

**DATA PACKAGE  
GENERAL CHEMISTRY**

**PROJECT NAME : JF HUEBNER**

**AMBRIC TECHNOLOGY CORPORATION**

**100 Pine Street**

**Colwyn, PA - 19023**

**Phone No: 215-928-8930**

**ORDER ID : Q3539**

**ATTENTION : Dan Mulvihill**



**Laboratory Certification ID # 20012**



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## Cover Page

**Order ID :** Q3539

**Project ID :** JF Huebner

**Client :** Ambric Technology Corporation

**Lab Sample Number**

Q3539-01

**Client Sample Number**

JF-HUEBNER

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 :

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 2:24 pm, Nov 12, 2025*

Date: 11/12/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

**CASE NARRATIVE**

**Ambric Technology Corporation**

**Project Name: JF Huebner**

**Project # N/A**

**Order ID # Q3539**

**Test Name: pH**

**A. Number of Samples and Date of Receipt:**

1 Solid sample was received on 11/04/2025.

**B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: pH. This data package contains results for pH.

**C. Analytical Techniques:**

The analysis of pH was based on method 9045D.

**D. QA/ QC Samples:**

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

The Duplicate analysis met criteria for all compounds.

The Calibration met the requirements.

**E. Additional Comments:**

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

---

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 \_\_\_\_\_

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 2:25 pm, Nov 12, 2025*

## DATA REPORTING QUALIFIERS- INORGANIC

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

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

**ALLIANCE** 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

**GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY**

ORDER ID: Q3539

MATRIX: Solid

METHOD: 9045D

	NA	NO	YES
1. Blank Contamination - If yes, list compounds and concentrations in each blank:	✓		
2. Sample Duplicate Analysis Met QC Criteria  If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓
3. Digestion Holding Time Met  If not met, list number of days exceeded for each sample:  The Holding Times were met for all samples except for JF-HUEBNER of pH as sample was receive out of holding time.		✓	

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

QA REVIEW

REVIEWED

Sohil Jodhani, QA/QC Director , 11/12/2025, 1:26:49 PM

**APPENDIX A**

**QA REVIEW GENERAL DOCUMENTATION**

Project #: Q3539

Completed

For thorough review, the report must have the following:

**GENERAL:**

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

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

Is the chain of custody signed and complete ✓

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

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

**COVER PAGE:**

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

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

**CHAIN OF CUSTODY:**

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

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

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

Were the samples received within hold time ✓

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

**ANALYTICAL:**

Was method requirement followed? ✓

Was client requirement followed? ✓

Does the case narrative summarize all QC failure? ✓

All runlogs and manual integration are reviewed for requirements ✓

All manual calculations and /or hand notations verified ✓

QA Review Signature: SOHIL JODHANI

Date: 11/12/2025

### LAB CHRONICLE

<b>OrderID:</b> Q3539	<b>OrderDate:</b> 11/4/2025 2:37:00 PM
<b>Client:</b> Ambric Technology Corporation	<b>Project:</b> JF Huebner
<b>Contact:</b> Dan Mulvihill	<b>Location:</b> --Select--,D41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3539-01	JF-HUEBNER	SOIL	pH	9045D	11/04/25 12:00		11/05/25 10:15	11/04/25



# SAMPLE DATA

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## Report of Analysis

Client: Ambric Technology Corporation	Date Collected: 11/04/25 12:00
Project: JF Huebner	Date Received: 11/04/25
Client Sample ID: JF-HUEBNER	SDG No.: Q3539
Lab Sample ID: Q3539-01	Matrix: SOIL
	% Solid: 100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
pH	8.26	H	1	0	0	pH		11/05/25 10:15	9045D

Comments: pH result reported at temperature 23.5 °C

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

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





# QC RESULT SUMMARY

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### Initial and Continuing Calibration Verification

