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# Cover Page

**Order ID :** Q2344

**Project ID :** Ansonia Landfill 2025

**Client :** Lockwood, Kessler & Bartlett, Inc.

| Lab Sample Number | Client Sample Number |
|---|---|
| Q2344-01 | MW-1 |
| Q2344-02 | MW-1 |
| Q2344-03 | MW-3 |
| Q2344-04 | MW-3 |
| Q2344-05 | MW-4 |
| Q2344-06 | MW-4 |
| Q2344-07 | MW-2 |
| Q2344-08 | MW-2 |
| Q2344-09 | TRIP-BLANK |

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

Signature : _____

Date: 6/26/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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# CASE NARRATIVE

**Lockwood, Kessler & Bartlett, Inc.**
**Project Name: Ansonia Landfill 2025**
**Project # N/A**
**Order ID # Q2344**
**Test Name: Alkalinity,Ammonia,Anions Group1,BOD5,pH,TDS,TKN,Total Nitrogen,TSS,Turbidity**

**A. Number of Samples and Date of Receipt:**
9 Water samples were received on 06/17/2025.

**B. Parameters:**
According to the Chain of Custody document, the following analyses were requested: Alkalinity, Ammonia, Anions Group1, BOD5, Dissolved Metals Group5, Metals Group4, pH, TDS, TKN, Total Nitrogen, TSS, Turbidity and VOCMS Group1. This data package contains results for Alkalinity,Ammonia,Anions Group1,BOD5,pH,TDS,TKN,Total Nitrogen,TSS,Turbidity.

**C. Analytical Techniques:**

The analysis of Anions Group1 was based on method 300.0, The analysis of Total Nitrogen was based on method Cal, The analysis of pH was based on method SM 4500-H B, The analysis of Turbidity was based on method SM2130 B, The analysis of Alkalinity was based on method SM2320 B, The analysis of TDS was based on method SM2540 C, The analysis of TSS was based on method SM2540 D, The analysis of TKN was based on method SM4500 N Org B or C, The analysis of Ammonia was based on method SM4500-NH3 and The analysis of BOD5 was based on method SM5210 B.

**D. QA/ QC Samples:**

The Holding Times were met for all analysis except for MW-1 of pH., for MW-2 of pH. For MW-3 of pH. For MW-4 of pH as samples were receive out of holding time.
Sample MW-1 was diluted due to high concentrations for Chloride & Sample MW-3 was diluted due to high concentrations for Chloride, Sulfate & Sample MW-3DL was diluted due to high concentrations for Chloride & Sample MW-4 was diluted due to high concentrations for Chloride, Sulfate & Sample MW-4DL was diluted due to high concentrations for Chloride & Sample MW-2 was diluted due to high concentrations for Ammonia as N, Chloride.
The Blank Spike met requirements for all parameters.
The Duplicate analysis met criteria for all parameters.
The Matrix Spike (MW-1MS) analysis met criteria for all parameters except for Chloride due to sample matrix interference.

The Matrix Spike Duplicate (MW-1MSD) analysis met criteria for all parameters except for Chloride due to sample matrix interference.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.

**E. Additional Comments:**

---

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

Signature_____

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Tel. 908-789-8900 Fax: 908-789-8922

# 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<br>**"P"** for ICP instrument<br>**"PM"** for ICP when Microwave Digestion is used<br>**"CV"** for Manual Cold Vapor AA<br>**"AV"** for automated Cold Vapor AA<br>**"CA"** for MIDI-Distillation Spectrophotometric<br>**"AS"** for Semi –Automated Spectrophotometric<br>**"C"** for Manual Spectrophotometric<br>**"T"** for Titrimetric<br>**"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 |

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**APPENDIX A**

**QA REVIEW GENERAL DOCUMENTATION**

**Project #:** **Q2344**

| | Completed |
|---|---|
| **For thorough review, the report must have the following:** | |
| **GENERAL:** | |
| **Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)** | ✓ |
| **Check chain-of-custody for proper relinquish/return of samples** | ✓ |
| **Is the chain of custody signed and complete** | ✓ |
| **Check internal chain-of-custody for proper relinquish/return of samples /sample extracts** | ✓ |
| **Collect information for each project id from server. Were all requirements followed** | ✓ |
| **COVER PAGE:** | |
| **Do numbers of samples correspond to the number of samples in the Chain of Custody on login page** | ✓ |
| **Do lab numbers and client Ids on cover page agree with the Chain of Custody** | ✓ |
| **CHAIN OF CUSTODY:** | |
| **Do requested analyses on Chain of Custody agree with form I results** | ✓ |
| **Do requested analyses on Chain of Custody agree with the log-in page** | ✓ |
| **Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody** | ✓ |
| **Were the samples received within hold time** | ✓ |
| **Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle** | ✓ |
| **ANALYTICAL:** | |
| **Was method requirement followed?** | ✓ |
| **Was client requirement followed?** | ✓ |
| **Does the case narrative summarize all QC failure?** | ✓ |
| **All runlogs and manual integration are reviewed for requirements** | ✓ |
| **All manual calculations and /or hand notations verified** | ✓ |

**QA Review Signature:** **KETAN PATEL** **Date:** **06/26/2025**

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# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | Q2344 | **OrderDate:** | 6/17/2025 11:52:00 AM |
| **Client:** | Lockwood, Kessler & Bartlett, Inc. | **Project:** | Ansonia Landfill 2025 |
| **Contact:** | John Gerlach | **Location:** | D31,VOA Ref. #3 Water |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **Q2344-01** | **MW-1** | **WATER** | | | **06/16/25 09:30** | | | **06/17/25** |
| | | | Alkalinity | SM2320 B | | | 06/19/25 12:43 | |
| | | | Ammonia | SM4500-NH3 | | 06/23/25 | 06/24/25 09:50 | |
| | | | Anions Group1 | 300.0 | | | 06/17/25 16:42 | |
| | | | BOD5 | SM5210 B | | | 06/18/25 09:25 | |
| | | | pH | SM 4500-H B | | | 06/18/25 10:47 | |
| | | | TDS | SM2540 C | | | 06/17/25 17:20 | |
| | | | TKN | SM4500-N Org C-11 plus NH3 B plus G-11 | | 06/23/25 | 06/24/25 12:47 | |
| | | | Total Nitrogen | Cal | | | 06/24/25 12:47 | |
| | | | TSS | SM2540 D | | | 06/18/25 18:00 | |
| | | | Turbidity | SM2130 B | | | 06/18/25 09:16 | |
| **Q2344-01DL** | **MW-1DL** | **WATER** | | | **06/16/25 09:30** | | | **06/17/25** |
| | | | Anions Group1 | 300.0 | | | 06/18/25 11:58 | |
| **Q2344-03** | **MW-3** | **WATER** | | | **06/16/25 10:30** | | | **06/17/25** |

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# LAB CHRONICLE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Alkalinity | SM2320 B | | 06/19/25 12:49 | |
| | | | Ammonia | SM4500-NH3 | 06/23/25 | 06/24/25 09:50 | |
| | | | Anions Group1 | 300.0 | | 06/17/25 17:47 | |
| | | | BOD5 | SM5210 B | | 06/18/25 09:25 | |
| | | | pH | SM 4500-H B | | 06/18/25 10:55 | |
| | | | TDS | SM2540 C | | 06/17/25 17:20 | |
| | | | TKN | SM4500-N Org C-11 plus NH3 B plus G-11 | 06/23/25 | 06/24/25 12:47 | |
| | | | Total Nitrogen | Cal | | 06/24/25 12:47 | |
| | | | TSS | SM2540 D | | 06/18/25 18:00 | |
| | | | Turbidity | SM2130 B | | 06/18/25 09:23 | |
| **Q2344-03DL** | **MW-3DL** | **WATER** | | | **06/16/25 10:30** | | **06/17/25** |
| | | | Anions Group1 | 300.0 | | 06/18/25 12:20 | |
| **Q2344-03DL2** | **MW-3DL2** | **WATER** | | | **06/16/25 10:30** | | **06/17/25** |
| | | | Anions Group1 | 300.0 | | 06/18/25 12:41 | |
| **Q2344-05** | **MW-4** | **WATER** | | | **06/16/25 11:00** | | **06/17/25** |
| | | | Alkalinity | SM2320 B | | 06/19/25 12:55 | |
| | | | Ammonia | SM4500-NH3 | 06/23/25 | 06/24/25 09:51 | |
| | | | Anions Group1 | 300.0 | | 06/17/25 18:08 | |

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# LAB CHRONICLE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | BOD5 | SM5210 B | | 06/18/25 09:25 | |
| | | | pH | SM 4500-H B | | 06/18/25 11:00 | |
| | | | TDS | SM2540 C | | 06/17/25 17:20 | |
| | | | TKN | SM4500-N Org C-11 plus NH3 B plus G-11 | 06/23/25 | 06/24/25 12:47 | |
| | | | Total Nitrogen | Cal | | 06/24/25 12:47 | |
| | | | TSS | SM2540 D | | 06/18/25 18:00 | |
| | | | Turbidity | SM2130 B | | 06/18/25 09:26 | |
| **Q2344-05DL** | **MW-4DL** | **WATER** | | | **06/16/25 11:00** | | **06/17/25** |
| | | | Anions Group1 | 300.0 | | 06/18/25 13:03 | |
| **Q2344-05DL2** | **MW-4DL2** | **WATER** | | | **06/16/25 11:00** | | **06/17/25** |
| | | | Anions Group1 | 300.0 | | 06/18/25 13:24 | |
| **Q2344-07** | **MW-2** | **WATER** | | | **06/16/25 12:00** | | **06/17/25** |
| | | | Alkalinity | SM2320 B | | 06/19/25 13:02 | |
| | | | Ammonia | SM4500-NH3 | 06/23/25 | 06/24/25 10:01 | |
| | | | Anions Group1 | 300.0 | | 06/17/25 18:30 | |
| | | | BOD5 | SM5210 B | | 06/18/25 09:25 | |
| | | | pH | SM 4500-H B | | 06/18/25 11:10 | |
| | | | TDS | SM2540 C | | 06/17/25 17:20 | |

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# LAB CHRONICLE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | TKN | SM4500-N Org C-11 plus NH3 B plus G-11 | | 06/23/25 | 06/24/25 12:57 |
| | | | Total Nitrogen | Cal | | | 06/24/25 12:57 |
| | | | TSS | SM2540 D | | | 06/18/25 18:00 |
| | | | Turbidity | SM2130 B | | | 06/18/25 09:30 |
| **Q2344-07DL** | **MW-2DL** | **WATER** | | | **06/16/25 12:00** | | **06/17/25** |
| | | | Ammonia | SM4500-NH3 | | 06/23/25 | 06/24/25 10:45 |
| | | | Anions Group1 | 300.0 | | | 06/18/25 13:46 |


# SAMPLE DATA

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Lockwood, Kessler & Bartlett, Inc. | Date Collected: | 06/16/25 09:30 |
| Project: | Ansonia Landfill 2025 | Date Received: | 06/17/25 |
| Client Sample ID: | MW-1 | SDG No.: | Q2344 |
| Lab Sample ID: | Q2344-01 | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity | 63.6 | | 1 | 1.00 | 2.00 | mg/L | | 06/19/25 12:43 | SM 2320 B-21 |
| Ammonia as N | 0.030 | U | 1 | 0.030 | 0.10 | mg/L | 06/23/25 08:50 | 06/24/25 09:50 | SM 4500-NH3 B plus G-21 |
| Chloride | 112 | OR | 1 | 0.19 | 0.60 | mg/L | | 06/17/25 16:42 | 300.0 |
| Nitrite | 0.074 | U | 1 | 0.074 | 0.60 | mg/L | | 06/17/25 16:42 | 300.0 |
| Nitrate | 1.80 | | 1 | 0.095 | 0.50 | mg/L | | 06/17/25 16:42 | 300.0 |
| Sulfate | 31.7 | | 1 | 0.46 | 3.00 | mg/L | | 06/17/25 16:42 | 300.0 |
| Nitrate+Nitrite | 1.80 | | 1 | 0.17 | 1.10 | mg/L | | 06/17/25 16:42 | 300.0 |
| BOD5 | 5.70 | | 1 | 0.20 | 2.00 | mg/L | | 06/18/25 09:25 | SM 5210 B-16 |
| pH | 6.16 | H | 1 | 0 | 0 | pH | | 06/18/25 10:47 | SM 4500-H B-21 |
| TDS | 136 | | 1 | 1.00 | 10.0 | mg/L | | 06/17/25 17:20 | SM 2540 C-20 |
| TKN | 0.36 | J | 1 | 0.11 | 0.50 | mg/L | 06/23/25 09:40 | 06/24/25 12:47 | SM4500-N Org C-21 plus NH3 B plus G-21 |
| Nitrogen | 2.16 | | 1 | 0.31 | 1.30 | mg/L | | 06/24/25 12:47 | SM 4500-N Org C-11 plus NH3 B plus G-11 |
| TSS | 1.00 | U | 1 | 1.00 | 4.00 | mg/L | | 06/18/25 18:00 | SM 2540 D-20 |
| Turbidity | 1.15 | | 1 | 0.15 | 1.00 | NTU | | 06/18/25 09:16 | SM 2130 B-20 |

Comments: The alkalinity to pH 4.31=63.6 mg CaCO3/L, pH result reported at temperature 20.4 °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

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Lockwood, Kessler & Bartlett, Inc. | Date Collected: | 06/16/25 09:30 |
| Project: | Ansonia Landfill 2025 | Date Received: | 06/17/25 |
| Client Sample ID: | MW-1DL | SDG No.: | Q2344 |
| Lab Sample ID: | Q2344-01DL | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 84.8 | D | 20 | 3.80 | 12.0 | mg/L | | 06/18/25 11:58 | 300.0 |

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

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Lockwood, Kessler & Bartlett, Inc. | Date Collected: | 06/16/25 10:30 |
| Project: | Ansonia Landfill 2025 | Date Received: | 06/17/25 |
| Client Sample ID: | MW-3 | SDG No.: | Q2344 |
| Lab Sample ID: | Q2344-03 | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity | 307 | | 1 | 1.00 | 2.00 | mg/L | | 06/19/25 12:49 | SM 2320 B-21 |
| Ammonia as N | 0.53 | | 1 | 0.030 | 0.10 | mg/L | 06/23/25 08:50 | 06/24/25 09:50 | SM 4500-NH3 B plus G-21 |
| Chloride | 246 | OR | 1 | 0.19 | 0.60 | mg/L | | 06/17/25 17:47 | 300.0 |
| Nitrite | 0.074 | U | 1 | 0.074 | 0.60 | mg/L | | 06/17/25 17:47 | 300.0 |
| Nitrate | 3.80 | | 1 | 0.095 | 0.50 | mg/L | | 06/17/25 17:47 | 300.0 |
| Sulfate | 77.8 | OR | 1 | 0.46 | 3.00 | mg/L | | 06/17/25 17:47 | 300.0 |
| Nitrate+Nitrite | 3.80 | | 1 | 0.17 | 1.10 | mg/L | | 06/17/25 17:47 | 300.0 |
| BOD5 | 14.7 | | 1 | 0.20 | 2.00 | mg/L | | 06/18/25 09:25 | SM 5210 B-16 |
| pH | 6.86 | H | 1 | 0 | 0 | pH | | 06/18/25 10:55 | SM 4500-H B-21 |
| TDS | 629 | | 1 | 1.00 | 10.0 | mg/L | | 06/17/25 17:20 | SM 2540 C-20 |
| TKN | 0.94 | | 1 | 0.11 | 0.50 | mg/L | 06/23/25 09:40 | 06/24/25 12:47 | SM4500-N Org C-21 plus NH3 B plus G-21 |
| Nitrogen | 4.74 | | 1 | 0.31 | 1.30 | mg/L | | 06/24/25 12:47 | SM 4500-N Org C-11 plus NH3 B plus G-11 |
| TSS | 1.00 | U | 1 | 1.00 | 4.00 | mg/L | | 06/18/25 18:00 | SM 2540 D-20 |
| Turbidity | 1.32 | | 1 | 0.15 | 1.00 | NTU | | 06/18/25 09:23 | SM 2130 B-20 |

Comments: The alkalinity to pH 4.40=307 mg CaCO3/L, pH result reported at temperature 20.3 °C

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Lockwood, Kessler & Bartlett, Inc. | Date Collected: | 06/16/25 10:30 |
| Project: | Ansonia Landfill 2025 | Date Received: | 06/17/25 |
| Client Sample ID: | MW-3DL | SDG No.: | Q2344 |
| Lab Sample ID: | Q2344-03DL | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 200 | OR | 5 | 0.95 | 3.00 | mg/L | | 06/18/25 12:20 | 300.0 |
| Sulfate | 71.6 | D | 5 | 2.30 | 15.0 | mg/L | | 06/18/25 12:20 | 300.0 |

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

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Lockwood, Kessler & Bartlett, Inc. | Date Collected: | 06/16/25 10:30 |
| Project: | Ansonia Landfill 2025 | Date Received: | 06/17/25 |
| Client Sample ID: | MW-3DL2 | SDG No.: | Q2344 |
| Lab Sample ID: | Q2344-03DL2 | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 174 | D | 50 | 9.50 | 30.0 | mg/L | | 06/18/25 12:41 | 300.0 |

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

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Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Lockwood, Kessler & Bartlett, Inc. | Date Collected: | 06/16/25 11:00 |
| Project: | Ansonia Landfill 2025 | Date Received: | 06/17/25 |
| Client Sample ID: | MW-4 | SDG No.: | Q2344 |
| Lab Sample ID: | Q2344-05 | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity | 306 | | 1 | 1.00 | 2.00 | mg/L | | 06/19/25 12:55 | SM 2320 B-21 |
| Ammonia as N | 0.55 | | 1 | 0.030 | 0.10 | mg/L | 06/23/25 08:50 | 06/24/25 09:51 | SM 4500-NH3 B plus G-21 |
| Chloride | 246 | OR | 1 | 0.19 | 0.60 | mg/L | | 06/17/25 18:08 | 300.0 |
| Nitrite | 0.074 | U | 1 | 0.074 | 0.60 | mg/L | | 06/17/25 18:08 | 300.0 |
| Nitrate | 3.80 | | 1 | 0.095 | 0.50 | mg/L | | 06/17/25 18:08 | 300.0 |
| Sulfate | 77.5 | OR | 1 | 0.46 | 3.00 | mg/L | | 06/17/25 18:08 | 300.0 |
| Nitrate+Nitrite | 3.80 | | 1 | 0.17 | 1.10 | mg/L | | 06/17/25 18:08 | 300.0 |
| BOD5 | 11.2 | | 1 | 0.20 | 2.00 | mg/L | | 06/18/25 09:25 | SM 5210 B-16 |
| pH | 6.80 | H | 1 | 0 | 0 | pH | | 06/18/25 11:00 | SM 4500-H B-21 |
| TDS | 565 | | 1 | 1.00 | 10.0 | mg/L | | 06/17/25 17:20 | SM 2540 C-20 |
| TKN | 0.98 | | 1 | 0.11 | 0.50 | mg/L | 06/23/25 09:40 | 06/24/25 12:47 | SM4500-N Org C-21 plus NH3 B plus G-21 |
| Nitrogen | 4.78 | | 1 | 0.31 | 1.30 | mg/L | | 06/24/25 12:47 | SM 4500-N Org C-11 plus NH3 B plus G-11 |
| TSS | 1.00 | U | 1 | 1.00 | 4.00 | mg/L | | 06/18/25 18:00 | SM 2540 D-20 |
| Turbidity | 1.32 | | 1 | 0.15 | 1.00 | NTU | | 06/18/25 09:26 | SM 2130 B-20 |

Comments: The alkalinity to pH 4.37=306 mg CaCO3/L, pH result reported at temperature 20.4 °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

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Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Lockwood, Kessler & Bartlett, Inc. | Date Collected: | 06/16/25 11:00 |
| Project: | Ansonia Landfill 2025 | Date Received: | 06/17/25 |
| Client Sample ID: | MW-4DL | SDG No.: | Q2344 |
| Lab Sample ID: | Q2344-05DL | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 200 | OR | 5 | 0.95 | 3.00 | mg/L | | 06/18/25 13:03 | 300.0 |
| Sulfate | 71.5 | D | 5 | 2.30 | 15.0 | mg/L | | 06/18/25 13:03 | 300.0 |

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

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Lockwood, Kessler & Bartlett, Inc. | Date Collected: | 06/16/25 11:00 |
| Project: | Ansonia Landfill 2025 | Date Received: | 06/17/25 |
| Client Sample ID: | MW-4DL2 | SDG No.: | Q2344 |
| Lab Sample ID: | Q2344-05DL2 | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 173 | D | 50 | 9.50 | 30.0 | mg/L | | 06/18/25 13:24 | 300.0 |

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

Alliance TECHNICAL GROUP
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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Lockwood, Kessler & Bartlett, Inc. | Date Collected: | 06/16/25 12:00 |
| Project: | Ansonia Landfill 2025 | Date Received: | 06/17/25 |
| Client Sample ID: | MW-2 | SDG No.: | Q2344 |
| Lab Sample ID: | Q2344-07 | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity | 454 | | 1 | 1.00 | 2.00 | mg/L | | 06/19/25 13:02 | SM 2320 B-21 |
| Ammonia as N | 7.20 | OR | 1 | 0.030 | 0.10 | mg/L | 06/23/25 08:50 | 06/24/25 10:01 | SM 4500-NH3 B plus G-21 |
| Chloride | 387 | OR | 1 | 0.19 | 0.60 | mg/L | | 06/17/25 18:30 | 300.0 |
| Nitrite | 0.074 | U | 1 | 0.074 | 0.60 | mg/L | | 06/17/25 18:30 | 300.0 |
| Nitrate | 0.79 | | 1 | 0.095 | 0.50 | mg/L | | 06/17/25 18:30 | 300.0 |
| Sulfate | 29.2 | | 1 | 0.46 | 3.00 | mg/L | | 06/17/25 18:30 | 300.0 |
| Nitrate+Nitrite | 0.79 | J | 1 | 0.17 | 1.10 | mg/L | | 06/17/25 18:30 | 300.0 |
| BOD5 | 8.43 | | 1 | 0.20 | 2.00 | mg/L | | 06/18/25 09:25 | SM 5210 B-16 |
| pH | 6.83 | H | 1 | 0 | 0 | pH | | 06/18/25 11:10 | SM 4500-H B-21 |
| TDS | 798 | | 1 | 1.00 | 10.0 | mg/L | | 06/17/25 17:20 | SM 2540 C-20 |
| TKN | 7.70 | | 1 | 0.11 | 0.50 | mg/L | 06/23/25 09:40 | 06/24/25 12:57 | SM4500-N Org C-21 plus NH3 B plus G-21 |
| Nitrogen | 8.49 | | 1 | 0.31 | 1.30 | mg/L | | 06/24/25 12:57 | SM 4500-N Org C-11 plus NH3 B plus G-11 |
| TSS | 11.6 | | 1 | 1.00 | 4.00 | mg/L | | 06/18/25 18:00 | SM 2540 D-20 |
| Turbidity | 52.0 | | 1 | 0.15 | 1.00 | NTU | | 06/18/25 09:30 | SM 2130 B-20 |

Comments: The alkalinity to pH 4.32=454 mg CaCO3/L, pH result reported at temperature 20.3 °C

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time
J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Lockwood, Kessler & Bartlett, Inc. | Date Collected: | 06/16/25 12:00 |
| Project: | Ansonia Landfill 2025 | Date Received: | 06/17/25 |
| Client Sample ID: | MW-2DL | SDG No.: | Q2344 |
| Lab Sample ID: | Q2344-07DL | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Ammonia as N | 7.00 | D | 5 | 0.15 | 0.50 | mg/L | 06/23/25 08:50 | 06/24/25 10:45 | SM 4500-NH3 B plus G-21 |
| Chloride | 249 | D | 100 | 19.0 | 60.0 | mg/L | | 06/18/25 13:46 | 300.0 |

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

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# Initial and Continuing Calibration Verification

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **RunNo.:** LB136185

| Analyte | Units | Result | True Value | % Recovery | Acceptance Window (%R) | Analysis Date |
|---|---|---|---|---|---|---|
| **Sample ID:** **ICV** | | | | | | |
| pH | pH | 6.98 | 7 | 100 | 90-110 | 06/18/2025 |
| **Sample ID:** **CCV1** | | | | | | |
| pH | pH | 2.01 | 2.00 | 101 | 90-110 | 06/18/2025 |
| **Sample ID:** **CCV2** | | | | | | |
| pH | pH | 12.02 | 12.00 | 100 | 90-110 | 06/18/2025 |

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# Initial and Continuing Calibration Verification

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **RunNo.:** LB136188

| Analyte | | Units | Result | True Value | % Recovery | Acceptance Window (%R) | Analysis Date |
|---|---|---|---|---|---|---|---|
| Sample ID: | ICV | | | | | | |
| Turbidity | | NTU | 9.068 | 10 | 91 | 90-110 | 06/18/2025 |
| Sample ID: | CCV1 | | | | | | |
| Turbidity | | NTU | 10.100 | 10 | 101 | 90-110 | 06/18/2025 |
| Sample ID: | CCV2 | | | | | | |
| Turbidity | | NTU | 9.232 | 10 | 92 | 90-110 | 06/18/2025 |

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# Initial and Continuing Calibration Verification

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **RunNo.:** LB136191

| Analyte | Units | Result | True Value | % Recovery | Acceptance Window (%R) | Analysis Date |
|---|---|---|---|---|---|---|
| **Sample ID: ICV1** | | | | | | |
| Bromide | mg/L | 10.2 | 10 | 102 | 90-110 | 05/22/2025 |
| Chloride | mg/L | 3.1 | 3 | 103 | 90-110 | 05/22/2025 |
| Fluoride | mg/L | 2.1 | 2 | 105 | 90-110 | 05/22/2025 |
| Nitrite | mg/L | 3.1 | 3 | 103 | 90-110 | 05/22/2025 |
| Nitrate | mg/L | 2.6 | 2.5 | 104 | 90-110 | 05/22/2025 |
| Sulfate | mg/L | 15.1 | 15 | 101 | 90-110 | 05/22/2025 |
| Orthophosphate as P | mg/L | 5.3 | 5 | 106 | 90-110 | 05/22/2025 |
| **Sample ID: CCV1** | | | | | | |
| Bromide | mg/L | 10.3 | 10 | 103 | 90-110 | 06/17/2025 |
| Chloride | mg/L | 3.1 | 3 | 103 | 90-110 | 06/17/2025 |
| Fluoride | mg/L | 2.1 | 2 | 105 | 90-110 | 06/17/2025 |
| Nitrite | mg/L | 3.1 | 3 | 103 | 90-110 | 06/17/2025 |
| Nitrate | mg/L | 2.6 | 2.5 | 104 | 90-110 | 06/17/2025 |
| Sulfate | mg/L | 15.3 | 15 | 102 | 90-110 | 06/17/2025 |
| Orthophosphate as P | mg/L | 5.3 | 5 | 106 | 90-110 | 06/17/2025 |
| **Sample ID: CCV2** | | | | | | |
| Bromide | mg/L | 10.3 | 10 | 103 | 90-110 | 06/17/2025 |
| Chloride | mg/L | 3.1 | 3 | 103 | 90-110 | 06/17/2025 |
| Fluoride | mg/L | 2.1 | 2 | 105 | 90-110 | 06/17/2025 |
| Nitrite | mg/L | 3.1 | 3 | 103 | 90-110 | 06/17/2025 |
| Nitrate | mg/L | 2.6 | 2.5 | 104 | 90-110 | 06/17/2025 |
| Sulfate | mg/L | 15.2 | 15 | 101 | 90-110 | 06/17/2025 |
| Orthophosphate as P | mg/L | 5.3 | 5 | 106 | 90-110 | 06/17/2025 |
| **Sample ID: CCV3** | | | | | | |
| Bromide | mg/L | 10.3 | 10 | 103 | 90-110 | 06/18/2025 |
| Chloride | mg/L | 3.1 | 3 | 103 | 90-110 | 06/18/2025 |
| Fluoride | mg/L | 2.1 | 2 | 105 | 90-110 | 06/18/2025 |
| Nitrite | mg/L | 3.1 | 3 | 103 | 90-110 | 06/18/2025 |
| Nitrate | mg/L | 2.6 | 2.5 | 104 | 90-110 | 06/18/2025 |
| Sulfate | mg/L | 15.3 | 15 | 102 | 90-110 | 06/18/2025 |
| Orthophosphate as P | mg/L | 5.1 | 5 | 102 | 90-110 | 06/18/2025 |
| **Sample ID: CCV4** | | | | | | |
| Bromide | mg/L | 10.3 | 10 | 103 | 90-110 | 06/18/2025 |
| Chloride | mg/L | 3.1 | 3 | 103 | 90-110 | 06/18/2025 |
| Fluoride | mg/L | 2.1 | 2 | 105 | 90-110 | 06/18/2025 |
| Nitrite | mg/L | 3.1 | 3 | 103 | 90-110 | 06/18/2025 |
| Nitrate | mg/L | 2.6 | 2.5 | 104 | 90-110 | 06/18/2025 |
| Sulfate | mg/L | 15.3 | 15 | 102 | 90-110 | 06/18/2025 |
| Orthophosphate as P | mg/L | 5.3 | 5 | 106 | 90-110 | 06/18/2025 |

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# Initial and Continuing Calibration Verification

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **RunNo.:** LB136242

| Analyte | Units | Result | True Value | % Recovery | Acceptance Window (%R) | Analysis Date |
|---|---|---|---|---|---|---|
| **Sample ID:** **ICV1** | | | | | | |
| Ammonia as N | mg/L | 0.97 | 1 | 97 | 90-110 | 06/24/2025 |
| **Sample ID:** **CCV1** | | | | | | |
| Ammonia as N | mg/L | 0.97 | 1 | 97 | 90-110 | 06/24/2025 |
| **Sample ID:** **CCV2** | | | | | | |
| Ammonia as N | mg/L | 1 | 1 | 100 | 90-110 | 06/24/2025 |
| **Sample ID:** **CCV3** | | | | | | |
| Ammonia as N | mg/L | 0.91 | 1 | 91 | 90-110 | 06/24/2025 |
| **Sample ID:** **CCV4** | | | | | | |
| Ammonia as N | mg/L | 0.99 | 1 | 99 | 90-110 | 06/24/2025 |

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# Initial and Continuing Calibration Verification

| | | | |
|---|---|---|---|
| **Client:** | Lockwood, Kessler & Bartlett, Inc. | **SDG No.:** | Q2344 |
| **Project:** | Ansonia Landfill 2025 | **RunNo.:** | LB136244 |

| Analyte | | Units | Result | True Value | % Recovery | Acceptance Window (%R) | Analysis Date |
|---|---|---|---|---|---|---|---|
| **Sample ID:** | **ICV1** | | | | | | |
| TKN | | mg/L | 4.9 | 5 | 98 | 90-110 | 06/24/2025 |
| **Sample ID:** | **CCV1** | | | | | | |
| TKN | | mg/L | 4.7 | 5 | 94 | 90-110 | 06/24/2025 |
| **Sample ID:** | **CCV2** | | | | | | |
| TKN | | mg/L | 4.8 | 5 | 96 | 90-110 | 06/24/2025 |
| **Sample ID:** | **CCV3** | | | | | | |
| TKN | | mg/L | 4.9 | 5 | 98 | 90-110 | 06/24/2025 |

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# Initial and Continuing Calibration Blank Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **RunNo.:** LB136188

| Analyte | Units | Result | Acceptance Limits | Conc Qual | MDL | RDL | Analysis Date |
|---|---|---|---|---|---|---|---|
| **Sample ID: ICB** | | | | | | | |
| Turbidity | NTU | 0.447 | 0.5000 | J | 0.15 | 1.0 | 06/18/2025 |
| **Sample ID: CCB1** | | | | | | | |
| Turbidity | NTU | 0.449 | 0.5000 | J | 0.15 | 1 | 06/18/2025 |
| **Sample ID: CCB2** | | | | | | | |
| Turbidity | NTU | 0.455 | 0.5000 | J | 0.15 | 1 | 06/18/2025 |

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# Initial and Continuing Calibration Blank Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **RunNo.:** LB136191

| Analyte | Units | Result | Acceptance Limits | Conc Qual | MDL | RDL | Analysis Date |
|---|---|---|---|---|---|---|---|
| **Sample ID: ICB1** | | | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | U | 0.37 | 2 | 05/22/2025 |
| Chloride | mg/L | < 0.3000 | 0.3000 | U | 0.19 | 0.6 | 05/22/2025 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | U | 0.11 | 0.4 | 05/22/2025 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | U | 0.074 | 0.6 | 05/22/2025 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | U | 0.095 | 0.5 | 05/22/2025 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | U | 0.46 | 3 | 05/22/2025 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | U | 0.34 | 1 | 05/22/2025 |
| **Sample ID: CCB1** | | | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | U | 0.37 | 2 | 06/17/2025 |
| Chloride | mg/L | < 0.3000 | 0.3000 | U | 0.19 | 0.6 | 06/17/2025 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | U | 0.11 | 0.4 | 06/17/2025 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | U | 0.074 | 0.6 | 06/17/2025 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | U | 0.095 | 0.5 | 06/17/2025 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | U | 0.46 | 3 | 06/17/2025 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | U | 0.34 | 1 | 06/17/2025 |
| **Sample ID: CCB2** | | | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | U | 0.37 | 2 | 06/17/2025 |
| Chloride | mg/L | < 0.3000 | 0.3000 | U | 0.19 | 0.6 | 06/17/2025 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | U | 0.11 | 0.4 | 06/17/2025 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | U | 0.074 | 0.6 | 06/17/2025 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | U | 0.095 | 0.5 | 06/17/2025 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | U | 0.46 | 3 | 06/17/2025 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | U | 0.34 | 1 | 06/17/2025 |
| **Sample ID: CCB3** | | | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | U | 0.37 | 2 | 06/18/2025 |
| Chloride | mg/L | < 0.3000 | 0.3000 | U | 0.19 | 0.6 | 06/18/2025 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | U | 0.11 | 0.4 | 06/18/2025 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | U | 0.074 | 0.6 | 06/18/2025 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | U | 0.095 | 0.5 | 06/18/2025 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | U | 0.46 | 3 | 06/18/2025 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | U | 0.34 | 1 | 06/18/2025 |
| **Sample ID: CCB4** | | | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | U | 0.37 | 2 | 06/18/2025 |
| Chloride | mg/L | < 0.3000 | 0.3000 | U | 0.19 | 0.6 | 06/18/2025 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | U | 0.11 | 0.4 | 06/18/2025 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | U | 0.074 | 0.6 | 06/18/2025 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | U | 0.095 | 0.5 | 06/18/2025 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | U | 0.46 | 3 | 06/18/2025 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | U | 0.34 | 1 | 06/18/2025 |

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# Initial and Continuing Calibration Blank Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **RunNo.:** LB136242

| Analyte | Units | Result | Acceptance Limits | Conc Qual | MDL | RDL | Analysis Date |
|---|---|---|---|---|---|---|---|
| **Sample ID: ICB1** | | | | | | | |
| Ammonia as N | mg/L | < 0.0500 | 0.0500 | U | 0.030 | 0.1 | 06/24/2025 |
| **Sample ID: CCB1** | | | | | | | |
| Ammonia as N | mg/L | < 0.0500 | 0.0500 | U | 0.030 | 0.1 | 06/24/2025 |
| **Sample ID: CCB2** | | | | | | | |
| Ammonia as N | mg/L | < 0.0500 | 0.0500 | U | 0.030 | 0.1 | 06/24/2025 |
| **Sample ID: CCB3** | | | | | | | |
| Ammonia as N | mg/L | < 0.0500 | 0.0500 | U | 0.030 | 0.1 | 06/24/2025 |
| **Sample ID: CCB4** | | | | | | | |
| Ammonia as N | mg/L | < 0.0500 | 0.0500 | U | 0.030 | 0.1 | 06/24/2025 |

