551	7.091	11.236	Chloride
4	8.760	0.6708	3.138	2.985	Nitrite
5	10.828	0.4430	1.796	10.099	Bromide
6	12.493	0.6214	2.205	2.456	Nitrate
7	14.397	0.3650	0.873	4.227	Phosphate
8	15.868	1.9724	5.140	25.602	Sulfate

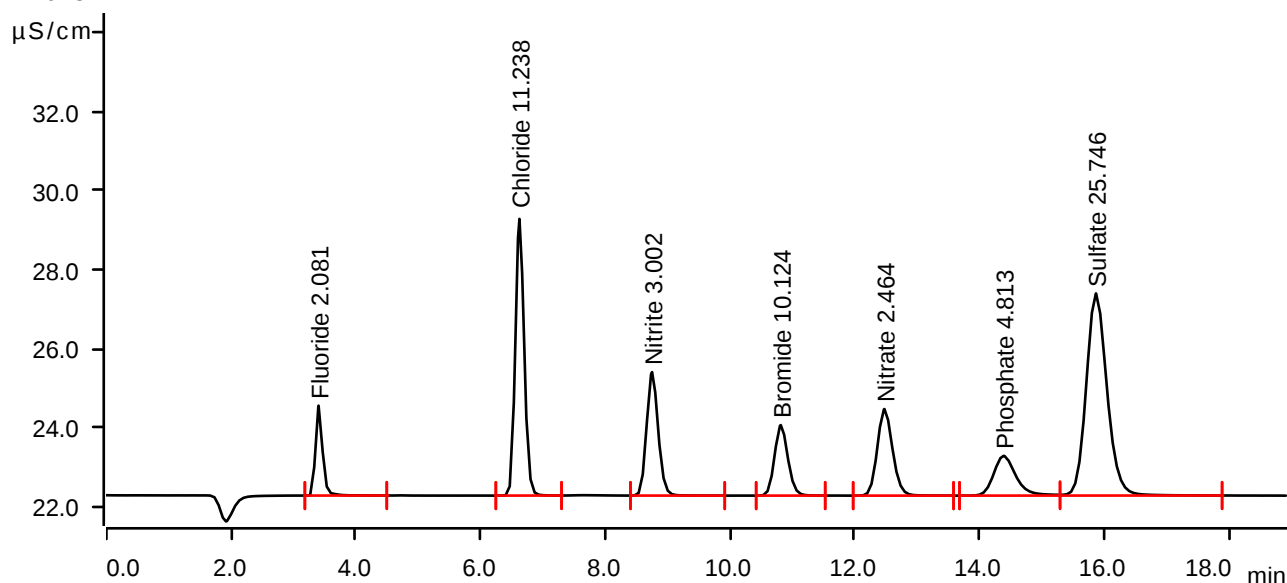
Sample data

Ident Q3068-01MSD
Sample type Sample
Determination start 2025-09-10 13:17:24 UTC-4
Method IC1-090925
Operator

Anions

Data source Conductivity detector 1 (Eco IC 1)
Channel Conductivity
Recording time 19.0 min
Integration Automatically
Column type Metrosep A Supp 19 - 150/4.0
Eluent composition not defined
Flow 0.700 mL/min
Maximum flow monitored yes
Pressure 12.61 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.403	0.3042	2.281	2.081	Fluoride
2	6.623	1.1553	7.022	11.238	Chloride
3	8.750	0.6747	3.134	3.002	Nitrite
4	10.813	0.4441	1.790	10.124	Bromide
5	12.475	0.6234	2.198	2.464	Nitrate
6	14.385	0.4165	1.008	4.813	Phosphate
7	15.865	1.9836	5.130	25.746	Sulfate

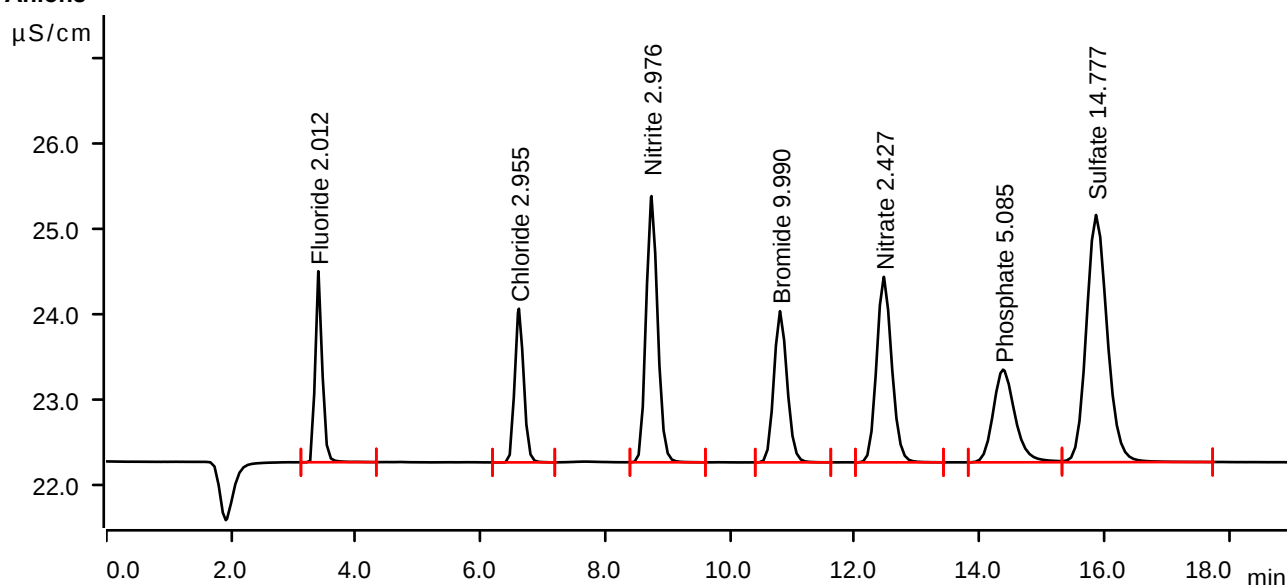
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2025-09-10 13:38:59 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.398	0.2939	2.237	2.012	Fluoride
2	6.615	0.3015	1.800	2.955	Chloride
3	8.740	0.6687	3.118	2.976	Nitrite
4	10.802	0.4381	1.771	9.990	Bromide
5	12.463	0.6140	2.173	2.427	Nitrate
6	14.377	0.4404	1.086	5.085	Phosphate
7	15.868	1.1259	2.896	14.777	Sulfate

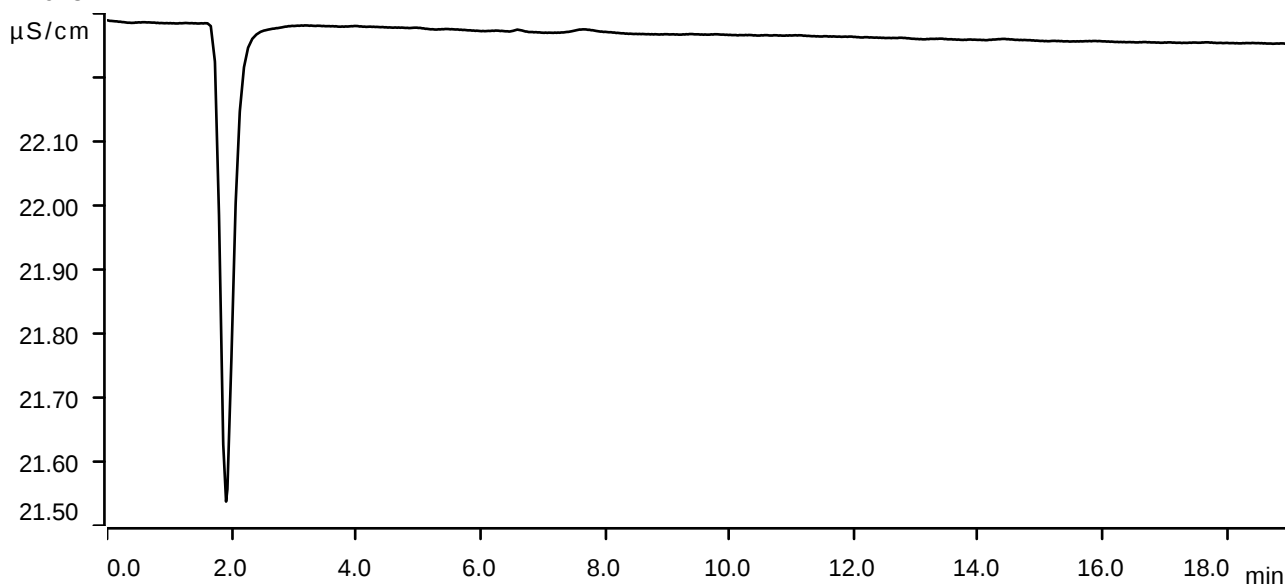
Sample data

Ident CCB
Sample type Sample
Determination start 2025-09-10 14:00:30 UTC-4
Method IC1-090925
Operator