**Client:** Ambric Technology Corporation

**SDG No.:** Q3539

**Project:** JF Huebner

**RunNo.:** LB137777

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: <b>ICV</b> pH	pH	7.00	7	100	90-110	11/05/2025
Sample ID: <b>CCV1</b> pH	pH	2.01	2.00	101	90-110	11/05/2025
Sample ID: <b>CCV2</b> pH	pH	12.02	12.00	100	90-110	11/05/2025

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### Duplicate Sample Summary

<b>Client:</b> Ambric Technology Corporation	<b>SDG No.:</b> Q3539
<b>Project:</b> JF Huebner	<b>Sample ID:</b> Q3543-01
<b>Client ID:</b> TRE-25-0073DUP	<b>Percent Solids for Spike Sample:</b> 100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
pH	pH	+/-20	7.05		7.07		1	0.28		11/05/2025

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# RAW DATA

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### Analytical Summary Report

**Analysis Method:** 9045D  
**Parameter:** pH  
**Run Number:** LB13777  
**BalanceID:** WC SC-7

**Analyst By :** jignesh  
**Supervisor Review By :** Iwona  
**Slope :** 98.6  
**pH Meter ID :** WC PH METER-1

Calibration Standards	Chemtech Log#
PH 4 BUFFER SOLUTION	W3178
BUFFER PH 7.00 GREEN 1PINT PK6	W3093
PH 10.01 BUFFER, COLOR CD 475ML	W3191
buffer solution pH 7 yellow	W3217
Buffer Solution, PH2 (500ml)	W3161
pH 12.00 Buffer	W3200

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

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

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

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.3	4.01	11/05/2025	10:00
2	CAL2	1	Water	NA	NA	20.2	7.00	11/05/2025	10:01
3	CAL3	1	Water	NA	NA	20.3	10.02	11/05/2025	10:02
4	ICV	1	Water	NA	NA	20.1	7.00	11/05/2025	10:05
5	CCV1	1	Water	NA	NA	20.2	2.01	11/05/2025	10:06
6	Q3539-01	1	Solid	20.02	20	23.5	8.26	11/05/2025	10:15
7	Q3543-01	1	Solid	20.03	20	23.6	7.05	11/05/2025	10:25
8	Q3543-01DUP	1	Solid	20.04	20	23.7	7.07	11/05/2025	10:27
9	CCV2	1	Water	NA	NA	20.2	12.02	11/05/2025	10:30

WB 137777

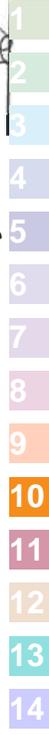
WORKLIST(Hardcopy Internal Chain)

WorkList Name : ph s q3473      WorkList ID : 192888      Department : Wet-Chemistry      Date : 11-05-2025 08:41:03

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3539-01	JF-HUEBNER	Solid	pH	Cool 4 deg C	AMBR01	D41	11/04/2025	9045D
Q3543-01	TRE-25-0073	Solid	pH	Cool 4 deg C	PSEG03	D41	11/04/2025	9045D

Date/Time 11/05/25 08:45  
 Raw Sample Received by: [Signature]  
 Raw Sample Relinquished by: [Signature]

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



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

**Daily Analysis Runlog For Sequence/QC Batch ID # LB137777**

Review By	jignesh	Review On	11/5/2025 10:10:21 AM
Supervise By	Iwona	Supervise On	11/5/2025 10:52:40 AM
SubDirectory	LB137777	Test	pH

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	W3178,W3093,W3191,W3217,W3161,W3200

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	11/05/25 10:00		Jignesh	OK
2	CAL2	CAL2	CAL	11/05/25 10:01		Jignesh	OK
3	CAL3	CAL3	CAL	11/05/25 10:02		Jignesh	OK
4	ICV	ICV	ICV	11/05/25 10:05		Jignesh	OK
5	CCV1	CCV1	CCV	11/05/25 10:06		Jignesh	OK
6	Q3539-01	JF-HUEBNER	SAM	11/05/25 10:15		Jignesh	OK
7	Q3543-01	TRE-25-0073	SAM	11/05/25 10:25		Jignesh	OK
8	Q3543-01DUP	TRE-25-0073DUP	DUP	11/05/25 10:27		Jignesh	OK
9	CCV2	CCV2	CCV	11/05/25 10:30		Jignesh	OK