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# Initial and Continuing Calibration Blank Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **RunNo.:** LB136244

| Analyte | | Units | Result | Acceptance Limits | Conc Qual | MDL | RDL | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| Sample ID: | ICB1 | | | | | | | |
| TKN | | mg/L | < 0.2500 | 0.2500 | U | 0.11 | 0.5 | 06/24/2025 |
| Sample ID: | CCB1 | | | | | | | |
| TKN | | mg/L | < 0.2500 | 0.2500 | U | 0.11 | 0.5 | 06/24/2025 |
| Sample ID: | CCB2 | | | | | | | |
| TKN | | mg/L | < 0.2500 | 0.2500 | U | 0.11 | 0.5 | 06/24/2025 |
| Sample ID: | CCB3 | | | | | | | |
| TKN | | mg/L | < 0.2500 | 0.2500 | U | 0.11 | 0.5 | 06/24/2025 |

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# Preparation Blank Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025

| Analyte | Units | Result | Acceptance Limits | Conc Qual | MDL | RDL | Analysis Date |
|---|---|---|---|---|---|---|---|
| **Sample ID:** LB136184BL | | | | | | | |
| BOD5 | mg/L | < 0.2000 | 0.2000 | U | 0.20 | 2.0 | 06/18/2025 |
| **Sample ID:** LB136186BL | | | | | | | |
| TDS | mg/L | < 5.0000 | 5.0000 | U | 1.0 | 10 | 06/17/2025 |
| **Sample ID:** LB136188BL | | | | | | | |
| Turbidity | NTU | 0.446 | 0.5000 | J | 0.15 | 1.0 | 06/18/2025 |
| **Sample ID:** LB136191BLW | | | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | U | 0.37 | 2 | 06/17/2025 |
| Chloride | mg/L | < 0.3000 | 0.3000 | U | 0.19 | 0.6 | 06/17/2025 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | U | 0.11 | 0.4 | 06/17/2025 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | U | 0.074 | 0.6 | 06/17/2025 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | U | 0.095 | 0.5 | 06/17/2025 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | U | 0.46 | 3 | 06/17/2025 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | U | 0.34 | 1 | 06/17/2025 |
| **Sample ID:** LB136191BLW2 | | | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | U | 0.37 | 2 | 06/18/2025 |
| Chloride | mg/L | < 0.3000 | 0.3000 | U | 0.19 | 0.6 | 06/18/2025 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | U | 0.11 | 0.4 | 06/18/2025 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | U | 0.074 | 0.6 | 06/18/2025 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | U | 0.095 | 0.5 | 06/18/2025 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | U | 0.46 | 3 | 06/18/2025 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | U | 0.34 | 1 | 06/18/2025 |
| **Sample ID:** LB136202BL | | | | | | | |
| TSS | mg/L | 1 | 2.0000 | J | 1 | 4 | 06/18/2025 |
| **Sample ID:** LB136205BLW | | | | | | | |
| Alkalinity | mg/L | < 1.0000 | 1.0000 | U | 1 | 2 | 06/19/2025 |
| **Sample ID:** PB168578BL | | | | | | | |
| Ammonia as N | mg/L | < 0.0500 | 0.0500 | U | 0.03 | 0.1 | 06/24/2025 |
| **Sample ID:** PB168588BL | | | | | | | |
| TKN | mg/L | < 0.2500 | 0.2500 | U | 0.11 | 0.5 | 06/24/2025 |

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Fax : 908 789 8922

# Matrix Spike Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2344-01
**Client ID:** MW-1MS
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit %R | Spiked Result | Conc. Qualifier | Sample Result | Conc. Qualifier | Spike Added | Dilution Factor | % Rec | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | mg/L | 80-120 | 10.3 | | 0.37 | U | 10 | 1 | 103 | | 06/17/2025 |
| Chloride | mg/L | 80-120 | 111 | OR | 112 | OR | 3 | 1 | -33 | * | 06/17/2025 |
| Fluoride | mg/L | 80-120 | 2.20 | | 0.12 | J | 2 | 1 | 104 | | 06/17/2025 |
| TKN | mg/L | 75-125 | 5.00 | | 0.36 | J | 5 | 1 | 93 | | 06/24/2025 |
| Nitrite | mg/L | 80-120 | 3.10 | | 0.074 | U | 3 | 1 | 103 | | 06/17/2025 |
| Nitrate | mg/L | 80-120 | 4.30 | | 1.80 | | 2.5 | 1 | 100 | | 06/17/2025 |
| Sulfate | mg/L | 80-120 | 46.4 | OR | 31.7 | | 15 | 1 | 98 | | 06/17/2025 |
| Orthophosphate as P | mg/L | 80-120 | 5.00 | | 0.34 | U | 5 | 1 | 100 | | 06/17/2025 |

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# Matrix Spike Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2344-01
**Client ID:** MW-1MSD
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit %R | Spiked Result | Conc. Qualifier | Sample Result | Conc. Qualifier | Spike Added | Dilution Factor | % Rec | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromide | mg/L | 80-120 | 10.1 | | 0.37 | U | 10 | 1 | 101 | | 06/17/2025 |
| Chloride | mg/L | 80-120 | 110 | OR | 112 | OR | 3 | 1 | -67 | * | 06/17/2025 |
| TKN | mg/L | 75-125 | 4.80 | | 0.36 | J | 5 | 1 | 89 | | 06/24/2025 |
| Fluoride | mg/L | 80-120 | 2.20 | | 0.12 | J | 2 | 1 | 104 | | 06/17/2025 |
| Nitrite | mg/L | 80-120 | 3.00 | | 0.074 | U | 3 | 1 | 100 | | 06/17/2025 |
| Nitrate | mg/L | 80-120 | 4.30 | | 1.80 | | 2.5 | 1 | 100 | | 06/17/2025 |
| Sulfate | mg/L | 80-120 | 46.1 | OR | 31.7 | | 15 | 1 | 96 | | 06/17/2025 |
| Orthophosphate as P | mg/L | 80-120 | 5.20 | | 0.34 | U | 5 | 1 | 104 | | 06/17/2025 |

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# Matrix Spike Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2385-01
**Client ID:** A5311MS
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit %R | Spiked Result | Conc. Qualifier | Sample Result | Conc. Qualifier | Spike Added | Dilution Factor | % Rec | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ammonia as N | mg/L | 75-125 | 0.95 | | 0.030 | U | 1 | 1 | 95 | | 06/24/2025 |

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# Matrix Spike Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2385-01
**Client ID:** A5311MSD
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit %R | Spiked Result | Conc. Qualifier | Sample Result | Conc. Qualifier | Spike Added | Dilution Factor | % Rec | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ammonia as N | mg/L | 75-125 | 0.96 | | 0.030 | U | 1 | 1 | 96 | | 06/24/2025 |

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# Duplicate Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2316-02
**Client ID:** RW8-SP303-20250612DUP
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit | Sample Result | Conc. Qualifier | Duplicate Result | Conc. Qualifier | Dilution Factor | RPD/ AD | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|
| TDS | mg/L | +/-5 | 1.00 | J | 1.00 | J | 1 | 0 | | 06/17/2025 |

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# Duplicate Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2334-01
**Client ID:** MW3DUP
**Percent Solids for Spike Sample:** 0

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

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# Duplicate Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2344-01
**Client ID:** MW-1DUP
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit | Sample Result | Conc. Qualifier | Duplicate Result | Conc. Qualifier | Dilution Factor | RPD/ AD | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|
| BOD5 | mg/L | +/-20 | 5.70 | | 5.88 | | 1 | 3.11 | | 06/18/2025 |
| Turbidity | NTU | +/-20 | 1.15 | | 1.15 | | 1 | 0 | | 06/18/2025 |
| TKN | mg/L | +/-20 | 0.36 | J | 0.36 | J | 1 | 0 | | 06/24/2025 |

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# Duplicate Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2344-01
**Client ID:** MW-1MSD
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit | Sample Result | Conc. Qualifier | Duplicate Result | Conc. Qualifier | Dilution Factor | RPD/ AD | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride | mg/L | +/-20 | 2.20 | | 2.20 | | 1 | 0 | | 06/17/2025 |
| Nitrate | mg/L | +/-20 | 4.30 | | 4.30 | | 1 | 0 | | 06/17/2025 |
| Chloride | mg/L | +/-20 | 111 | OR | 110 | OR | 1 | 1 | | 06/17/2025 |
| Sulfate | mg/L | +/-20 | 46.4 | OR | 46.1 | OR | 1 | 1 | | 06/17/2025 |
| Bromide | mg/L | +/-20 | 10.3 | | 10.1 | | 1 | 2 | | 06/17/2025 |
| Nitrite | mg/L | +/-20 | 3.10 | | 3.00 | | 1 | 3 | | 06/17/2025 |
| Orthophosphate as P | mg/L | +/-20 | 5.00 | | 5.20 | | 1 | 4 | | 06/17/2025 |
| TKN | mg/L | +/-20 | 5.00 | | 4.80 | | 1 | 4 | | 06/24/2025 |

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# Duplicate Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2344-07
**Client ID:** MW-2DUP
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit | Sample Result | Conc. Qualifier | Duplicate Result | Conc. Qualifier | Dilution Factor | RPD/ AD | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|
| pH | pH | +/-20 | 6.83 | | 6.84 | | 1 | 0.15 | | 06/18/2025 |
| TSS | mg/L | +/-5 | 11.6 | | 12.1 | | 1 | 4.22 | | 06/18/2025 |

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# Duplicate Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2385-01
**Client ID:** A5311DUP
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit | Sample Result | Conc. Qualifier | Duplicate Result | Conc. Qualifier | Dilution Factor | RPD/ AD | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|
| Ammonia as N | mg/L | +/-20 | 0.030 | U | 0.030 | U | 1 | 0 | | 06/24/2025 |

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# Duplicate Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc.
**SDG No.:** Q2344
**Project:** Ansonia Landfill 2025
**Sample ID:** Q2385-01
**Client ID:** A5311MSD
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit | Sample Result | Conc. Qualifier | Duplicate Result | Conc. Qualifier | Dilution Factor | RPD/ AD | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|
| **Ammonia as N** | **mg/L** | **+/-20** | **0.95** | | **0.96** | | **1** | **1** | | **06/24/2025** |

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# Laboratory Control Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **Run No.:** LB136184

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** LB136184BS | | | | | | | | |
| BOD5 | mg/L | 198 | 198 | | 100 | 1 | 84.6-115.4 | 06/18/2025 |

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# Laboratory Control Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **Run No.:** LB136186

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** LB136186BS | | | | | | | | |
| TDS | mg/L | 100 | 95.0 | | 95 | 1 | 90-110 | 06/17/2025 |

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# Laboratory Control Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **Run No.:** LB136191

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** LB136191BSW | | | | | | | | |
| Bromide | mg/L | 10 | 10.3 | | 103 | 1 | 90-110 | 06/17/2025 |
| Chloride | mg/L | 3 | 3.10 | | 103 | 1 | 90-110 | 06/17/2025 |
| Fluoride | mg/L | 2 | 2.10 | | 105 | 1 | 90-110 | 06/17/2025 |
| Nitrite | mg/L | 3 | 3.10 | | 103 | 1 | 90-110 | 06/17/2025 |
| Nitrate | mg/L | 2.5 | 2.60 | | 104 | 1 | 90-110 | 06/17/2025 |
| Sulfate | mg/L | 15 | 15.3 | | 102 | 1 | 90-110 | 06/17/2025 |
| Orthophosphate as P | mg/L | 5 | 5.40 | | 108 | 1 | 90-110 | 06/17/2025 |

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# Laboratory Control Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **Run No.:** LB136191

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** LB136191BSW2 | | | | | | | | |
| Bromide | mg/L | 10 | 10.3 | | 103 | 1 | 90-110 | 06/18/2025 |
| Chloride | mg/L | 3 | 3.10 | | 103 | 1 | 90-110 | 06/18/2025 |
| Fluoride | mg/L | 2 | 2.10 | | 105 | 1 | 90-110 | 06/18/2025 |
| Nitrite | mg/L | 3 | 3.10 | | 103 | 1 | 90-110 | 06/18/2025 |
| Nitrate | mg/L | 2.5 | 2.60 | | 104 | 1 | 90-110 | 06/18/2025 |
| Sulfate | mg/L | 15 | 15.3 | | 102 | 1 | 90-110 | 06/18/2025 |
| Orthophosphate as P | mg/L | 5 | 5.10 | | 102 | 1 | 90-110 | 06/18/2025 |

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# Laboratory Control Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **Run No.:** LB136202

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** LB136202BS | | | | | | | | |
| TSS | mg/L | 550 | 533 | | 97 | 1 | 90-110 | 06/18/2025 |

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Fax : 908 789 8922

# Laboratory Control Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **Run No.:** LB136205

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

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# Laboratory Control Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **Run No.:** LB136242

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Sample ID PB168578BS** | | | | | | | | |
| Ammonia as N | mg/L | 1 | 0.95 | | 95 | 1 | 90-110 | 06/24/2025 |

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Fax : 908 789 8922

# Laboratory Control Sample Summary

**Client:** Lockwood, Kessler & Bartlett, Inc. **SDG No.:** Q2344

**Project:** Ansonia Landfill 2025 **Run No.:** LB136244

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** PB168588BS | | | | | | | | |
| TKN | mg/L | 5 | 4.90 | | 98 | 1 | 90-110 | 06/24/2025 |

Alliance
TECHNICAL GROUP

# RAW DATA

Reviewed By:Iwona
On:6/23/2025 2:06:26 PM
Inst Id :DO METER
LB :LB136184

# BOD5 LOG

**ANALYST:** rubir
**SUPERVISOR:** Iwona

**QC BATCH ID:** LB136184
**Analysis Date:** 06/18/2025
**BOD Water:** WP113565
**MANGANOUS SULFATE SOLUTION:** W3103
**Starch:** W3149
**Alkaline Iodide Azide:** W3109
**Sulfuric acid, 1N:** WP112832
**Sodium Thiosulfate, 0.025N:** W3105
**POLYSEED:** WP113566
**NaOH, 1N:** WP111323
**GGA:** WP113567
**IncubatorID:** INCUBATOR #3
**Chlorine Strips:** W3155
**GuageID:** 0511064
**pH Strips:** W3215
**Zero DO:** WP113147

| Lab SampleID | Client ID | Bottle No. | VOL. ML | Initial Reading(ML) | Final Reading(ML) | Difference | Average |
|---|---|---|---|---|---|---|---|
| WINKLER 1 | WINKLER 1 | 1 | 300 | 0 | 9.8 | 9.8 | 9.8 |
| WINKLER 2 | WINKLER 2 | 2 | 300 | 9.9 | 19.7 | 9.8 | 9.8 |

Meter Calibration1: 9.86 Zero DO Reading1: 0.10 mg/L (<=0.2 Criteria)

Barometric Pressure1: 760 mmHg DO Meter BOD fluid reading for winkler comparison: 9.92

**After Incubation**

Meter Calibration2: 8.36 Zero DO Reading2: 0.15 mg/L (<=0.2 Criteria)

Barometric Pressure2: 765 mmHg

Reviewed By:Iwona
On:6/23/2025 2:06:26 PM
Inst Id :DO METER
LB :LB136184

Alliance TECHNICAL GROUP

**QC BATCH ID:** LB136184

**INCUBATOR TEMP IN(C):** 19.8

**INCUBATOR TEMP OUT(C):** 20.2

**TIME IN:** 09:25

**TIME OUT:** 09:45

**DATE IN:** 06/18/2025

**DATE OUT:** 06/23/2025

| Lab SampleID | Bottle No. | Check CL | Initial PH | Final PH | Temp °C | Sam Vol. (mL) | D.O.1 Initial | D.O.2 Final | Depletion | BOD Result (mg/L) | Avg Result (mg/L) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LB136184BL | 1 | No | 6.61 | N/A | 20.90 | 300 | 9.92 | 9.90 | 0.02 | 0.02 | 0.02 | |
| POLYSEED | 1 | | | | | 10 | 9.72 | 7.29 | 2.43 | 0.49 | 0.59 | |
| POLYSEED | 2 | | | | | 15 | 9.69 | 5.10 | 4.59 | 0.61 | | |
| POLYSEED | 3 | | | | | 20 | 9.68 | 3.01 | 6.67 | 0.67 | | |
| GGA | 1 | | | | | 6 | 9.72 | 5.33 | 4.39 | 190 | 197.67 | |
| GGA | 2 | | | | | 6 | 9.69 | 5.10 | 4.59 | 200 | | |
| GGA | 3 | | | | | 6 | 9.67 | 5.02 | 4.65 | 203 | | |
| Q2344-01 | 1 | No | 6.16 | 6.67 | 20.10 | 5 | 9.74 | 8.90 | - | 0 | 5.7 | pH Adjuste |
| Q2344-01 | 2 | | | | | 20 | 9.68 | 8.68 | - | 0 | | |
| Q2344-01 | 3 | | | | | 50 | 9.66 | 8.02 | - | 0 | | |
| Q2344-01 | 4 | | | | | 150 | 9.64 | 6.20 | 3.44 | 5.7 | | |
| Q2344-01DUP | 1 | No | 6.15 | 6.67 | 20.10 | 5 | 9.73 | 8.88 | - | 0 | 5.88 | pH Adjuste |
| Q2344-01DUP | 2 | | | | | 20 | 9.72 | 8.70 | - | 0 | | |
| Q2344-01DUP | 3 | | | | | 50 | 9.68 | 8.22 | - | 0 | | |
| Q2344-01DUP | 4 | | | | | 150 | 9.65 | 6.12 | 3.53 | 5.88 | | |
| Q2344-03 | 1 | No | 6.86 | 6.86 | 20.30 | 5 | 9.71 | 8.70 | - | 0 | 14.73 | pH Adjuste |
| Q2344-03 | 2 | | | | | 20 | 9.70 | 8.49 | - | 0 | | |
| Q2344-03 | 3 | | | | | 50 | 9.67 | 6.49 | 3.18 | 15.54 | | |
| Q2344-03 | 4 | | | | | 150 | 9.64 | 2.09 | 7.55 | 13.92 | | |
| Q2344-05 | 1 | No | 6.81 | 6.81 | 20.40 | 5 | 9.68 | 8.80 | - | 0 | 11.22 | pH Adjuste |
| Q2344-05 | 2 | | | | | 20 | 9.59 | 8.19 | - | 0 | | |
| Q2344-05 | 3 | | | | | 50 | 9.58 | 7.12 | 2.46 | 11.22 | | |
| Q2344-05 | 4 | | | | | 150 | 9.09 | 0.35 | - | 0 | | |
| Q2344-07 | 1 | No | 6.83 | 6.83 | 20.50 | 5 | 9.72 | 8.71 | - | 0 | 8.43 | pH Adjuste |
| Q2344-07 | 2 | | | | | 20 | 9.69 | 7.92 | - | 0 | | |
| Q2344-07 | 3 | | | | | 50 | 9.57 | 7.57 | 2 | 8.46 | | |
| Q2344-07 | 4 | | | | | 150 | 9.07 | 4.28 | 4.79 | 8.4 | | |

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

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

LB 136184

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** BOD-061725 **WorkList ID :** 190262 **Department :** Wet-Chemistry **Date :** 06-18-2025 12:06:51

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q2344-01 | MW-1 | Water | BOD5 | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM5210 B |
| Q2344-03 | MW-3 | Water | BOD5 | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM5210 B |
| Q2344-05 | MW-4 | Water | BOD5 | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM5210 B |
| Q2344-07 | MW-2 | Water | BOD5 | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM5210 B |

**Date/Time** 06/18/25 09:00
**Raw Sample Received by:** [illegible]
**Raw Sample Relinquished by:** [illegible]



**Date/Time** 06/18/25 11:15
**Raw Sample Received by:** [illegible]
**Raw Sample Relinquished by:** [illegible]

Reviewed By:Iwona PM
On:6/23/2025 2:06:26
Inst Id :DO METER
LB :LB136184

Reviewed By:Iwona
On:6/19/2025 12:58:12 PM
Inst Id :WC PH METER-1

# Analytical Summary Report

**Analysis Method:** SM 4500-H B
**Parameter:** pH
**Run Number:** LB136185

**Analyst By :** jignesh
**Supervisor Review By :** Iwona
**Slope :** 98.5
**pH Meter ID :** WC PH METER-1

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

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

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 | 06/18/2025 | 10:30 |
| 2 | CAL2 | 1 | Water | NA | NA | 20.2 | 7.00 | 06/18/2025 | 10:31 |
| 3 | CAL3 | 1 | Water | NA | NA | 20.3 | 10.02 | 06/18/2025 | 10:33 |
| 4 | ICV | 1 | Water | NA | NA | 20.3 | 6.98 | 06/18/2025 | 10:37 |
| 5 | CCV1 | 1 | Water | NA | NA | 20.2 | 2.01 | 06/18/2025 | 10:40 |
| 6 | Q2344-01 | 1 | Water | NA | NA | 20.4 | 6.16 | 06/18/2025 | 10:47 |
| 7 | Q2344-03 | 1 | Water | NA | NA | 20.3 | 6.86 | 06/18/2025 | 10:55 |
| 8 | Q2344-05 | 1 | Water | NA | NA | 20.4 | 6.80 | 06/18/2025 | 11:00 |
| 9 | Q2344-07 | 1 | Water | NA | NA | 20.3 | 6.83 | 06/18/2025 | 11:10 |
| 10 | Q2344-07DUP | 1 | Water | NA | NA | 20.4 | 6.84 | 06/18/2025 | 11:15 |
| 11 | CCV2 | 1 | Water | NA | NA | 20.2 | 12.02 | 06/18/2025 | 11:20 |

# WORKLIST(Hardcopy Internal Chain)

JB 196185

**WorkList Name :** PH Q2344 W **WorkList ID :** 190259 **Department :** Wet-Chemistry **Date :** 06-18-2025 10:17:36

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q2344-01 D | MW-1 | Water | pH | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM 4500-H B |
| Q2344-03 D | MW-3 | Water | pH | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM 4500-H B |
| Q2344-05 D | MW-4 | Water | pH | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM 4500-H B |
| Q2344-07 D | MW-2 | Water | pH | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM 4500-H B |

**Date/Time** 06/18/25 10:25
**Raw Sample Received by:**
**Raw Sample Relinquished by:**



**Date/Time** 06/18/25 13:
**Raw Sample Received by:**
**Raw Sample Relinquished by:**

Reviewed By:Iwona
On:6/19/2025 12:58:12 PM
Inst Id :WC PH METER-1

# TOTAL Dissolved Solids - SM2540C

**Run Number:** LB136186 **Date:** 06/18/2025

**SUPERVISOR:** Iwona **ANALYST:** jignesh **BalanceID:** WC SC-6

**Filter ID:** 17416528

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **EMPTY DISH TEMP IN:** | 103 °C | 06/17/2025 | 11:00 | **EMPTY DISH TEMP OUT:** | 104 °C | 06/17/2025 | 12:00 | **OvenID:** | WC OVEN-1 | **Thermo ID:** | WET IVEN-1 |
| **TEMP1 IN:** | 103 °C | 06/17/2025 | 12:30 | **TEMP1 OUT:** | 103 °C | 06/17/2025 | 13:30 | **OvenID1:** | WC OVEN-1 | **Thermo ID1:** | WET OVEN#1 |
| **TEMP2 IN:** | 104 °C | 06/17/2025 | 17:20 | **TEMP2 OUT:** | 103 °C | 06/18/2025 | 08:00 | **OvenID2:** | WC OVEN-2 | **Thermo ID2:** | WET OVEN#2 |
| **TEMP3 IN:** | 180 °C | 06/18/2025 | 08:05 | **TEMP3 OUT:** | 182 °C | 06/18/2025 | 10:00 | **OvenID3:** | WC OVEN-2 | **Thermo ID3:** | WET OVEN#2 |

| Dish # | Lab ID | Client ID | Empty Dish Weight (g) | Final Empty Dish Weight (g) | Sample Volume (ml) | 1st Empty Dish+Sample weight after 1.5hr drying @180(±2)°C (g) | 2nd Empty Dish+Sample weight after 1.5hr drying @180(±2)°C (g) | Final Empty Dish+Sample weight after 1.5hr drying @180(±2)°C (g) | Weight (g) | Result mg/L |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LB136186BL | LB136186BL | 74.0122 | 74.0122 | 100 | 74.0122 | 74.0122 | 74.0122 | 0.0000 | 0 |
| 2 | LB136186BS | LB136186BS | 98.6371 | 98.6371 | 100 | 98.6466 | 98.6466 | 98.6466 | 0.0095 | 95 |
| 3 | Q2316-02 | RW8-SP303-20250612 | 143.6303 | 143.6303 | 100 | 143.6304 | 143.6304 | 143.6304 | 0.0001 | 1 |
| 4 | Q2316-02DUP | RW8-SP303-20250612DUP | 153.0007 | 153.0007 | 100 | 153.0008 | 153.0008 | 153.0008 | 0.0001 | 1 |
| 5 | Q2344-01 | MW-1 | 106.1516 | 106.1516 | 100 | 106.1652 | 106.1652 | 106.1652 | 0.0136 | 136 |
| 6 | Q2344-03 | MW-3 | 110.2271 | 110.2271 | 100 | 110.2900 | 110.2900 | 110.2900 | 0.0629 | 629 |
| 7 | Q2344-05 | MW-4 | 156.5915 | 156.5915 | 100 | 156.6480 | 156.6480 | 156.6480 | 0.0565 | 565 |
| 8 | Q2344-07 | MW-2 | 152.1969 | 152.1969 | 100 | 152.2767 | 152.2767 | 152.2767 | 0.0798 | 798 |

**A =** Sample Volume (ml)
**B =** Empty Dish Weight (g)
**C =** 2nd Empty Dish + Sample weight after 1.5 hr drying @180(±2)°C(g)
**D =** Weight (g)

**Weight (g) =** C - B

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

LB136186

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** tds q2316 **WorkList ID :** 190222 **Department :** Wet-Chemistry **Date :** 06-17-2025 07:52:15

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q2344-01 D | MW-1 | Water | TDS | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2540 C |
| Q2344-03 D | MW-3 | Water | TDS | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2540 C |
| Q2344-05 D | MW-4 | Water | TDS | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2540 C |
| Q2344-07 D | MW-2 | Water | TDS | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2540 C |
| Q2316-02 B | RW8-SP303-20250612 | Water | TDS | Cool 4 deg C | TETR06 | D41 | 06/12/2025 | SM2540 C |

**Date/Time** 06/17/25 16:25
**Raw Sample Received by:**
**Raw Sample Relinquished by:**



**Date/Time** 06/17/25 18:0
**Raw Sample Received by:**
**Raw Sample Relinquished by:**

Reviewed By:lwona
On:6/19/2025 12:57:32 PM
Inst Id :WC SC-3
LB :LB136186

Reviewed By:Iwona
On:6/18/2025 1:46:44 PM
Inst Id :WC TURBIDIMETER-1

# Analytical Summary Report

Analysis Method: SM2130 B
ANALYST: Eman
Parameter: Turbidity
SUPERVISOR REVIEW BY: Iwona
Run Number: LB136188

| Reagent/Standard | Lot/Log # |
|---|---|
| TURBIDITY LOD STD, 0.5NTU | WP113569 |
| Turbidity Calibration std, 0NTU | WP113563 |
| Turbidity Calibration std, 20NTU | WP113558 |
| Turbidity Calibration std, 80NTU | WP113564 |
| Turbidity Calibration std, 40NTU | WP113557 |
| Turbidity Calibration std, 1NTU | WP113561 |
| Turbidity Calibration std, 5NTU | WP113560 |
| Turbidity LOQ std, 1.0NTU | WP113568 |
| Turbidity Calibration - CCV std, 10 NTU | WP113559 |
| 10 NTU Standard 500 ml | W3116 |

**Intercept:** -0.3653 **Slope:** 0.9787 **Regression:** 0.9998

| Seq | Lab ID | True Value (NTU) | Dilution | Reading | Result (mg/l) | %D | Anal Date | Anal Time |
|---|---|---|---|---|---|---|---|---|
| 1 | CAL1 | 0 | 1 | 0.095 | 0.47 | | 06/18/2025 | 08:30 |
| 2 | CAL2 | 1 | 1 | 0.855 | 1.25 | 24.7 | 06/18/2025 | 08:33 |
| 3 | CAL3 | 5 | 1 | 4.830 | 5.31 | 6.2 | 06/18/2025 | 08:36 |
| 4 | CAL4 | 10 | 1 | 9.240 | 9.81 | -1.9 | 06/18/2025 | 08:40 |
| 5 | CAL5 | 20 | 1 | 18.700 | 19.48 | -2.6 | 06/18/2025 | 08:43 |
| 6 | CAL6 | 40 | 1 | 37.900 | 39.10 | -2.3 | 06/18/2025 | 08:46 |
| 7 | CAL7 | 80 | 1 | 78.500 | 80.58 | 0.7 | 06/18/2025 | 08:50 |

Reviewed By:Iwona
On:6/18/2025 1:46:44 PM
Inst Id :WC TURBIDIMETER-1

# Analytical Summary Report

Analysis Method: SM2130 B
Parameter: Turbidity
Run Number: LB136188

ANALYST: Eman
SUPERVISOR REVIEW BY: Iwona

| Seq | Lab ID | True Value (NTU) | Dilution | Reading | Result (NTU) | AnalDate | Anal Time |
|---|---|---|---|---|---|---|---|
| 1 | ICV | 10 | 1 | 8.510 | 9.068 | 06/18/2025 | 08:53 |
| 2 | ICB | | 1 | 0.072 | 0.447 | 06/18/2025 | 08:56 |
| 3 | CCV1 | 10 | 1 | 9.520 | 10.100 | 06/18/2025 | 09:00 |
| 4 | CCB1 | | 1 | 0.074 | 0.449 | 06/18/2025 | 09:03 |
| 5 | LB136188BL | | 1 | 0.071 | 0.446 | 06/18/2025 | 09:06 |
| 6 | Q2126-10 | | 1 | 0.320 | 0.700 | 06/18/2025 | 09:10 |
| 7 | Q2126-11 | | 1 | 0.916 | 1.309 | 06/18/2025 | 09:13 |
| 8 | Q2344-01 | | 1 | 0.759 | 1.149 | 06/18/2025 | 09:16 |
| 9 | Q2344-01DUP | | 1 | 0.762 | 1.152 | 06/18/2025 | 09:20 |
| 10 | Q2344-03 | | 1 | 0.924 | 1.317 | 06/18/2025 | 09:23 |
| 11 | Q2344-05 | | 1 | 0.928 | 1.321 | 06/18/2025 | 09:26 |
| 12 | Q2344-07 | | 1 | 50.500 | 51.972 | 06/18/2025 | 09:30 |
| 13 | CCV2 | 10 | 1 | 8.670 | 9.232 | 06/18/2025 | 09:33 |
| 14 | CCB2 | | 1 | 0.080 | 0.455 | 06/18/2025 | 09:36 |

# WORKLIST(Hardcopy Internal Chain)

LB136188

**WorkList Name :** TURBIDITY-061725 **WorkList ID :** 190246 **Department :** Wet-Chemistry **Date :** 06-17-2025 16:56:35

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q2344-01 | MW-1 | Water | Turbidity | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2130 B |
| Q2344-03 | MW-3 | Water | Turbidity | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2130 B |
| Q2344-05 | MW-4 | Water | Turbidity | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2130 B |
| Q2344-07 | MW-2 | Water | Turbidity | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2130 B |

**Date/Time** 06/18/25 8:15

**Raw Sample Received by:** EM (WC)

**Raw Sample Relinquished by:** [signature] (WC)



**Date/Time** 06/18/25 09:45

**Raw Sample Received by:** [signature] (WC)

**Raw Sample Relinquished by:** EM (WC)

Reviewed By:iwona
On:6/18/2025 1:46:44 PM
Inst Id :WC
TURBIDIMETER-1

Instrument IC-1 Analyst : NF Method: 300.0 / 9056A

| Ident | Con F- | Con CL- | Con NO2 | Con BR- | Con NO3 | Con HPO4 | Con SO4 | Method name | date time | Initial wt/Fi | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| STD1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | IC1-052225 | 5/22/2025 11:09 | 10 | NF/IZ |
| STD2 | 0.430 | 0.640 | 0.649 | 2.129 | 0.543 | 1.098 | 3.287 | IC1-052225 | 5/22/2025 11:30 | 10 | NF/IZ |
| STD3 | 0.795 | 1.207 | 1.205 | 4.018 | 1.004 | 1.867 | 6.069 | IC1-052225 | 5/22/2025 11:52 | 10 | NF/IZ |
| STD4 | 0.977 | 1.480 | 1.479 | 4.929 | 1.229 | 2.477 | 7.415 | IC1-052225 | 5/22/2025 12:13 | 10 | NF/IZ |
| STD5 | 1.991 | 2.968 | 2.960 | 9.916 | 2.467 | 5.110 | 14.621 | IC1-052225 | 5/22/2025 12:35 | 10 | NF/IZ |
| STD6 | 4.001 | 5.967 | 5.959 | 19.868 | 4.966 | 9.870 | 29.848 | IC1-052225 | 5/22/2025 12:56 | 10 | NF/IZ |
| STD7 | 5.006 | 7.539 | 7.548 | 25.140 | 6.290 | 12.578 | 37.260 | IC1-052225 | 5/22/2025 13:17 | 10 | NF/IZ |
| ICV | 2.054 | 3.101 | 3.056 | 10.229 | 2.610 | 5.286 | 15.128 | IC1-052225 | 5/22/2025 13:39 | 10 | NF/IZ |
| ICB | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | IC1-052225 | 5/22/2025 14:22 | 10 | NF/IZ |
| CCV | 2.084 | 3.081 | 3.082 | 10.323 | 2.555 | 5.312 | 15.259 | IC1-052225 | 6/17/2025 11:12 | 10 | NF/IZ |
| CCB | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | IC1-052225 | 6/17/2025 11:33 | 10 | NF/IZ |
| LB136191BLW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | IC1-052225 | 6/17/2025 11:55 | 10 | NF/IZ |
| LB136191BSW | 2.097 | 3.079 | 3.088 | 10.316 | 2.557 | 5.363 | 15.300 | IC1-052225 | 6/17/2025 12:16 | 10 | NF/IZ |
| Q2344-01 | 0.123 | 112.230 | 0.000 | 0.212 | 1.843 | 0.000 | 31.685 | IC1-052225 | 6/17/2025 16:42 | 10 | NF/IZ |
| Q2344-01MS | 2.191 | 110.543 | 3.059 | 10.302 | 4.338 | 5.007 | 46.445 | IC1-052225 | 6/17/2025 17:04 | 10 | NF/IZ |
| Q2344-01MSD | 2.158 | 110.445 | 2.990 | 10.084 | 4.280 | 5.227 | 46.082 | IC1-052225 | 6/17/2025 17:25 | 10 | NF/IZ |
| Q2344-03 | 0.194 | 246.000 | 0.000 | 0.227 | 3.770 | 0.000 | 77.789 | IC1-052225 | 6/17/2025 17:47 | 10 | NF/IZ |
| Q2344-05 | 0.204 | 245.807 | 0.000 | 0.219 | 3.773 | 0.000 | 77.547 | IC1-052225 | 6/17/2025 18:08 | 10 | NF/IZ |
| Q2344-07 | 0.234 | 386.759 | 0.000 | 0.462 | 0.789 | 0.000 | 29.190 | IC1-052225 | 6/17/2025 18:30 | 10 | NF/IZ |
| CCV | 2.083 | 3.083 | 3.086 | 10.281 | 2.554 | 5.326 | 15.210 | IC1-052225 | 6/17/2025 18:52 | 10 | NF/IZ |
| CCB | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | IC1-052225 | 6/17/2025 19:13 | 10 | NF/IZ |
| CCV | 2.090 | 3.089 | 3.086 | 10.347 | 2.567 | 5.059 | 15.284 | IC1-052225 | 6/18/2025 10:32 | 10 | NF/IZ |
| CCB | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | IC1-052225 | 6/18/2025 10:53 | 10 | NF/IZ |
| LB136191BLW2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | IC1-052225 | 6/18/2025 11:15 | 10 | NF/IZ |
| LB136191BSW2 | 2.090 | 3.084 | 3.090 | 10.328 | 2.572 | 5.143 | 15.257 | IC1-052225 | 6/18/2025 11:36 | 10 | NF/IZ |
| Q2344-01DLX20 | 0.000 | 4.241 | 0.000 | 0.000 | 0.132 | 0.000 | 1.896 | IC1-052225 | 6/18/2025 11:58 | 10 | NF/IZ |
| Q2344-03DLX5 | 0.058 | 40.076 | 0.000 | 0.000 | 0.767 | 0.000 | 14.323 | IC1-052225 | 6/18/2025 12:20 | 10 | NF/IZ |
| Q2344-03DL2X50 | 0.000 | 3.479 | 0.000 | 0.000 | 0.119 | 0.000 | 1.795 | IC1-052225 | 6/18/2025 12:41 | 10 | NF/IZ |
| Q2344-05DLX5 | 0.051 | 39.964 | 0.000 | 0.000 | 0.765 | 0.000 | 14.303 | IC1-052225 | 6/18/2025 13:03 | 10 | NF/IZ |
| Q2344-05DL2X50 | 0.000 | 3.451 | 0.000 | 0.000 | 0.120 | 0.000 | 1.790 | IC1-052225 | 6/18/2025 13:24 | 10 | NF/IZ |
| Q2344-07DLX100 | 0.000 | 2.494 | 0.000 | 0.000 | 0.000 | 0.000 | 0.681 | IC1-052225 | 6/18/2025 13:46 | 10 | NF/IZ |
| CCV | 2.087 | 3.083 | 3.087 | 10.303 | 2.563 | 5.328 | 15.289 | IC1-052225 | 6/18/2025 14:07 | 10 | NF/IZ |
| CCB | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | IC1-052225 | 6/18/2025 14:29 | 10 | NF/IZ |