Anions

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

Anions



WORKLIST(Hardcopy Internal Chain) LB 137133

WorkList Name : Anions-091025 WorkList ID : 191791 Department : Wet-Chemistry Date : 09-10-2025 10:56:56

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3068-01	AMBRIC-TECH-9-9	Solid	Anions Group2	Cool 4 deg C	AMBR01	D31	09/09/2025	9056A

Q 3068-01 N> 5.03g
Q 3068-01 N>D 5.01g
BL 5.00g
BS 5.00g

Final volume 100 ml with DI water

Balance ID:
WC SC-7

12 9/10/25

Date/Time 09/10/25 11:30
Raw Sample Received by: 12 (WC)
Raw Sample Relinquished by: 28 (WC)

Date/Time 09/10/25 12:25
Raw Sample Received by: 28 (WC)
Raw Sample Relinquished by: 12 (WC)

Sample ID	Result	Std. Dev.	RSD	Mode	ALT
CCV1	1060.8805			TOC	
CCV1	1027.8414			TOC	
CCV1	1062.9329			TOC	
CCV1.....	1065.1368...	..	...	TOC	..
CCB1	1.0044			TOC	
CCB1	7.7065			TOC	
CCB1.....	4.0059...	..	...	TOC	..
CCB1	5.1983			TOC	
LB137140BLS	5.7644			TOC	
LB137140BLS.....	3.9383...	..	...	TOC	..
LB137140BLS	3.1032			TOC	
LB137140BLS	8.1650			TOC	
LB137140BSS.....	1036.1298...	..	...	TOC	..
LB137140BSS	1026.4052			TOC	
LB137140BSS	1054.4572			TOC	
LB137140BSS.....	1046.7633...	..	...	TOC	..
Q3068-01	14337.6660			TOC	
Q3068-01	14217.3281			TOC	
Q3068-01.....	16365.4717...	..	...	TOC	..
Q3068-01	14793.9814			TOC	
Q3068-01MS	17824.3027			TOC	
Q3068-01MS.....	16336.2910...	..	...	TOC	..
Q3068-01MS	15444.4688			TOC	
Q3068-01MS	14553.3486			TOC	
Q3068-01MSD.....	17786.6191...	..	...	TOC	..
Q3068-01MSD	15645.7930			TOC	
Q3068-01MSD	17089.3613			TOC	
Q3068-01MSD.....	13849.9111...	..	...	TOC	..
CCV2	1059.3604			TOC	
CCV2	1098.2224			TOC	
CCV2.....	1083.5157...	..	...	TOC	..
CCV2	1079.8411			TOC	
CCB2	0.3927			TOC	
CCB2.....	8.5513...	..	...	TOC	..
CCB2	7.4588			TOC	
CCB2	4.7245			TOC	

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Method ID		Sample Type	Vial Timestamp		Message
Boat Sampler		Sample	2025/09/10	12:33	
Boat Sampler		Sample	2025/09/10	12:35	
Boat Sampler		Sample	2025/09/10	12:38	
Boat Sampler	...	Sample	..	..2025/09/10 12:40	..
Boat Sampler		Sample	2025/09/10	12:43	Low Sample Detected
Boat Sampler		Sample	2025/09/10	12:47	Low Sample Detected
Boat Sampler	...	Sample	..	..2025/09/10 12:50	..Low Sample Detected
Boat Sampler		Sample	2025/09/10	12:54	Low Sample Detected
Boat Sampler		Sample	2025/09/10	12:57	Low Sample Detected
Boat Sampler	...	Sample	..	..2025/09/10 13:04	..Low Sample Detected
Boat Sampler		Sample	2025/09/10	13:08	Low Sample Detected
Boat Sampler		Sample	2025/09/10	13:12	Low Sample Detected
Boat Sampler	...	Sample	..	..2025/09/10 13:22	..
Boat Sampler		Sample	2025/09/10	13:25	
Boat Sampler		Sample	2025/09/10	13:27	
Boat Sampler	...	Sample	..	..2025/09/10 13:30	..
Boat Sampler		Sample	2025/09/10	13:39	
Boat Sampler		Sample	2025/09/10	13:44	
Boat Sampler	...	Sample	..	..2025/09/10 13:50	..
Boat Sampler		Sample	2025/09/10	13:53	
Boat Sampler		Sample	2025/09/10	13:59	
Boat Sampler	...	Sample	..	..2025/09/10 14:01	..
Boat Sampler		Sample	2025/09/10	14:05	
Boat Sampler		Sample	2025/09/10	14:07	
Boat Sampler	...	Sample	..	..2025/09/10 14:16	..
Boat Sampler		Sample	2025/09/10	14:24	
Boat Sampler		Sample	2025/09/10	14:36	
Boat Sampler	...	Sample	..	..2025/09/10 14:39	..
Boat Sampler		Sample	2025/09/10	14:50	
Boat Sampler		Sample	2025/09/10	14:55	
Boat Sampler	...	Sample	..	..2025/09/10 14:58	..
Boat Sampler		Sample	2025/09/10	15:00	
Boat Sampler		Sample	2025/09/10	15:04	Low Sample Detected
Boat Sampler	...	Sample	..	..2025/09/10 15:07	..Low Sample Detected
Boat Sampler		Sample	2025/09/10	15:10	Low Sample Detected
Boat Sampler		Sample	2025/09/10	15:14	Low Sample Detected

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Last Message: Low Sample Detected
=====

Sample ID: CCB1 Mode: TOC
Method: Boat Sampler Filename: 09101248
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 12:50
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.0059	0.1602	11891	-1.494	-1.536	120

Last Message: Low Sample Detected
=====

Sample ID: CCB1 Mode: TOC
Method: Boat Sampler Filename: 09101251
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 12:54
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5.1983	0.2079	15431	-1.531	-1.552	120

Last Message: Low Sample Detected
=====

Sample ID: LB137140BLS Mode: TOC
Method: Boat Sampler Filename: 09101255
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 12:57
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5.7644	0.2306	17112	-1.566	-1.567	120

Last Message: Low Sample Detected
=====

Sample ID: LB137140BLS Mode: TOC
Method: Boat Sampler Filename: 09101302
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:04
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	3.9383	0.1575	11691	-1.592	-1.630	120

Last Message: Low Sample Detected
=====

Sample ID: LB137140BLS Mode: TOC
Method: Boat Sampler Filename: 09101305
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:08
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	3.1032	0.1241	9212	-1.586	-1.615	120

Last Message: Low Sample Detected
=====

Sample ID: LB137140BLS Mode: TOC
Method: Boat Sampler Filename: 09101309
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:12
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.1650	0.3266	24238	-1.634	-1.643	120

Last Message: Low Sample Detected
=====

Sample ID: LB137140BSS Mode: TOC
Method: Boat Sampler Filename: 09101321
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:22
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1036.1298	41.4452	3075758	-1.098	-0.102	71

Sample ID: LB137140BSS Mode: TOC
Method: Boat Sampler Filename: 09101323
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:25
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1026.4052	41.0562	3046890	-1.242	-0.242	67

Sample ID: LB137140BSS Mode: TOC
Method: Boat Sampler Filename: 09101325
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:27
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1054.4572	42.1783	3130163	-1.308	-0.309	73

Sample ID: LB137140BSS Mode: TOC
Method: Boat Sampler Filename: 09101328
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:30
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1046.7633	41.8705	3107323	-1.350	-0.357	71

Sample ID: Q3068-01 Mode: TOC
Method: Boat Sampler Filename: 09101335
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:39
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14337.6660	133.3403	9895537	-1.263	-0.266	200

Sample ID: Q3068-01 Mode: TOC
Method: Boat Sampler Filename: 09101342
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:44
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14217.3281	86.7257	6436145	3.950	4.926	71

Sample ID: Q3068-01 Mode: TOC
Method: Boat Sampler Filename: 09101345
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:50
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	16365.4717	114.5583	8501676	0.883	1.882	236