### Prep Standard - Chemical Standard Summary

**Order ID :** Q3539  
**Test :** Percent Solids,pH  
**Prepbatch ID :**  
**Sequence ID/Qc Batch ID:** LB137777,

**Standard ID :**

**Chemical ID :**  
W3093,W3161,W3178,W3191,W3200,W3217,

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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.	AL13850-1 / Buffer Solution, PH2 (500ml)	2411E26	10/31/2026	12/09/2024 / lwona	12/09/2024 / lwona	W3161

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14455-3 / buffer solution pH 7 yellow	2504D34	03/31/2027	07/02/2025 / jignesh	06/26/2025 / lwona	W3217



*W3093*  
*004121*  
*04/09/2024*  
*18*

## 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 <span style="float: right;">*Not a certified value.</span>

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

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

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

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

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

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Paul Brandon (01/08/2024)

Production Manager

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

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

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

# Certificate of Analysis

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

**Lot Number:** 2411E26

**Product Number:** 1493

**Manufacture Date:** NOV 11, 2024

**Expiration Date:** OCT 2026

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

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

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

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

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

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

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

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

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



Jose Pena (11/11/2024)  
Operations Manager

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

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



## 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

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

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

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

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

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



RICCA CHEMICAL COMPANY®

W3191

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

W3191

receive  
package

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

Version: 1.3

Lot Number: 2410F80

Product Number: 1601

Page 1 of 2

# Certificate of Analysis

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

**Lot Number:** 2504F20

**Product Number:** 1615

**Manufacture Date:** APR 08, 2025

**Expiration Date:** SEP 2026

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

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

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

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

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

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

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

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



Jose Pena (04/08/2025)  
Operations Manager

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

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

# Certificate of Analysis

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

**Lot Number:** 2504D34

**Product Number:** 1551

**Manufacture Date:** APR 03, 2025

**Expiration Date:** MAR 2027

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

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

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

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

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

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.003	0.02	186-I-g, 186-II-g, 191d

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1551-2.5	10 L Cubitainer®	24 months
1551-20	20 x 20 mL pack	24 months
1551-32	1 L natural poly	24 months
1551-5	20 L Cubitainer®	24 months

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

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Jose Pena (04/03/2025)  
Operations Manager

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

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

**PERCENT SOLID**

Supervisor: Iwona  
 Analyst: jignesh  
 Date: 11/5/2025

OVENTEMP IN Celsius(°C): 107  
 Time IN: 17:30  
 In Date: 11/04/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104  
 Time OUT: 08:37  
 Out Date: 11/05/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 BalanceID: M SC-4  
 Thermometer ID: % SOLID-OVEN