Reviewed By:Sohil
On:6/19/2025 9:14:11 AM
Inst Id :IC-1
LB :LB136191

Clear table

Instrument ID: IC-2 Analyst : IZ Method: 300.0 / 9056A

| ident | concentration F- | concentration CL- | concentration NO2 | concentration BR- | concentration NO3 | concentration HPO4 | concentration SO4 | file name | date time | Initial wt/ Final | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| STD1 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | IC1-052225 | 5/22/2025 11:09 | 10 | NF/IZ |
| STD2 | 0.4300 | 0.6400 | 0.6490 | 2.1290 | 0.5430 | 1.0980 | 3.2870 | IC1-052225 | 5/22/2025 11:30 | 10 | NF/IZ |
| STD3 | 0.7950 | 1.2070 | 1.2050 | 4.0180 | 1.0040 | 1.8670 | 6.0690 | IC1-052225 | 5/22/2025 11:52 | 10 | NF/IZ |
| STD4 | 0.9770 | 1.4800 | 1.4790 | 4.9290 | 1.2290 | 2.4770 | 7.4150 | IC1-052225 | 5/22/2025 12:13 | 10 | NF/IZ |
| STD5 | 1.9910 | 2.9680 | 2.9600 | 9.9160 | 2.4670 | 5.1100 | 14.6210 | IC1-052225 | 5/22/2025 12:35 | 10 | NF/IZ |
| STD6 | 4.0010 | 5.9670 | 5.9590 | 19.8680 | 4.9660 | 9.8700 | 29.8480 | IC1-052225 | 5/22/2025 12:56 | 10 | NF/IZ |
| STD7 | 5.0060 | 7.5390 | 7.5480 | 25.1400 | 6.2900 | 12.5780 | 37.2600 | IC1-052225 | 5/22/2025 13:17 | 10 | NF/IZ |

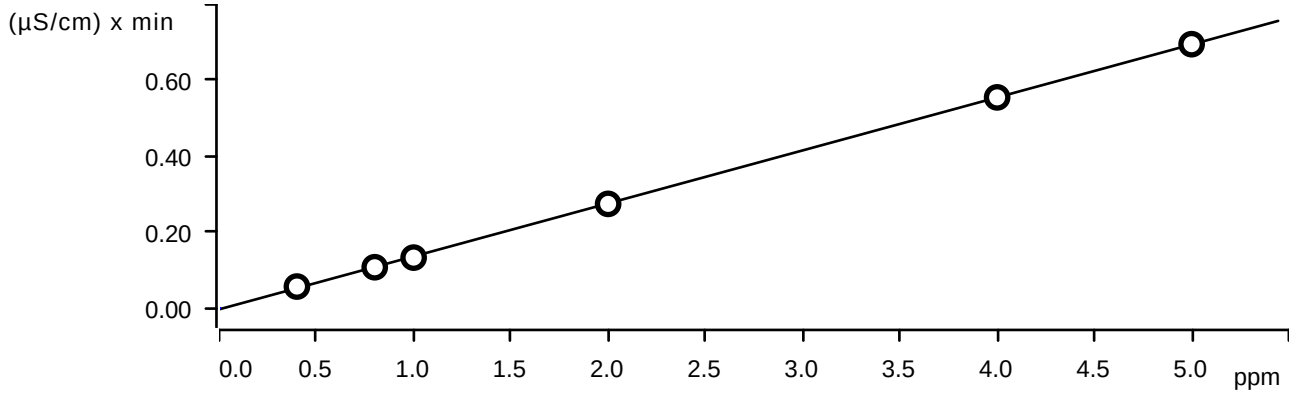
| ident | True Value F- | True Value CL- | True Value NO2 | True Value BR- | True Value NO3 | True Value HPO4 | True Value SO4 |
|---|---|---|---|---|---|---|---|
| STD1 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| STD2 | 0.4000 | 0.6000 | 0.6000 | 2.0000 | 0.5000 | 1.0000 | 3.0000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

| ident | Relative Error F- | Relative Error CL- | Relative Error NO2 | Relative Error BR- | Relative Error NO3 | Relative Error HPO4 | Relative Error SO4 |
|---|---|---|---|---|---|---|---|
| STD1 | | | | | | | |
| STD2 | 7.5000 | 6.6667 | 8.1667 | 6.4500 | 8.6000 | 9.8000 | 9.5667 |
| STD3 | -0.6250 | 0.5833 | 0.4167 | 0.4500 | 0.4000 | -6.6500 | 1.1500 |
| STD4 | -2.3000 | -1.3333 | -1.4000 | -1.4200 | -1.6800 | -0.9200 | -1.1333 |
| STD5 | -0.4500 | -1.0667 | -1.3333 | -0.8400 | -1.3200 | 2.2000 | -2.5267 |
| STD6 | 0.0250 | -0.5500 | -0.6833 | -0.6600 | -0.6800 | -1.3000 | -0.5067 |
| STD7 | 0.1200 | 0.5200 | 0.6400 | 0.5600 | 0.6400 | 0.6240 | 0.7027 |

Reviewed By:Sohil
On:6/19/2025 9:14:11 AM
Inst Id :IC-1
LB :LB136191

Reviewed By:Sohi
On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

**Fluoride (Anions)**



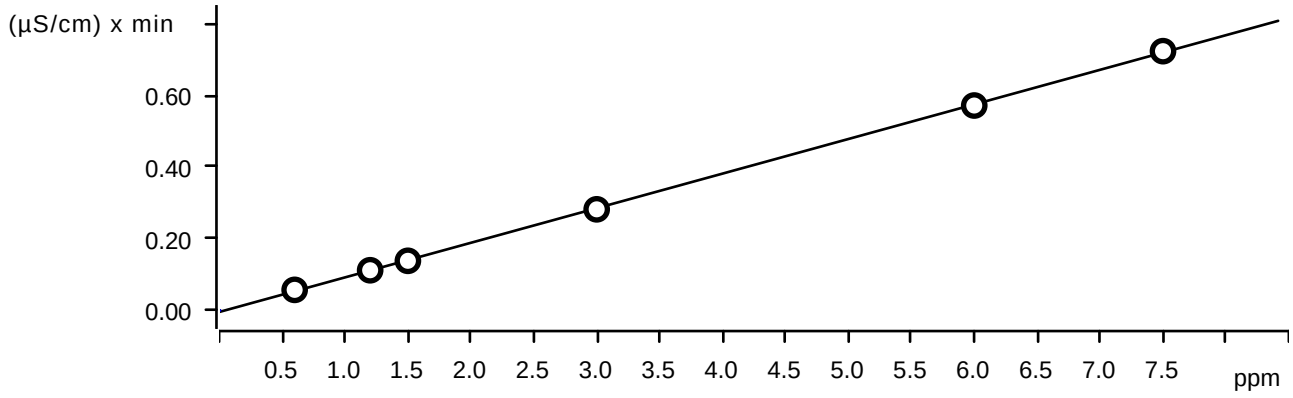

Function: . . . . . *A = - 2.82659E-3 + 0.0139492× Q*

Relative standard deviation . . . . . *0.920519 %*

Correlation coefficient . . . . . *0.999955*

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

**Chloride (Anions)**




Function: . . . . . *A = - 4.33057E-3 + 9.64673E-3× Q*

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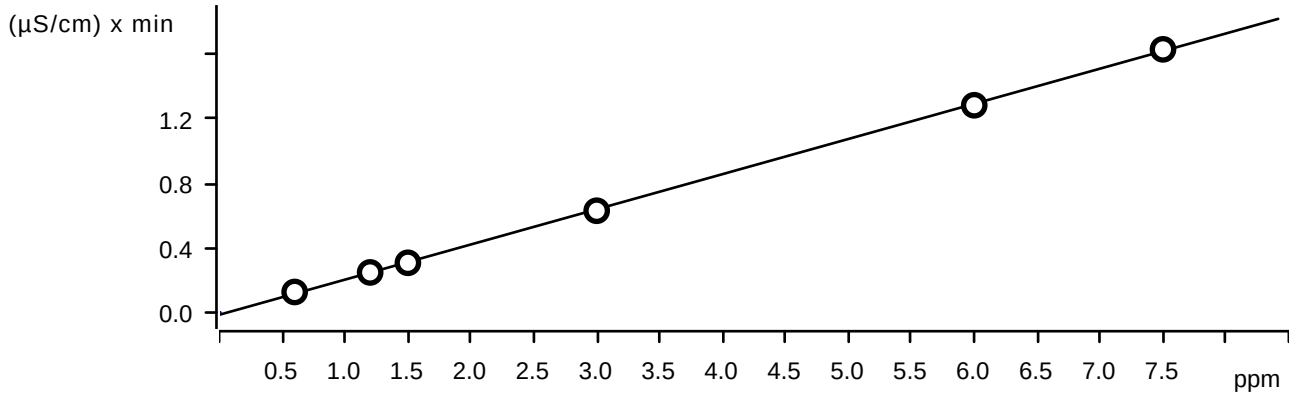
LB :LB136191

Relative standard deviation . . . . . *1.154335 %*

Correlation coefficient . . . . . *0.999929*

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

**Nitrite (Anions)**




Function: . . . . . *A = - 0.0150155 + 0.0217890× Q*

Relative standard deviation . . . . . *1.428639 %*

Correlation coefficient . . . . . *0.999893*

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

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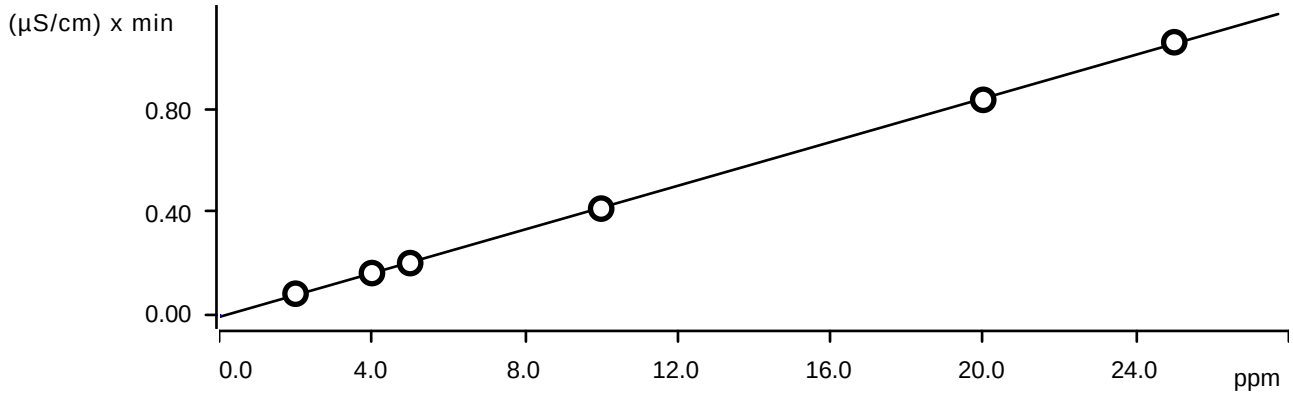
**Bromide (Anions)**



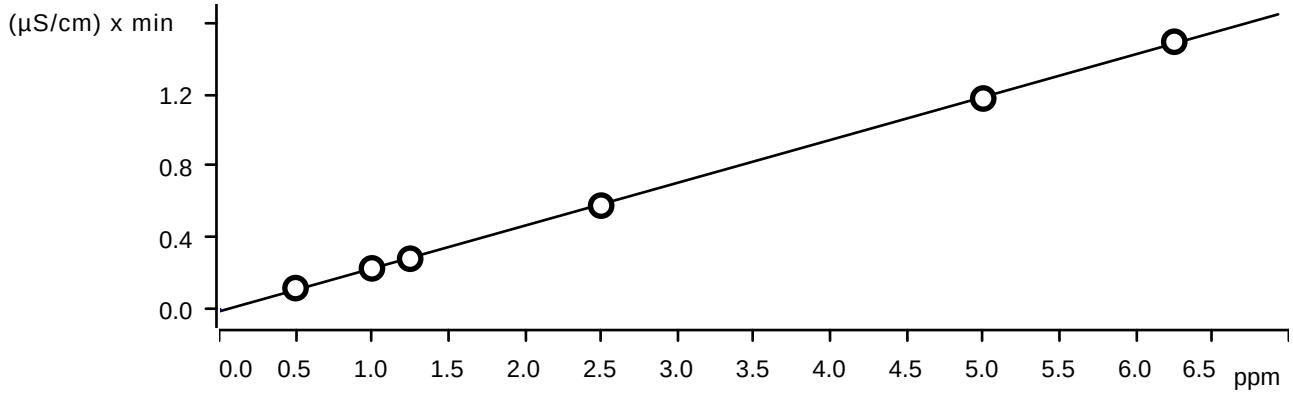

Function: . . . . . *A = - 6.27114E-3 + 4.23162E-3× Q*

Relative standard deviation . . . . . *1.185575 %*

Correlation coefficient . . . . . *0.999925*

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

**Nitrate (Anions)**




Function: . . . . . *A = - 0.0109593 + 0.0239055× Q*

Relative standard deviation . . . . . *1.451672 %*

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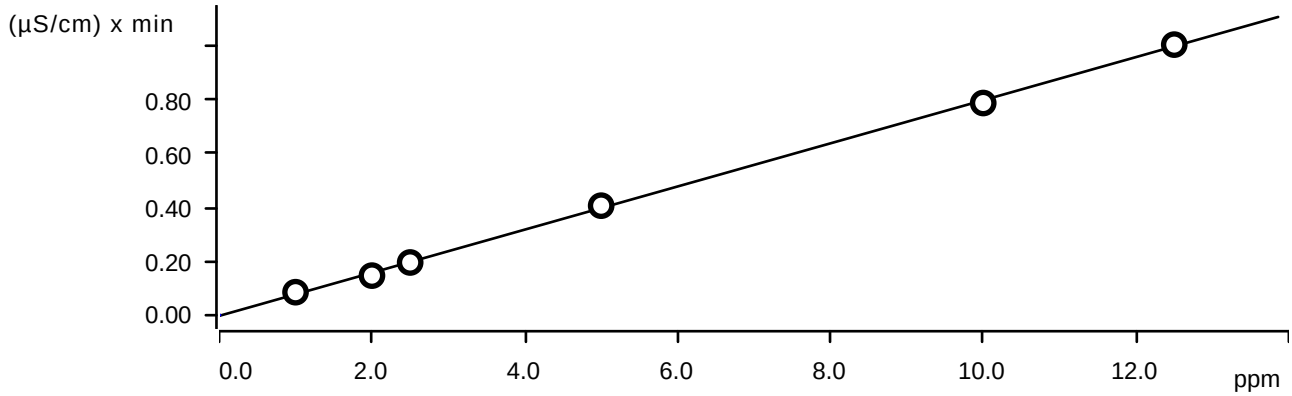
Correlation coefficient . . . . . *0.999889*

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

**Phosphate (Anions)**




Function: . . . . . *A = - 3.02035E-3 + 8.01761E-3× Q*

Relative standard deviation . . . . . *2.297726 %*

Correlation coefficient . . . . . *0.999716*

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

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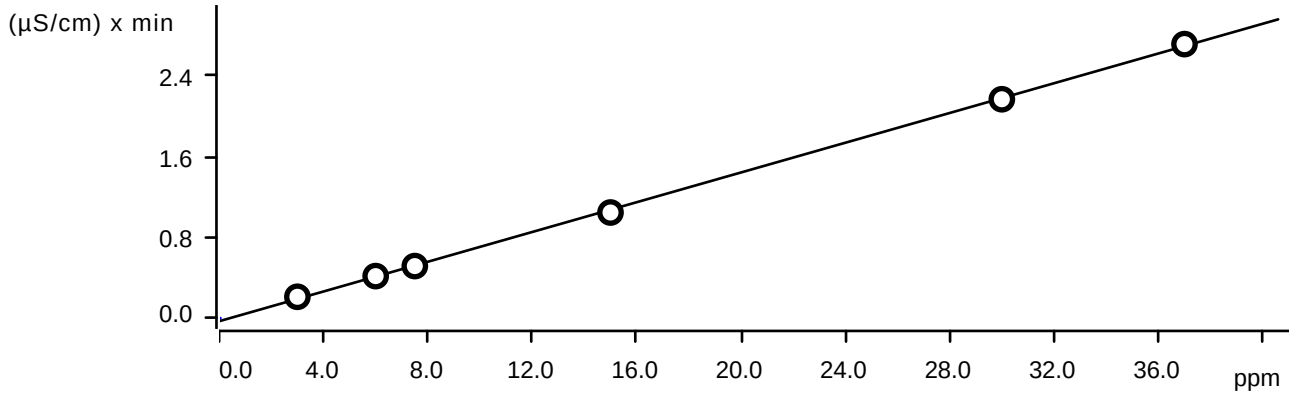
**Sulfate (Anions)**




Function: . . . . . *A = - 0.0303663 + 7.37295E-3× Q*

Relative standard deviation . . . . . *1.792871 %*

Correlation coefficient . . . . . *0.999832*

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

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LB :LB136191

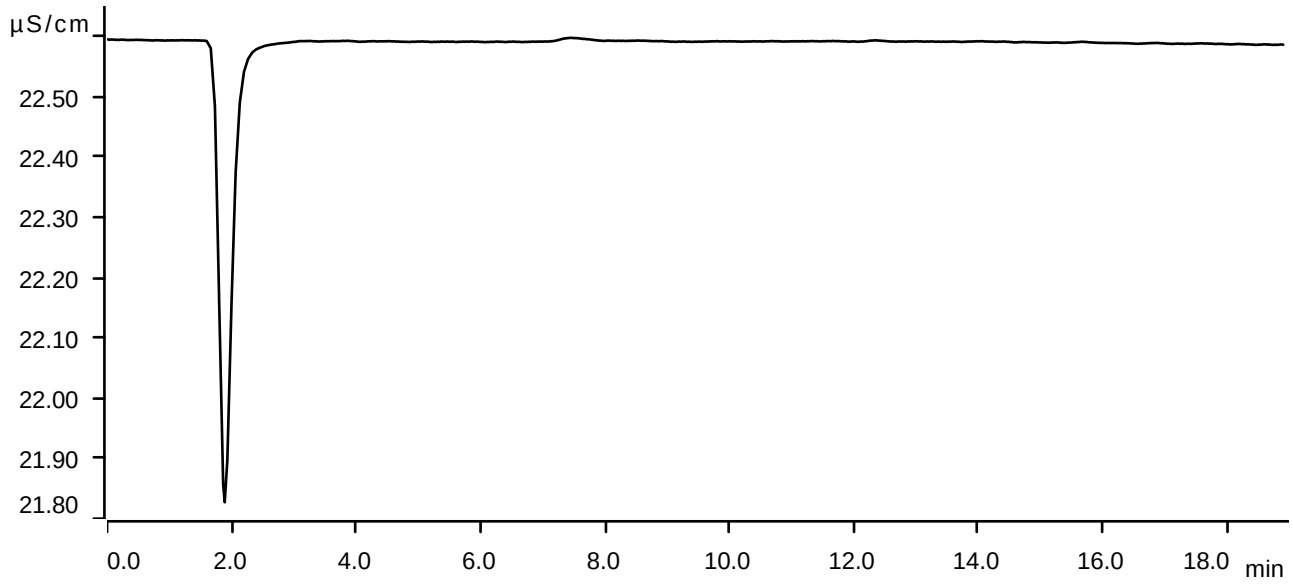
## Sample data

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

## Anions

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

## Anions



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LB :LB136191

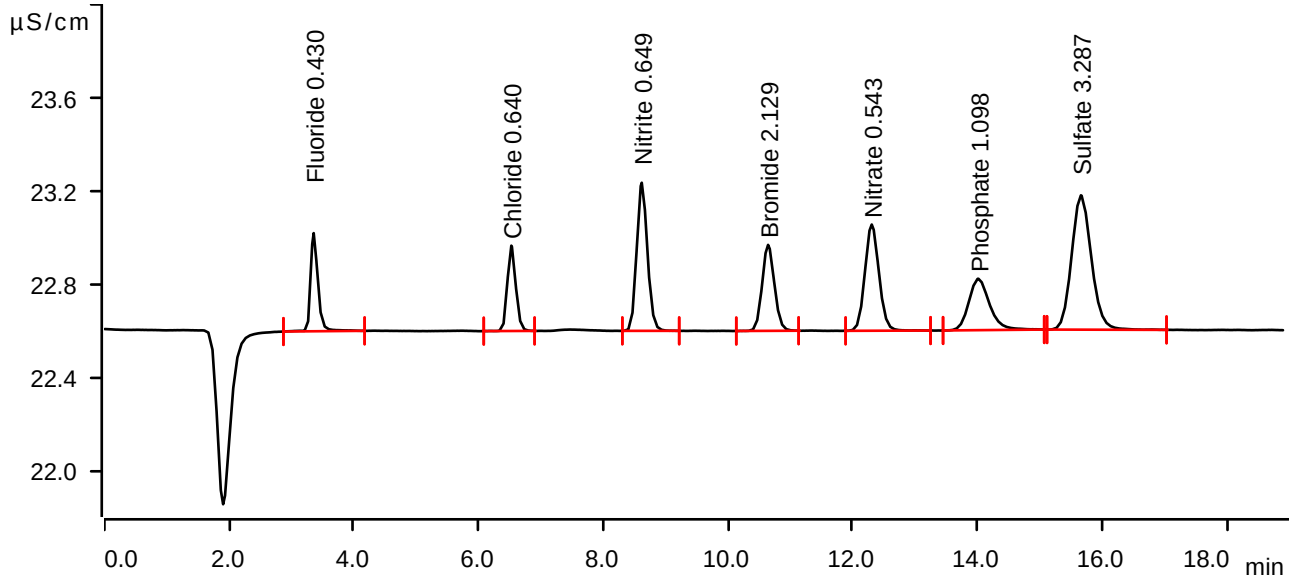
## Sample data

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

## Anions

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

## Anions




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

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Inst Id :IC-1
LB :LB136191

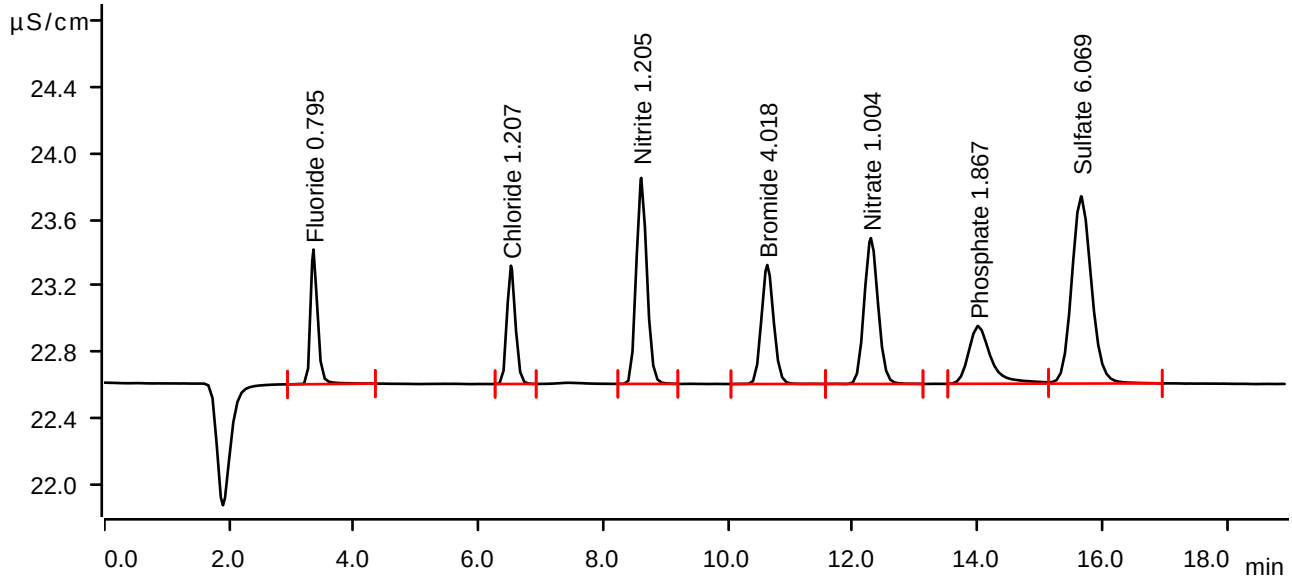
## Sample data

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

## Anions

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

## Anions




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

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Inst Id :IC-1
LB :LB136191

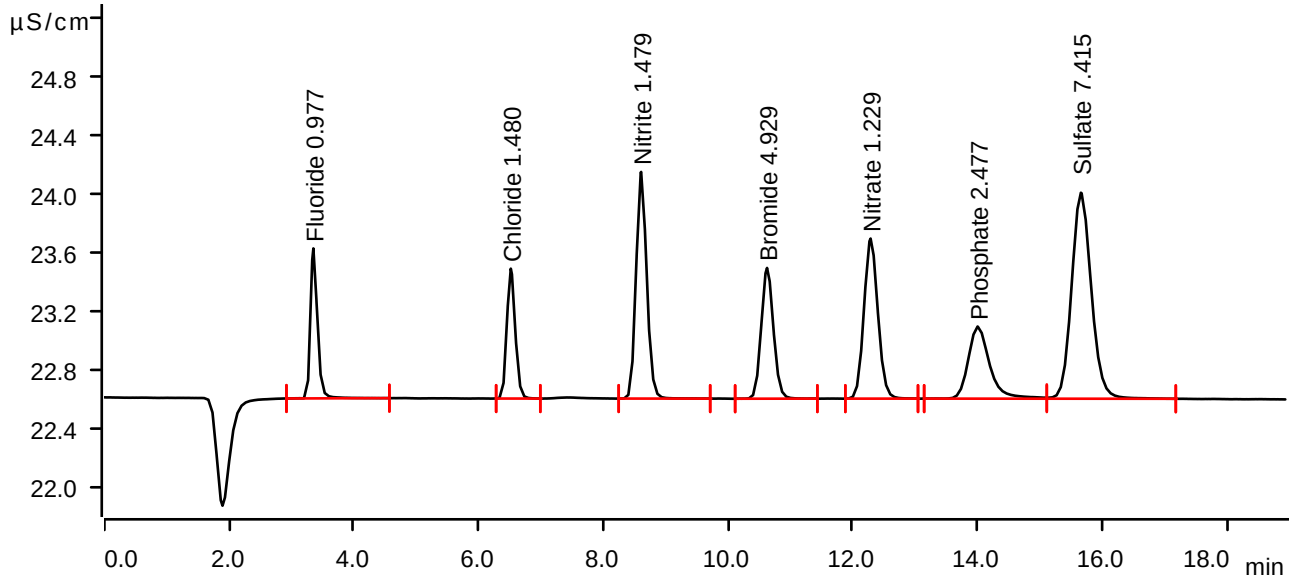
## Sample data

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

## Anions

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

## Anions




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

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LB :LB136191

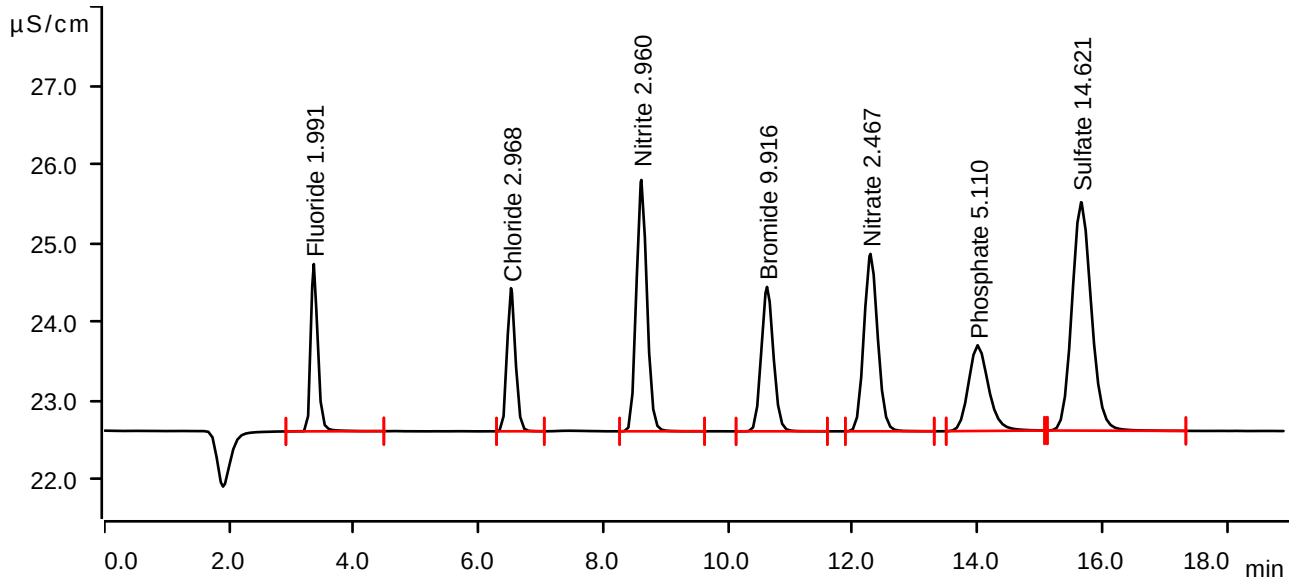
## Sample data

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

## Anions

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

## Anions




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

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LB :LB136191

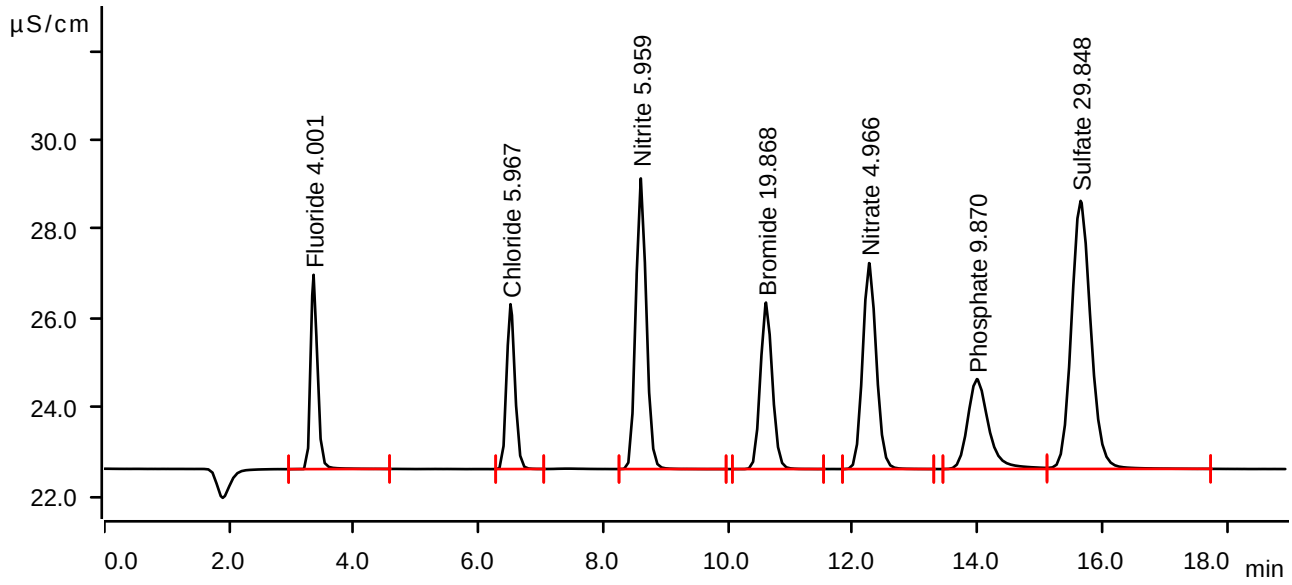
## Sample data

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

## Anions

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

## Anions




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

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On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

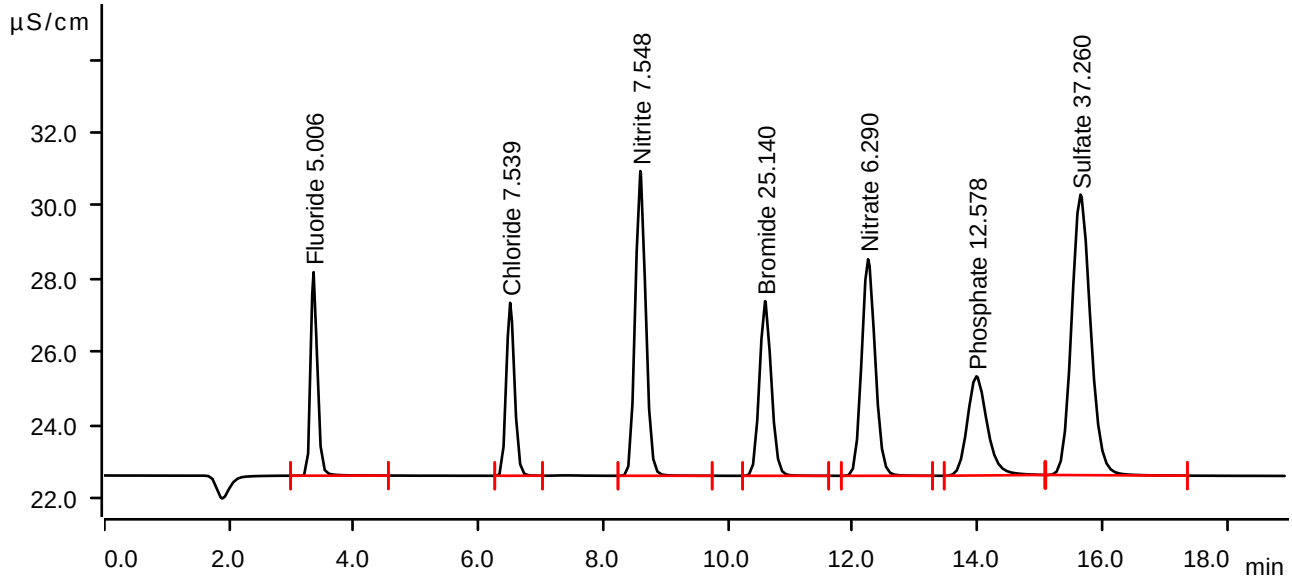
## Sample data

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

## Anions

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

## Anions




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

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On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