Sample ID: Q3068-01 Mode: TOC
Method: Boat Sampler Filename: 09101350
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:53
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14793.9814	99.1197	7355934	1.624	2.622	103

Sample ID: Q3068-01MS Mode: TOC
Method: Boat Sampler Filename: 09101355
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 13:59
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	17824.3027	115.8580	8598127	-1.448	-0.452	207

Sample ID: Q3068-01MS Mode: TOC
Method: Boat Sampler Filename: 09101400
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 14:01
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	16336.2910	99.6514	7395393	7.742	8.691	69

Sample ID: Q3068-01MS Mode: TOC
Method: Boat Sampler Filename: 09101403
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 14:05
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	15444.4688	97.3002	7220903	8.814	9.814	86

Sample ID: Q3068-01MS
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101406
Timestamp: 2025/09/10 14:07
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14553.3486	85.8648	6372252	22.227	23.115	59

Sample ID: Q3068-01MSD
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101414
Timestamp: 2025/09/10 14:16
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	17786.6191	112.0557	8315952	10.187	11.186	73

Sample ID: Q3068-01MSD
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101423
Timestamp: 2025/09/10 14:24
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	15645.7930	100.1331	7431141	7.513	8.481	68

Sample ID: Q3068-01MSD
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101433
Timestamp: 2025/09/10 14:36
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	17089.3613	114.4987	8497255	-0.372	0.625	178

Sample ID: Q3068-01MSD
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101437
Timestamp: 2025/09/10 14:39
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	13849.9111	95.5644	7092087	21.861	22.846	60

Sample ID: CCV2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101449
Timestamp: 2025/09/10 14:50
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1059.3604	42.3744	3144718	-0.113	0.875	67

Sample ID: CCV2

Mode: TOC

Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Filename: 09101454
Timestamp: 2025/09/10 14:55
Sample Type: Sample

Reviewed By:Iwona
On:9/11/2025 1:00:12 PM
Inst Id :Appolo-9000
LB :LB137140

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1098.2224	43.9289	3260080	-1.485	-0.491	76

Sample ID: CCV2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101456
Timestamp: 2025/09/10 14:58
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1083.5157	43.3406	3216423	-1.424	-0.425	74

Sample ID: CCV2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101458
Timestamp: 2025/09/10 15:00
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1079.8411	43.1936	3205515	-1.448	-0.449	75

Sample ID: CCB2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101501
Timestamp: 2025/09/10 15:04
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.3927	0.0157	1166	-1.574	-1.758	120

Last Message: Low Sample Detected

Sample ID: CCB2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101504
Timestamp: 2025/09/10 15:07
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.5513	0.3421	25384	-1.767	-1.787	120

Last Message: Low Sample Detected

Sample ID: CCB2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: RM IZ

Mode: TOC
Filename: 09101508
Timestamp: 2025/09/10 15:10
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7.4588	0.2984	22142	-1.777	-1.815	120

Last Message: Low Sample Detected

Reviewed By:Iwona
On:9/11/2025 1:00:12
PM
Inst Id :Appolo-9000
LB :LB137140

Sample ID: CCB2 Mode: TOC
Method: Boat Sampler Filename: 09101511
Cal. Curve: TOC SOIL Timestamp: 2025/09/10 15:14
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.7245	0.1890	14025	-1.776	-1.790	120

Last Message: Low Sample Detected

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Sample ID	Result	Std. Dev.	RSD	Mode	ALT
BLANK	9654	4527	46.90	TOC	
250mg/l	815484	52798	6.47	TOC	
500mg/l	1674242	35888	2.14	TOC	
1000mg/l.....	3145790...	89290..	2.84...	TOC	..
2000mg/l	5974688	94378	1.58	TOC	
ICV	972.3586			TOC	
ICV.....	961.9182...	..	...	TOC	..
ICV	968.0812			TOC	
ICV	969.9279			TOC	
ICB.....	4.2936...	..	...	TOC	..
ICB	4.9668			TOC	
ICB	3.5644			TOC	
ICB.....	7.3627...	..	...	TOC	..

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Method ID	Sample Type	Vial	Timestamp	Message
Boat Sampler	TOC Standard		2025/07/22 10:12	Low Sample Detected
Boat Sampler	TOC Standard		2025/07/22 10:21	
Boat Sampler	TOC Standard		2025/07/22 10:29	
Boat Sampler	...TOC Standard	..	..2025/07/22 10:39	..
Boat Sampler	TOC Standard		2025/07/22 10:50	
Boat Sampler	Sample		2025/07/22 10:56	
Boat Sampler	...Sample	..	..2025/07/22 10:58	..
Boat Sampler	Sample		2025/07/22 11:01	
Boat Sampler	Sample		2025/07/22 11:03	
Boat Sampler	...Sample	..	..2025/07/22 11:10	..Low Sample Detected
Boat Sampler	Sample		2025/07/22 11:13	Low Sample Detected
Boat Sampler	Sample		2025/07/22 11:16	Low Sample Detected
Boat Sampler	...Sample	..	..2025/07/22 11:19	..Low Sample Detected

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Sample ID: 2000mg/l Mode: TOC
Method: Boat Sampler Filename: 07221040
Cal. Curve: TOC SOIL Timestamp: 2025/07/22 10:50
Operator ID: RM IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			5833243	-1.688	-0.691	105
2			6019740	-1.376	-0.378	97
3			6018462	-1.273	-0.275	92
4			6027308	-1.269	-0.272	94

<<<Statistics>>> Mean: 5974688 Std Dev: 94378 RSD: 1.58
=====

Sample ID: ICV Mode: TOC
Method: Boat Sampler Filename: 07221054
Cal. Curve: TOC SOIL Timestamp: 2025/07/22 10:56
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	972.3586	38.8943	2886453	-1.846	-0.848	70

Sample ID: ICV Mode: TOC
Method: Boat Sampler Filename: 07221056
Cal. Curve: TOC SOIL Timestamp: 2025/07/22 10:58
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	961.9182	38.4767	2855460	-1.619	-0.620	66

Sample ID: ICV Mode: TOC
Method: Boat Sampler Filename: 07221059
Cal. Curve: TOC SOIL Timestamp: 2025/07/22 11:01
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	968.0812	38.7232	2873755	-1.730	-0.731	68

Sample ID: ICV Mode: TOC
Method: Boat Sampler Filename: 07221101
Cal. Curve: TOC SOIL Timestamp: 2025/07/22 11:03
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	969.9279	38.7971	2879237	-1.619	-0.623	67

Sample ID: ICB Mode: TOC
Method: Boat Sampler Filename: 07221107
Cal. Curve: TOC SOIL Timestamp: 2025/07/22 11:10
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.2936	0.1717	12746	-1.840	-1.885	120

Last Message: Low Sample Detected
=====

Sample ID: ICB Mode: TOC
Method: Boat Sampler Filename: 07221110
Cal. Curve: TOC SOIL Timestamp: 2025/07/22 11:13
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.9668	0.1987	14744	-1.910	-1.920	120

Last Message: Low Sample Detected
=====

Sample ID: ICB Mode: TOC
Method: Boat Sampler Filename: 07221114
Cal. Curve: TOC SOIL Timestamp: 2025/07/22 11:16
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	3.5644	0.1426	10581	-1.892	-1.896	120

Last Message: Low Sample Detected
=====

Sample ID: ICB Mode: TOC
Method: Boat Sampler Filename: 07221117
Cal. Curve: TOC SOIL Timestamp: 2025/07/22 11:19
Operator ID: RM IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7.3627	0.2945	2			
1856	-1.846	-1.882	120			

Last Message: Low Sample Detected
=====

Cal. Curve ID: TOC SOIL
Created: 2025/07/22 10:51
Calibration Factor (m): 7.421e+04
Y Intercept (b): 97592
r-squared: 0.99879

Standard ID	Y	X Expected	Measured	Message	Date & Time
	Raw Data	ug C	ug C		
BLANK	9653	0.000	-1.185	-	2025/07/22 10:12
250mg/l	815483	10.000	9.673	-3.3	2025/07/22 10:21
500mg/l	1674242	20.000	21.245	6.2	2025/07/22 10:29
1000mg/l	3145790	40.000	41.074	2.7	2025/07/22 10:39
2000mg/l	5974688	80.000	79.193	-0.3	2025/07/22 10:50

12
7/22/25

WORKLIST(Hardcopy Internal Chain)

LB137140

WorkList Name : TOC-091025 WorkList ID : 191794 Department : Wet-Chemistry Date : 09-10-2025 10:57:26

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3068-01	AMBRIC-TECH-9-9	Solid	TOC	Cool 4 deg C	AMBR01	D31	09/09/2025	9060A

Date/Time 09/10/25 11:30
 Raw Sample Received by: 12 (w)
 Raw Sample Relinquished by: 12 (w)

Date/Time 09/10/25 12:25
 Raw Sample Received by: 12 (w)
 Raw Sample Relinquished by: 12 (w)

Analytical Summary Report

Analysis Method: 9045D

Analyst By : JIGNESH

Parameter: pH

Supervisor Review By : Iwona

Run Number: LB137148

Slope : 98.4

BalanceID: WC SC-7

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	W3217
Buffer Solution, PH2 (500ml)	W3161
pH 12.00 Buffer	W3200

True Value of ICV = 7.00 Control Limits[+/- 0.1].