QC:LB137758

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
Q3530-01	LOD-MDL-SOIL-01-QT4-2025	1	1.00	1.00	2.00	2.00	100.0	
Q3530-02	LOQ-SOIL-02-QT4-2025	2	1.00	1.00	2.00	2.00	100.0	
Q3530-03	MDL-SOIL-03-QT4-2025	3	1.00	1.00	2.00	2.00	100.0	
Q3530-04	LOD-MDL-SOIL-04-QT4-2025	4	1.00	1.00	2.00	2.00	100.0	
Q3530-05	LOQ-SOIL-05-QT4-2025	5	1.00	1.00	2.00	2.00	100.0	
Q3530-06	MDL-SOIL-06-QT4-2025	6	1.00	1.00	2.00	2.00	100.0	
Q3530-16	LLOQ-SOIL-QT4-2025	7	1.00	1.00	2.00	2.00	100.0	
Q3532-01	TP-1	8	1.18	10.44	11.62	9.9	83.5	
Q3532-02	TP-1-EPH	9	1.19	10.40	11.59	9.76	82.4	
Q3532-03	TP-1-VOC	10	1.16	10.40	11.56	9.76	82.7	
Q3532-05	TP-2	11	1.18	10.81	11.99	10.41	85.4	
Q3532-06	TP-2-EPH	12	1.18	10.50	11.68	9.94	83.4	
Q3532-07	TP-2-VOC	13	1.18	10.94	12.12	10.54	85.6	
Q3536-01	FILTER-COMP	14	1.00	1.00	2.00	2.00	100.0	filter sample
Q3536-03	2061	15	1.00	1.00	2.00	2.00	100.0	debris
Q3536-04	2052	16	1.00	1.00	2.00	2.00	100.0	debris
Q3537-01	MW-17-SOIL	17	1.15	11.14	12.29	10.66	85.4	
Q3538-01	3899-RICHMOND-STREET-S B1	19	1.13	10.61	11.74	10.47	88.0	
Q3538-02	3899-RICHMOND-STREET-S B2	20	1.17	10.13	11.3	10.37	90.8	
Q3539-01	JF-HUEBNER	21	1.14	10.21	11.35	8.7	74.0	
Q3543-01	TRE-25-0073	18	1.13	10.50	11.63	11.24	96.3	

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

137758

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-110425      WorkList ID : 192868      Department : Wet-Chemistry      Date : 11-04-2025 13:32:49

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3530-01	LOD-MDL-SOIL-01-QT4-2025	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	11/03/2025	Chemtech -SO
Q3530-02	LOQ-SOIL-02-QT4-2025	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	11/03/2025	Chemtech -SO
Q3530-03	MDL-SOIL-03-QT4-2025	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	11/03/2025	Chemtech -SO
Q3530-04	LOD-MDL-SOIL-04-QT4-2025	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	11/03/2025	Chemtech -SO
Q3530-05	LOQ-SOIL-05-QT4-2025	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	11/03/2025	Chemtech -SO
Q3530-06	MDL-SOIL-06-QT4-2025	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	11/03/2025	Chemtech -SO
Q3530-16	LLOQ-SOIL-QT4-2025	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	11/03/2025	Chemtech -SO
Q3532-01	TP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/03/2025	Chemtech -SO
Q3532-02	TP-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/04/2025	Chemtech -SO
Q3532-03	TP-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/04/2025	Chemtech -SO
Q3532-05	TP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/04/2025	Chemtech -SO
Q3532-06	TP-2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/04/2025	Chemtech -SO
Q3532-07	TP-2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/04/2025	Chemtech -SO
Q3536-01	FILTER-COMP	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/04/2025	Chemtech -SO
Q3536-03	2061	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/04/2025	Chemtech -SO
Q3536-04	2052	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/04/2025	Chemtech -SO
Q3537-01	MW-17-SOIL	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/04/2025	Chemtech -SO
Q3538-01	3899-RICHMOND-STREET-SB	Solid	Percent Solids	Cool 4 deg C	AMBR01	D31	11/04/2025	Chemtech -SO
Q3538-02	3899-RICHMOND-STREET-SB:	Solid	Percent Solids	Cool 4 deg C	AMBR01	D31	11/04/2025	Chemtech -SO
Q3539-01	JF-HUEBNER	Solid	Percent Solids	Cool 4 deg C	AMBR01	D41	11/04/2025	Chemtech -SO
Q3543-01	TRE-25-0073	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/04/2025	Chemtech -SO

Date/Time 11/04/25 15:25      Date/Time 11/04/25  
 Raw Sample Received by: JB COFC      Raw Sample Received by: JB COFC  
 Raw Sample Relinquished by: JB COFC      Raw Sample Relinquished by: JB COFC



# SHIPPING DOCUMENTS

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### Laboratory Certification

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

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