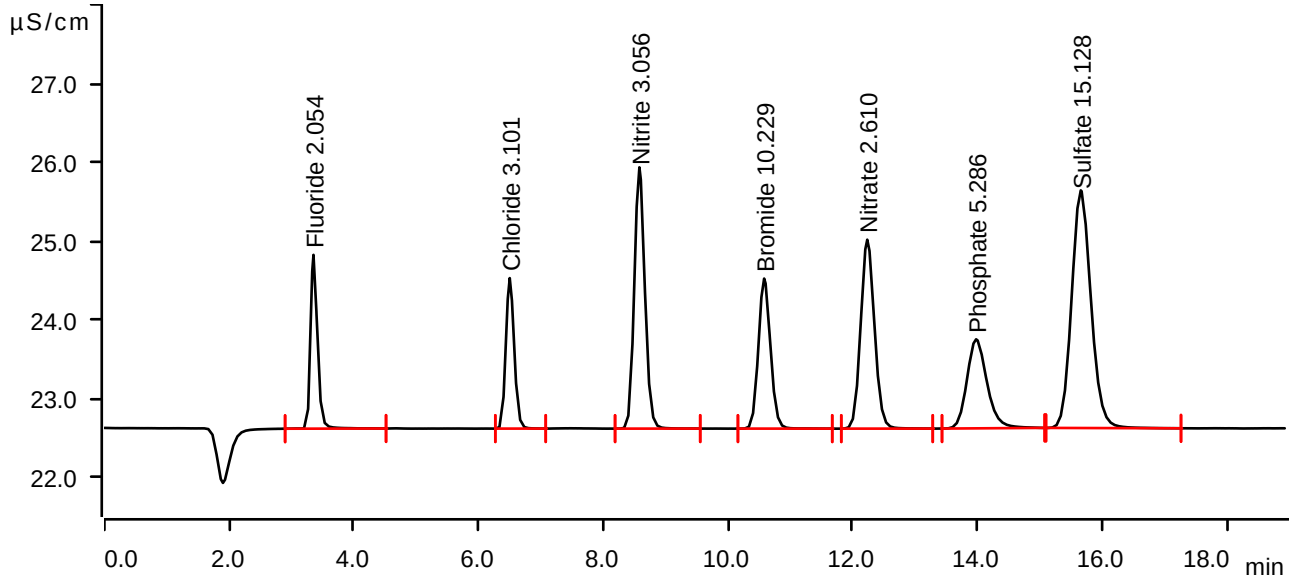
## Sample data

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

## Anions

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

## Anions




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

Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

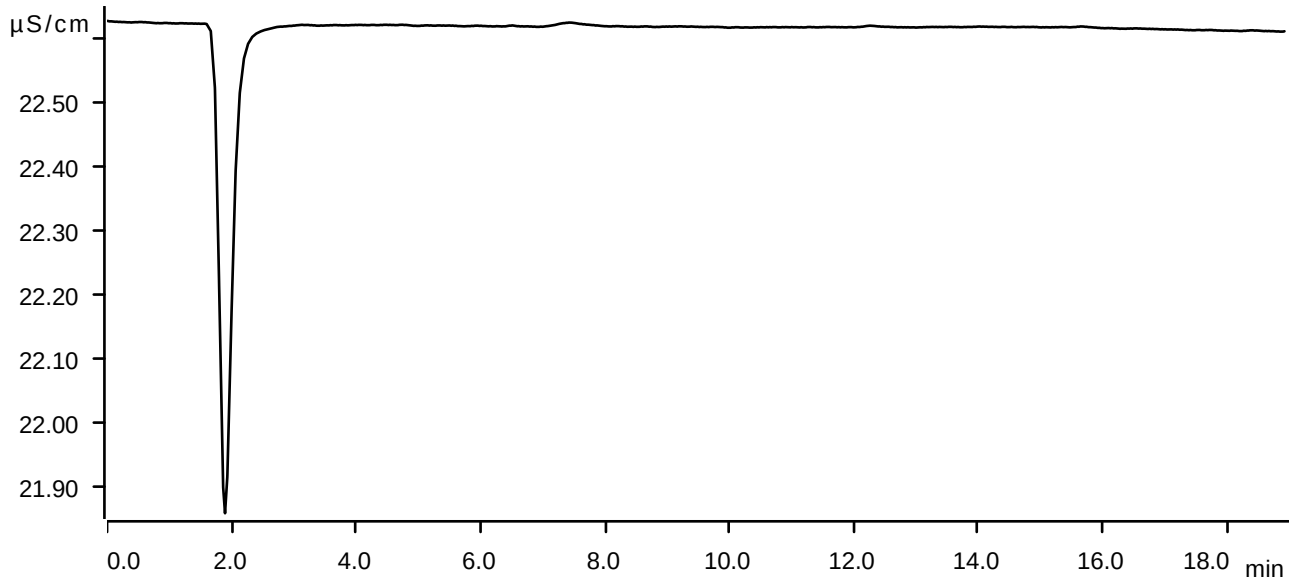
## Sample data

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

## Anions

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

## Anions



Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

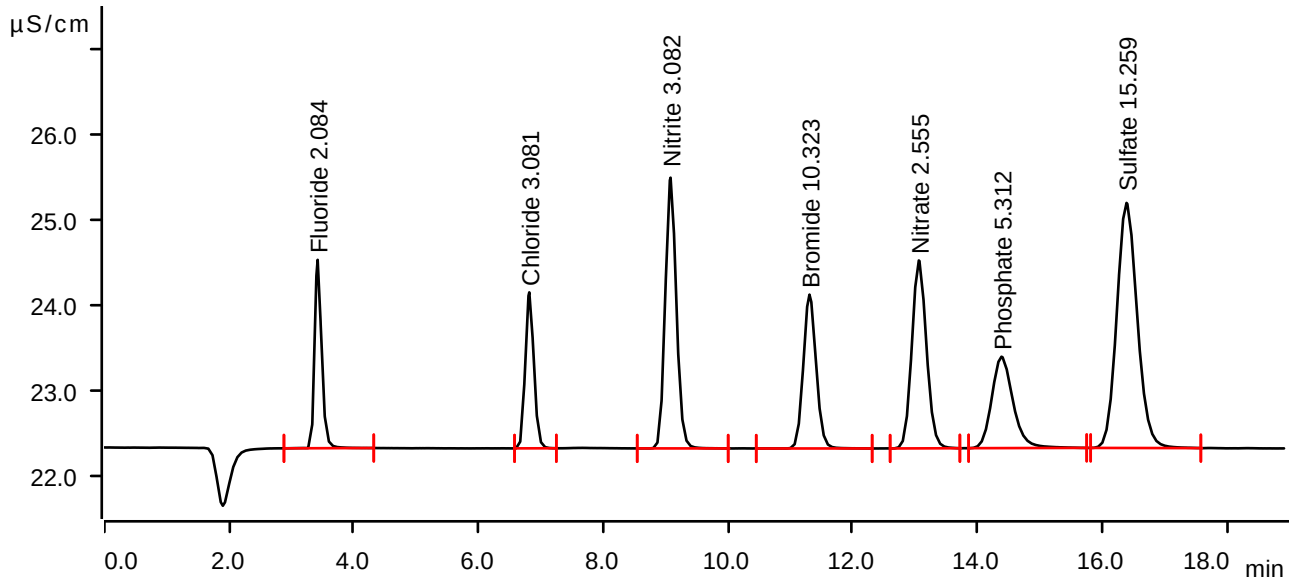
## Sample data

| | |
|---|---|
| Ident | CCV |
| Sample type | Check standard 1 |
| Determination start | 2025-06-17 11:12:21 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 13.18 | 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 | 3.420 | 0.2879 | 2.206 | 2.084 | Fluoride |
| 2 | 6.813 | 0.2929 | 1.827 | 3.081 | Chloride |
| 3 | 9.078 | 0.6566 | 3.171 | 3.082 | Nitrite |
| 4 | 11.305 | 0.4305 | 1.803 | 10.323 | Bromide |
| 5 | 13.058 | 0.5998 | 2.201 | 2.555 | Nitrate |
| 6 | 14.383 | 0.4229 | 1.071 | 5.312 | Phosphate |
| 7 | 16.388 | 1.0947 | 2.871 | 15.259 | Sulfate |

Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

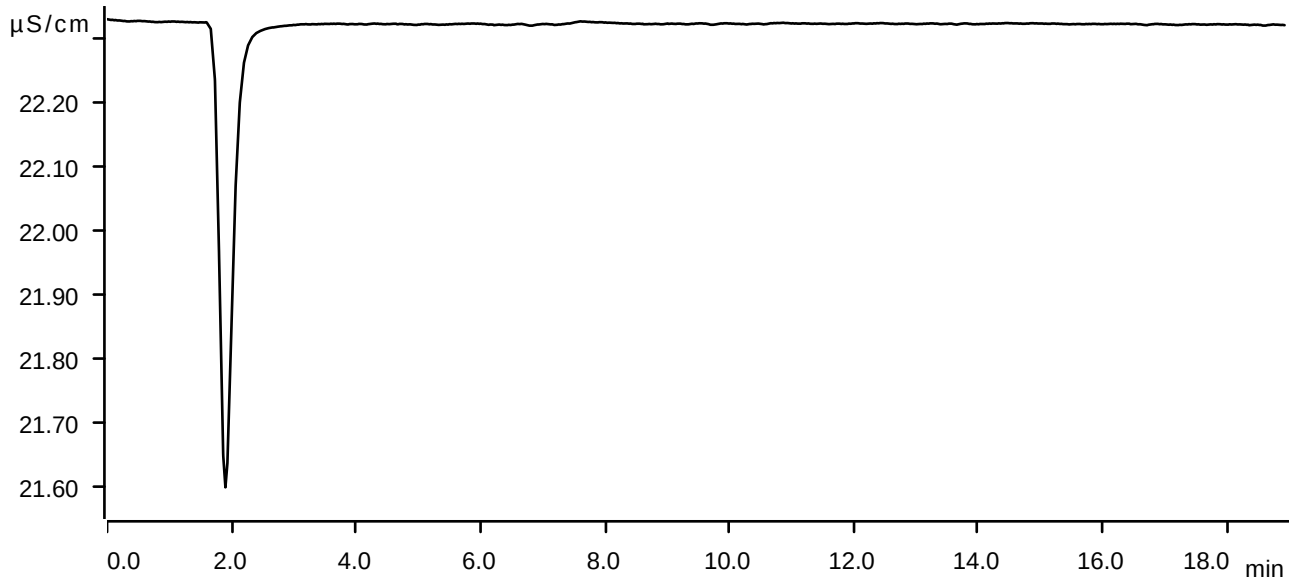
## Sample data

| | |
|---|---|
| Ident | CCB |
| Sample type | Sample |
| Determination start | 2025-06-17 11:33:52 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 13.06 | MPa |
| Maximum pressure monitored | yes | |
| Temperature | ----- | °C |

## Anions



Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

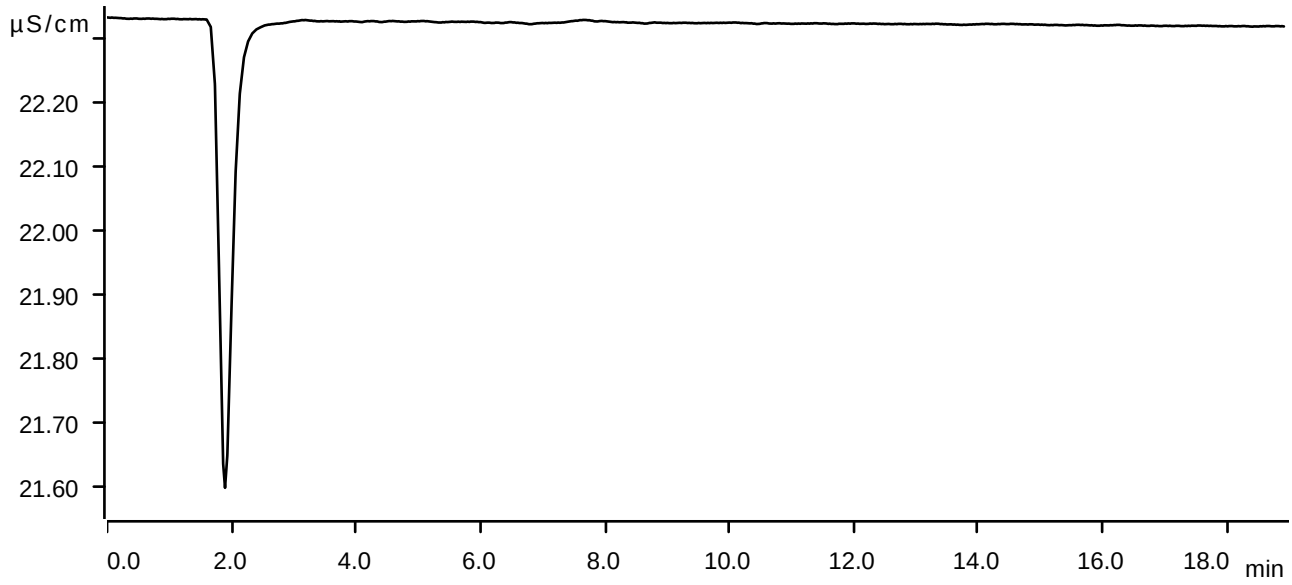
## Sample data

| | | |
|---|---|---|
| Ident | LB136191BLW | |
| Sample type | Sample | |
| Determination start | 2025-06-17 11:55:22 UTC-4 | |
| Method | IC1-052225 | |
| Operator | | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 13.01 | MPa |
| Maximum pressure monitored | yes | |
| Temperature | ----- | °C |

## Anions



Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

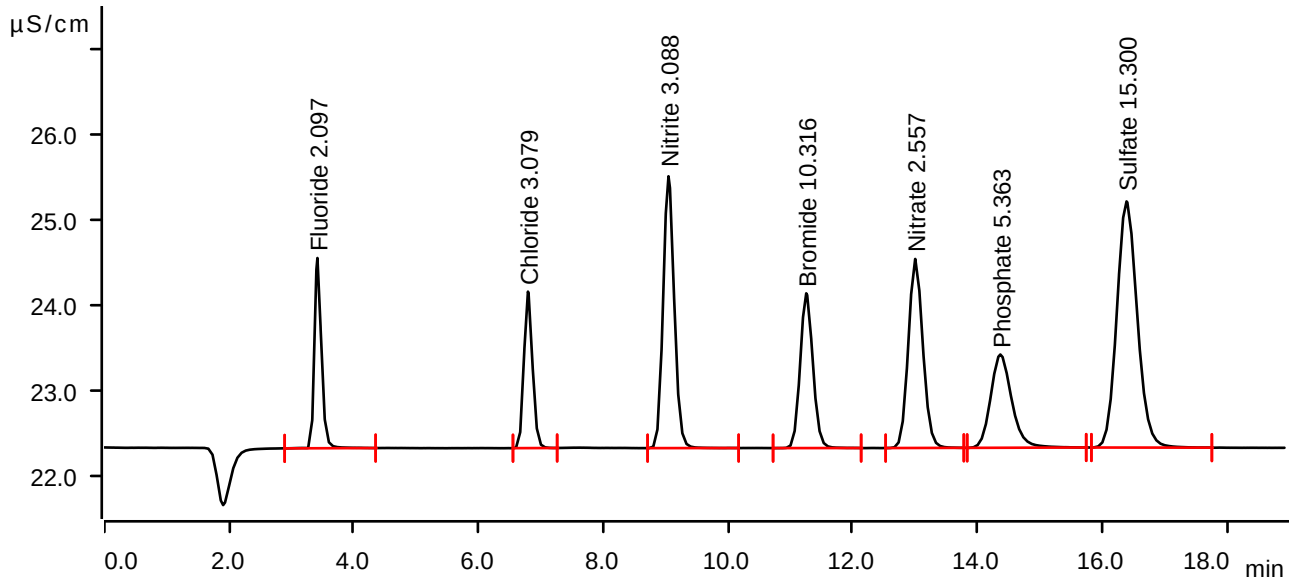
## Sample data

| | |
|---|---|
| Ident | LB136191BSW |
| Sample type | Check standard 1 |
| Determination start | 2025-06-17 12:16:54 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 13.01 | 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 | 3.417 | 0.2898 | 2.228 | 2.097 | Fluoride |
| 2 | 6.792 | 0.2927 | 1.833 | 3.079 | Chloride |
| 3 | 9.045 | 0.6577 | 3.184 | 3.088 | Nitrite |
| 4 | 11.253 | 0.4303 | 1.813 | 10.316 | Bromide |
| 5 | 13.002 | 0.6003 | 2.214 | 2.557 | Nitrate |
| 6 | 14.365 | 0.4270 | 1.092 | 5.363 | Phosphate |
| 7 | 16.388 | 1.0977 | 2.884 | 15.300 | Sulfate |

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On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

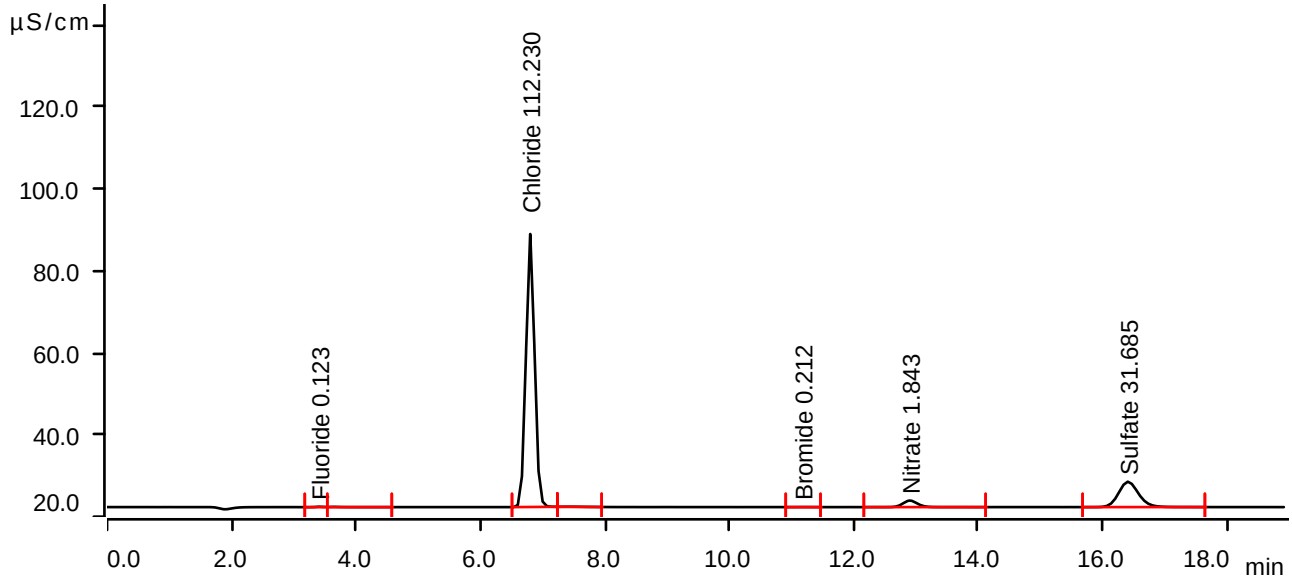
## Sample data

| | |
|---|---|
| Ident | Q2344-01 |
| Sample type | Sample |
| Determination start | 2025-06-17 16:42:47 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

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

## Anions




| Peak number | Retention time min | Area (µS/cm) x min | Height µS/cm | Concentration ppm | Component name |
|---|---|---|---|---|---|
| 1 | 3.408 | 0.0144 | 0.105 | 0.123 | Fluoride |
| 2 | 3.647 | 0.0141 | 0.065 | invalid | |
| 3 | 6.802 | 10.8222 | 66.619 | 112.230 | Chloride |
| 4 | 7.415 | 0.0127 | 0.035 | invalid | |
| 5 | 11.177 | 0.0027 | 0.011 | 0.212 | Bromide |
| 6 | 12.900 | 0.4296 | 1.601 | 1.843 | Nitrate |
| 7 | 16.405 | 2.3058 | 6.187 | 31.685 | Sulfate |

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On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

## Sample data

| | |
|---|---|
| Ident | Q2344-01MS |
| Sample type | Sample |
| Determination start | 2025-06-17 17:04:20 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

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

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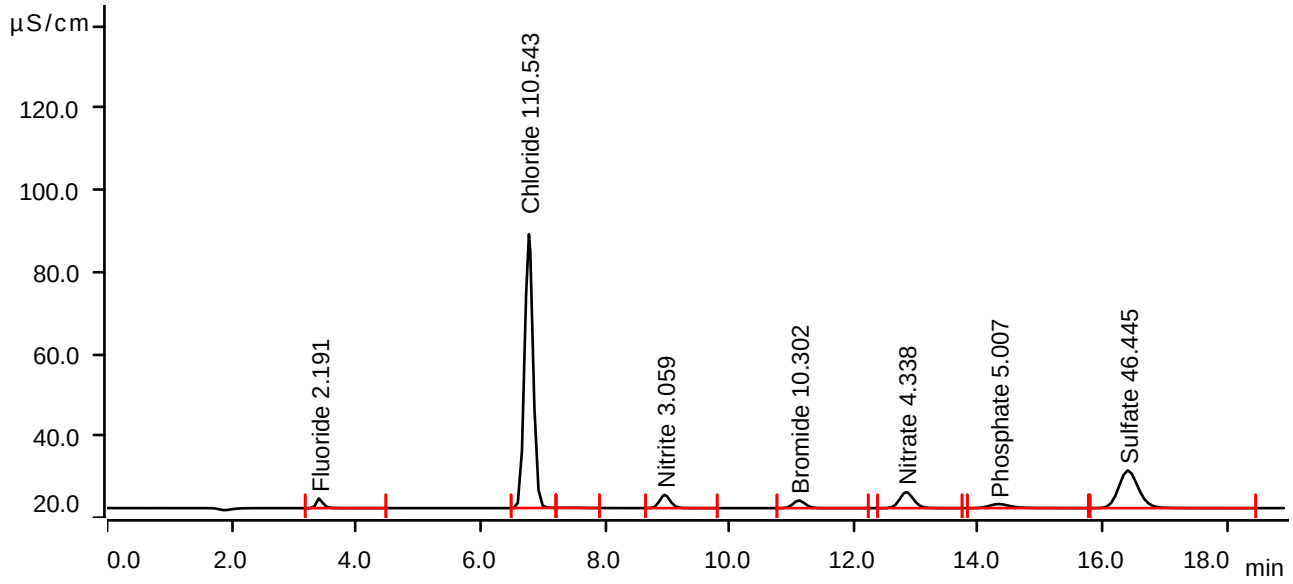
On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

**Anions**




| Peak number | Retention time min | Area (µS/cm) x min | Height µS/cm | Concentration ppm | Component name |
|---|---|---|---|---|---|
| 1 | 3.408 | 0.3028 | 2.340 | 2.191 | Fluoride |
| 2 | 6.780 | 10.6594 | 66.800 | 110.543 | Chloride |
| 3 | 7.395 | 0.0112 | 0.032 | invalid | |
| 4 | 8.962 | 0.6516 | 3.241 | 3.059 | Nitrite |
| 5 | 11.118 | 0.4297 | 1.857 | 10.302 | Bromide |
| 6 | 12.843 | 1.0260 | 3.900 | 4.338 | Nitrate |
| 7 | 14.327 | 0.3984 | 0.996 | 5.007 | Phosphate |
| 8 | 16.405 | 3.3940 | 9.213 | 46.445 | Sulfate |

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On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

## Sample data

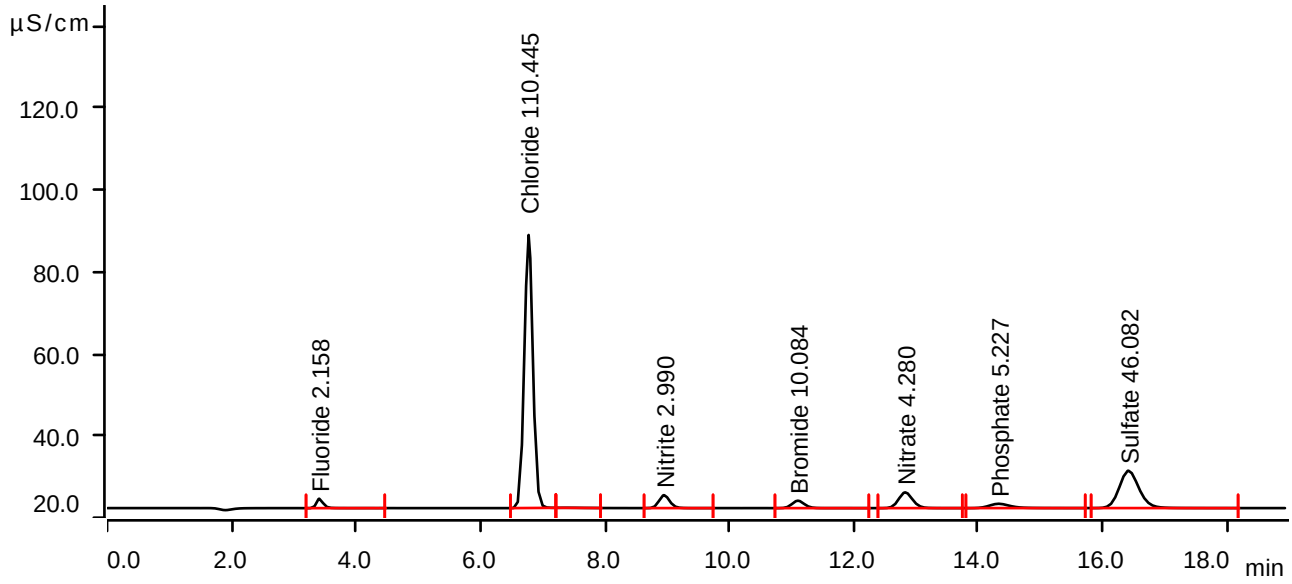
| | |
|---|---|
| Ident | Q2344-01MSD |
| Sample type | Sample |
| Determination start | 2025-06-17 17:25:42 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

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

Reviewed By:Sohi
On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

**Anions**




| Peak number | Retention time min | Area (µS/cm) x min | Height µS/cm | Concentration ppm | Component name |
|---|---|---|---|---|---|
| 1 | 3.412 | 0.2982 | 2.298 | 2.158 | Fluoride |
| 2 | 6.775 | 10.6500 | 66.627 | 110.445 | Chloride |
| 3 | 7.395 | 0.0109 | 0.032 | invalid | |
| 4 | 8.952 | 0.6364 | 3.168 | 2.990 | Nitrite |
| 5 | 11.102 | 0.4205 | 1.816 | 10.084 | Bromide |
| 6 | 12.827 | 1.0122 | 3.846 | 4.280 | Nitrate |
| 7 | 14.328 | 0.4160 | 1.059 | 5.227 | Phosphate |
| 8 | 16.413 | 3.3672 | 9.129 | 46.082 | Sulfate |

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On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

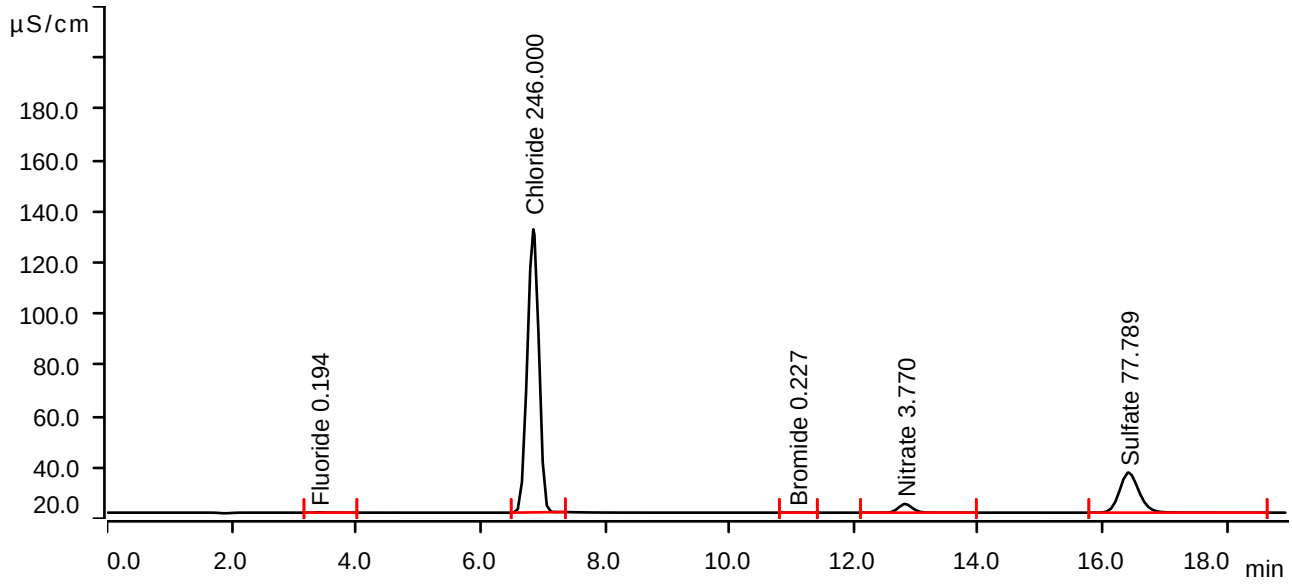
## Sample data

| | |
|---|---|
| Ident | Q2344-03 |
| Sample type | Sample |
| Determination start | 2025-06-17 17:47:17 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

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

## Anions




| Peak number | Retention time min | Area (µS/cm) x min | Height µS/cm | Concentration ppm | Component name |
|---|---|---|---|---|---|
| 1 | 3.405 | 0.0243 | 0.168 | 0.194 | Fluoride |
| 2 | 6.850 | 23.7266 | 110.520 | 246.000 | Chloride |
| 3 | 11.092 | 0.0033 | 0.014 | 0.227 | Bromide |
| 4 | 12.823 | 0.8904 | 3.386 | 3.770 | Nitrate |
| 5 | 16.415 | 5.7050 | 15.680 | 77.789 | Sulfate |

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On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

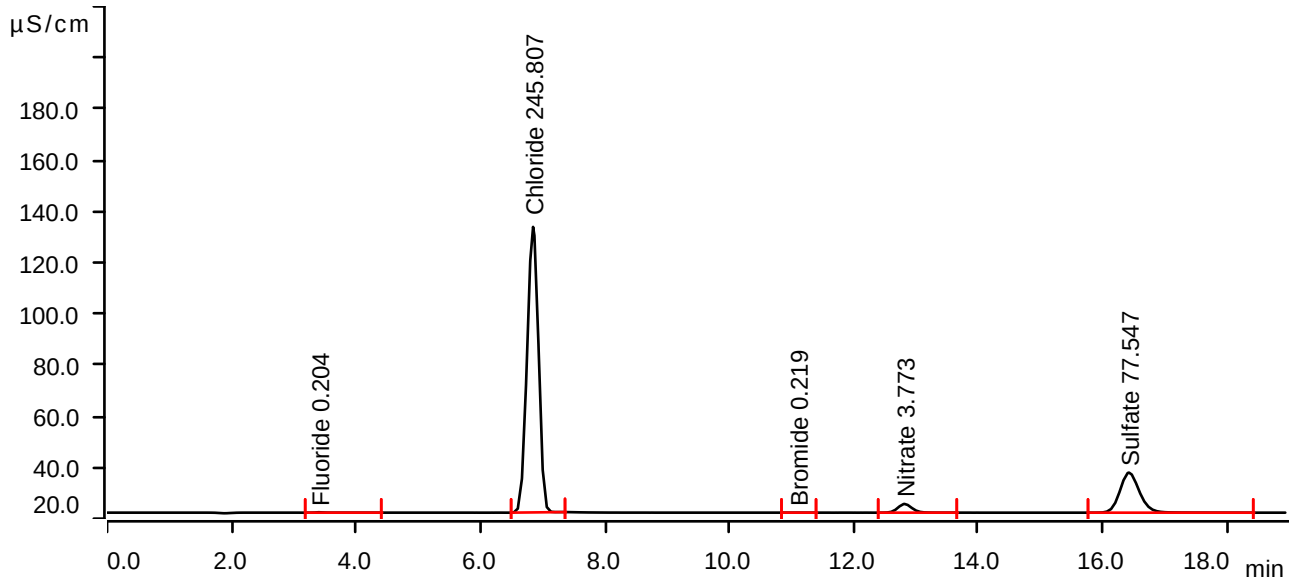
## Sample data

| | |
|---|---|
| Ident | Q2344-05 |
| Sample type | Sample |
| Determination start | 2025-06-17 18:08:52 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

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

## Anions




| Peak number | Retention time min | Area (µS/cm) x min | Height µS/cm | Concentration ppm | Component name |
|---|---|---|---|---|---|
| 1 | 3.407 | 0.0256 | 0.167 | 0.204 | Fluoride |
| 2 | 6.847 | 23.7080 | 111.486 | 245.807 | Chloride |
| 3 | 11.103 | 0.0030 | 0.013 | 0.219 | Bromide |
| 4 | 12.815 | 0.8911 | 3.403 | 3.773 | Nitrate |
| 5 | 16.422 | 5.6871 | 15.659 | 77.547 | Sulfate |

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On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

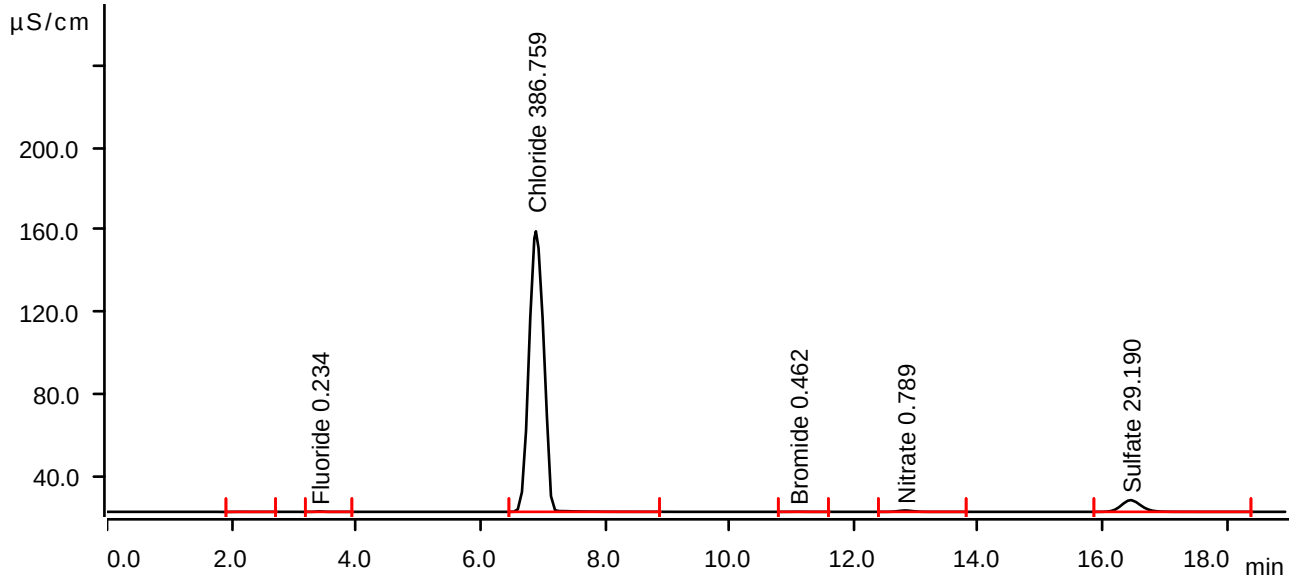
## Sample data

| | |
|---|---|
| Ident | Q2344-07 |
| Sample type | Sample |
| Determination start | 2025-06-17 18:30:27 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 12.44 | 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 | 2.132 | 0.0200 | 0.057 | invalid | |
| 2 | 3.410 | 0.0298 | 0.217 | 0.234 | Fluoride |
| 3 | 6.892 | 37.3053 | 136.930 | 386.759 | Chloride |
| 4 | 11.102 | 0.0133 | 0.057 | 0.462 | Bromide |
| 5 | 12.825 | 0.1777 | 0.668 | 0.789 | Nitrate |
| 6 | 16.448 | 2.1218 | 5.712 | 29.190 | Sulfate |

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On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