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	09/11/2025	08:30
2	CAL2	1	Water	NA	NA	20.2	7.00	09/11/2025	08:31
3	CAL3	1	Water	NA	NA	20.2	10.02	09/11/2025	08:33
4	ICV	1	Water	NA	NA	20.3	7.02	09/11/2025	08:35
5	CCV1	1	Water	NA	NA	20.2	2.01	09/11/2025	08:38
6	Q3068-01	1	Solid	20.02	20	20.2	7.80	09/11/2025	08:45
7	Q3068-01DUP	1	Solid	20.03	20	20.3	7.82	09/11/2025	08:47
8	CCV2	1	Water	NA	NA	20.2	12.02	09/11/2025	08:50

WORKLIST(Hardcopy Internal Chain)

US 37148

WorkList Name : ph s q3068

WorkList ID : 191796

Department : Wet-Chemistry

Date : 09-11-2025 08:14:03

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3068-01	B AMBRIC-TECH-9-9	Solid	pH	Cool 4 deg C	AMBR01	D31	09/09/2025	9045D

Date/Time

09-11-25 08:25

Raw Sample Received by:

ph (WC)

Raw Sample Relinquished by:

ph (WC)

Date/Time

09-11-25

Raw Sample Received by:

ph (WC)

Raw Sample Relinquished by:

ph (WC)

Analysis Method: 365.3
Parameter: Phosphorus, Total
Run Number: LB137156

ANALYST: Iwona
SUPERVISOR REVIEW BY: JIGNESH
BALANCE ID: WC SC-7

Reagent/Standard	Lot/Log #
calibration std. phosphate 1 ppm	WP114614
calibration std. phosphate 0.5 ppm	WP114613
calibration std. phosphate 0.3 ppm	WP114612
calibration std. phosphate 0.1 ppm	WP114611
calibration std. phosphate 0.05 ppm	WP114610
calibration std. 0 ppm	WP114609
phosphate CCV std.	WP114615
5N sulfuric acid	WP112831
Combined reagent	WP114732
Phenolphthalein indicator	WP113378
Sodium hydroxide, 1N	WP113878
Phosphate ICV-LCS Std	WP114616
Phosphate LOD-MDL Std 0.025ppm	WP114620

Intercept: -0.0034 Slope: 0.6581 Regression: 0.999699

Seq	Lab ID	True Value (mg/L)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	%D	AnalDate	AnalTime
1	CAL1	0.00	1	50	50	0.000	0.005		09/11/2025	13:15
2	CAL2	0.05	1	50	50	0.034	0.057	14	09/11/2025	13:15
3	CAL3	0.10	1	50	50	0.062	0.099	-1	09/11/2025	13:16
4	CAL4	0.30	1	50	50	0.182	0.282	-6	09/11/2025	13:16
5	CAL5	0.50	1	50	50	0.328	0.504	0.8	09/11/2025	13:17
6	CAL6	1.00	1	50	50	0.657	1.003	0.3	09/11/2025	13:17

Analysis Method: 365.3

ANALYST: Iwona

Parameter: Phosphorus, Total

SUPERVISOR REVIEW BY: JIGNESH

Run Number: LB137156

BALANCE ID: WC SC-7

Seq	Lab ID	True Value (mg/l)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	AnalDate	AnalTime
1	ICV	0.50	1	50	50	0.324	0.497	09/11/2025	13:18
2	ICB		1	50	50	0.002	0.008	09/11/2025	13:18
3	CCV1	0.50	1	50	50	0.320	0.491	09/11/2025	13:19
4	CCB1		1	50	50	0.001	0.007	09/11/2025	13:19
5	RL Check	0.05	1	50	50	0.028	0.048	09/11/2025	13:20
6	PB169664BL		1	1.00	50	0.003	0.010	09/11/2025	13:20
7	PB169664BS	0.50	1	1.00	50	0.325	0.499	09/11/2025	13:21
8	Q2893-03		1	1.00	50	0.014	0.026	09/11/2025	13:21
9	Q3068-01		1	1.03	50	0.956	1.458	09/11/2025	13:22
10	Q3068-01DUP		1	1.05	50	0.957	1.459	09/11/2025	13:22
11	Q3068-01MS	0.50	1	1.06	50	1.024	1.561	09/11/2025	13:23
12	Q3068-01MSD	0.50	1	1.06	50	1.026	1.564	09/11/2025	13:23
13	Q3068-01		10	1.03	50	0.362	0.555	09/11/2025	13:24
14	Q3068-01DUP		10	1.05	50	0.362	0.555	09/11/2025	13:24
15	CCV2	0.50	1	50	50	0.326	0.501	09/11/2025	13:25
16	CCB2		1	50	50	0.000	0.005	09/11/2025	13:25
17	Q3068-01MS	0.50	10	1.06	50	0.402	0.616	09/11/2025	13:26
18	Q3068-01MSD	0.50	10	1.06	50	0.401	0.614	09/11/2025	13:26
19	CCV3	0.50	1	50	50	0.322	0.494	09/11/2025	13:27
20	CCB3		1	50	50	0.002	0.008	09/11/2025	13:27

SOP ID : M365.3 & SM4500-P E-19

SDG No : N/A

Start Digest Date: 09/11/2025 Time : 10:40 Temp : 95 °C

Matrix : SOIL

End Digest Date: 09/11/2025 Time : 11:45 Temp : 96 °C

Pippete ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#3

Digestion tube ID : M5595

Block Thermometer ID : WC-BLOCK#1

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

Filter paper ID : 400213

Prep Technician Signature: 12

Weigh By : IZ

pH Meter ID : N/A

Supervisor Signature: 20

Standard Name	MLS USED	STD REF. # FROM LOG
LCSS	0.5ML	WP112914
PBS003	50.0ML	W3112
RL CHECK	50.0ML	WP114617
LOD	50.0ML	WP114620
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
11N H2SO4	1ML	WP112615
AMMONIUM PERSULFATE	0.4g	W3035
pH Paper 0-14	N/A	W3215
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
CAL1	CAL1	50.0ML	WP114609
CAL2	CAL2	50.0ML	WP114610
CAL3	CAL3	50.0ML	WP114611
CAL4	CAL4	50.0ML	WP114612
CAL5	CAL5	50.0ML	WP114613
CAL6	CAL6	50.0ML	WP114614
ICV	ICV	50.0ML	WP114616
ICB	ICB	50.0ML	W3112
CCV	CCV	50.0ML	WP114615
CCB	CCB	50.0ML	W3112

Extraction Conformance/Non-Conformance Comments:

N/A

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

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB169664BL	PBS664	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB169664BS	LCS664	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2893-03	MDL-SOIL-03-QT3-2025	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3068-01	AMBRIC-TECH-9-9	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3068-01DUP	AMBRIC-TECH-9-9DUP	1.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3068-01MS	AMBRIC-TECH-9-9MS	1.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q3068-01MSD	AMBRIC-TECH-9-9MSD	1.05	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TotalPhos-091125 WorkList ID : 191813 Department : Distillation Date : 09-11-2025 10:18:23

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3068-01	AMBRIC-TECH-9-9	Solid	Phosphorus, Total	Cool 4 deg C	AMBR01	D31	09/09/2025	365.3

Date/Time 09/11/25 10:20
Raw Sample Received by: 12/20
Raw Sample Relinquished by: [Signature]

Date/Time 09/11/25 11:05
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: 12/20

Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137133

Review By	rubina	Review On	9/11/2025 9:34:39 AM
Supervise By	Iwona	Supervise On	9/11/2025 12:56:45 PM
SubDirectory	LB137133	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP114677,WP114678,WP114679,WP114680,WP114681,WP114682,WP114683		
ICV Standard	WP114684		
CCV Standard	WP114699		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP114700		
Chk Standard	WP114685,WP114686		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	STD1	STD1	CAL1	09/09/25 10:21	All standards, samples, and	RM/IZ	OK
2	STD2	STD2	CAL2	09/09/25 10:42	QC are filtered through	RM/IZ	OK
3	STD3	STD3	CAL3	09/09/25 11:25	0.45um, filter lot W3160	RM/IZ	OK
4	STD4	STD4	CAL4	09/09/25 11:47		RM/IZ	OK
5	STD5	STD5	CAL5	09/09/25 13:36		RM/IZ	OK
6	STD6	STD6	CAL6	09/09/25 13:58		RM/IZ	OK
7	STD7	STD7	CAL7	09/09/25 14:41		RM/IZ	OK
8	ICV1	ICV1	ICV	09/09/25 15:02		RM/IZ	OK
9	ICB1	ICB1	ICB	09/09/25 15:45		RM/IZ	OK
10	CCV1	CCV1	CCV	09/10/25 11:08		RM/IZ	OK
11	CCB1	CCB1	CCB	09/10/25 11:29		RM/IZ	OK
12	LB137133BLS	LB137133BLS	MB	09/10/25 11:51		RM/IZ	OK
13	LB137133BSS	LB137133BSS	LCS	09/10/25 12:12		RM/IZ	OK
14	Q3068-01	AMBRIC-TECH-9-9	SAM	09/10/25 12:34		RM/IZ	OK
15	Q3068-01MS	AMBRIC-TECH-9-9MS	MS	09/10/25 12:55	5ml W3092	RM/IZ	OK
16	Q3068-01MSD	AMBRIC-TECH-9-9MSD	MSD	09/10/25 13:17	5ml W3092	RM/IZ	OK
17	CCV2	CCV2	CCV	09/10/25 13:38		RM/IZ	OK
18	CCB2	CCB2	CCB	09/10/25 14:00		RM/IZ	OK

Instrument ID: TOC

Daily Analysis Runlog For Sequence/QC Batch ID # LB137140

Review By	rubina	Review On	9/11/2025 9:38:24 AM
Supervise By	Iwona	Supervise On	9/11/2025 1:00:12 PM
SubDirectory	LB137140	Test	TOC
STD. NAME	STD REF.#		
ICAL Standard	WP114036,WP114037,WP114038,WP114039,WP114040		
ICV Standard	WP114041		
CCV Standard	WP114722		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP114723		
Chk Standard	WP112446,WP112447		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	BLANK	BLANK	CAL1	07/22/25 10:12		RM IZ	OK
2	250mg/l	250mg/l	CAL2	07/22/25 10:21		RM IZ	OK
3	500mg/l	500mg/l	CAL3	07/22/25 10:29		RM IZ	OK
4	1000mg/l	1000mg/l	CAL4	07/22/25 10:39		RM IZ	OK
5	2000mg/l	2000mg/l	CAL5	07/22/25 10:50		RM IZ	OK
6	ICV1	ICV1	ICV	07/22/25 11:03		RM IZ	OK
7	ICB1	ICB1	ICB	07/22/25 11:19		RM IZ	OK
8	CCV1	CCV1	CCV	09/10/25 12:40		RM IZ	OK
9	CCB1	CCB1	CCB	09/10/25 12:54		RM IZ	OK
10	LB137140BLS	LB137140BLS	MB	09/10/25 13:12		RM IZ	OK
11	LB137140BSS	LB137140BSS	LCS	09/10/25 13:30		RM IZ	OK
12	Q3068-01	AMBRIC-TECH-9-9	SAM	09/10/25 13:53		RM IZ	OK
13	Q3068-01MS	AMBRIC-TECH-9-9MS	MS	09/10/25 14:07	sample + 40ul of WP114722	RM IZ	OK
14	Q3068-01MSD	AMBRIC-TECH-9-9MSD	MSD	09/10/25 14:39	sample + 40ul of WP114722	RM IZ	OK
15	CCV2	CCV2	CCV	09/10/25 15:00		RM IZ	OK
16	CCB2	CCB2	CCB	09/10/25 15:14		RM IZ	OK

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137148

Review By	JIGNESH	Review On	9/11/2025 10:17:03 AM
Supervise By	Iwona	Supervise On	9/11/2025 11:13:19 AM
SubDirectory	LB137148	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,W3217,W3161,W3200		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	09/11/25 08:30		Jignesh	OK
2	CAL2	CAL2	CAL	09/11/25 08:31		Jignesh	OK
3	CAL3	CAL3	CAL	09/11/25 08:33		Jignesh	OK
4	ICV	ICV	ICV	09/11/25 08:35		Jignesh	OK
5	CCV1	CCV1	CCV	09/11/25 08:38		Jignesh	OK
6	Q3068-01	AMBRIC-TECH-9-9	SAM	09/11/25 08:45		Jignesh	OK
7	Q3068-01DUP	AMBRIC-TECH-9-9DUP	DUP	09/11/25 08:47		Jignesh	OK
8	CCV2	CCV2	CCV	09/11/25 08:50		Jignesh	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137156

Review By	Iwona	Review On	9/11/2025 2:33:06 PM
Supervise By	JIGNESH	Supervise On	9/11/2025 2:36:59 PM
SubDirectory	LB137156	Test	Phosphorus, Total
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP114614,WP114613,WP114612,WP114611,WP114610,WP114609,WP114615,WP112831,WP114732,WP113378,V		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	09/11/25 13:15		Iwona	OK
2	CAL2	CAL2	CAL	09/11/25 13:15		Iwona	OK
3	CAL3	CAL3	CAL	09/11/25 13:16		Iwona	OK
4	CAL4	CAL4	CAL	09/11/25 13:16		Iwona	OK
5	CAL5	CAL5	CAL	09/11/25 13:17		Iwona	OK
6	CAL6	CAL6	CAL	09/11/25 13:17		Iwona	OK
7	ICV	ICV	ICV	09/11/25 13:18		Iwona	OK
8	ICB	ICB	ICB	09/11/25 13:18		Iwona	OK
9	CCV1	CCV1	CCV	09/11/25 13:19		Iwona	OK
10	CCB1	CCB1	CCB	09/11/25 13:19		Iwona	OK
11	RL Check	RL Check	RL	09/11/25 13:20		Iwona	OK
12	PB169664BL	PB169664BL	MB	09/11/25 13:20		Iwona	OK
13	PB169664BS	PB169664BS	LCS	09/11/25 13:21		Iwona	OK
14	Q2893-03	MDL-SOIL-03-QT3-20	SAM	09/11/25 13:21		Iwona	OK
15	Q3068-01	AMBRIC-TECH-9-9	SAM	09/11/25 13:22		Iwona	OK
16	Q3068-01DUP	AMBRIC-TECH-9-9DUP	DUP	09/11/25 13:22		Iwona	OK
17	Q3068-01MS	AMBRIC-TECH-9-9MS	MS	09/11/25 13:23		Iwona	OK
18	Q3068-01MSD	AMBRIC-TECH-9-9MSD	MSD	09/11/25 13:23		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137156

Review By	Iwona	Review On	9/11/2025 2:33:06 PM
Supervise By	JIGNESH	Supervise On	9/11/2025 2:36:59 PM
SubDirectory	LB137156	Test	Phosphorus, Total
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP114614,WP114613,WP114612,WP114611,WP114610,WP114609,WP114615,WP112831,WP114732,WP113378,V		

19	Q3068-01DL	AMBRIC-TECH-9-9DL	SAM	09/11/25 13:24		Iwona	OK
20	Q3068-01DUP	AMBRIC-TECH-9-9DUP	DUP	09/11/25 13:24		Iwona	OK
21	CCV2	CCV2	CCV	09/11/25 13:25		Iwona	OK
22	CCB2	CCB2	CCB	09/11/25 13:25		Iwona	OK
23	Q3068-01MS	AMBRIC-TECH-9-9MS	MS	09/11/25 13:26		Iwona	OK
24	Q3068-01MSD	AMBRIC-TECH-9-9MSD	MSD	09/11/25 13:26		Iwona	OK
25	CCV3	CCV3	CCV	09/11/25 13:27		Iwona	OK
26	CCB3	CCB3	CCB	09/11/25 13:27		Iwona	OK

Prep Standard - Chemical Standard Summary

Order ID : Q3068

Test : Anions Group2,Percent Solids,pH,Phosphorus, Total,TOC

Prepbatch ID : PB169664,

Sequence ID/Qc Batch ID: LB137133,LB137140,LB137148,LB137156,

Standard ID :

WP112446,WP112447,WP112615,WP112796,WP112831,WP112913,WP112914,WP113112,WP113113,WP113378,WP113780,WP113878,WP114035,WP114036,WP114037,WP114038,WP114039,WP114040,WP114041,WP114609,WP114610,WP114611,WP114612,WP114613,WP114614,WP114615,WP114616,WP114617,WP114618,WP114620,WP114677,WP114678,WP114679,WP114680,WP114681,WP114682,WP114683,WP114684,WP114685,WP114686,WP114699,WP114700,WP114722,WP114723,WP114731,WP114732,

Chemical ID :

M6041,M6186,W2306,W2647,W2650,W2664,W2788,W2860,W3035,W3074,W3093,W3112,W3113,W3161,W3163,W3169,W3178,W3180,W3191,W3197,W3198,W3200,W3206,W3215,W3217,W3219,

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>
613	Phosphoric acid reagent	WP112446	03/25/2025	09/25/2025	Niha Farheen Shaik	None	None	Iwona Zarych 03/26/2025
FROM 150.00000ml of W3112 + 50.00000ml of W2860 = Final Quantity: 200.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2435	1:1 PHOSPHORIC ACID FOR TOC SOILS	WP112447	03/25/2025	09/25/2025	Niha Farheen Shaik	None	None	Iwona Zarych 03/26/2025
FROM 50.00000ml of W2860 + 50.00000ml of W3112 = Final Quantity: 100.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1211	11 N sulfuric acid	WP112615	04/03/2025	10/07/2025	Niha Farheen Shaik	None	None	Iwona Zarych
								04/07/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4035	IC ELUENT CONCENTRATE FOR IC-1	WP112796	04/22/2025	10/22/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh
								04/22/2025

FROM 2.10000gram of W2647 + 84.75000gram of W3163 + 913.15000ml of W3112 = Final Quantity: 1000.000 ml

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>
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>
115	Phosphate Stock Std. (50 ppm)	WP112913	05/01/2025	11/01/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh
								05/06/2025

FROM 0.11000gram of W3198 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
2790	Phosphate Stock std, 50PPM-SS	WP112914	05/01/2025	11/01/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 05/06/2025
FROM 0.11000gram of W3206 + 500.00000ml of W3112 = Final Quantity: 500.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
648	Ammonium molybdate solution	WP113112	05/16/2025	11/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 05/16/2025
FROM 20.00000gram of W2664 + 480.00000ml of W3112 = Final Quantity: 500.000 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>
588	Potassium Antimonyl Tartrate	WP113113	05/16/2025	11/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 05/16/2025
FROM 1.37150gram of W2306 + 500.00000ml of W3112 = Final Quantity: 500.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1213	Phenolphthalein indicator	WP113378	06/04/2025	12/04/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 06/05/2025
FROM 0.10000gram of W2650 + 50.00000ml of W2788 + 50.00000ml of W3112 = Final Quantity: 100.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2051	TOC STOCK STD-SS, 4000PPM	WP113780	07/01/2025	01/01/2026	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 07/02/2025
FROM 2.50000ml of W2860 + 4.25600gram of W3219 + 495.00000ml of W3112 = Final Quantity: 500.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1571	Sodium hydroxide, 1N	WP113878	07/09/2025	12/31/2025	Iwona Zarych	WETCHEM_S CALE_7 (WC SC-6)	None	Jignesh Parikh 07/09/2025
FROM 4.00000gram of W3113 + 96.00000ml of W3112 = Final Quantity: 100.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2050	TOC STOCK STD, 4000PPM	WP114035	07/22/2025	01/22/2026	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	Glass Pipette-A	Jignesh Parikh 07/22/2025
FROM 5.00000ml of W2860 + 8.51200gram of W3169 + 990.00000ml 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>
304	TOC CAL 0.00ppm	WP114036	07/22/2025	07/29/2025	Iwona Zarych	None	None	Jignesh Parikh 07/22/2025
FROM 100.00000ml of W3112 = Final Quantity: 100.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
712	TOC SOIL cal 250ppm	WP114037	07/22/2025	07/29/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 07/22/2025
FROM 15.00000ml of W3112 + 1.00000ml of WP114035 = Final Quantity: 16.000 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>
710	TOC SOIL cal 500ppm	WP114038	07/22/2025	07/29/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 07/22/2025
FROM 14.00000ml of W3112 + 2.00000ml of WP114035 = Final Quantity: 16.000 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>
3544	TOC SOIL Cal- CCV 1000PPM	WP114039	07/22/2025	07/29/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 07/22/2025

FROM 15.00000ml of W3112 + 5.00000ml of WP114035 = Final Quantity: 20.000 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>
713	TOC SOIL cal 2000ppm	WP114040	07/22/2025	07/29/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 07/22/2025

FROM 5.00000ml of W3112 + 5.00000ml of WP114035 = 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>
2819	TOC ICV-LCSS, 1000PPM	WP114041	07/22/2025	07/29/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 07/22/2025

FROM 15.00000ml of W3112 + 5.00000ml of WP113780 = Final Quantity: 20.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
122	calibration std. 0 ppm	WP114609	09/05/2025	09/12/2025	Iwona Zarych	None	None	Jignesh Parikh 09/05/2025

FROM 100.00000ml of W3112 = Final Quantity: 100.000 ml

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
121	calibration std. phosphate 0.05 ppm	WP114610	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.90000ml of W3112 + 0.10000ml of WP112913 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
120	calibration std. phosphate 0.1 ppm	WP114611	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.80000ml of W3112 + 0.20000ml of WP112913 = Final Quantity: 100.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
119	calibration std. phosphate 0.3 ppm	WP114612	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.40000ml of W3112 + 0.60000ml of WP112913 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
118	calibration std. phosphate 0.5 ppm	WP114613	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112913 = Final Quantity: 100.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
117	calibration std. phosphate 1 ppm	WP114614	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 98.00000ml of W3112 + 2.00000ml of WP112913 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
124	phosphate CCV std.	WP114615	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112913 = Final Quantity: 100.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3805	Phosphate ICV-LCS Std	WP114616	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112914 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4212	Phosphate RL CHECK	WP114617	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.80000ml of W3112 + 0.20000ml of WP112913 = Final Quantity: 100.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3907	Phosphate MDL-LOD-LOQ spike solution, 5ppm	WP114618	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 9.00000ml of W3112 + 1.00000ml of WP112913 = 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>
3814	Phosphate LOD-MDL Std 0.025ppm	WP114620	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.50000ml of W3112 + 0.50000ml of WP114618 = 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>
2487	Anions 300/9056 calibration standard 1	WP114677	09/09/2025	09/10/2025	Iwona Zarych	None	None	Jignesh Parikh 09/11/2025

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	WP114678	09/09/2025	09/10/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 09/11/2025

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	WP114679	09/09/2025	09/10/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 09/11/2025
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	WP114680	09/09/2025	09/10/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 09/11/2025
FROM 0.50000ml of W3180 + 9.50000ml of W3112 = Final Quantity: 10.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3680	Anions 300/9056 calibration standard 5-CCV	WP114681	09/09/2025	09/10/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 09/11/2025
FROM 45.00000ml of W3112 + 5.00000ml of W3180 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3679	Anions 300/9056 calibration standard 6	WP114682	09/09/2025	09/10/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 09/11/2025
FROM 2.00000ml of W3180 + 8.00000ml of W3112 = Final Quantity: 10.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3681	Anions 300/9056 calibration standard 7	WP114683	09/09/2025	09/10/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/11/2025
FROM 2.50000ml of W3180 + 7.50000ml of W3112 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3233	Anions 300/9056 ICV-LCS std	WP114684	09/09/2025	09/10/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/11/2025
FROM 45.00000ml of W3112 + 5.00000ml of W3197 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4036	IC ELUENT FOR IC-1	WP114685	09/09/2025	10/09/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 09/11/2025

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	WP114686	09/09/2025	09/10/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 09/11/2025