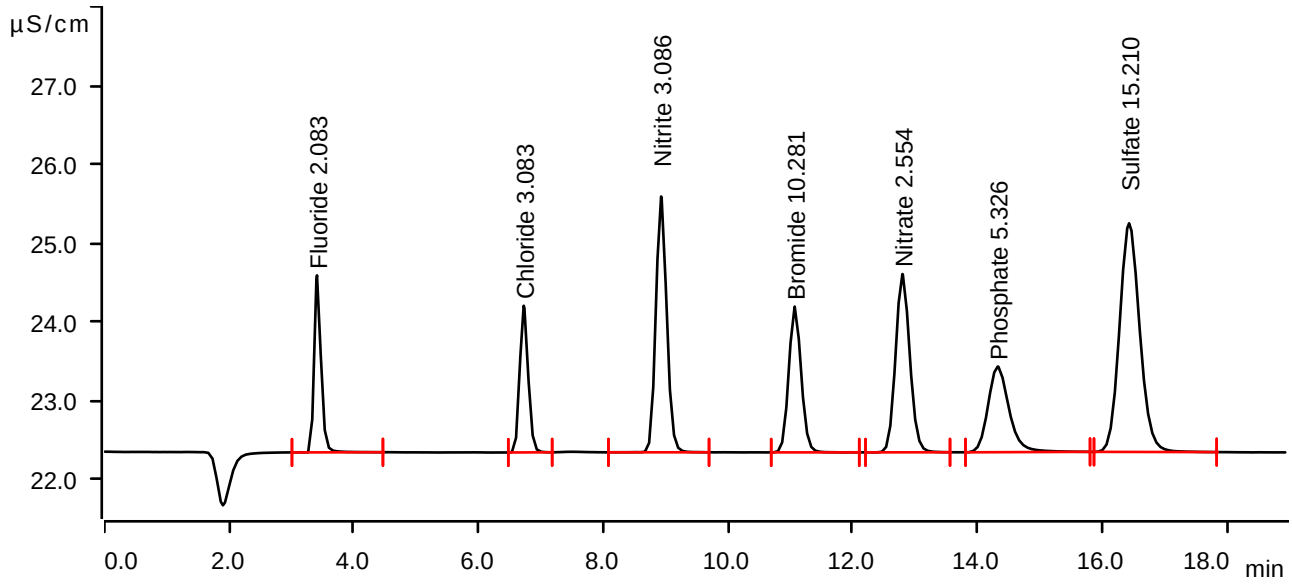
## Sample data

| | |
|---|---|
| Ident | CCV |
| Sample type | Check standard 1 |
| Determination start | 2025-06-17 18:52:01 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

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

## Anions




| Peak number | Retention time min | Area (µS/cm) x min | Height µS/cm | Concentration ppm | Component name |
|---|---|---|---|---|---|
| 1 | 3.410 | 0.2877 | 2.246 | 2.083 | Fluoride |
| 2 | 6.723 | 0.2931 | 1.861 | 3.083 | Chloride |
| 3 | 8.927 | 0.6574 | 3.246 | 3.086 | Nitrite |
| 4 | 11.068 | 0.4288 | 1.850 | 10.281 | Bromide |
| 5 | 12.795 | 0.5997 | 2.262 | 2.554 | Nitrate |
| 6 | 14.323 | 0.4240 | 1.088 | 5.326 | Phosphate |
| 7 | 16.430 | 1.0911 | 2.902 | 15.210 | Sulfate |

Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

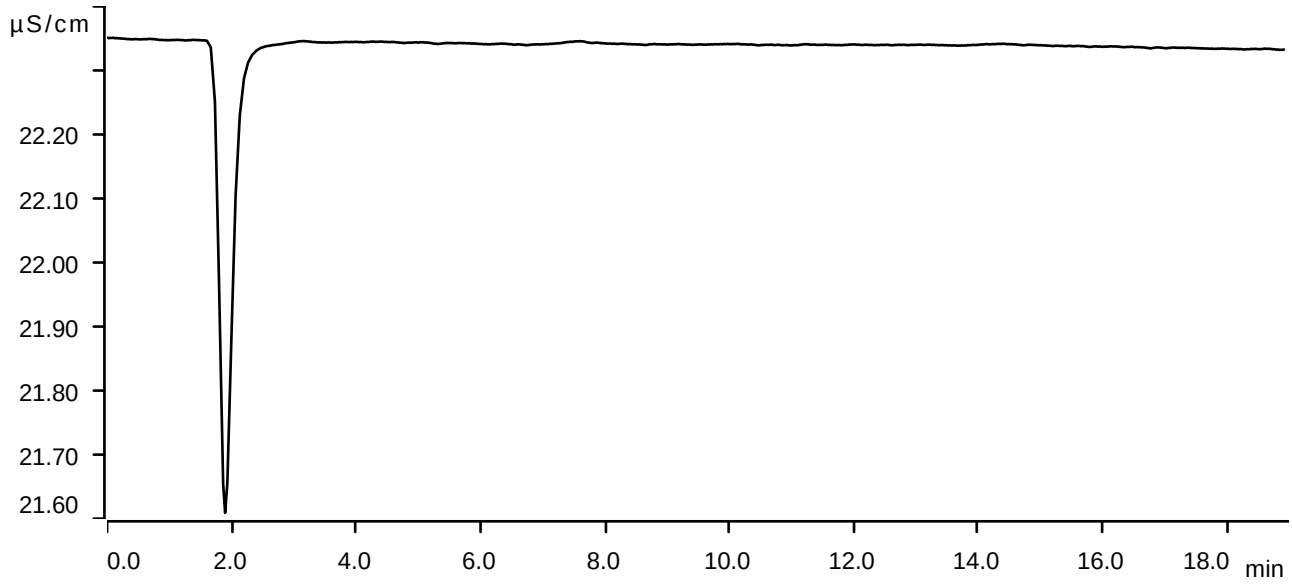
## Sample data

| | | |
|---|---|---|
| Ident | CCB | |
| Sample type | Sample | |
| Determination start | 2025-06-17 19:13:31 UTC-4 | |
| Method | IC1-052225 | |
| Operator | | |

## Anions

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

## Anions






Metrohm

Reviewed By:Sohi
On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

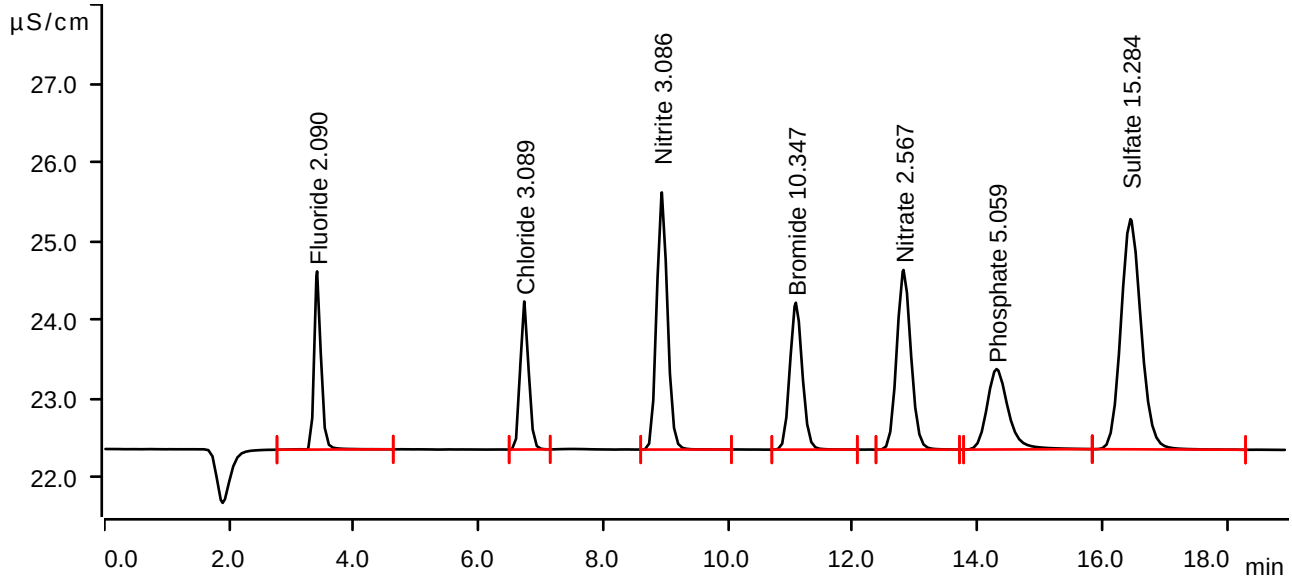
## Sample data

| | |
|---|---|
| Ident | CCV |
| Sample type | Check standard 1 |
| Determination start | 2025-06-18 10:32:26 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

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

## Anions




| Peak number | Retention time min | Area (µS/cm) x min | Height µS/cm | Concentration ppm | Component name |
|---|---|---|---|---|---|
| 1 | 3.412 | 0.2888 | 2.261 | 2.090 | Fluoride |
| 2 | 6.732 | 0.2936 | 1.878 | 3.089 | Chloride |
| 3 | 8.938 | 0.6573 | 3.263 | 3.086 | Nitrite |
| 4 | 11.087 | 0.4316 | 1.864 | 10.347 | Bromide |
| 5 | 12.813 | 0.6026 | 2.279 | 2.567 | Nitrate |
| 6 | 14.305 | 0.4026 | 1.021 | 5.059 | Phosphate |
| 7 | 16.452 | 1.0965 | 2.921 | 15.284 | Sulfate |

Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

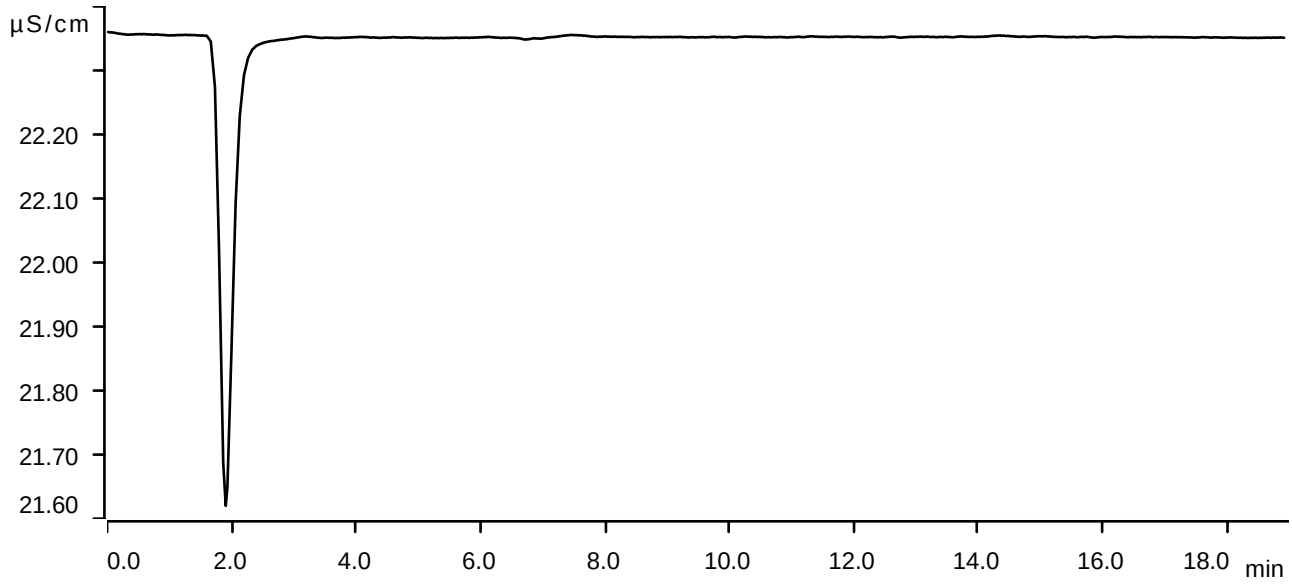
## Sample data

| | | |
|---|---|---|
| Ident | CCB | |
| Sample type | Sample | |
| Determination start | 2025-06-18 10:53:56 UTC-4 | |
| Method | IC1-052225 | |
| Operator | | |

## Anions

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

## Anions



Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

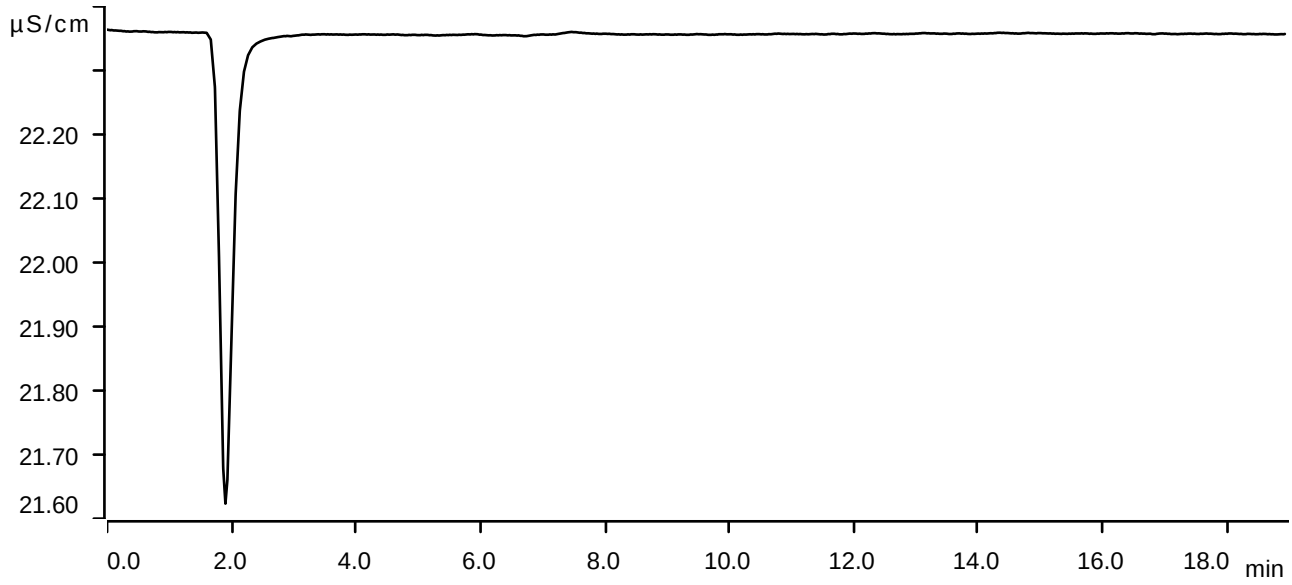
## Sample data

| | |
|---|---|
| Ident | LB136191BLW2 |
| Sample type | Sample |
| Determination start | 2025-06-18 11:15:27 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

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

**Anions**






Metrohm

Reviewed By:Sohi
On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

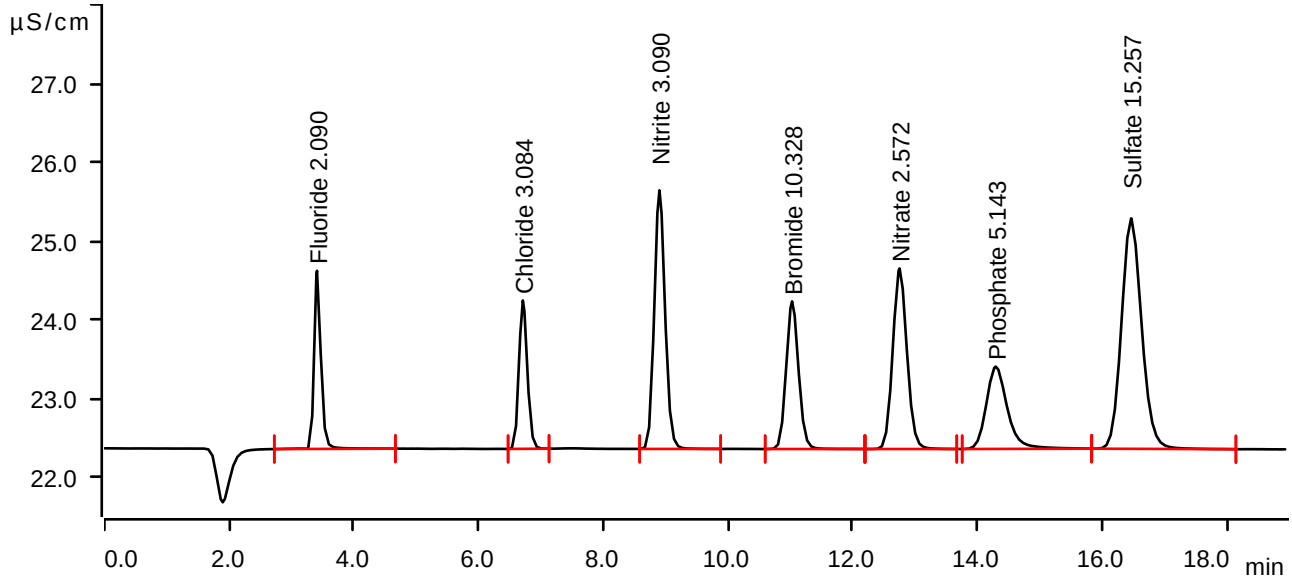
## Sample data

| | |
|---|---|
| Ident | LB136191BSW2 |
| Sample type | Check standard 1 |
| Determination start | 2025-06-18 11:36:58 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

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

## Anions




| Peak number | Retention time min | Area (µS/cm) x min | Height µS/cm | Concentration ppm | Component name |
|---|---|---|---|---|---|
| 1 | 3.410 | 0.2888 | 2.260 | 2.090 | Fluoride |
| 2 | 6.710 | 0.2932 | 1.883 | 3.084 | Chloride |
| 3 | 8.900 | 0.6583 | 3.281 | 3.090 | Nitrite |
| 4 | 11.027 | 0.4308 | 1.873 | 10.328 | Bromide |
| 5 | 12.750 | 0.6040 | 2.291 | 2.572 | Nitrate |
| 6 | 14.292 | 0.4093 | 1.045 | 5.143 | Phosphate |
| 7 | 16.462 | 1.0946 | 2.924 | 15.257 | Sulfate |

Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

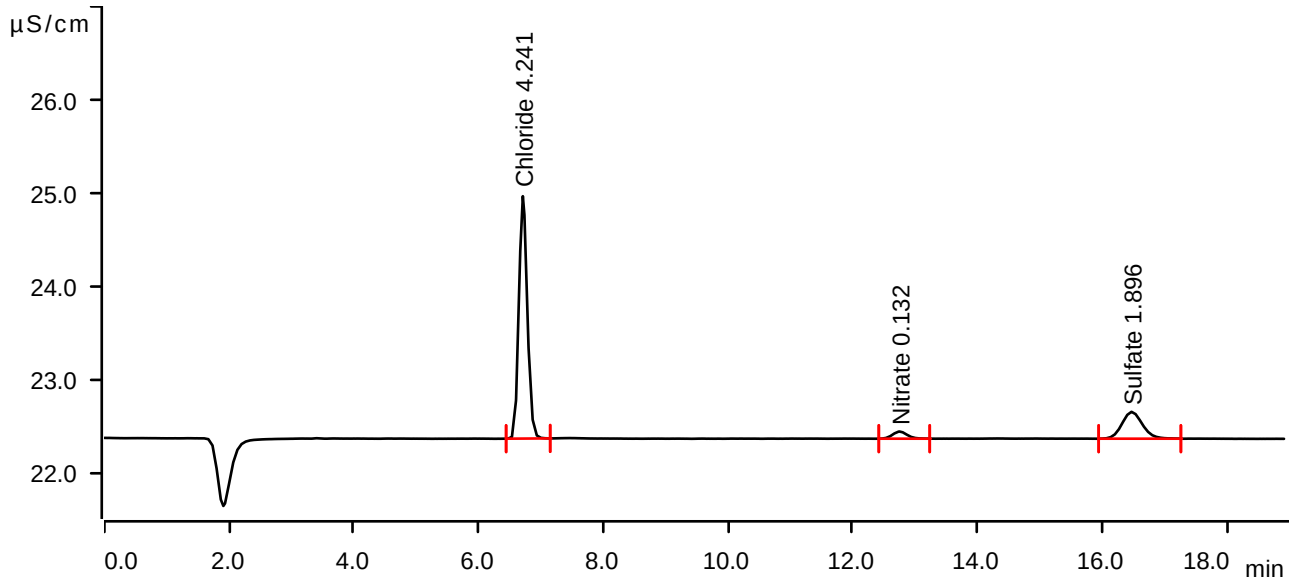
## Sample data

| | |
|---|---|
| Ident | Q2344-01DLX20 |
| Sample type | Sample |
| Determination start | 2025-06-18 11:58:31 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 12.22 | 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 | 6.710 | 0.4048 | 2.602 | 4.241 | Chloride |
| 2 | 12.748 | 0.0206 | 0.077 | 0.132 | Nitrate |
| 3 | 16.470 | 0.1094 | 0.288 | 1.896 | Sulfate |



Metrohm

Reviewed By:Sohi
On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

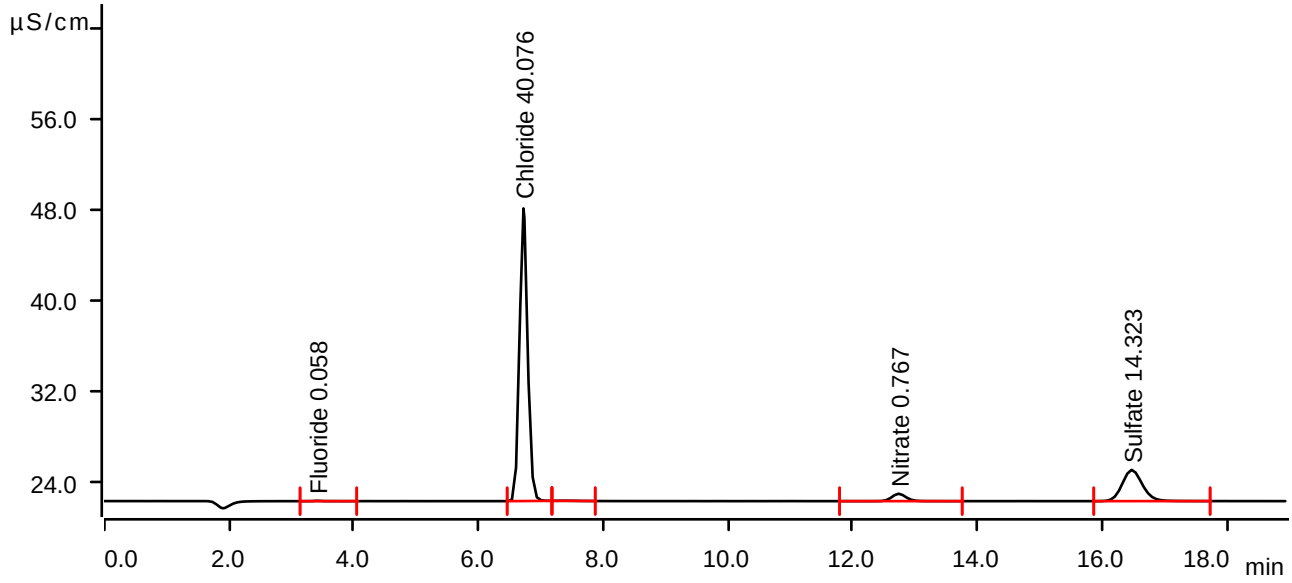
## Sample data

| | |
|---|---|
| Ident | Q2344-03DLX5 |
| Sample type | Sample |
| Determination start | 2025-06-18 12:20:04 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 12.27 | 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 | 3.410 | 0.0053 | 0.034 | 0.058 | Fluoride |
| 2 | 6.720 | 3.8617 | 25.706 | 40.076 | Chloride |
| 3 | 7.383 | 0.0055 | 0.016 | invalid | |
| 4 | 12.735 | 0.1725 | 0.648 | 0.767 | Nitrate |
| 5 | 16.473 | 1.0257 | 2.737 | 14.323 | Sulfate |

Reviewed By:Sohi
On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

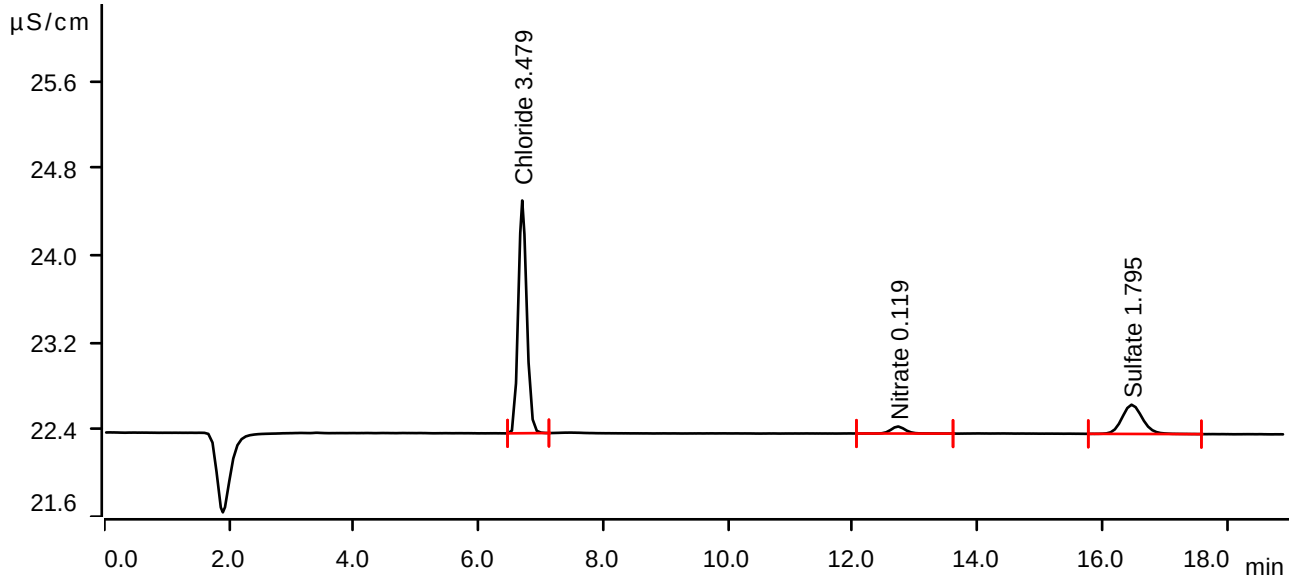
## Sample data

| | |
|---|---|
| Ident | Q2344-03DL2X50 |
| Sample type | Sample |
| Determination start | 2025-06-18 12:41:37 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 12.27 | 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 | 6.700 | 0.3313 | 2.135 | 3.479 | Chloride |
| 2 | 12.725 | 0.0176 | 0.064 | 0.119 | Nitrate |
| 3 | 16.470 | 0.1020 | 0.268 | 1.795 | Sulfate |

Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

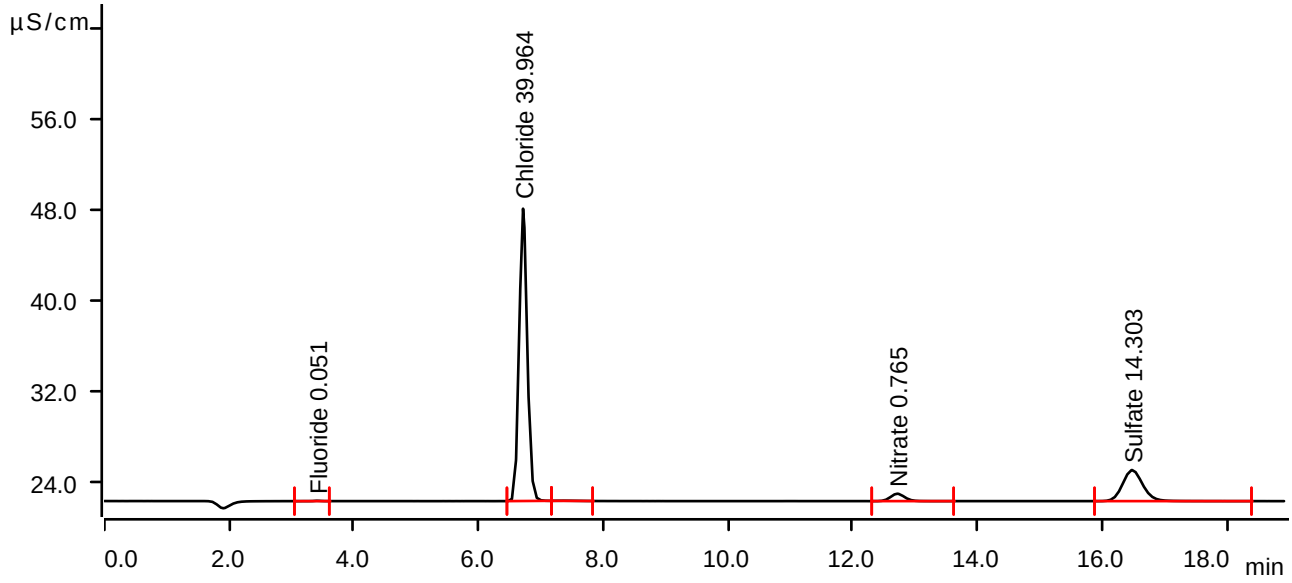
## Sample data

| | |
|---|---|
| Ident | Q2344-05DLX5 |
| Sample type | Sample |
| Determination start | 2025-06-18 13:03:11 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 12.22 | 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 | 3.413 | 0.0043 | 0.032 | 0.051 | Fluoride |
| 2 | 6.713 | 3.8509 | 25.679 | 39.964 | Chloride |
| 3 | 7.353 | 0.0053 | 0.015 | invalid | |
| 4 | 12.713 | 0.1720 | 0.650 | 0.765 | Nitrate |
| 5 | 16.478 | 1.0242 | 2.730 | 14.303 | Sulfate |

Reviewed By:Sohi
On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

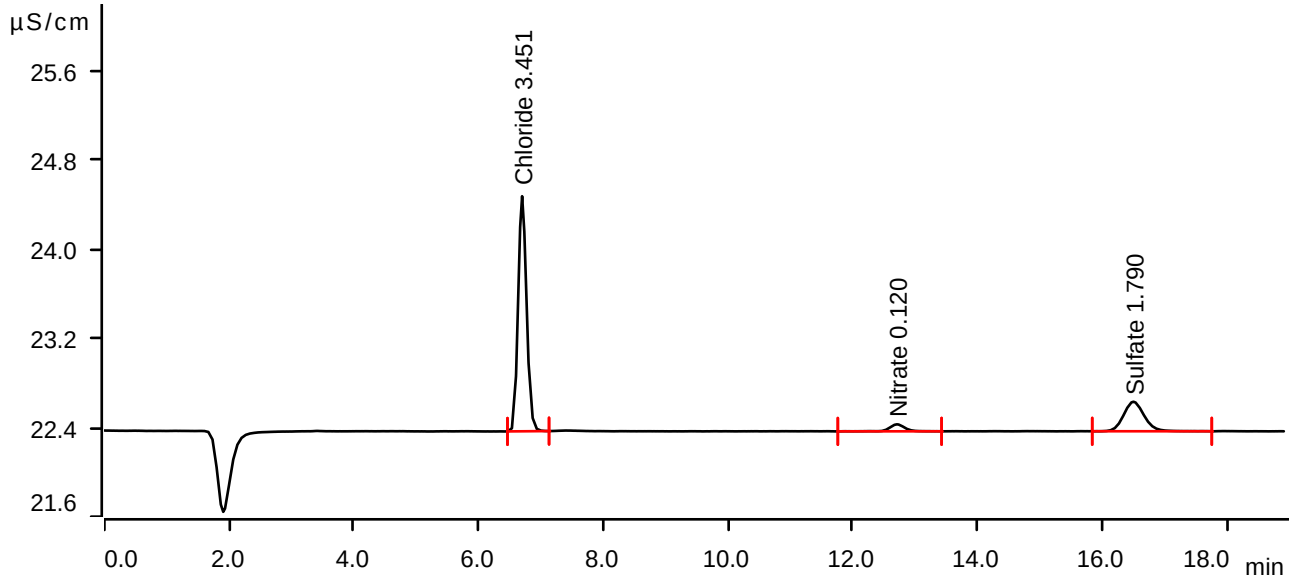
## Sample data

| | |
|---|---|
| Ident | Q2344-05DL2X50 |
| Sample type | Sample |
| Determination start | 2025-06-18 13:24:47 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 12.22 | 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 | 6.698 | 0.3285 | 2.111 | 3.451 | Chloride |
| 2 | 12.707 | 0.0178 | 0.063 | 0.120 | Nitrate |
| 3 | 16.500 | 0.1016 | 0.265 | 1.790 | Sulfate |

Reviewed By:Sohi
On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

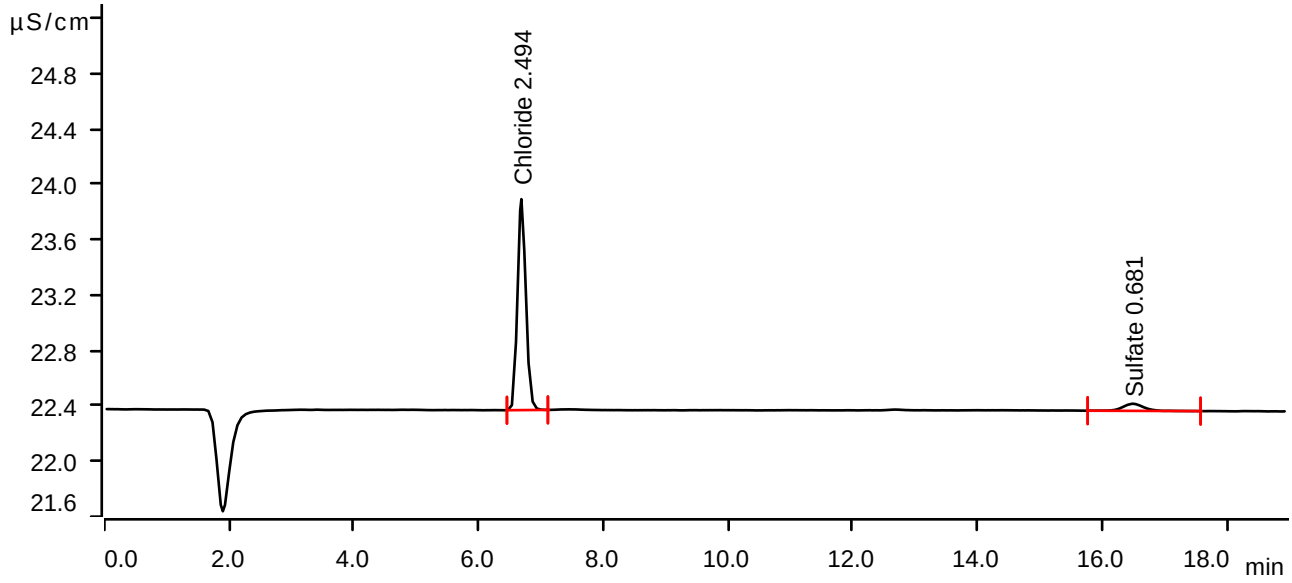
## Sample data

| | |
|---|---|
| Ident | Q2344-07DLX100 |
| Sample type | Sample |
| Determination start | 2025-06-18 13:46:21 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 12.11 | 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 | 6.687 | 0.2363 | 1.524 | 2.494 | Chloride |
| 2 | 16.490 | 0.0198 | 0.051 | 0.681 | Sulfate |



Metrohm

Reviewed By:Sohi
On:6/19/2025 9:14
AM
Inst Id :IC-1
LB :LB136191

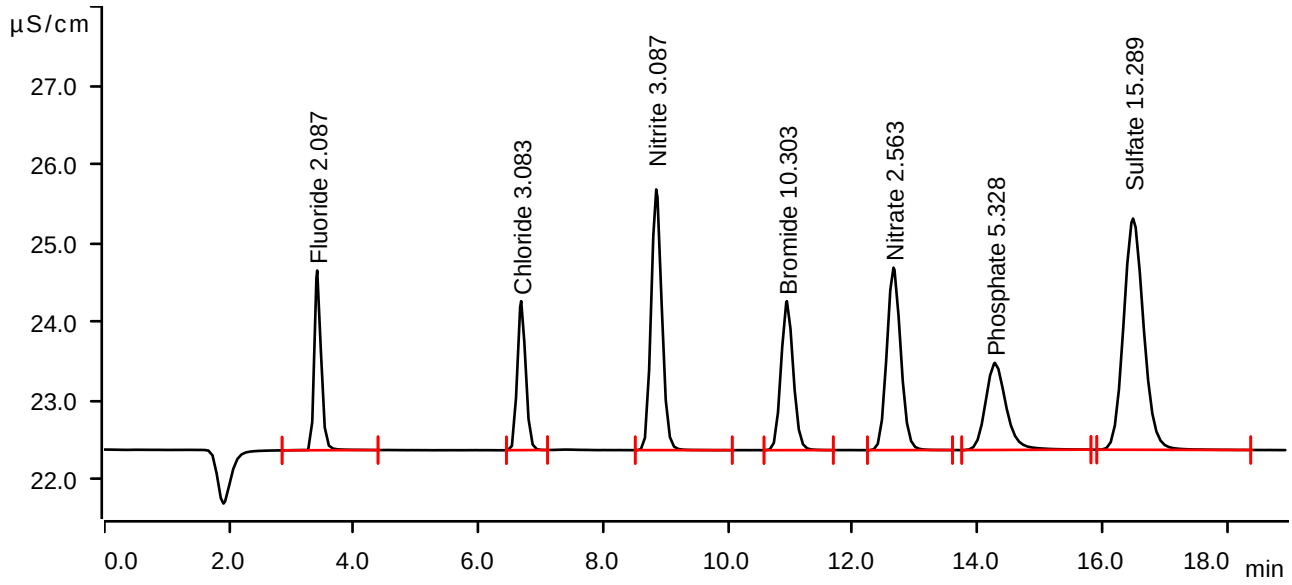
## Sample data

| | |
|---|---|
| Ident | CCV |
| Sample type | Check standard 1 |
| Determination start | 2025-06-18 14:07:55 UTC-4 |
| Method | IC1-052225 |
| Operator | |