FROM 5.60000ml of M6186 + 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>
3680	Anions 300/9056 calibration standard 5-CCV	WP114699	09/10/2025	09/11/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/11/2025
FROM 45.00000ml of W3112 + 5.00000ml of W3180 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3233	Anions 300/9056 ICV-LCS std	WP114700	09/10/2025	09/11/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/11/2025
FROM 45.00000ml of W3112 + 5.00000ml of W3197 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3544	TOC SOIL Cal- CCV 1000PPM	WP114722	09/10/2025	09/17/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 09/11/2025

FROM 15.00000ml of W3112 + 5.00000ml of WP114035 = Final Quantity: 20.000 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>
2819	TOC ICV-LCSS, 1000PPM	WP114723	09/10/2025	09/17/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 09/11/2025

FROM 15.00000ml of W3112 + 5.00000ml of WP113780 = Final Quantity: 20.000 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>
590	Ascorbic Acid	WP114731	09/11/2025	09/12/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 09/11/2025
FROM 0.52800gram of W3074 + 30.00000ml of W3112 = Final Quantity: 30.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
658	Combined reagent	WP114732	09/11/2025	09/12/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 09/11/2025
FROM 15.00000ml of WP113112 + 30.00000ml of WP114731 + 5.00000ml of WP113113 + 50.00000ml of WP112831 = Final Quantity: 100.000 ml								

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	02/12/2026	08/13/2025 / Sagar	08/06/2025 / Sagar	M6186

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J2870-1 / PHENOLPHTHALEIN, INDICATOR F/TITRATION, 500G	0000235350	06/04/2025	01/31/2020 / AMANDEEP	01/20/2020 / apatel	W2650

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

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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

CHEMICAL RECEIPT LOG BOOK

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 #
Inorganic Ventures	300-CAL-A-500ML / 300.0 Calibration Standard, 500 ml	040525	04/05/2027	04/08/2025 / lwona	04/08/2025 / lwona	W3197

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRY, ACS, 500G	MKCW6723	10/31/2028	04/11/2025 / lwona	04/11/2025 / lwona	W3198

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

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

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

CHEMICAL RECEIPT LOG BOOK

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	2504D34	03/31/2027	07/02/2025 / jignesh	06/26/2025 / Iwona	W3217

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	2025040493	06/30/2030	06/26/2025 / Iwona	06/26/2025 / Iwona	W3219



CERTIFICATE OF ANALYSIS

Printed: 12/8/2017

Page 1 of 1

Customer No : 30017
Order Number : 3008126
Catalog : A1561

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

Customer PO : 6035343

Lot : 2GH0057

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

Formula Weight : 667.87

W2306
received
12/11/17
AB

Test

Limit
Min. Max.

Results

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

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

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

Certificate of Analysis Results Certified By:

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

(ammonium heptamolybdate, tetrahydrate)



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

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

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

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

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

James Ethier
Jamie Ethier
Vice President Global Quality

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

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



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

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

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

For Laboratory, Research or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality

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

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

(sodium hydrogen carbonate)



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

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

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

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

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

James Ethier
Jamie Ethier
Vice President Global Quality

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

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

(orthophosphoric acid)



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

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

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

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

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


Jamie Ethier
Vice President Global Quality

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



CERTIFICATE OF ANALYSIS

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

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

⁺This test is performed quarterly

Certification and Compliance Statements

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

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

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

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

Approved by: D. Simoncelli, Quality Control Chemist

Date of Approval: 06/23/2020



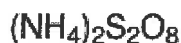
W 3035
rec. 6/6/23 12

Product Name:

Certificate of Analysis

Ammonium persulfate - ACS reagent, $\geq 98.0\%$

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



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


Larry Coers, Director
Quality Control
Milwaukee, WI US

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



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

avantor™



M 6041-4b
MS

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

Certificate of Analysis

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

>>> Continued on page 2 >>>

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

 **avantor™**

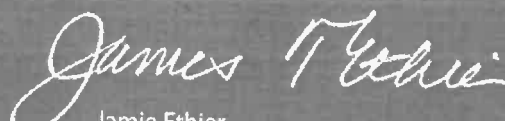


Material No.: 9673-33
Batch No.: 23D2462010

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

For Laboratory, Research, or Manufacturing Use

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



Jamie Ethier
Vice President Global Quality

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

avantor™



MG186

Reciev Date :- 08/06/25

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

 **avantorsm**

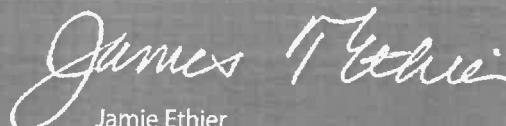


Material No.: 9673-33
Batch No.: 23D2462010

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

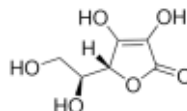
W3074 Rec. on 01/16/24 by IZ

Certificate of Analysis

Product Name:

L-Ascorbic acid - ACS reagent, ≥99%

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



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

Larry Coers, Director
 Quality Control
 Milwaukee, WI US

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





Certificate of Analysis

W3093
094121
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)

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Paul Brandon

Paul Brandon (01/08/2024)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials --
Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

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

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	Manufacture Date:	12/14/2022
Molecular Weight:	40	Expiration Date:	12/31/2025
CAS #:	1310-73-2		
Appearance:		Storage:	Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature

Additional Information

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

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

Product meets analytical specifications of the grades listed.



Certificate of Analysis

Buffer, Reference Standard, pH 2.00 ± 0.01 at 25°C**Lot Number:** 2411E26**Product Number:** 1493**Manufacture Date:** NOV 11, 2024**Expiration Date:** OCT 2026

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

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

°C	10	15	20	25	30	35	40	45	50
pH	1.93	1.98	1.98	2.00	2.01	2.03	2.03	2.04	2.04

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1493-1	4 L natural poly	24 months
1493-16	500 mL natural poly	24 months
1493-1CT	4 L Cubitainer®	24 months
1493-2.5	10 L Cubitainer®	24 months
1493-32	1 L natural poly	24 months

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



Jose Pena (11/11/2024)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

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



W3163 Rec. on 12/10/24 by IZ

Certificate of Analysis

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

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

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

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

Internal ID #: 710

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



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

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

Internal ID #: 322

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

**RICCA CHEMICAL COMPANY®**

1841 Broad Street
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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Christiansburg, VA 24073 USA
inorganicventures.com

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

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

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

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

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{TS} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

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

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

X_a = mean of Assay Method A with

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

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

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ITS} = 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; 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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Pocomoke City, MD 21851
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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

W3198 Received on 4/11/2025 by IZ

3050 Spruce Street, Saint Louis, MO 63103, USA

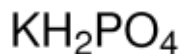
Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:

Potassium phosphate monobasic - ACS reagent, ≥99.0%

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



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



Larry Coers, Director
Quality Control
Milwaukee, WI US

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





Certificate of Analysis

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

Lot Number: 2504F20

Product Number: 1615

Manufacture Date: APR 08, 2025

Expiration Date: SEP 2026

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

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

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1615-1	4 L natural poly	18 months
1615-16	500 mL clear PET-G	18 months
1615-5	20 L Cubitainer®	18 months

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



Jose Pena (04/08/2025)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

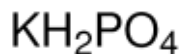
This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Certificate of Analysis

Product Name:

Potassium phosphate monobasic - ACS reagent, ≥99.0%

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



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



Larry Coers, Director
Quality Control
Milwaukee, WI US

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



Certificate of Analysis

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

Lot Number: 2504D34

Product Number: 1551

Manufacture Date: APR 03, 2025

Expiration Date: MAR 2027

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 (from ACS)

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

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.003	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 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)
1551-2.5	10 L Cubitainer®	24 months
1551-20	20 x 20 mL pack	24 months
1551-32	1 L natural poly	24 months
1551-5	20 L Cubitainer®	24 months

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



Jose Pena (04/03/2025)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

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

Certificate Of Analysis



Date of Release: 4/8/2025

Name: **Potassium Hydrogen Phthalate**

ACS

Item No: **PX1476 All Sizes**

Lot / Batch No: **2025040493**

Country of Origin: **USA**

Item	Specifications	Analysis
Assay (Dried Basis)	99.95-100.05%	99.98%
Chlorine compounds (as Cl)	0.003% max.	<0.003%
Color	White	Passes Test
Form	Crystals	Passes Test
Heavy metals (by ICP-OES)	5 ppm max.	<5 ppm
Insoluble Matter	0.005% max.	<0.005%
Iron (Fe)	5 ppm max.	<5 ppm
pH of a 0.05m solution @ 25.0C	4.00-4.02	4.00
Sodium (Na)	0.005% max.	<0.005%
Sulfur compounds (as S)	0.002% max.	<0.002%