## Anions

| | | |
|---|---|---|
| Data source | Conductivity detector 1 (Eco IC 1) | |
| Channel | Conductivity | |
| Recording time | 19.0 | min |
| Integration | Automatically | |
| Column type | Metrosep A Supp 19 - 150/4.0 | |
| Eluent composition | not defined | |
| Flow | 0.700 | mL/min |
| Maximum flow monitored | yes | |
| Pressure | 12.11 | 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 | 3.413 | 0.2883 | 2.280 | 2.087 | Fluoride |
| 2 | 6.683 | 0.2931 | 1.890 | 3.083 | Chloride |
| 3 | 8.848 | 0.6577 | 3.308 | 3.087 | Nitrite |
| 4 | 10.943 | 0.4297 | 1.891 | 10.303 | Bromide |
| 5 | 12.652 | 0.6018 | 2.315 | 2.563 | Nitrate |
| 6 | 14.278 | 0.4242 | 1.105 | 5.328 | Phosphate |
| 7 | 16.493 | 1.0969 | 2.934 | 15.289 | Sulfate |

Reviewed By:Sohi
On:6/19/2025 9:14 AM
Inst Id :IC-1
LB :LB136191

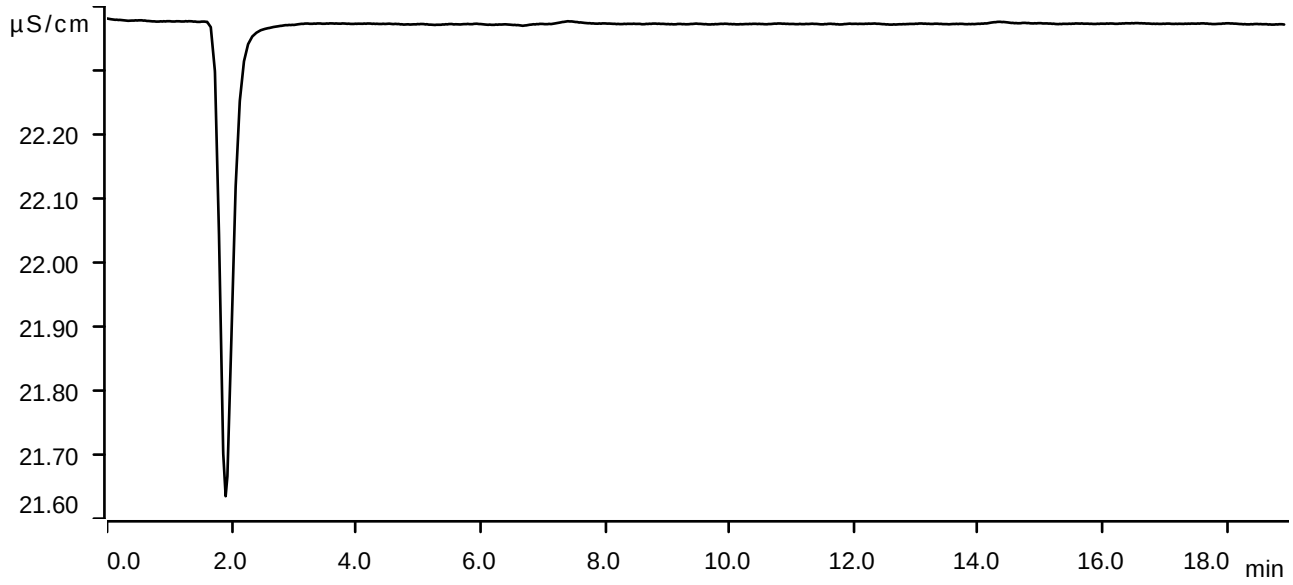
## Sample data

| | | |
|---|---|---|
| Ident | CCB | |
| Sample type | Sample | |
| Determination start | 2025-06-18 14:29:25 UTC-4 | |
| Method | IC1-052225 | |
| Operator | | |

## Anions

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

## Anions



# TOTAL SUSPENDED SOLIDS - SM2540D

**SUPERVISOR:** Iwona
**ANALYST:** jignesh
**Date:** 06/18/2025
**Run Number:** LB136202
**BalanceID:** WC SC-6
**OvenID:** WC OVEN-1
**FilterID:** 17416528
**ThermometerID:** WET OVEN#1

| | | | | | |
|---|---|---|---|---|---|
| **TEMP1 IN:** | 103 °C | 06/18/2025 12:00 | **TEMP1 OUT:** | 103 °C | 06/18/2025 13:00 |
| **TEMP2 IN:** | 104 °C | 06/18/2025 13:30 | **TEMP2 OUT:** | 103 °C | 06/18/2025 14:30 |
| **TEMP3 IN:** | 104 °C | 06/18/2025 18:00 | **TEMP3 OUT:** | 103 °C | 06/18/2025 19:30 |
| **TEMP4 IN:** | 104 °C | 06/18/2025 20:00 | **TEMP4 OUT:** | 103 °C | 06/18/2025 20:40 |

| Dish # | Lab ID | Client ID | Empty Dish Weight (g) | Final Empty Dish Weight (g) | Sample Volume (ml) | 1st Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g) | 2nd Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g) | Final Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g) | Weight (g) | Result mg/L |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LB136202BL | LB136202BL | 1.5893 | 1.5893 | 100 | 1.5894 | 1.5894 | 1.5894 | 0.0001 | 1 |
| 2 | LB136202BS | LB136202BS | 1.4733 | 1.4733 | 100 | 1.5266 | 1.5266 | 1.5266 | 0.0533 | 533 |
| 3 | Q2316-02 | RW8-SP303-20250612 | 1.4984 | 1.4984 | 700 | 1.4987 | 1.4987 | 1.4987 | 0.0003 | 0.4 |
| 4 | Q2344-01 | MW-1 | 1.3988 | 1.3988 | 2000 | 1.3990 | 1.3990 | 1.3990 | 0.0002 | 0.1 |
| 5 | Q2344-03 | MW-3 | 1.4107 | 1.4107 | 2000 | 1.4112 | 1.4112 | 1.4112 | 0.0005 | 0.3 |
| 6 | Q2344-05 | MW-4 | 1.4901 | 1.4901 | 2000 | 1.4904 | 1.4904 | 1.4904 | 0.0003 | 0.2 |
| 7 | Q2344-07 | MW-2 | 1.4124 | 1.4124 | 1000 | 1.4240 | 1.4240 | 1.4240 | 0.0116 | 11.6 |
| 8 | Q2344-07DUP | MW-2DUP | 1.4260 | 1.4260 | 1000 | 1.4381 | 1.4381 | 1.4381 | 0.0121 | 12.1 |
| 9 | Q2348-01 | 001-WILLETS-PT-BLVD(MAY) | 1.4884 | 1.4884 | 100 | 1.5147 | 1.5147 | 1.5147 | 0.0263 | 263 |
| 10 | Q2348-02 | 002-35TH-AVE(MAY) | 1.4906 | 1.4906 | 200 | 1.5202 | 1.5202 | 1.5202 | 0.0296 | 148 |
| 11 | Q2360-02 | COMP | 1.4812 | 1.4812 | 200 | 1.5604 | 1.5604 | 1.5604 | 0.0792 | 396 |

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

**Weight (g) =** C - B

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

# WORKLIST(Hardcopy Internal Chain)

LB136202

**WorkList Name :** TSS Q2344 **WorkList ID :** 190260 **Department :** Wet-Chemistry **Date :** 06-18-2025 10:18:00

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q2316-02 C | RW8-SP303-20250612 | Water | TSS | Cool 4 deg C | TETR06 | D41 | 06/12/2025 | SM2540 D |
| Q2344-01 F, E | MW-1 | Water | TSS | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2540 D |
| Q2344-03 F, E | MW-3 | Water | TSS | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2540 D |
| Q2344-05 F, E | MW-4 | Water | TSS | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2540 D |
| Q2344-07 F, E | MW-2 | Water | TSS | Cool 4 deg C | LOCK01 | D31 | 06/16/2025 | SM2540 D |
| Q2348-01 B | 001-WILLETS-PT-BLVD(MAY) | Water | TSS | Cool 4 deg C | TULL01 | D41 | 06/17/2025 | SM2540 D |
| Q2348-02 B | 002-35TH-AVE(MAY) | Water | TSS | Cool 4 deg C | TULL01 | D41 | 06/17/2025 | SM2540 D |
| Q2360-02 A | COMP | Water | TSS | Cool 4 deg C | ARAM01 | D41 | 06/18/2025 | SM2540 D |

**Date/Time** 06/18/25 16:45

**Raw Sample Received by:** WC

**Raw Sample Relinquished by:** JDCSM

**Date/Time** 06/18/25 1914.30

**Raw Sample Received by:** JDCSM

**Raw Sample Relinquished by:**



Reviewed By:Iwona On:6/19/2025 12:53:46 PM Inst Id :WC SC-3 LB :LB136202

Reviewed By:Sohil
On:6/20/2025 4:09:21 PM
Inst Id :Titroline Alpha Titrator

# *TitriSoft Report*

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

06/19/2025

6/19/25
12

Reviewed By:Iwona
On:6/25/2025 9:31:06 AM
Inst Id :Konelab 20
LB :LB136242

LB136

Test results | Aquakem 7.2AQ1 | Page: 1

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

Reviewed by : RM | Instrument ID : Konelab

6/24/2025 11:24

Test: Ammonia-N

| Sample Id | Result | Dil. 1 + | Response | Errors |
|---|---|---|---|---|
| ICV1 | 0.970 | 0.0 | 0.245 | |
| ICB1 | 0.014 | 0.0 | 0.048 | |
| CCV1 | 0.969 | 0.0 | 0.245 | |
| CCB1 | 0.008 | 0.0 | 0.046 | |
| RL CHECK | 0.095 | 0.0 | 0.064 | 95% (50-150) 06/24/2025 RM |
| PB168578BL | -0.002 | 0.0 | 0.044 | |
| PB168578BS | 0.951 | 0.0 | 0.241 | |
| Q2344-01 | 0.008 | 0.0 | 0.046 | |
| Q2344-03 | 0.531 | 0.0 | 0.154 | |
| Q2344-05 | 0.553 | 0.0 | 0.159 | |
| Q2344-07 | 7.236 | 0.0 | 1.537 | Test limit high |
| Q2385-01 | 0.029 | 0.0 | 0.051 | |
| Q2385-01DUP | 0.025 | 0.0 | 0.050 | |
| Q2385-01MS | 0.948 | 0.0 | 0.240 | |
| CCV2 | 1.001 | 0.0 | 0.251 | |
| CCB2 | 0.003 | 0.0 | 0.045 | |
| Q2385-01MSD | 0.957 | 0.0 | 0.242 | |
| CCV3 | 0.907 | 0.0 | 0.232 | |
| CCB3 | -0.003 | 0.0 | 0.044 | |
| Q2344-07DLX5 | 1.402 | 0.0 | 0.334 | |
| CCV4 | 0.990 | 0.0 | 0.249 | |
| CCB4 | -0.003 | 0.0 | 0.044 | |

| | |
|---|---|
| N | 22 |
| Mean | 0.799 |
| SD | 1.5160 |
| CV% | 189.64 |

Reviewed By:Iwona
On:6/25/2025 9:31:06 AM
Inst Id :Konelab 20
LB :LB136242

Aquakem v. 7.2AQ1
Results from time period:
Tue Jun 24 09:02:56 2025
Tue Jun 24 11:06:30 2025

| Sample Id | Sam/Ctr/cA | Test short r | Test type | Result | Result unit | Result date and time | Stat |
|---|---|---|---|---|---|---|---|
| 0.0PPM | A | Ammonia-N | P | 0.013 | mg/l | 6/24/2025 9:02:56 | |
| 0.1PPM | A | Ammonia-N | P | 0.1196 | mg/l | 6/24/2025 9:02:57 | |
| 0.2PPM | A | Ammonia-N | P | 0.196 | mg/l | 6/24/2025 9:02:58 | |
| 0.4PPM | A | Ammonia-N | P | 0.397 | mg/l | 6/24/2025 9:02:59 | |
| 1.0PPM | A | Ammonia-N | P | 0.9391 | mg/l | 6/24/2025 9:03:00 | |
| 1.3PPM | A | Ammonia-N | P | 1.3482 | mg/l | 6/24/2025 9:03:01 | |
| 2.0PPM | A | Ammonia-N | P | 2.0206 | mg/l | 6/24/2025 9:03:02 | |
| ICV1 | S | Ammonia-N | P | 0.9701 | mg/l | 6/24/2025 9:40:05 | |
| ICB1 | S | Ammonia-N | P | 0.0141 | mg/l | 6/24/2025 9:40:08 | |
| CCV1 | S | Ammonia-N | P | 0.9691 | mg/l | 6/24/2025 9:40:09 | |
| CCB1 | S | Ammonia-N | P | 0.0075 | mg/l | 6/24/2025 9:40:11 | |
| RL CHECK | S | Ammonia-N | P | 0.095 | mg/l | 6/24/2025 9:40:16 | |
| PB168578BL | S | Ammonia-N | P | -0.0023 | mg/l | 6/24/2025 9:50:49 | |
| PB168578BS | S | Ammonia-N | P | 0.9509 | mg/l | 6/24/2025 9:50:51 | |
| Q2344-01 | S | Ammonia-N | P | 0.0079 | mg/l | 6/24/2025 9:50:54 | |
| Q2344-03 | S | Ammonia-N | P | 0.5306 | mg/l | 6/24/2025 9:50:59 | |
| Q2344-05 | S | Ammonia-N | P | 0.5526 | mg/l | 6/24/2025 9:51:00 | |
| Q2344-07 | S | Ammonia-N | P | 7.236 | mg/l | 6/24/2025 10:01:31 | |
| Q2385-01 | S | Ammonia-N | P | 0.0291 | mg/l | 6/24/2025 10:01:36 | |
| Q2385-01DUP | S | Ammonia-N | P | 0.0255 | mg/l | 6/24/2025 10:01:37 | |
| Q2385-01MS | S | Ammonia-N | P | 0.9479 | mg/l | 6/24/2025 10:01:39 | |
| CCV2 | S | Ammonia-N | P | 1.0014 | mg/l | 6/24/2025 10:07:00 | |
| CCB2 | S | Ammonia-N | P | 0.0025 | mg/l | 6/24/2025 10:07:02 | |
| Q2385-01MSD | S | Ammonia-N | P | 0.9569 | mg/l | 6/24/2025 10:44:56 | |
| CCV3 | S | Ammonia-N | P | 0.9065 | mg/l | 6/24/2025 10:45:00 | |
| CCB3 | S | Ammonia-N | P | -0.0028 | mg/l | 6/24/2025 10:45:01 | |
| Q2344-07DLX5 | S | Ammonia-N | P | 1.4017 | mg/l | 6/24/2025 10:45:05 | |
| CCV4 | S | Ammonia-N | P | 0.9903 | mg/l | 6/24/2025 10:50:24 | |
| CCB4 | S | Ammonia-N | P | -0.0026 | mg/l | 6/24/2025 10:50:25 | |

Reviewed By:Iwona
On:6/25/2025 9:31:06 AM
Inst Id :Konelab 20
LB :LB136242

Calibration results  Aquakem 7.2AQ1  Page:

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

Reviewed by : RM  Instrument ID : Konelab

6/24/2025 9:08

---

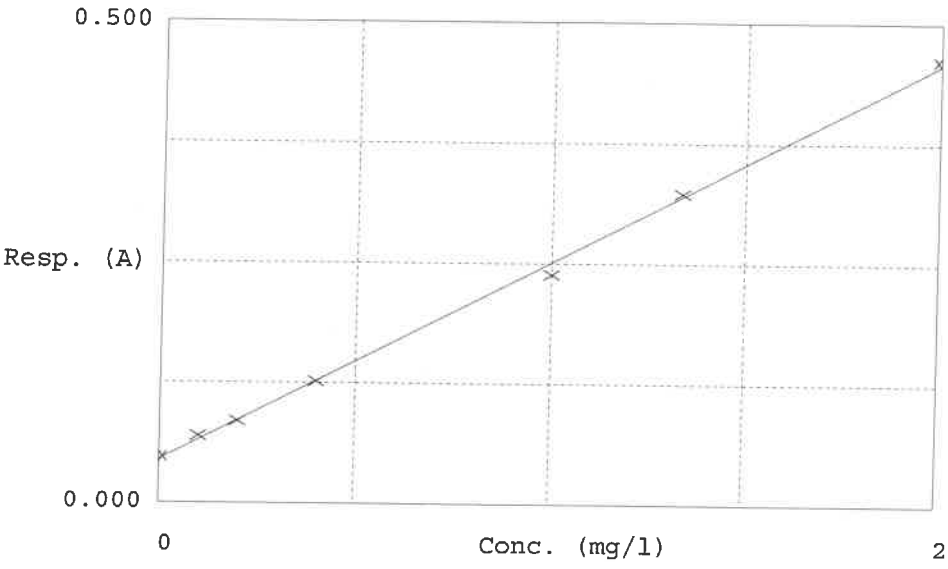
Test  Ammonia-N

Accepted  6/24/2025  9:08

Factor  4.85
Bias  0.045

Coeff. of det.  0.998538

Errors




| | Calibrator | Response | Calc. con. | Conc. | Errors |
|---|---|---|---|---|---|
| 1 | 0.00PPM | 0.047 | 0.0130 | 0.0000 | |
| 2 | NH3-2PPM | 0.069 | 0.1196 | 0.1000 | 19.6 |
| 3 | NH3-2PPM | 0.085 | 0.1960 | 0.2000 | -2.0 |
| 4 | NH3-2PPM | 0.127 | 0.3970 | 0.4000 | -0.8 |
| 5 | NH3-2PPM | 0.238 | 0.9391 | 1.0000 | -6.1 |
| 6 | NH3-2PPM | 0.323 | 1.3482 | 1.3333 | 3.7 |
| 7 | NH3-2PPM | 0.461 | 2.0206 | 2.0000 | 1.0 |

06/24/2025
RM

Reviewed By:Iwona
On:6/25/2025 9:30:59 AM
Inst Id :Konelab 20
LB :LB136244

LB136244

Test results | Aquakem 7.2AQ1 | Page: 1

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

Reviewed by : RM | Instrument ID : Konelab

6/24/2025 13:12

Test: TKN-NH3

| Sample Id | Result | Dil. 1 + | Response | Errors |
|---|---|---|---|---|
| ICV1 | 4.895 | 0.0 | 1.072 | |
| ICB1 | 0.067 | 0.0 | 0.049 | |
| CCV1 | 4.741 | 0.0 | 1.039 | |
| CCB1 | 0.057 | 0.0 | 0.046 | |
| RL CHECK | 0.472 | 0.0 | 0.134 | |
| PB168588BL | 0.066 | 0.0 | 0.048 | |
| PB168588BS | 4.861 | 0.0 | 1.065 | |
| Q2344-01 | 0.360 | 0.0 | 0.111 | |
| Q2344-01DUP | 0.361 | 0.0 | 0.111 | |
| Q2344-01MS | 4.980 | 0.0 | 1.090 | |
| Q2344-01MSD | 4.793 | 0.0 | 1.050 | |
| Q2344-03 | 0.944 | 0.0 | 0.234 | |
| Q2344-05 | 0.982 | 0.0 | 0.242 | |
| Q2344-07 | 7.701 | 0.0 | 1.667 | |
| CCV2 | 4.768 | 0.0 | 1.045 | |
| CCB2 | 0.057 | 0.0 | 0.046 | |
| Q2385-01 | 0.363 | 0.0 | 0.111 | |
| CCV3 | 4.895 | 0.0 | 1.072 | |
| CCB3 | 0.054 | 0.0 | 0.046 | |

06/24/2025 RM

94% (50-150)
06/24/2025 RM

| | |
|---|---|
| N | 19 |
| Mean | 2.390 |
| SD | 2.5579 |
| CV% | 107.01 |

Reviewed By:Iwona
On:6/25/2025 9:30:59 AM
Inst Id :Konelab 20
LB :LB136244

Aquakem v. 7.2AQ1
Results from time period:
Tue Jun 24 11:51:59 2025
Tue Jun 24 13:06:11 2025

| Sample Id | Sam/Ctr/cA | Test short r | Test type | Result | Result unit | Result date and time | Stat |
|---|---|---|---|---|---|---|---|
| 0.0PPM | A | TKN-NH3 | P | 0.0887 | mg/l | 6/24/2025 11:51:59 | |
| 0.5PPM | A | TKN-NH3 | P | 0.5307 | mg/l | 6/24/2025 11:52:00 | |
| 1.0PPM | A | TKN-NH3 | P | 0.9987 | mg/l | 6/24/2025 11:52:01 | |
| 2.5PPM | A | TKN-NH3 | P | 2.3697 | mg/l | 6/24/2025 11:52:02 | |
| 5.0PPM | A | TKN-NH3 | P | 5.0141 | mg/l | 6/24/2025 11:52:03 | |
| 6.7PPM | A | TKN-NH3 | P | 6.5886 | mg/l | 6/24/2025 11:52:04 | |
| 10.0PPM | A | TKN-NH3 | P | 10.0762 | mg/l | 6/24/2025 11:52:05 | |
| ICV1 | S | TKN-NH3 | P | 4.8955 | mg/l | 6/24/2025 12:36:15 | |
| ICB1 | S | TKN-NH3 | P | 0.0674 | mg/l | 6/24/2025 12:36:17 | |
| CCV1 | S | TKN-NH3 | P | 4.7407 | mg/l | 6/24/2025 12:36:19 | |
| CCB1 | S | TKN-NH3 | P | 0.0574 | mg/l | 6/24/2025 12:36:22 | |
| RL CHECK | S | TKN-NH3 | P | 0.4722 | mg/l | 6/24/2025 12:36:23 | |
| PB168588BL | S | TKN-NH3 | P | 0.0655 | mg/l | 6/24/2025 12:46:59 | |
| PB168588BS | S | TKN-NH3 | P | 4.861 | mg/l | 6/24/2025 12:47:01 | |
| Q2344-01 | S | TKN-NH3 | P | 0.3601 | mg/l | 6/24/2025 12:47:03 | |
| Q2344-01DUP | S | TKN-NH3 | P | 0.3606 | mg/l | 6/24/2025 12:47:05 | |
| Q2344-01MS | S | TKN-NH3 | P | 4.9802 | mg/l | 6/24/2025 12:47:07 | |
| Q2344-01MSD | S | TKN-NH3 | P | 4.7931 | mg/l | 6/24/2025 12:47:08 | |
| Q2344-03 | S | TKN-NH3 | P | 0.944 | mg/l | 6/24/2025 12:47:09 | |
| Q2344-05 | S | TKN-NH3 | P | 0.9816 | mg/l | 6/24/2025 12:47:10 | |
| Q2344-07 | S | TKN-NH3 | P | 7.7012 | mg/l | 6/24/2025 12:57:40 | |
| CCV2 | S | TKN-NH3 | P | 4.7683 | mg/l | 6/24/2025 12:57:42 | |
| CCB2 | S | TKN-NH3 | P | 0.0565 | mg/l | 6/24/2025 12:57:44 | |
| Q2385-01 | S | TKN-NH3 | P | 0.3629 | mg/l | 6/24/2025 12:57:45 | |
| CCV3 | S | TKN-NH3 | P | 4.8951 | mg/l | 6/24/2025 12:57:48 | |
| CCB3 | S | TKN-NH3 | P | 0.0541 | mg/l | 6/24/2025 12:57:51 | |

Reviewed By:Iwona
On:6/25/2025 9:30:59 AM
Inst Id :Konelab 20
LB :LB136244

Calibration results — Aquakem 7.2AQ1 — 

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

Reviewed by : RM

6/24/2025 11:56 — Instrument ID : Konelab

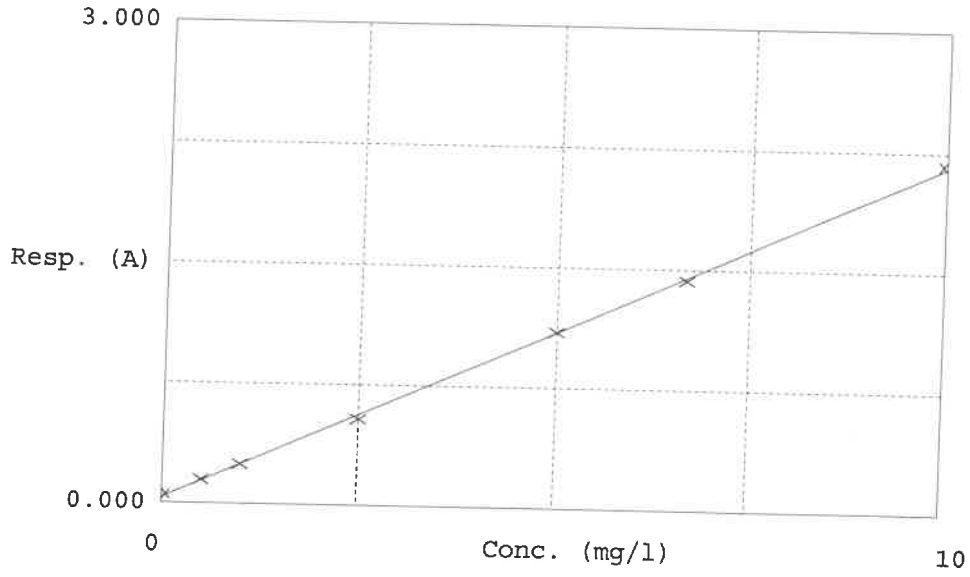
Test TKN-NH3

Accepted 6/24/2025 11:56

Factor 4.717
Bias 0.034

Coeff. of det. 0.999543

Errors




| | Calibrator | Response | Calc. con. | Conc. | Errors |
|---|---|---|---|---|---|
| 1 | 0.00PPM | 0.053 | 0.0887 | 0.0000 | |
| 2 | TKN-10 | 0.147 | 0.5307 | 0.5000 | 6.1 |
| 3 | TKN-10 | 0.246 | 0.9987 | 1.0000 | -0.1 |
| 4 | TKN-10 | 0.537 | 2.3697 | 2.5000 | -5.2 |
| 5 | TKN-10 | 1.097 | 5.0141 | 5.0000 | 0.3 |
| 6 | TKN-10 | 1.431 | 6.5886 | 6.6667 | -1.7 |
| 7 | TKN-10 | 2.170 | 10.0762 | 10.0000 | 0.8 |

06/24/2025
RM

Alliance TECHNICAL GROUP

**Water Ammonia Preparation Sheet**

PB168578

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

**SDG No :** N/A

**Matrix :** WATER

**Pippete ID :** WC

**Balance ID :** N/A

**Hood ID :** HOOD#2

**Block ID :** WC-DIST-BLOCK-1

**Weigh By :** RM

**Start Digest Date:** 06/23/2025 **Time :** 08:50 **Temp :** 150 °C

**End Digest Date:** 06/23/2025 **Time :** 09:50 **Temp :** 158 °C

I believe: 06/23/2025 10:15 150C; 06/23/2025 11:15 160C

**Digestion tube ID :** M5595

**Filter paper ID :** N/A

**pH Meter ID :** N/A

**Block Thermometer ID :** WC CYANIDE

**Prep Technician Signature:** RM

**Supervisor Signature:** 12

| Standared Name | MLS USED | STD REF. # FROM LOG |
|---|---|---|
| LCSW | 1.0ML | WP113449 |
| MS/MSD SPIKE SOL. | 1.0ML | WP113450 |
| PBW | 50.0ML | W3112 |
| RL CHECK | 0.1ML | WP113450 |
| N/A | N/A | N/A |

| Chemical Used | ML/SAMPLE USED | Lot Number |
|---|---|---|
| BORATE BUFFER | 2.5ML | WP111325 |
| NAOH 6N | 0.5-2.0ML | WP111318 |
| H2SO4 0.04N | 5.0ML | WP112828 |
| pH strip-Ammonia | N/A | W3133 |
| KI-starch paper | N/A | W3155 |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |

**Extraction Conformance/Non-Conformance Comments:**

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

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|---|---|---|
| 06/23/2025 11:30 | RM CWC | RM CWC |
| | **Preparation Group** | **Analysis Group** |

Alliance TECHNICAL GROUP

**Water Ammonia Preparation Sheet**

**PB168578**

| Lab Sample ID | Client Sample ID | Initial Vol (ml) | Final Vol (ml) | pH | Sulfide | Oxidizing | Nitrate/ Nitrite | Comment | Prep Pos |
|---|---|---|---|---|---|---|---|---|---|
| PB168578BL | PBW578 | 50 | 50 | <2 | N/A | Negative | N/A | AFTER ADDING 6N NAOH PH IS 9.5 | N/A |
| PB168578BS | LCS578 | 50 | 50 | <2 | N/A | Negative | N/A | AFTER ADDING 6N NAOH PH IS 9.5 | N/A |
| Q2344-01 | MW-1 | 50 | 50 | <2 | N/A | Negative | N/A | AFTER ADDING 6N NAOH PH IS 9.5 | N/A |
| Q2344-03 | MW-3 | 50 | 50 | <2 | N/A | Negative | N/A | AFTER ADDING 6N NAOH PH IS 9.5 | N/A |
| Q2344-05 | MW-4 | 50 | 50 | <2 | N/A | Negative | N/A | AFTER ADDING 6N NAOH PH IS 9.5 | N/A |
| Q2344-07 | MW-2 | 50 | 50 | <2 | N/A | Negative | N/A | AFTER ADDING 6N NAOH PH IS 9.5 | N/A |
| Q2385-01 | A5311 | 50 | 50 | <2 | N/A | Negative | N/A | AFTER ADDING 6N NAOH PH IS 9.5 | N/A |
| Q2385-01DUP | A5311DUP | 50 | 50 | <2 | N/A | Negative | N/A | AFTER ADDING 6N NAOH PH IS 9.5 | N/A |
| Q2385-01MS | A5311MS | 50 | 50 | <2 | N/A | Negative | N/A | AFTER ADDING 6N NAOH PH IS 9.5 | N/A |
| Q2385-01MSD | A5311MSD | 50 | 50 | <2 | N/A | Negative | N/A | AFTER ADDING 6N NAOH PH IS 9.5 | N/A |

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** ammonia-6*23 **WorkList ID :** 190312 **Department :** Distillation **Date :** 06-23-2025 08:12:17

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q2344-01 | MW-1 | Water | Ammonia | Conc H2SO4 to pH < 2 | LOCK01 | D31 | 06/16/2025 | SM4500-NH3 |
| Q2344-03 | MW-3 | Water | Ammonia | Conc H2SO4 to pH < 2 | LOCK01 | D31 | 06/16/2025 | SM4500-NH3 |
| Q2344-05 | MW-4 | Water | Ammonia | Conc H2SO4 to pH < 2 | LOCK01 | D31 | 06/16/2025 | SM4500-NH3 |
| Q2344-07 | MW-2 | Water | Ammonia | Conc H2SO4 to pH < 2 | LOCK01 | D31 | 06/16/2025 | SM4500-NH3 |
| Q2385-01 | A5311 | Water | Ammonia | Conc H2SO4 to pH < 2 | PSEG03 | D51 | 06/20/2025 | SM4500-NH3 |

**Date/Time** 06/23/2025 08.15
**Raw Sample Received by:** RM (WC)
**Raw Sample Relinquished by:** ~~[illegible]~~ (WC)



**Date/Time** 06/23/2025 10.00
**Raw Sample Received by:** ~~[illegible]~~ (WC)
**Raw Sample Relinquished by:** RM (WC)

Alliance TECHNICAL GROUP

**Water TKN Preparation Sheet**

PB168588

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

**SDG No :** N/A

**Matrix :** WATER

**Pippete ID :** WC

**Balance ID :** N/A

**Hood ID :** HOOD#2&3

**Block ID :** WC-DIST-BLOCK-1

**Weigh By :** N/A

**Start Digest Date:** 06/23/2025 **Time :** 09:40 **Temp :** 380 °C

**End Digest Date:** 06/23/2025 **Time :** 11:10 **Temp :** 385 °C

**Start Distillation Date:** 06/23/2025 **Time :** 11:45 **Temp :** 150 °C

**End Distillation Date:** 06/23/2025 **Time :** 12:45 **Temp :** 157 °C

**Digestion tube ID :** M5595

**Filter paper ID :** N/A

**pH Meter ID :** N/A

**Block Thermometer ID :** Therm#2(2179)

**Prep Technician Signature:** RM

**Supervisor Signature:** 12

| Standared Name | MLS USED | STD REF. # FROM LOG |
|---|---|---|
| TKN CAL STD | 50.0ML | WP113625 |
| TKN CCV STD | 50.0ML | WP113626 |
| TKN ICV STD | 50.0ML | WP113627 |
| TKN LCS STD | 50.0ML | WP113628 |
| MS/MSD SPIKE SOL. | 0.25ML | WP112611 |

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

**Extraction Conformance/Non-Conformance Comments:**

RL CHECK 10ML FROM WP113626 , ALL GLASSWEAR ARE STEAMED OUT AND THERE WERE NO TRACE OF AMMONIA USING NESLER REAGENT WP111604.

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|---|---|---|
| 06/23/2025 14.35 | RM (WC) | RM (WC) |
| | Preparation Group | Analysis Group |

Alliance TECHNICAL GROUP

## Water TKN Preparation Sheet

**PB168588**

| Lab Sample ID | Client Sample ID | Initial Vol (ml) | Final Vol (ml) | pH | Sulfide | Oxidizing | Nitrate/ Nitrite | Comment | Prep Pos |
|---|---|---|---|---|---|---|---|---|---|
| PB168588BL | PBW588 | 50 | 50 | <2 | N/A | N/A | N/A | PH AFTER ADDING DIST BUFFER>11 | N/A |
| PB168588BS | LCS588 | 50 | 50 | <2 | N/A | N/A | N/A | PH AFTER ADDING DIST BUFFER>11 | N/A |
| Q2344-01DUP | MW-1DUP | 50 | 50 | <2 | N/A | N/A | N/A | PH AFTER ADDING DIST BUFFER>11 | N/A |
| Q2344-01MS | MW-1MS | 50 | 50 | <2 | N/A | N/A | N/A | PH AFTER ADDING DIST BUFFER>11 | N/A |
| Q2344-01MSD | MW-1MSD | 50 | 50 | <2 | N/A | N/A | N/A | PH AFTER ADDING DIST BUFFER>11 | N/A |
| Q2344-01 | MW-1 | 50 | 50 | <2 | N/A | N/A | N/A | PH AFTER ADDING DIST BUFFER>11 | N/A |
| Q2344-03 | MW-3 | 50 | 50 | <2 | N/A | N/A | N/A | PH AFTER ADDING DIST BUFFER>11 | N/A |
| Q2344-05 | MW-4 | 50 | 50 | <2 | N/A | N/A | N/A | PH AFTER ADDING DIST BUFFER>11 | N/A |
| Q2344-07 | MW-2 | 50 | 50 | <2 | N/A | N/A | N/A | PH AFTER ADDING DIST BUFFER>11 | N/A |
| Q2385-01 | A5311 | 50 | 50 | <2 | N/A | N/A | N/A | PH AFTER ADDING DIST BUFFER>11 | N/A |

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** tkn-6-23 **WorkList ID :** 190309 **Department :** Distillation **Date :** 06-23-2025 08:11:45

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q2344-01 | MW-1 | Water | TKN | Conc H2SO4 to pH < 2 | LOCK01 | D31 | 06/16/2025 | SM4500 N Org |
| Q2344-03 | MW-3 | Water | TKN | Conc H2SO4 to pH < 2 | LOCK01 | D31 | 06/16/2025 | SM4500 N Org |
| Q2344-05 | MW-4 | Water | TKN | Conc H2SO4 to pH < 2 | LOCK01 | D31 | 06/16/2025 | SM4500 N Org |
| Q2344-07 | MW-2 | Water | TKN | Conc H2SO4 to pH < 2 | LOCK01 | D31 | 06/16/2025 | SM4500 N Org |
| Q2385-01 | A5311 | Water | TKN | Conc H2SO4 to pH < 2 | PSEG03 | D51 | 06/20/2025 | SM4500 N Org |

**Date/Time** 06/23/2025 08.15
**Raw Sample Received by:** RM (WC)
**Raw Sample Relinquished by:** AA Cook



**Date/Time** 06/23/2025 10.20
**Raw Sample Received by:** AA Cook
**Raw Sample Relinquished by:** RM (WC)

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

**Instrument ID:** DO METER

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136184

| | | | |
|---|---|---|---|
| Review By | rubina | Review On | 6/23/2025 2:04:31 PM |
| Supervise By | Iwona | Supervise On | 6/23/2025 2:06:26 PM |
| SubDirectory | LB136184 | Test | BOD5 |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | N/A |
| ICV Standard | N/A |
| CCV Standard | N/A |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | N/A |
| Chk Standard | WP113565,W3149,WP112832,W3103,W3109,W3105,WP113566,WP113567,WP111323 |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | LB136184BL | LB136184BL | MB | 06/18/25 09:25 | | Iwona | OK |
| 2 | LB136184BS | LB136184BS | LCS | 06/18/25 09:25 | | Iwona | OK |
| 3 | Q2344-01 | MW-1 | SAM | 06/18/25 09:25 | | Iwona | OK |
| 4 | Q2344-01DUP | MW-1DUP | DUP | 06/18/25 09:25 | | Iwona | OK |
| 5 | Q2344-03 | MW-3 | SAM | 06/18/25 09:25 | | Iwona | OK |
| 6 | Q2344-05 | MW-4 | SAM | 06/18/25 09:25 | | Iwona | OK |
| 7 | Q2344-07 | MW-2 | SAM | 06/18/25 09:25 | | Iwona | OK |

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**Instrument ID:** WC PH METER-1

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136185

| | | | |
|---|---|---|---|
| Review By | jignesh | Review On | 6/18/2025 1:26:30 PM |
| Supervise By | Iwona | Supervise On | 6/19/2025 12:58:12 PM |
| SubDirectory | LB136185 | Test | pH |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | N/A |
| ICV Standard | N/A |
| CCV Standard | N/A |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | N/A |
| Chk Standard | W3178,W3093,W3191,W3071,W3161,W3200 |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | CAL1 | CAL1 | CAL | 06/18/25 10:30 | | jignesh | OK |
| 2 | CAL2 | CAL2 | CAL | 06/18/25 10:31 | | jignesh | OK |
| 3 | CAL3 | CAL3 | CAL | 06/18/25 10:33 | | jignesh | OK |
| 4 | ICV | ICV | ICV | 06/18/25 10:37 | | jignesh | OK |
| 5 | CCV1 | CCV1 | CCV | 06/18/25 10:40 | | jignesh | OK |
| 6 | Q2344-01 | MW-1 | SAM | 06/18/25 10:47 | | jignesh | OK |
| 7 | Q2344-03 | MW-3 | SAM | 06/18/25 10:55 | | jignesh | OK |
| 8 | Q2344-05 | MW-4 | SAM | 06/18/25 11:00 | | jignesh | OK |
| 9 | Q2344-07 | MW-2 | SAM | 06/18/25 11:10 | | jignesh | OK |
| 10 | Q2344-07DUP | MW-2DUP | DUP | 06/18/25 11:15 | | jignesh | OK |
| 11 | CCV2 | CCV2 | CCV | 06/18/25 11:20 | | jignesh | OK |

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**Instrument ID:** WC SC-3

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136186

| | | | |
|---|---|---|---|
| Review By | jignesh | Review On | 6/19/2025 11:33:08 AM |
| Supervise By | Iwona | Supervise On | 6/19/2025 12:57:32 PM |
| SubDirectory | LB136186 | Test | TDS |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | N/A |
| ICV Standard | N/A |
| CCV Standard | N/A |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | N/A |
| Chk Standard | N/A |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | LB136186BL | LB136186BL | MB | 06/17/25 17:20 | | jignesh | OK |
| 2 | LB136186BS | LB136186BS | LCS | 06/17/25 17:20 | WP113581 | jignesh | OK |
| 3 | Q2316-02 | RW8-SP303-2025061 | SAM | 06/17/25 17:20 | | jignesh | OK |
| 4 | Q2316-02DUP | RW8-SP303-2025061 | DUP | 06/17/25 17:20 | | jignesh | OK |
| 5 | Q2344-01 | MW-1 | SAM | 06/17/25 17:20 | | jignesh | OK |
| 6 | Q2344-03 | MW-3 | SAM | 06/17/25 17:20 | | jignesh | OK |
| 7 | Q2344-05 | MW-4 | SAM | 06/17/25 17:20 | | jignesh | OK |
| 8 | Q2344-07 | MW-2 | SAM | 06/17/25 17:20 | | jignesh | OK |

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**Instrument ID:** WC TURBIDIMETER-1

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136188

| | | | |
|---|---|---|---|
| Review By | Eman | Review On | 6/18/2025 1:42:24 PM |
| Supervise By | Iwona | Supervise On | 6/18/2025 1:46:44 PM |
| SubDirectory | LB136188 | Test | Turbidity |

| 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 | WP113569,WP113563,WP113558,WP113564,WP113557,WP113561,WP113560,WP113568,WP113559,W3116 |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | CAL1 | CAL1 | CAL | 06/18/25 08:30 | | Iwona | OK |
| 2 | CAL2 | CAL2 | CAL | 06/18/25 08:33 | | Iwona | OK |
| 3 | CAL3 | CAL3 | CAL | 06/18/25 08:36 | | Iwona | OK |
| 4 | CAL4 | CAL4 | CAL | 06/18/25 08:40 | | Iwona | OK |
| 5 | CAL5 | CAL5 | CAL | 06/18/25 08:43 | | Iwona | OK |
| 6 | CAL6 | CAL6 | CAL | 06/18/25 08:46 | | Iwona | OK |
| 7 | CAL7 | CAL7 | CAL | 06/18/25 08:50 | | Iwona | OK |
| 8 | ICV | ICV | ICV | 06/18/25 08:53 | | Iwona | OK |
| 9 | ICB | ICB | ICB | 06/18/25 08:56 | | Iwona | OK |
| 10 | CCV1 | CCV1 | CCV | 06/18/25 09:00 | | Iwona | OK |
| 11 | CCB1 | CCB1 | CCB | 06/18/25 09:03 | | Iwona | OK |
| 12 | LB136188BL | LB136188BL | MB | 06/18/25 09:06 | | Iwona | OK |
| 13 | Q2126-10 | LOD-MDL-WATER-04 | SAM | 06/18/25 09:10 | | Iwona | OK |
| 14 | Q2126-11 | LOQ-WATER-05-QT2 | SAM | 06/18/25 09:13 | | Iwona | OK |
| 15 | Q2344-01 | MW-1 | SAM | 06/18/25 09:16 | | Iwona | OK |
| 16 | Q2344-01DUP | MW-1DUP | DUP | 06/18/25 09:20 | | Iwona | OK |
| 17 | Q2344-03 | MW-3 | SAM | 06/18/25 09:23 | | Iwona | OK |
| 18 | Q2344-05 | MW-4 | SAM | 06/18/25 09:26 | | Iwona | OK |

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**Instrument ID:** WC TURBIDIMETER-1

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136188

| | | | |
|---|---|---|---|
| Review By | Eman | Review On | 6/18/2025 1:42:24 PM |
| Supervise By | Iwona | Supervise On | 6/18/2025 1:46:44 PM |
| SubDirectory | LB136188 | Test | Turbidity |

| 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 | WP113569,WP113563,WP113558,WP113564,WP113557,WP113561,WP113560,WP113568,WP113559,W3116 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q2344-07 | MW-2 | SAM | 06/18/25 09:30 | | Iwona | OK |
| 20 | CCV2 | CCV2 | CCV | 06/18/25 09:33 | | Iwona | OK |
| 21 | CCB2 | CCB2 | CCB | 06/18/25 09:36 | | Iwona | OK |

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**Instrument ID:** IC-1

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136191

| | | | |
|---|---|---|---|
| Review By | Iwona | Review On | 6/19/2025 9:07:17 AM |
| Supervise By | Sohil | Supervise On | 6/19/2025 9:14:11 AM |
| SubDirectory | LB136191 | Test | Anions |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | WP113186,WP113187,WP113188,WP113189,WP113190,WP113191,WP113192 |
| ICV Standard | WP113193 |
| CCV Standard | WP113549,WP113554 |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | WP113550,WP113555 |
| Chk Standard | WP113194,WP113195 |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | STD1 | STD1 | CAL1 | 05/22/25 11:09 | All standards, samples, and | NF/IZ | OK |
| 2 | STD2 | STD2 | CAL2 | 05/22/25 11:30 | QC are filtered through | NF/IZ | OK |
| 3 | STD3 | STD3 | CAL3 | 05/22/25 11:52 | 0.45um, filter lot W3160 | NF/IZ | OK |
| 4 | STD4 | STD4 | CAL4 | 05/22/25 12:13 | | NF/IZ | OK |
| 5 | STD5 | STD5 | CAL5 | 05/22/25 12:35 | | NF/IZ | OK |
| 6 | STD6 | STD6 | CAL6 | 05/22/25 12:56 | | NF/IZ | OK |
| 7 | STD7 | STD7 | CAL7 | 05/22/25 13:17 | | NF/IZ | OK |
| 8 | ICV1 | ICV1 | ICV | 05/22/25 13:39 | | NF/IZ | OK |
| 9 | ICB1 | ICB1 | ICB | 05/22/25 14:22 | | NF/IZ | OK |
| 10 | CCV1 | CCV1 | CCV | 06/17/25 11:12 | | NF/IZ | OK |
| 11 | CCB1 | CCB1 | CCB | 06/17/25 11:33 | | NF/IZ | OK |
| 12 | LB136191BLW | LB136191BLW | MB | 06/17/25 11:55 | | NF/IZ | OK |
| 13 | LB136191BSW | LB136191BSW | LCS | 06/17/25 12:16 | | NF/IZ | OK |
| 14 | Q2344-01 | MW-1 | SAM | 06/17/25 16:42 | Cl is high | NF/IZ | Dilution |
| 15 | Q2344-01MS | MW-1MS | MS | 06/17/25 17:04 | 9.5ml of sample, 0.5mL W3092 | NF/IZ | OK |
| 16 | Q2344-01MSD | MW-1MSD | MSD | 06/17/25 17:25 | 9.5ml of sample, 0.5mL W3092 | NF/IZ | OK |
| 17 | Q2344-03 | MW-3 | SAM | 06/17/25 17:47 | Cl and SO2-4 is high | NF/IZ | Dilution |
| 18 | Q2344-05 | MW-4 | SAM | 06/17/25 18:08 | Cl and SO2-4 is high | NF/IZ | Dilution |

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**Instrument ID:** IC-1

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136191

| | | | |
|---|---|---|---|
| Review By | Iwona | Review On | 6/19/2025 9:07:17 AM |
| Supervise By | Sohil | Supervise On | 6/19/2025 9:14:11 AM |
| SubDirectory | LB136191 | Test | Anions |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | WP113186,WP113187,WP113188,WP113189,WP113190,WP113191,WP113192 |
| ICV Standard | WP113193 |
| CCV Standard | WP113549,WP113554 |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | WP113550,WP113555 |
| Chk Standard | WP113194,WP113195 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q2344-07 | MW-2 | SAM | 06/17/25 18:30 | Cl is high | NF/IZ | Dilution |
| 20 | CCV2 | CCV2 | CCV | 06/17/25 18:52 | | NF/IZ | OK |
| 21 | CCB2 | CCB2 | CCB | 06/17/25 19:13 | | NF/IZ | OK |
| 22 | CCV3 | CCV3 | CCV | 06/18/25 10:32 | | NF/IZ | OK |
| 23 | CCB3 | CCB3 | CCB | 06/18/25 10:53 | | NF/IZ | OK |
| 24 | LB136191BLW2 | LB136191BLW2 | MB | 06/18/25 11:15 | | NF/IZ | OK |
| 25 | LB136191BSW2 | LB136191BSW2 | LCS | 06/18/25 11:36 | | NF/IZ | OK |
| 26 | Q2344-01DL | MW-1DL | SAM | 06/18/25 11:58 | 20X for Cl | NF/IZ | Confirms |
| 27 | Q2344-03DL | MW-3DL | SAM | 06/18/25 12:20 | Cl is high | NF/IZ | Dilution |
| 28 | Q2344-03DL2 | MW-3DL2 | SAM | 06/18/25 12:41 | 50X for Cl | NF/IZ | Confirms |
| 29 | Q2344-05DL | MW-4DL | SAM | 06/18/25 13:03 | Cl is high | NF/IZ | Dilution |
| 30 | Q2344-05DL2 | MW-4DL2 | SAM | 06/18/25 13:24 | 50X for Cl | NF/IZ | Confirms |
| 31 | Q2344-07DL | MW-2DL | SAM | 06/18/25 13:46 | 100X for Cl | NF/IZ | Confirms |
| 32 | CCV4 | CCV4 | CCV | 06/18/25 14:07 | | NF/IZ | OK |
| 33 | CCB4 | CCB4 | CCB | 06/18/25 14:29 | | NF/IZ | OK |

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**Instrument ID:** WC SC-3

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136202

| | | | |
|---|---|---|---|
| Review By | jignesh | Review On | 6/19/2025 12:38:33 PM |
| Supervise By | Iwona | Supervise On | 6/19/2025 12:53:46 PM |
| SubDirectory | LB136202 | Test | TSS |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | N/A |
| ICV Standard | N/A |
| CCV Standard | N/A |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | N/A |
| Chk Standard | N/A |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | LB136202BL | LB136202BL | MB | 06/18/25 18:00 | | jignesh | OK |
| 2 | LB136202BS | LB136202BS | LCS | 06/18/25 18:00 | 55mg w3186 + 100 ml for w3112 | jignesh | OK |
| 3 | Q2316-02 | RW8-SP303-2025061 | SAM | 06/18/25 18:00 | | jignesh | OK |
| 4 | Q2344-01 | MW-1 | SAM | 06/18/25 18:00 | | jignesh | OK |
| 5 | Q2344-03 | MW-3 | SAM | 06/18/25 18:00 | | jignesh | OK |
| 6 | Q2344-05 | MW-4 | SAM | 06/18/25 18:00 | | jignesh | OK |
| 7 | Q2344-07 | MW-2 | SAM | 06/18/25 18:00 | | jignesh | OK |
| 8 | Q2344-07DUP | MW-2DUP | DUP | 06/18/25 18:00 | | jignesh | OK |
| 9 | Q2348-01 | 001-WILLETS-PT-BL | SAM | 06/18/25 18:00 | | jignesh | OK |
| 10 | Q2348-02 | 002-35TH-AVE(MAY) | SAM | 06/18/25 18:00 | | jignesh | OK |
| 11 | Q2360-02 | COMP | SAM | 06/18/25 18:00 | | jignesh | OK |

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**Instrument ID:** TITRATOR

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136205

| | | | |
|---|---|---|---|
| Review By | Iwona | Review On | 6/20/2025 4:04:31 PM |
| Supervise By | Sohil | Supervise On | 6/20/2025 4:09:21 PM |
| SubDirectory | LB136205 | Test | Alkalinity |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | N/A |
| ICV Standard | N/A |
| CCV Standard | N/A |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | WP113583 |
| Chk Standard | W3071,W3178,W3150 |

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

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**Instrument ID:** KONELAB

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136242

| | | | |
|---|---|---|---|
| Review By | rubina | Review On | 6/25/2025 8:24:30 AM |
| Supervise By | Iwona | Supervise On | 6/25/2025 9:31:06 AM |
| SubDirectory | LB136242 | Test | Ammonia |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | WP113645 |
| ICV Standard | WP113647 |
| CCV Standard | WP113646 |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | WP113449 |
| Chk Standard | WP113429,WP111745,WP111385,WP111660 |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | 0.0PPM | 0.0PPM | CAL1 | 06/24/25 09:02 | | rubina | OK |
| 2 | 0.1PPM | 0.1PPM | CAL2 | 06/24/25 09:02 | | rubina | OK |
| 3 | 0.2PPM | 0.2PPM | CAL3 | 06/24/25 09:02 | | rubina | OK |
| 4 | 0.4PPM | 0.4PPM | CAL4 | 06/24/25 09:02 | | rubina | OK |
| 5 | 1.0PPM | 1.0PPM | CAL5 | 06/24/25 09:03 | | rubina | OK |
| 6 | 1.3PPM | 1.3PPM | CAL6 | 06/24/25 09:03 | | rubina | OK |
| 7 | 2.0PPM | 2.0PPM | CAL7 | 06/24/25 09:03 | | rubina | OK |
| 8 | ICV1 | ICV1 | ICV | 06/24/25 09:40 | | rubina | OK |
| 9 | ICB1 | ICB1 | ICB | 06/24/25 09:40 | | rubina | OK |
| 10 | CCV1 | CCV1 | CCV | 06/24/25 09:40 | | rubina | OK |
| 11 | CCB1 | CCB1 | CCB | 06/24/25 09:40 | | rubina | OK |
| 12 | RL | RL | LOQ | 06/24/25 09:40 | | rubina | OK |
| 13 | PB168578BL | PB168578BL | MB | 06/24/25 09:50 | | rubina | OK |
| 14 | PB168578BS | PB168578BS | LCS | 06/24/25 09:50 | | rubina | OK |
| 15 | Q2344-01 | MW-1 | SAM | 06/24/25 09:50 | | rubina | OK |
| 16 | Q2344-03 | MW-3 | SAM | 06/24/25 09:50 | | rubina | OK |
| 17 | Q2344-05 | MW-4 | SAM | 06/24/25 09:51 | | rubina | OK |
| 18 | Q2344-07 | MW-2 | SAM | 06/24/25 10:01 | NH3 is high | rubina | Dilution |

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**Instrument ID:** KONELAB

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136242

| | | | |
|---|---|---|---|
| Review By | rubina | Review On | 6/25/2025 8:24:30 AM |
| Supervise By | Iwona | Supervise On | 6/25/2025 9:31:06 AM |
| SubDirectory | LB136242 | Test | Ammonia |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | WP113645 |
| ICV Standard | WP113647 |
| CCV Standard | WP113646 |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | WP113449 |
| Chk Standard | WP113429,WP111745,WP111385,WP111660 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q2385-01 | A5311 | SAM | 06/24/25 10:01 | | rubina | OK |
| 20 | Q2385-01DUP | A5311DUP | DUP | 06/24/25 10:01 | | rubina | OK |
| 21 | Q2385-01MS | A5311MS | MS | 06/24/25 10:01 | | rubina | OK |
| 22 | CCV2 | CCV2 | CCV | 06/24/25 10:07 | | rubina | OK |
| 23 | CCB2 | CCB2 | CCB | 06/24/25 10:07 | | rubina | OK |
| 24 | Q2385-01MSD | A5311MSD | MSD | 06/24/25 10:44 | | rubina | OK |
| 25 | CCV3 | CCV3 | CCV | 06/24/25 10:45 | | rubina | OK |
| 26 | CCB3 | CCB3 | CCB | 06/24/25 10:45 | | rubina | OK |
| 27 | Q2344-07DL | MW-2DL | SAM | 06/24/25 10:45 | 5X For NH3 | rubina | Confirms |
| 28 | CCV4 | CCV4 | CCV | 06/24/25 10:50 | | rubina | OK |
| 29 | CCB4 | CCB4 | CCB | 06/24/25 10:50 | | rubina | OK |

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**Instrument ID:** KONELAB

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136244

| | | | |
|---|---|---|---|
| Review By | rubina | Review On | 6/25/2025 8:18:51 AM |
| Supervise By | Iwona | Supervise On | 6/25/2025 9:30:59 AM |
| SubDirectory | LB136244 | Test | TKN |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | WP113625 |
| ICV Standard | WP113627 |
| CCV Standard | WP113626 |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | WP113628 |
| Chk Standard | WP113429,WP111745,WP111385,WP111660 |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | 0.0PPM | 0.0PPM | CAL1 | 06/24/25 11:51 | | rubina | OK |
| 2 | 0.5PPM | 0.5PPM | CAL2 | 06/24/25 11:52 | | rubina | OK |
| 3 | 1.0PPM | 1.0PPM | CAL3 | 06/24/25 11:52 | | rubina | OK |
| 4 | 2.5PPM | 2.5PPM | CAL4 | 06/24/25 11:52 | | rubina | OK |
| 5 | 5.0PPM | 5.0PPM | CAL5 | 06/24/25 11:52 | | rubina | OK |
| 6 | 6.7PPM | 6.7PPM | CAL6 | 06/24/25 11:52 | | rubina | OK |
| 7 | 10.0PPM | 10.0PPM | CAL7 | 06/24/25 11:52 | | rubina | OK |
| 8 | ICV1 | ICV1 | ICV | 06/24/25 12:36 | | rubina | OK |
| 9 | ICB1 | ICB1 | ICB | 06/24/25 12:36 | | rubina | OK |
| 10 | CCV1 | CCV1 | CCV | 06/24/25 12:36 | | rubina | OK |
| 11 | CCB1 | CCB1 | CCB | 06/24/25 12:36 | | rubina | OK |
| 12 | RL | RL | LOQ | 06/24/25 12:36 | | rubina | OK |
| 13 | PB168588BL | PB168588BL | MB | 06/24/25 12:46 | | rubina | OK |
| 14 | PB168588BS | PB168588BS | LCS | 06/24/25 12:47 | | rubina | OK |
| 15 | Q2344-01 | MW-1 | SAM | 06/24/25 12:47 | | rubina | OK |
| 16 | Q2344-01DUP | MW-1DUP | DUP | 06/24/25 12:47 | | rubina | OK |
| 17 | Q2344-01MS | MW-1MS | MS | 06/24/25 12:47 | | rubina | OK |
| 18 | Q2344-01MSD | MW-1MSD | MSD | 06/24/25 12:47 | | rubina | OK |

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**Instrument ID:** KONELAB

## Daily Analysis Runlog For Sequence/QCBatch ID # LB136244

| | | | |
|---|---|---|---|
| Review By | rubina | Review On | 6/25/2025 8:18:51 AM |
| Supervise By | Iwona | Supervise On | 6/25/2025 9:30:59 AM |
| SubDirectory | LB136244 | Test | TKN |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | WP113625 |
| ICV Standard | WP113627 |
| CCV Standard | WP113626 |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | WP113628 |
| Chk Standard | WP113429,WP111745,WP111385,WP111660 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q2344-03 | MW-3 | SAM | 06/24/25 12:47 | | rubina | OK |
| 20 | Q2344-05 | MW-4 | SAM | 06/24/25 12:47 | | rubina | OK |
| 21 | Q2344-07 | MW-2 | SAM | 06/24/25 12:57 | | rubina | OK |
| 22 | CCV2 | CCV2 | CCV | 06/24/25 12:57 | | rubina | OK |
| 23 | CCB2 | CCB2 | CCB | 06/24/25 12:57 | | rubina | OK |
| 24 | Q2385-01 | A5311 | SAM | 06/24/25 12:57 | | rubina | OK |
| 25 | CCV3 | CCV3 | CCV | 06/24/25 12:57 | | rubina | OK |
| 26 | CCB3 | CCB3 | CCB | 06/24/25 12:57 | | rubina | OK |

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**Instrument ID:**

## Daily Analysis Runlog For Sequence/QCBatch ID #

| | |
|---|---|
| Review By | Review On |
| Supervise By | Supervise On |

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

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

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# Prep Standard - Chemical Standard Summary

**Order ID :** Q2344

**Test :** Alkalinity,Ammonia,Anions Group1,BOD5,pH,TDS,TKN,Total Nitrogen,TSS,Turbidity

**Prepbatch ID :** PB168578,PB168588,

**Sequence ID/Qc Batch ID:** LB136184,LB136185,LB136186,LB136188,LB136191,LB136202,LB136205,LB136242,LB136244,LB13

**Standard ID :**
WP111317,WP111318,WP111323,WP111325,WP111385,WP111660,WP111745,WP112079,WP112611,WP112612,WP112796,WP112828,WP112832,WP113135,WP113186,WP113187,WP113188,WP113189,WP113190,WP113191,WP113192,WP113193,WP113194,WP113195,WP113429,WP113449,WP113450,WP113549,WP113550,WP113552,WP113553,WP113554,WP113555,WP113556,WP113557,WP113558,WP113559,WP113560,WP113561,WP113563,WP113564,WP113565,WP113566,WP113567,WP113568,WP113569,WP113582,WP113583,WP113625,WP113626,WP113627,WP113628,WP113645,WP113646,WP113647,

**Chemical ID :**
M6041,W2647,W2653,W2654,W2666,W2700,W2858,W2983,W3058,W3071,W3078,W3081,W3093,W3103,W3105,W3109,W3112,W3113,W3116,W3132,W3133,W3144,W3148,W3149,W3150,W3155,W3161,W3163,W3174,W3178,W3180,W3191,W3195,W3196,W3197,W3199,W3200,W3212,W3215,

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1796 | NaOH, 0.1N | WP111317 | 01/09/2025 | 07/09/2025 | Rubina Mughal | WETCHEM_SCALE_7 (WCSC-6) | None | Iwona Zarych 01/09/2025 |

**FROM** 4.00000gram of W3113 + 996.00000ml of W3112 = Final Quantity: 1000.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1471 | NaOH Solution, 6N | WP111318 | 01/09/2025 | 07/09/2025 | Rubina Mughal | WETCHEM_SCALE_7 (WCSC-6) | None | Iwona Zarych 01/09/2025 |

**FROM** 240.00000gram of W3113 + 760.00000ml of W3112 = Final Quantity: 1000.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1571 | Sodium hydroxide, 1N | WP111323 | 01/09/2025 | 07/09/2025 | Rubina Mughal | WETCHEM_SCALE_8 (WCSC-7) | None | Iwona Zarych 01/09/2025 |

**FROM** 4.00000gram of W3113 + 96.00000ml of W3112 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1494 | BORATE BUFFER | WP111325 | 01/09/2025 | 07/09/2025 | Rubina Mughal | WETCHEM_SCALE_5 (WCSC-5) | None | Iwona Zarych 01/09/2025 |

**FROM** 100.00000L of W3112 + 9.50000gram of W2700 + 88.00000ml of WP111317 = Final Quantity: 100.000 L

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 290 | Phenol reagent for Ammonia | WP111385 | 01/13/2025 | 07/13/2025 | Rubina Mughal | WETCHEM_SCALE_8 (WCSC-7) | None | Iwona Zarych 01/13/2025 |

**FROM** 3.20000gram of W3113 + 8.30000gram of W2858 + 88.80000ml of W3112 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 635 | EDTA BUFFER FOR AMMONIA | WP111660 | 01/28/2025 | 07/28/2025 | Rubina Mughal | WETCHEM_SCALE_8 (WCSC-7) | None | Iwona Zarych 01/28/2025 |

**FROM** 5.50000gram of W3113 + 50.00000gram of W3132 + 950.00000ml of W3112 = Final Quantity: 1000.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 289 | Sodium Hypochlorite for Ammonia | WP111745 | 02/03/2025 | 07/31/2025 | Rubina Mughal | None | None | Iwona Zarych 02/03/2025 |

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

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1338 | TKN DISTILLING BUFFER | WP112079 | 02/27/2025 | 08/27/2025 | Rubina Mughal | WETCHEM_SCALE_8 (WCSC-7) | None | Iwona Zarych 02/27/2025 |

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

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 153 | Ammonia Stock Std. (1000 ppm) | WP112611 | 04/07/2025 | 10/07/2025 | Rubina Mughal | WETCHEM_SCALE_8 (WCSC-7) | None | Iwona Zarych 04/07/2025 |

**FROM** 3.81900gram of W3196 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1895 | Ammonia Stock Std, 1000PPM-SS | WP112612 | 04/07/2025 | 10/07/2025 | Rubina Mughal | WETCHEM_SCALE_8 (WCSC-7) | None | Iwona Zarych 04/07/2025 |

**FROM** 3.81900gram of W3195 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 4035 | IC ELUENT CONCENTRATE FOR IC-1 | WP112796 | 04/22/2025 | 10/22/2025 | Iwona Zarych | WETCHEM_SCALE_5 (WCSC-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

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1597 | 0.04 N H2SO4 | WP112828 | 04/25/2025 | 10/25/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 04/25/2025 |

**FROM** 1.00000ml of M6041 + 999.00000ml of W3112 = Final Quantity: 1000.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1841 | Sulfuric Acid, 1N | WP112832 | 04/25/2025 | 10/25/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 04/25/2025 |

**FROM** 2.80000ml of M6041 + 97.20000ml of W3112 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 619 | TKN digestion solution | WP113135 | 05/20/2025 | 11/20/2025 | Rubina Mughal | WETCHEM_SCALE_8 (WCSC-7) | None | Iwona Zarych 05/20/2025 |

**FROM** 134.00000gram of W2983 + 134.00000ml of M6041 + 7.30000gram of W3199 + 725.00000ml of W3112 = Final Quantity: 1000.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2487 | Anions 300/9056 calibration standard 1 | WP113186 | 05/22/2025 | 05/23/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 05/22/2025 |

**FROM** 10.00000ml of W3112 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 24 | Anions 300/9056 calibration standard 2 | WP113187 | 05/22/2025 | 05/23/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 05/22/2025 |

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

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 25 | Anions 300/9056 calibration standard 3 | WP113188 | 05/22/2025 | 05/23/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 05/22/2025 |

**FROM** 0.40000ml of W3180 + 9.60000ml of W3112 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 26 | Anions 300/9056 calibration standard 4 | WP113189 | 05/22/2025 | 05/23/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 05/22/2025 |

**FROM** 0.50000ml of W3180 + 9.50000ml of W3112 = Final Quantity: 10.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3680 | Anions 300/9056 calibration standard 5-CCV | WP113190 | 05/22/2025 | 05/23/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 05/22/2025 |

**FROM** 5.00000ml of W3180 + 95.00000ml of W3112 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3679 | Anions 300/9056 calibration standard 6 | WP113191 | 05/22/2025 | 05/23/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 05/22/2025 |

**FROM** 2.00000ml of W3180 + 8.00000ml of W3112 = Final Quantity: 10.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3681 | Anions 300/9056 calibration standard 7 | WP113192 | 05/22/2025 | 05/23/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 05/22/2025 |

**FROM** 2.50000ml of W3180 + 7.50000ml of W3112 = Final Quantity: 10.000 ml

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

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

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# Wet Chemistry STANDARD PREPARATION LOG

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

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

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

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

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 740 | sodium nitroferricyanide for ammonia | WP113429 | 06/06/2025 | 07/06/2025 | Iwona Zarych | WETCHEM_SCALE_5 (WCSC-5) | None | Jignesh Parikh 06/06/2025 |

**FROM** 0.05000gram of W2666 + 99.95000ml of W3112 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1639 | Ammonia Intermediate Std-Second source, 50PPM | WP113449 | 06/09/2025 | 07/09/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 06/10/2025 |

**FROM** 95.00000ml of W3112 + 5.00000ml of WP112612 = Final Quantity: 100.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1322 | Ammonia Intermediate Std, 50PPM | WP113450 | 06/09/2025 | 07/09/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 06/10/2025 |

**FROM** 95.00000ml of W3112 + 5.00000ml of WP112611 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3680 | Anions 300/9056 calibration standard 5-CCV | WP113549 | 06/17/2025 | 06/18/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/17/2025 |

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

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3233 | Anions 300/9056 ICV-LCS std | WP113550 | 06/17/2025 | 06/18/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/17/2025 |

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

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1843 | HEXAMETHYLENETETRAMINE SOLUTION 1 | WP113552 | 06/17/2025 | 07/17/2025 | Iwona Zarych | WETCHEM_SCALE_5 (WCSC-5) | None | Jignesh Parikh 06/23/2025 |

**FROM** 10.00000gram of W3081 + 90.00000ml of W3112 = Final Quantity: 100.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1167 | hydrazine sulfate solution 1 | WP113553 | 06/17/2025 | 07/17/2025 | Iwona Zarych | WETCHEM_SCALE_5 (WCSC-5) | None | Jignesh Parikh 06/23/2025 |

**FROM** 1.00000gram of W3078 + 99.00000ml of W3112 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3680 | Anions 300/9056 calibration standard 5-CCV | WP113554 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/23/2025 |

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

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3233 | Anions 300/9056 ICV-LCS std | WP113555 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/23/2025 |

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

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1102 | Formazin turbidity 400 NTU suspension | WP113556 | 06/17/2025 | 07/17/2025 | Iwona Zarych | None | None | Jignesh Parikh 06/23/2025 |

**FROM** 90.00000ml of W3112 + 5.00000ml of WP113552 + 5.00000ml of WP113553 = Final Quantity: 100.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3718 | Turbidity Calibration std, 40NTU | WP113557 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | Glass Pipette-A | Jignesh Parikh 06/23/2025 |

**FROM** 90.00000ml of W3112 + 10.00000ml of WP113556 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3714 | Turbidity Calibration std, 20NTU | WP113558 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | Glass Pipette-A | Jignesh Parikh 06/23/2025 |

**FROM** 95.00000ml of W3112 + 5.00000ml of WP113556 = Final Quantity: 100.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3807 | Turbidity Calibration - CCV std, 10 NTU | WP113559 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/23/2025 |

**FROM** 97.50000ml of W3112 + 2.50000ml of WP113556 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3722 | Turbidity Calibration std, 5NTU | WP113560 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | Glass Pipette-A | Jignesh Parikh 06/23/2025 |

**FROM** 87.50000ml of W3112 + 12.50000ml of WP113557 = Final Quantity: 100.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3720 | Turbidity Calibration std, 1NTU | WP113561 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/23/2025 |

**FROM** 97.50000ml of W3112 + 2.50000ml of WP113557 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3713 | Turbidity Calibration std, 0NTU | WP113563 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | None | Jignesh Parikh 06/23/2025 |

**FROM** 100.00000ml of W3112 = Final Quantity: 100.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3717 | Turbidity Calibration std, 80NTU | WP113564 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | Glass Pipette-A | Jignesh Parikh 06/23/2025 |

**FROM** 80.00000ml of W3112 + 20.00000ml of WP113556 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 127 | BOD Dilution fluid | WP113565 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | None | Jignesh Parikh 06/23/2025 |

**FROM** 18.00000L of W3112 + 3.00000PILLOW of W3144 = Final Quantity: 18.000 L

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 128 | polyseed seed control | WP113566 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | None | Jignesh Parikh 06/23/2025 |

**FROM** 1.00000PILLOW of W3212 + 300.00000ml of WP113565 = Final Quantity: 300.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 129 | Glutamic acid-glucose mix for BOD | WP113567 | 06/18/2025 | 06/19/2025 | Iwona Zarych | WETCHEM_SCALE_6 (MSC-4) | None | Jignesh Parikh 06/23/2025 |

**FROM** 0.15000gram of W2653 + 0.15000gram of W2654 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3739 | Turbidity LOQ std, 1.0NTU | WP113568 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | Glass Pipette-A | Jignesh Parikh 06/23/2025 |

**FROM** 10.00000ml of W3116 + 90.00000ml of W3112 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1998 | TURBIDITY LOD STD, 0.5NTU | WP113569 | 06/18/2025 | 06/19/2025 | Iwona Zarych | None | Glass Pipette-A | Jignesh Parikh 06/23/2025 |

**FROM** 5.00000ml of W3116 + 95.00000ml of W3112 = Final Quantity: 100.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

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

**FROM** 0.62500gram of W3058 + 249.40000ml of W3112 = Final Quantity: 250.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 293 | alkalinity LCSW 50 ppm | WP113583 | 06/19/2025 | 06/26/2025 | Iwona Zarych | None | Glass Pipette-A | Jignesh Parikh 06/23/2025 |

**FROM** 196.00000ml of W3112 + 4.00000ml of WP113582 = Final Quantity: 200.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 295 | TKN Calibration Std (10 ppm) | WP113625 | 06/23/2025 | 06/30/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/23/2025 |

**FROM** 49.50000ml of W3112 + 0.50000ml of WP112611 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 297 | TKN CCV STD 5 ppm | WP113626 | 06/23/2025 | 06/30/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/23/2025 |

**FROM** 49.75000ml of W3112 + 0.25000ml of WP112611 = Final Quantity: 50.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 296 | TKN ICV STD 5 ppm | WP113627 | 06/23/2025 | 06/30/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/23/2025 |

**FROM** 49.75000ml of W3112 + 0.25000ml of WP112612 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 298 | TKN LCS STD 5 ppm | WP113628 | 06/23/2025 | 06/30/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/23/2025 |

**FROM** 49.75000ml of W3112 + 0.25000ml of WP112612 = Final Quantity: 50.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 275 | Ammonia Calibration Std. (2 ppm) | WP113645 | 06/24/2025 | 06/25/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/24/2025 |

**FROM** 48.00000ml of W3112 + 2.00000ml of WP113450 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 285 | Ammonia CCV Std. (1 ppm) | WP113646 | 06/24/2025 | 06/25/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/24/2025 |

**FROM** 49.00000ml of W3112 + 1.00000ml of WP113450 = Final Quantity: 50.000 ml

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# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 286 | Ammonia ICV Std. (1 ppm) | WP113647 | 06/24/2025 | 06/25/2025 | Rubina Mughal | None | WETCHEM_PIPETTE_3 (WC) | Jignesh Parikh 06/24/2025 |

**FROM** 49.00000ml of W3112 + 1.00000ml of WP113449 = Final Quantity: 50.000 ml

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# CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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

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# CHEMICAL RECEIPT LOG BOOK

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

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

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

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

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | J2177-1 / Hydrazine sulfate, 500 gms | BCCK9980 | 10/13/2028 | 01/26/2024 / lwona | 01/26/2024 / lwona | W3078 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | AA36462-36 / hexamethylenetetramine | M02K021 | 01/02/2027 | 02/26/2024 / lwona | 02/26/2024 / lwona | W3081 |

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# CHEMICAL RECEIPT LOG BOOK

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

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | 4620-32 / MANGANOUS SULFATE SOLUTION-364 | 2403J02 | 03/31/2026 | 04/22/2024 / Iwona | 04/22/2024 / Iwona | W3103 |

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

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

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

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

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| HACH | 2659949 / 10 NTU Standard 500 ml | A4151 | 05/30/2026 | 07/12/2024 / Iwona | 07/12/2024 / Iwona | W3116 |

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

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

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

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

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

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# CHEMICAL RECEIPT LOG BOOK

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

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | 140730 / TEST PAPER,POT.IOD-STRCH,PK100,CS12 | 14-860 | 12/02/2029 | 12/02/2024 / Iwona | 12/02/2024 / Iwona | W3155 |

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

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

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

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

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# CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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

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# CHEMICAL RECEIPT LOG BOOK

| 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 / Iwona | 04/11/2025 / Iwona | W3200 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | 136742-80 / POLYSEED | 132409 | 09/30/2026 | 05/21/2025 / Iwona | 05/21/2025 / Iwona | W3212 |

| 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 / Iwona | 06/09/2025 / Iwona | W3215 |

W2647 Received on 01/20/2020 by AP

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

(sodium hydrogen carbonate)

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

# Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

| Test | Specification | Result |
|---|---|---|
| Assay ($NaHCO_3$) (dried basis) | 99.7 - 100.3 % | 100.1 |
| Insoluble Matter | <= 0.015 % | < 0.002 |
| Chloride (Cl) | <= 0.003 % | 0.003 |
| Phosphate ($PO_4$) | <= 0.001 % | 0.001 |
| Sulfur Compounds (as $SO_4$) | <= 0.003 % | 0.003 |
| Calcium (Ca) | <= 0.02 % | 0.02 |
| Trace Impurities - Iron (Fe) | <= 0.001 % | 0.001 |
| Magnesium (Mg) | <= 0.005 % | 0.005 |
| Potassium (K) | <= 0.005 % | 0.005 |
| Ammonium ($NH_4$) | <= 5 ppm | 5 |
| Trace Impurities - ACS - Heavy Metals (as Pb) | <= 5 ppm | 5 |

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

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

Jamie Ethier
Vice President Global Quality

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

ThermoFisher SCIENTIFIC

# Certificate of Analysis

W2858 Received by AP on 07/07/2021

Product No.: 33213

Product: Phenol, ACS, 99+%, stab.