Joe Schoellkopf

Quality Control Manager

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

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

EMD Millipore Corporation

400 Summit Drive
Burlington, MA 01803
U.S.A.

Form number: 00005624CA, Rev. 2.0

PERCENT SOLID

Supervisor: Iwona
Analyst: JIGNESH
Date: 9/11/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:35
In Date: 09/10/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:37
Out Date: 09/11/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB137131

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q3064-01	905-A	1	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3064-02	905-B-FRONT	2	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3064-03	905-B-BACK	3	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3065-01	VNJ-204	4	1.18	10.85	12.03	10.24	83.5	
Q3065-02	VNJ-204-E2	5	1.16	10.61	11.77	10.15	84.7	
Q3066-01	354	6	1.13	10.53	11.66	11.18	95.4	
Q3066-02	354-EPH-2	7	1.14	10.16	11.3	10.8	95.1	
Q3066-03	VNJ-242	8	1.13	10.84	11.97	11.05	91.5	
Q3066-04	VNJ-242-EPH-2	9	1.16	10.56	11.72	10.71	90.4	
Q3068-01	AMBRIC-TECH-9-9	10	1.18	10.42	11.6	10.45	89.0	
Q3072-01	30-GARFIELD-PL-COMP	11	1.14	10.30	11.44	10.62	92.0	
Q3072-01D	30-GARFIELD-PL-COMPDUP	12	1.16	10.30	11.46	10.65	92.1	
Q3073-01	BEL-25-0022	13	1.00	1.00	2.00	2.00	100.0	oil sample
Q3073-02	BEL-25-0023	14	1.00	1.00	2.00	2.00	100.0	oily-debris
Q3074-01	MOO-25-0141	15	1.00	1.00	2.00	2.00	100.0	oily-debris
Q3075-01	MOO-25-0254	16	1.12	10.76	11.88	9.93	81.9	
Q3075-02	MOO-25-0254-0256	17	1.19	10.70	11.89	9.77	80.2	
Q3075-04	MOO-25-0258	18	1.00	1.00	2.00	2.00	100.0	debris
Q3075-06	MOO-25-0259	19	1.00	1.00	2.00	2.00	100.0	debris
Q3075-08	MOO-25-0260	20	1.13	10.83	11.96	11.56	96.3	
Q3075-09	MOO-25-0260	21	1.13	10.83	11.96	11.56	96.3	
Q3075-10	MOO-25-02563	22	1.14	10.51	11.65	10.36	87.7	
Q3075-11	MOO-25-02561-0263	23	1.15	10.35	11.5	10.22	87.6	
Q3076-01	L18A	24	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-02	L18B	25	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-03	L19A	26	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-04	L20A	27	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-05	L20B	28	1.00	1.00	2.00	2.00	100.0	PILC

PERCENT SOLID

Supervisor: Iwona
Analyst: JIGNESH
Date: 9/11/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:35
In Date: 09/10/2025
Weight Check 1.0g: 1.00
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OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:37
Out Date: 09/11/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB137131

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
Q3076-06	L21A	29	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-07	L21B	30	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-08	L22A	31	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-09	L22B	32	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-10	245F75-1-1	33	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-11	245F75-1-2	34	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-12	JEB978E-1-1	35	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-13	JEB978E-1-2	36	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-14	JEB978E-2-1	37	1.00	1.00	2.00	2.00	100.0	PILC
Q3076-15	JEB978E-2-2	38	1.00	1.00	2.00	2.00	100.0	PILC
Q3077-01	LAW-25-0137	39	1.00	1.00	2.00	2.00	100.0	debris
Q3077-02	LAW-25-0137	40	1.16	10.46	11.62	10.2	86.4	
Q3077-03	LAW-25-0139	41	1.16	10.46	11.62	10.2	86.4	

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

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-091025

WorkList ID : 191784

Department : Wet-Chemistry

Date : 09-10-2025 10:40:17

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3064-01	905-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3064-02	905-B-FRONT	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3064-03	905-B-BACK	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3065-01	VNJ-204	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3065-02	VNJ-204-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3066-01	354	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3066-02	354-EPH-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3066-03	VNJ-242	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3066-04	VNJ-242-EPH-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3068-01	AMBRIC-TECH-9-9	Solid	Percent Solids	Cool 4 deg C	AMBR01	D31	09/10/2025	Chemtech -SO
Q3072-01	30-GARFIELD-PL-COMP	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	09/10/2025	Chemtech -SO
Q3073-01	BEL-25-0022	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3073-02	BEL-25-0023	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3074-01	MOO-25-0141	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3075-01	MOO-25-0254	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3075-02	MOO-25-0254-0256	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3075-04	MOO-25-0258	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3075-06	MOO-25-0259	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3075-08	MOO-25-0260	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3075-09	MOO-25-0260	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3075-10	MOO-25-02563	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO

Date/Time 09-10-25 16:10

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 09-10-25

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

JF 3431

WorkList Name : %1-091025

WorkList ID : 191784

Department : Wet-Chemistry

Date : 09-10-2025 10:40:17

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3075-11	MOO-25-02561-0263	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-01	L18A	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-02	L18B	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-03	L19A	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-04	L20A	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-05	L20B	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-06	L21A	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-07	L21B	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-08	L22A	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-09	L22B	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-10	245F75-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-11	245F75-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-12	JEB978E-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-13	JEB978E-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-14	JEB978E-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3076-15	JEB978E-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3077-01	LAW-25-0137	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3077-02	LAW-25-0137	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO
Q3077-03	LAW-25-0139	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/10/2025	Chemtech -SO

Date/Time 09-10-25 10:10

Raw Sample Received by: JF WCC

Raw Sample Relinquished by: JF WCC

Date/Time 09-10-25

Raw Sample Received by: JF WCC

Raw Sample Relinquished by: JF WCC

17:40

JF WCC

JF WCC



SHIPPING DOCUMENTS

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

Q3068

Alliance Project Number:

Q3069

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION			PROJECT INFORMATION			BILLING INFORMATION												
COMPANY: <u>AMERIC TECHNOLOGY CORP</u>			PROJECT NAME: <u>J.F. Huebner</u>			BILL TO: <u>AMERIC TECHNOLOGY CORP</u>												
ADDRESS: <u>100 PINE STREET</u>			PROJECT #: <u> </u>			ADDRESS: <u>100 PINE STREET</u>												
CITY: <u>COLUMBIA</u> STATE: <u>PA</u> ZIP: <u>19023</u>			PROJECT MANAGER: <u>DANIEL MULVHILL</u>			CITY: <u>COLUMBIA</u> STATE: <u>PA</u> ZIP: <u>19023</u>												
ATTENTION: <u>DANIEL MULVHILL</u>			E-MAIL: <u>daniel.mulvhill@americtech.com</u>			ATTENTION: <u>MICHAEL</u> PHONE: <u>215-928-8930</u>												
PHONE: <u>215-360-6246</u> FAX: <u>215-928-8980</u>			PHONE: <u> </u> FAX: <u> </u>			ANALYSIS												
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION															
FAX: <u> </u> DAYS* <u> </u>			☒ RESULTS ONLY ☐ USEPA CLP															
HARD COPY: <u>1</u> DAYS* <u> </u>			☒ RESULTS + QC ☐ New York State ASP "B"															
EDD <u> </u> DAYS* <u> </u>			☐ New Jersey REDUCED ☐ New York State ASP "A"															
* TO BE APPROVED BY ALLIANCE			☐ New Jersey CLP ☐ Other <u> </u>															
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS			☐ EDD Format <u> </u>															
ALLIANCE SAMPLE ID			PROJECT SAMPLE IDENTIFICATION		SAMPLE MATRIX		SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles				COMMENTS			
1.							COMP		DATE		TIME		1		A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other			
2.													2					
3.													3					
4.													4					
5.													5					
6.													6					
7.													7					
8.													8					
9.													9					
10.																		
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 <u>27.3</u> MeOH extraction requires an additional 4oz. jar for percent solid ☐ Ice in Cooler? <u>no</u>											
1.			9/10/25		1.													
RELINQUISHED BY			DATE/TIME		RECEIVED BY													
2.					2.													
RELINQUISHED BY			DATE/TIME		RECEIVED FOR LAB BY													
3.					3.													
WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY																		
SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight ☐ Picked Up ☐ Overnight															Shipment Complete ☐ YES ☐ NO			

Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312