Lot No.: M13H048

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

Retest date: January 7, 2026

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ThermoFisher SCIENTIFIC

# Certificate of Analysis

W2666 Recived on 02/10/2020 by AP

Product No.: 87683

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

Lot No.: W12F013

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

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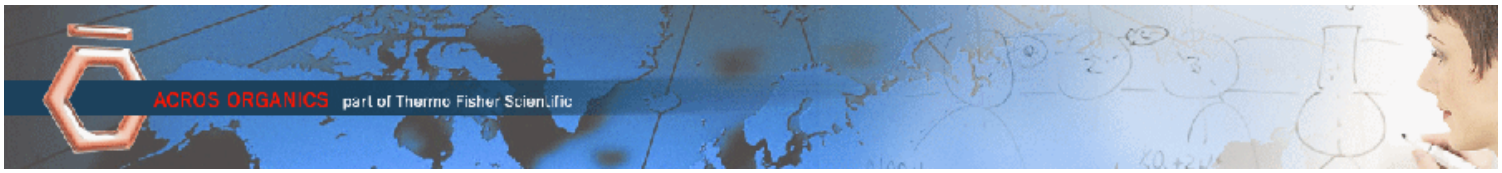
W2653 Received on 1/24/2020 by AP




ACROS ORGANICS

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

# Certificate of Analysis

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| | | | |
|---|---|---|---|
| **Catalog Number** | 15621 | **Quality Test / Release Date** | 13 March 2019 |
| **Lot Number** | A0405990 | **Suggested Retest Date** | March 2022 |

| | |
|---|---|
| **Description** | L(+)-Glutamic acid,99% |
| **Country of Origin** | CHINA |
| **Declaration of Origin** | plant |

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

| Result Name | Specifications | Test Value |
|---|---|---|
| Appearance (Color) | White | White |
| Appearance (Form) | Powder | Powder |
| Infrared spectrum | Conforms | Conforms |
| Titration with NaOH | 98.5 to 100.5 % (On dried substance) | 99.32 % (On dried substance) |
| Loss on drying | =<0.5 % (105°C, 3 hrs) | 0.002 % (105°C, 3 hrs) |
| Heavy metals (as Pb) | =<10 ppm | =<10 ppm |
| Sulfated ash | =<0.1 % | 0.08 % |
| Other amino acids | not detectable | not detectable |
| Specific optical rotation | +30.5° to +32.5° (20°C, 589 nm) (on dried substance) | +32° (20°C, 589 nm) (on dried substance) |
| Specific optical rotation | (c=10, 2N HCl) | (c=10, 2N HCl) |
| Chloride (Cl) | =<200 ppm | =<200 ppm |
| Iron (Fe) | =<30 ppm | =<10 ppm |
| Sulfate (SO4) | =<300 ppm | =<200 ppm |
| Ammonium (NH4) | =<200 ppm | =<200 ppm |
| Arsenic oxide (As2O3) | =<1 ppm | =<1 ppm |


L. Van den Broek, QA Manager Issued: 24 January 2020

Acros Organics
ENA23, zone 1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: http://www.acros.com
1 Reagent Lane, Fair Lawn, NJ 07410,USA Fax 201-796-1329

RICCA CHEMICAL COMPANY®

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Batesville, IN 47006
http://www.riccachemical.com
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customerservice@riccachemical.com

W3071
Rec 12/6/23

# Certificate of Analysis 12

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

**Lot Number:** 4308H30 **Product Number:** 1551

**Manufacture Date:** AUG 09, 2023
**Expiration Date:** JUL 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.
The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

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

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

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

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

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

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

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

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

Paul Brandon (08/09/2023)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

## This product was tested in an ISO 17025 Accredited Laboratory

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

Sigma-Aldrich.

~~H2278~~ W2983

Rec. 11/21/22 ,2

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

# Certificate of Analysis

Product Name:
**Potassium sulfate - ReagentPlus®, ≥99.0%**

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

$K_2SO_4$

| Test | Specification | Result |
|---|---|---|
| Appearance (Color) | White | White |
| Appearance (Form) | Powder | Powder |
| Solubility (Color) | Colorless | Colorless |
| Solubility (Turbidity) 10 g plus 150 mL, H2O | Clear | Clear |
| Titration with NaOH | ≥ 99.0 % | 99.2 % |

Brian Dulle

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

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

# Certificate Of Analysis

W 3058
Rec. 10/19/23 12

Date of Release: 1/27/2023

Name: **Sodium Carbonate, Anhydrous**
Powder, ACS
Item No: **SX0395 All Sizes**
Lot / Batch No: **2023012653**
Country of Origin: **India**

| Item | Specifications | Analysis |
|---|---|---|
| Assay (calculated on dried substance) | 99.5% min. | 100.2% |
| Calcium (Ca) | 0.03% max. | 0.004% |
| Chloride (Cl) | 0.001% max. | <0.001% |
| Color | White | Passes Test |
| Form | Powder | Passes Test |
| Heavy metals (by ICP-OES) | 5 ppm max. | <5 ppm |
| Insoluble Matter | 0.01% max. | 0.003% |
| Iron (Fe) | 5 ppm max. | <5 ppm |
| Loss on heating at 285C | 1.0% max. | 0.1% |
| Magnesium (Mg) | 0.005% max. | 0.0008% |
| Phosphate (PO4) | 0.001% max. | <0.001% |
| Potassium (K) | 0.005% max. | 0.003% |
| Silica (SiO2) | 0.005% max. | <0.005% |
| Sulfur compounds (as SO4) | 0.003% max. | <0.003% |

Joe Schoellkopff
---
Quality Control Manager

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

EMD Millipore Corporation
400 Summit Drive
Burlington, MA 01803
U.S.A.

# Certificate Of Analysis

Date of Release: 11/14/2019

W2700 Recived by AP on 3/11/2020

Name: **Sodium Borate, Decahydrate**
ACS

Item No: **SX0355 All Sizes**
Lot / Batch No: **2019111354**
Country of Origin: **India**

| Item | Specifications | Analysis |
|---|---|---|
| Assay (Na2B4O7 • 10H2O) | 99.5 - 105.0% | 101.7% |
| Calcium (Ca) | 0.005% max. | 0.003% |
| Chloride (Cl) | 0.001% max. | <0.001% |
| Color | White | Passes Test |
| Form | Crystals | Passes Test |
| Heavy Metals (as Pb) | 0.001% max. | <0.001% |
| Insoluble Matter | 0.005% max. | 0.002% |
| Iron (Fe) | 5 ppm max. | <5 ppm |
| pH of a 0.01 M solution at 25C | 9.15 - 9.20 | 9.17 |
| Phosphate (PO4) | 0.001% max. | <0.001% |
| Sulfate (SO4) | 0.005% max. | <0.005% |

Joe Schoellkopff
---
Quality Control Manager

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EMD Millipore Corporation
400 Summit Drive
Burlington, MA 01803
U.S.A.

W2654 Received on 1/24/2020 by AP



ThermoFisher SCIENTIFIC

# Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

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

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

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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

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

M 6041-46
MS

avantor™ | J.T.Baker®

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 ($H_2SO_4$) | 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 SO2) | ≤ 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™ | J.T.Baker®

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

James T Ethier

Jamie Ethier
Vice President Global Quality

W 3078 Rec. on 1/26/24 by 12

Sigma-Aldrich.

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

# Certificate of Analysis

Product Name:
Hydrazine sulfate salt - ACS reagent, ≥99.0%

$NH_2NH_2 \cdot H_2SO_4$

| | |
|---|---|
| **Product Number:** | **216046** |
| **Batch Number:** | **BCCK9980** |
| Brand: | SIAL |
| CAS Number: | 10034-93-2 |
| Formula: | H4N2 · H2SO4 |
| Formula Weight: | 130,12 g/mol |
| Quality Release Date: | 13 OCT 2023 |

| Test | Specification | Result |
|---|---|---|
| Appearance (Color) | White | White |
| Appearance (Form) | Powder or Crystals or Chunk(s) | Crystals |
| Redox Titration<br>With Iodine | ≥ 99.0 % | 99.4 % |
| Residue on Ignition | ≤ 0.05 % | 0.01 % |
| Infrared Spectrum | Conforms to Structure | Conforms |
| Meets ACS Requirements | Corresponds to Requirements | Corresponds |
| ACS Specifications<br>Heavy Metals < = 0.002 % (as Pb),<br>Insoluble Matter < = 0.005 % (C= 6.67%, H2O) | Corresponds to Requirements | Corresponds |
| Iron (Fe) | ≤ 10 mg/kg | < 10 mg/kg |
| Chloride (Cl) | ≤ 50 mg/kg | < 50 mg/kg |

Dr.Reinhold Schwenninger
Quality Assurance
Buchs,Switzerland CH

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

ThermoFisher SCIENTIFIC

# Certificate of Analysis

W3081 Recieved on 02/26/2024 by IZ

Product No.: 036462

Product: Hexamethylenetetramine, ACS, 99+%

Lot No.: M02K021

Appearance White solid

| Test | Limits | Results |
|---|---|---|
| Assay | 99.0 % min | 100.7 % |
| Loss on drying | 2.0 % max | 0.2 % |
| Heavy metals (as Pb) | 0.001 % max | < 0.001 % |
| Residue after ignition | 0.1 % max | < 0.1 % |

Retest Date: January 2, 2027

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W3093 0941.. 04/03/2024 LG

# Certificate of Analysis

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

**Lot Number:** 4401F99 **Product Number:** 1551

**Manufacture Date:** JAN 08, 2024
**Expiration Date:** DEC 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.
The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

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

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

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

| Test | Certified Value | Uncertainty | NIST SRM# |
|---|---|---|---|
| pH at 25°C (Method: SQCP027, SQCP033) | 7.004 | 0.02 | 186-I-g, 186-II-g, 191d |

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

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

| Part Number | Size / Package Type | Shelf Life (Unopened Container) |
|---|---|---|
| 1551-1 | 4 L natural poly | 24 months |
| 1551-1CT | 4 L Cubitainer® | 24 months |
| 1551-2.5 | 10 L Cubitainer® | 24 months |
| 1551-5 | 20 L Cubitainer® | 24 months |

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

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

## This product was tested in an ISO 17025 Accredited Laboratory

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

RICCA CHEMICAL COMPANY®
W3103 Received on 4/22/24 by IZ

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

# Certificate of Analysis

## Manganous Sulfate Solution, 364 g/L

**Lot Number:** 2403J02 **Product Number:** 4620

**Manufacture Date:** MAR 15, 2024
**Expiration Date:** MAR 2026

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

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

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

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

| Part Number | Size / Package Type | Shelf Life (Unopened Container) |
|---|---|---|
| 4620-32 | 1 L natural poly | 24 months |

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

Jose Pena (03/15/2024)

Operations Manager

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W3105 Received on 4/22/24 by IZ

# Certificate of Analysis

## Sodium Thiosulfate, 0.0250 Normal (N/40)

**Lot Number:** 4403S13 **Product Number:** 7900

**Manufacture Date:** MAR 29, 2024
**Expiration Date:** SEP 2025

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

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

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

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

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

| Part Number | Size / Package Type | Shelf Life (Unopened Container) |
|---|---|---|
| 7900-1 | 4 L natural poly | 18 months |
| 7900-16 | 500 mL natural poly | 18 months |
| 7900-1CT | 4 L Cubitainer® | 18 months |
| 7900-32 | 1 L natural poly | 18 months |

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

Paul Brandon (03/29/2024)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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RICCA CHEMICAL COMPANY®

448 West Fork Dr
Arlington, TX 76012
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

# Certificate of Analysis

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

**Lot Number:** 1405D67 **Product Number:** 535

**Manufacture Date:** APR 05, 2024
**Expiration Date:** APR 2026

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

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

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

| Specification | Reference |
|---|---|
| Alkaline Iodide-Sodium Azide Solution II | ASTM (D 888 A) |

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

| Part Number | Size / Package Type | Shelf Life (Unopened Container) |
|---|---|---|
| 535-32 | 1 L natural poly | 24 months |

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

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

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# Certificate of Analysis

# Sodium Hydroxide (Pellets)

**Material:** 0583

**Grade:** ACS GRADE

**Batch Number:** 23B1556310

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

Pellets

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

Storage: Room Temperature

| 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.

# Certificate of Analysis

# 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

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.

# *Certificate of Analysis List*

For request number 2018129

| Catalog Number Entered | Lot Number Entered | Related Catalog Number | Related Lot Code | Description |
|---|---|---|---|---|
| 2659949 | 4151 | N/A | N/A | StablCal\|sup\|TS\|sup Standard, 10 NTU |

Total Enclosures: 1

**HACH COMPANY**

P.O.Box 389
Loveland, CO 80539
(970) 669-3050

An ISO 9001 Certified Company

# *Certificate of Analysis*



COMMODITY:**StablCal|sup|TS|sup Standard, 10 NTU**
COMMODITY NUMBER: **2659949** MANUFACTURE DATE: **6/4/2024** DATE OF ANALYSIS: **6/7/2024**
LOT NUMBER: **A4151**

| *TEST* | *SPECIFICATIONS* | *RESULTS* |
|---|---|---|
| Turbidity | 9.5 to 10.5 NTU | 9.99 NTU |

The expiration date is May 2026

Formazin and StablCal® solutions provided by Hach are not NIST traceable because the NIST does not carry turbidity standards. However, the use of Formazin and StablCal® as used in Hach method 8195 are accepted by the EPA as a primary standard to be used in the calibration of turbidity instruments.

Certified by Scott Als

Scott Als
Analytical Services Chemist

spectrum® CHEMICAL MFG CORP

# Certificate Of Analysis

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

| TEST | SPECIFICATION | | RESULT |
|---|---|---|---|
| | MIN | MAX | |
| ASSAY (DRIED BASIS) | 99.0 | 101.0 % | 99.5 % |
| pH OF A 5% SOLUTION @ 25°C | 4.0 | 6.0 | 4.6 |
| LOSS ON DRYING | 8.7 | 11.4 % | 8.90 % |
| CALCIUM (Ca) | NO PRECIPITATE IS FORMED | | NO PRECIPITATE IS FORMED |
| ELEMENTAL IMPURITIES: | | | . |
| NICKEL (Ni) | AS REPORTED | | <0.3 ppm |
| CHROMIUM (Cr) | AS REPORTED | | <0.3 ppm |
| NITRILOTRIACETIC ACID[$n[(HOCOCH_2)_3N]$] | | 0.1 % | <0.10 % |
| IDENTIFICATION A | MATCHES REFERENCE | | MATCHES REFERENCE |
| IDENTIFICATION B | RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION | | RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION |
| IDENTIFICATION C | MEETS THE REQUIREMENTS FOR SODIUM | | MEETS THE REQUIREMENTS FOR SODIUM |
| CERTIFIED HALAL | | | CERTIFIED HALAL |
| EXPIRATION DATE | | | 10-JUL-2026 |
| DATE OF MANUFACTURE | | | 11-JUL-2023 |
| APPEARANCE | | | WHITE CRYSTALLINE POWDER |
| RESIDUAL SOLVENTS | | AS REPORTED | NO RESIDUAL SOLVENTS PRESENT |
| MONOGRAPH EDITION | | | USP 2024 |

Certificate of Analysis Results Entered By:

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

Certificate of Analysis Results Approved By:

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

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ

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

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

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

Loveland, CO 80539
(970) 669-3050

An ISO 9001 Certified Company

# *Certificate of Analysis*

## *This is a Component of 1486266 / LOT A4169*

**PRODUCT:** BOD Nutrient Buffer Pillows

**PRODUCT NUMBER:** 1486227

**LOT NUMBER:** A4169

**MANUFACTURE DATE:** 06/24/2024

**DATE OF ANALYSIS:** 07/03/2024

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

The expiration date is Jun 2029

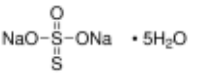
Certified by: Scott Als

Analytical Services Chemist

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

# Certificate of Analysis

Product Name:
Sodium thiosulfate pentahydrate - ACS reagent, ≥99.5%



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

| Test | Specification | Result |
|---|---|---|
| Appearance (Color) | Colorless or White | White |
| Appearance (Form) | Powder or Crystals or Pellets | Crystals |
| ICP Major Analysis<br>Confirms Sodium and Sulfur Components | Confirmed | Confirmed |
| Titration by Iodine | 99.5 - 101.0 % | 100.2 % |
| pH<br>c = 5%; Water; At 25 Deg C | 6.0 - 8.4 | 6.1 |
| Insoluble Matter<br>c = 10%; Water | ≤ 0.005 % | < 0.001 % |
| Nitrogen Compounds | ≤ 0.002 % | < 0.002 % |
| Sulfate & Sulfite (as SO4) | ≤ 0.1 % | < 0.1 % |
| Sulfide | Pass | Pass |
| Meets ACS Requirements | Current ACS Specification | Conforms |
| Recommended Retest Period<br>5 Years | ---------- | ---------- |

Larry Coers, Director
Quality Control
Milwaukee, WI US

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

RICCA CHEMICAL COMPANY®

W3149 Received on 10/16/24 by IZ

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Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

# Certificate of Analysis

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

**Lot Number:** 4408P62 **Product Number:** 8000

**Manufacture Date:** AUG 28, 2024
**Expiration Date:** AUG 2026

This product is Mercury-free.

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

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

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

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

| Part Number | Size / Package Type | Shelf Life (Unopened Container) |
|---|---|---|
| 8000-1 | 4 L natural poly | 24 months |
| 8000-16 | 500 mL natural poly | 24 months |
| 8000-32 | 1 L natural poly | 24 months |

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

Paul Brandon (08/28/2024)
Production Manager

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W3150 Received on 11/4/24 by IZ

Certificate of Analysis



# Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

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

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

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

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

Harout Sahagian - Quality Control Manager - Fair Lawn

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

RICCA CHEMICAL COMPANY®

W3161 Rec. on 12/09/24 by IZ

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

# Certificate of Analysis

## Buffer, Reference Standard, pH 2.00 ± 0.01 at 25°C

**Lot Number:** 2411E26 **Product Number:** 1493

**Manufacture Date:** NOV 11, 2024
**Expiration Date:** OCT 2026

The certified value for this product is confirmed in independent testing by a second qualified chemist.
The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

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

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

| Test | Specification | Result | |
|---|---|---|---|
| Appearance | Colorless liquid | Passed | *Not a certified value. |

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

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

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

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

Jose Pena (11/11/2024)
Operations Manager

## This product was tested in an ISO 17025 Accredited Laboratory

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W3163 Rec. on 12/10/24 by IZ

# Certificate of Analysis

| | |
|---|---|
| Material | BDH9284-2.5KG |
| Material Description | BDH SODIUM CARB ANHYD ACS 2.5KG |
| Grade | U S P REAGENT (ACS GRADE) |
| Batch | 24E3156178 |
| Reassay Date | 09/30/2027 |
| CAS Number | 497-19-8 |
| Molecular Formula | Na2CO3 |
| Molecular Mass | 105.99 |
| Date of Manufacture | 09/01/2023 |
| Storage | Room Temperature |

Material is hygroscopic. Protect from Moisture.
Additional Product Description:

| Characteristics | Specifications | Measured Values |
|---|---|---|
| Appearance | Fine white granular powder | Fine white granular powder |
| Calcium | <= 0.03 % | 0.003 % |
| Chloride | <= 0.001 % | 0.0003 % |
| Heavy Metals (as Pb) | <= 0.0005 % | 0.0001 % |
| Insolubles | <= 0.01 % | 0.001 % |
| Iron | <= 0.0005 % | 0.0001 % |
| Loss on Heating | <= 1.0 % | 0.03 % |
| Magnesium | <= 0.005 % | 0.001 % |
| Phosphate | <= 0.001 % | 0.001 % |
| Potassium | <= 0.005 % | 0.003 % |
| Purity | >= 99.5 % | 100.0 % |
| Silica | <= 0.005 % | 0.001 % |
| Sulfur Compounds | <= 0.003 % | 0.002 % |

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

Internal ID #: 710

## Signature

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

## Additional Information

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
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customerservice@riccachemical.com

# Certificate of Analysis

## Sodium Hypochlorite Solution, 5% available Chlorine

**Lot Number:** 2501J28 **Product Number:** 7495.5

**Manufacture Date:** JAN 17, 2025
**Expiration Date:** JUL 2025

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

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

| Test | Specification | Result | NIST SRM# |
|---|---|---|---|
| Appearance | Colorless to greenish-yellow liquid | Passed | |
| Assay (vs. Sodium Thiosulfate/Starch) | 4.75-5.25 % (w/w) $Cl_2$ | 5.17 % (w/w) $Cl_2$ | 136 |

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

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

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

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

Jose Pena (01/17/2025)
Operations Manager

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

RICCA CHEMICAL COMPANY®

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Pocomoke City, MD 21851
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# Certificate of Analysis

W3178 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 | 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)

INORGANIC VENTURES™
Refine your results. Redefine your industry.

# Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
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## 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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 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:<br>Sulfate,<br>100 µg/mL ea:<br>Bromide,<br>50 µg/mL ea:<br>o-Phosphate as P,<br>30 µg/mL ea:<br>Chloride, Nitrite as N,<br>25 µg/mL ea:<br>Nitrate as N,<br>20 µg/mL ea:<br>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, NNO3-** | **25.00 ± 0.10 µg/mL** |
| **Nitrite as N, NNO2-** | **30.00 ± 0.10 µg/mL** | **o-Phosphate as P, PPO4** | **50.00 ± 0.18 µg/mL** |
| **Sulfate, SO4** | **150.0 ± 0.8 µg/mL** | | |

**Density:** 0.999 g/mL (measured at 20 ± 4 ºC)

**Assay Information:**

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

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

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

### Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

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

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

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

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

$X_a$ = mean of Assay Method A with

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

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2

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

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

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

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

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

### 4.1 Thermometer Calibration

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

### 4.2 Balance Calibration

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

### 4.3 Glassware Calibration

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

## 5.0 CHROMATOGRAM

N/A

## 6.0 INTENDED USE

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

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

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

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

## 8.0 HAZARDOUS INFORMATION

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

## 9.0 HOMOGENEITY

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

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

**11.1 Certification Issue Date**

April 02, 2024

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

**11.2 Lot Expiration Date**

- **April 02, 2029**

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

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

**11.3 Period of Validity**

- Sealed TCT Bag Open Date: _____

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

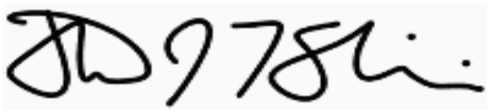
## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Prepared By:**

Uyen Truong
Custom Processing Supervisor

**Certificate Approved By:**

Thomas Kozikowski
Stock VS Manager



**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

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W3191 W3191 Receive Date: 03/18/25 JP

# 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 | *Not a certified value. |

| 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 |

W3195 Received on 03/19/2025 by IZ

# Certificate of Analysis

| | |
|---|---|
| Material | BDH9208-500G |
| Material Description | BDH AMMONIUM CHLORIDE ACS 500G |
| Grade | U S P REAGENT (ACS GRADE) |
| Batch | 24L0356561 |
| Reassay Date | 08/31/2027 |
| CAS Number | 12125-02-9 |
| Molecular Formula | NH4Cl |
| Molecular Mass | 53.49 |
| Date of Manufacture | 08/01/2024 |
| Storage | Room Temperature |

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

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

Internal ID #: 710

## Signature

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

## Additional Information

Analysis may have been rounded to significant digits in specification limits

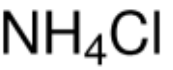
Product meets analytical specifications of the grades listed.

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

W3196 Received on 03/19/2025 by IZ

# Certificate of Analysis

Product Name:
Ammonium chloride - ACS reagent, ≥99.5%



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

| Test | Specification | Result |
|---|---|---|
| Appearance (Color) | White | White |
| Appearance (Form) | Powder or Crystals or Chunk(s) | Crystals |
| Titration by AgNO3 | ≥ 99.5 % | 100.2 % |
| pH @ 25 Deg c (5% Solution) | 4.5 - 5.5 | 4.9 |
| Insoluble Matter 10%, H2O | ≤ 0.005 % | 0.001 % |
| Residue on ignition (Ash) | ≤ 0.01 % | < 0.01 % |
| Calcium (Ca) | ≤ 0.001 % | < 0.001 % |
| Magnesium (Mg) | ≤ 5 ppm | 1 ppm |
| Heavy Metals by ICP | ≤ 5 ppm | < 1 ppm |
| Iron (Fe) | ≤ 2 ppm | < 1 ppm |
| Phosphate (PO4) | ≤ 2 ppm | < 2 ppm |
| Sulfate (SO4) | ≤ 0.002 % | < 0.002 % |
| Meets ACS Requirements | Current ACS Specification | Conforms |
| Recommended Retest Period 3 Years | ---------- | ---------- |

Larry Coers, Director

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

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Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

# Certificate of Analysis

**Product Number:** **213330**
**Batch Number:** **MKCV1009**

---

Quality Control
Milwaukee, WI US

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

Instrument IC-1 Analyst : NF Method: 300.0 / 9056A

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

# Certificate of Analysis

W3199 Received on04/11/2025 by IZ

| | |
|---|---|
| Material | BDH9312-2.5KG |
| Material Description | COPPER SULFATE CRYST 2500GM |
| Grade | U S P REAGENT (ACS GRADE) |
| Batch | 24H0956271 |
| Reassay Date | 05/31/2027 |
| CAS Number | 7758-99-8 |
| Molecular Formula | CuSO4.5H2O |
| Molecular Mass | 249.68 |
| Date of Manufacture | 05/01/2024 |
| Storage | Room Temperature |

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

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

CUSTOMER PART# BDH9312-2.5KG

Internal ID #: 793

## Signature

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

## Additional Information

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

W3200 Received on 04/11/2025 by IZ

# 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.

N3212 Received on 5/21/25 by 12

POLYSEED®

# CERTIFICATE OF ANALYSIS

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

**FINISHED PRODUCT, LOT NUMBER, MFG. /EXP DATE:**
PolySeed® • Part No. P-110 • Lot 132409 • Mfg. Date: 09/2024 • Exp. Date: 09/2026

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

**VIABLE COUNT, FINAL TEST RESULT:**
The product has been fully tested in accordance with Finished Product Specifications and contains a minimum viable count of $4.00 \times 10^9$ cfu/g.

**GLUCOSE/GLUTAMIC-ACID RESULTS:**
Tested results within acceptable range 198 +/- 30.5 mg/L (167.5 - 228.5 mg/L). GGA Lot# 43100020 – Average Test Result: 202.1

See www.polyseed.com for details.

**SEED CONTROL FACTOR:**
Tested results within acceptable range 0.6 – 1.0 see www.polyseed.com for details

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

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

**Signature:** _____ **Date**: 09/13/2024

***Quality Control Department***

POLYSEED.Ref.1.19 Revised Jan 24

InterLab®
International Laboratory Supply

ISO 9002
DNV
DNV Certification, Inc.
REGISTERED FIRM


# SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO. Q2344
QUOTE NO. Bottle # B2506013
COC Number 2046517

## CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: LKB ENGINEERING, PLLC.
ADDRESS: 1 AERIAL WAY
CITY SYOSSET STATE: NY ZIP: 11791
ATTENTION: JOHN GERLACH
PHONE: 516-210-8931 FAX:

## CLIENT PROJECT INFORMATION

PROJECT NAME: ANSONIA LANDFILL
PROJECT NO.: 0774-08 LOCATION: CT
PROJECT MANAGER: JOHN GERLACH
e-mail: jgerlach@LKB-ENGINEERING.COM
PHONE: SAME FAX:

## CLIENT BILLING INFORMATION

BILL TO: LKB ENGINEERING, PLLC. PO#: N/A for lab
ADDRESS: SAME
CITY STATE: ZIP:
ATTENTION: SHARON F. PHONE:

## DATA TURNAROUND INFORMATION

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

## DATA DELIVERABLE INFORMATION

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

## ANALYSIS

1: VOCs SEE BOTTLE ORDER # B2506013
2
3
4
5
6
7
8
9

| ALLIANCE SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE COMP | SAMPLE TYPE GRAB | SAMPLE COLLECTION DATE | SAMPLE COLLECTION TIME | # OF BOTTLES | PRESERVATIVES A/E | PRESERVATIVES E+OTHER AS APPROPRIATE 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | MW-1 | GW | | X | 6/16/25 | 9:30A | 10 | | | X | | | | | | | | SAMPLES FOR DISS. Fe + Mn FILTERED IN FIELD. |
| 2. | MW-3 | | | X | | 10:30A | 10 | | | X | | | | | | | | |
| 3. | MW-4 | | | X | | 11:00A | 10 | | | X | | | | | | | | |
| 4. | MW-2 | ↓ | | X | ↓ | 12:00P | 10 | | | X | | | | | | | | |
| 5. | TRIP-BLANK | DI | | X | ↓ | | 2 | X | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | | |

PRESERVATIVES: ← Specify Preservatives — A-HCl, B-HN03, C-H2SO4, D-NaOH, E-ICE, F-OTHER

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

| | DATE/TIME | | |
|---|---|---|---|
| RELINQUISHED BY SAMPLER: 1. | DATE/TIME: 1147 6-17-25 | RECEIVED BY: 1. | 1147 6-17-25 |
| RELINQUISHED BY SAMPLER: 2. | DATE/TIME: | RECEIVED BY: 2. | |
| RELINQUISHED BY SAMPLER: 3. | DATE/TIME: 1608 6-7-25 | RECEIVED BY: 3. | |

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 0.6 °C
Comments: _____

Page _____ of

CLIENT: ☐ Hand Delivered ☐ Other _____

Shipment Complete ☐ YES ☐ NO

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

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

# Laboratory Certification

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

QA Control Code: A2070148

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

# LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** Q2344 LOCK01
**Client Name :** Lockwood, Kessler & Bartl
**Client Contact :** John Gerlach
**Invoice Name :** Lockwood, Kessler & Bartl
**Invoice Contact :** John Gerlach

**Order Date :** 6/17/2025 11:52:00 AM
**Project Name :** Ansonia Landfill 2025
**Receive DateTime :** 6/17/2025 ~~12:00:00 AM~~ 16:05 LA
**Purchase Order :**

**Project Mgr :**
**Report Type :** ~~NYS ASP B~~ Level 2 dP
**EDD Type :** EXCEL NOCLEANUP
**Hard Copy Date :**
**Date Signoff :**

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|
| Q2344-01 | MW-1 | Water | 16 JN 06/~~17~~/2025 | 09:30 | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | | 10 Bus. Days |
| Q2344-03 | MW-3 | Water | 16 JN 06/~~17~~/2025 | 10:30 | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | | 10 Bus. Days |
| Q2344-05 | MW-4 | Water | 16 JN 06/~~17~~/2025 | 11:00 | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | | 10 Bus. Days |
| Q2344-07 | MW-2 | Water | 16 JN 06/~~17~~/2025 | 12:00 | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | | 10 Bus. Days |
| Q2344-09 | TRIP-BLANK | Water | 16 JN 06/~~17~~/2025 | 00:00 | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | | 10 Bus. Days |

**Relinguished By :**
**Date / Time :** 6/18/25 9:30

**Received By :** Sam
**Date / Time :** 06/18/25 9:30 Lgt 4

**Storage Area : VOA Refridgerator Room**