

DATA REPORTING QUALIFIERS- INORGANIC

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

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

LAB CHRONICLE

OrderID: Q2681
Client: Core Environmental Consultants and Services, Inc.
Contact: Roland Scardino

OrderDate: 7/23/2025 2:59:39 PM
Project: NYPA
Location: D21

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2681-01	NYPA-POUCH-SPENT-CARBON	SOIL			07/23/25 08:45			07/23/25
			Ignitability	1030			07/24/25 09:40	
			pH	9045D			07/24/25 12:15	



SAMPLE DATA

Report of Analysis

Client:	Core Environmental Consultants and Services, Inc.	Date Collected:	07/23/25 08:45
Project:	NYPA	Date Received:	07/23/25
Client Sample ID:	NYPA-POUCH-SPENT-CARBON	SDG No.:	Q2681
Lab Sample ID:	Q2681-01	Matrix:	SOIL
		% Solid:	93

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ignitability	NO		1	0	0	oC		07/24/25 09:40	1030
pH	5.46	H	1	0	0	pH		07/24/25 12:15	9045D

Comments: pH result reported at temperature 22.6 °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



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

Initial and Continuing Calibration Verification

Client: Core Environmental Consultants and Services, Inc.

SDG No.: Q2681

Project: NYPA

RunNo.: LB136593

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV						
pH		pH	7.02	7	100	90-110	07/24/2025
Sample ID:	CCV1						
pH		pH	2.01	2.00	101	90-110	07/24/2025
Sample ID:	CCV2						
pH		pH	12.02	12.00	100	90-110	07/24/2025

Duplicate Sample Summary

Client:	Core Environmental Consultants and Services, Inc.	SDG No.:	Q2681
Project:	NYPA	Sample ID:	Q2681-01
Client ID:	NYPA-POUCH-SPENT-CARBONDUP	Percent Solids for Spike Sample:	100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
pH	pH	+/-20	5.46		5.48		1	0.37		07/24/2025
Ignitability	oC	+/-20	NO		NO		1	0		07/24/2025



RAW DATA

Analytical Summary Report

Analysis Method: 9045D

Analyst By : jignesh

Parameter: pH

Supervisor Review By : Iwona

Run Number: LB136593

Slope : 98.3

BalanceID: WC SC-7

pH Meter ID : WC PH METER-1

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

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

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

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

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.3	4.02	07/24/2025	11:50
2	CAL2	1	Water	NA	NA	20.2	7.01	07/24/2025	11:51
3	CAL3	1	Water	NA	NA	20.3	10.02	07/24/2025	11:55
4	ICV	1	Water	NA	NA	20.3	7.02	07/24/2025	11:57
5	CCV1	1	Water	NA	NA	20.3	2.01	07/24/2025	11:59
6	Q2681-01	1	Solid	20.02	20	22.6	5.46	07/24/2025	12:15
7	Q2681-01DUP	1	Solid	20.04	20	22.8	5.48	07/24/2025	12:19
8	CCV2	1	Water	NA	NA	20.3	12.02	07/24/2025	12:20

WORKLIST(Hardcopy Internal Chain)

17131593

WorkList Name : ph s q2681

WorkList ID : 190918

Department : Wet-Chemistry

Date : 07-24-2025 11:31:45

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2681-01	NYPA-POUCH-SPENT-CARBO	Solid	pH	Cool 4 deg C	CORE02	D21	07/23/2025	9045D

Date/Time

07/24/25 11:45

Raw Sample Received by:

gc (wp)

Raw Sample Relinquished by:

gc (sum)

Date/Time

07/24/25

Raw Sample Received by:

gc (wp)

Raw Sample Relinquished by:

gc (sum)

Analytical Summary Report

Analysis Method: 1030
Parameter: Ignitability
Run Number: LB136606

Reviewed By: Eman

Supervisor Review By: Iwona

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Anal Time
1	Q2681-01	NYPA-POUCH-SPENT-CAR	1	Solid	NO	0.00	07/24/2025	09:40
2	Q2681-01DUP	NYPA-POUCH-SPENT-CAR	1	Solid	NO	0.00	07/24/2025	09:47
3	Q2685-01	COMP-1	1	Solid	NO	0.00	07/24/2025	09:52
4	Q2685-02	COMP-2	1	Solid	NO	0.00	07/24/2025	10:00
5	Q2685-03	COMP-3	1	Solid	NO	0.00	07/24/2025	10:07
6	Q2685-04	COMP-4	1	Solid	NO	0.00	07/24/2025	10:15
7	Q2688-01	COMP-1	1	Solid	NO	0.00	07/24/2025	10:23
8	Q2688-02	COMP-2	1	Solid	NO	0.00	07/24/2025	10:30
9	Q2688-03	COMP-3	1	Solid	NO	0.00	07/24/2025	10:38
10	Q2688-04	COMP-4	1	Solid	NO	0.00	07/24/2025	10:45
11	Q2688-05	COMP-5	1	Solid	NO	0.00	07/24/2025	10:52
12	Q2688-06	COMP-6	1	Solid	NO	0.00	07/24/2025	11:00
13	Q2688-07	COMP-7	1	Solid	NO	0.00	07/24/2025	11:08
14	Q2688-08	COMP-8	1	Solid	NO	0.00	07/24/2025	11:15
15	Q2688-10	SOM-103	1	Solid	NO	0.00	07/24/2025	11:30
16	Q2688-11	SOM-77	1	Solid	NO	0.00	07/24/2025	11:37

Burning Rate = $\frac{\text{Length (mm)}}{\text{Total Time (sec)}}$

WORKLIST(Hardcopy Internal Chain)

66136606

WorkList Name : ign-07-24

WorkList ID : 190928

Department : Wet-Chemistry

Date : 07-24-2025 08:15:07

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2681-01	NYPA-POUCH-SPENT-CARBO	Solid	Ignitability	Cool 4 deg C	CORE02	D21	07/23/2025	1030
Q2685-01	COMP-1	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2685-02	COMP-2	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2685-03	COMP-3	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2685-04	COMP-4	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2688-01	COMP-1	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2688-02	COMP-2	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2688-03	COMP-3	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2688-04	COMP-4	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2688-05	COMP-5	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2688-06	COMP-6	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2688-07	COMP-7	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2688-08	COMP-8	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2688-10	SOM-103	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030
Q2688-11	SOM-77	Solid	Ignitability	Cool 4 deg C	PSEG03	D21	07/23/2025	1030

Date/Time 07/24/2025 08:25
 Raw Sample Received by: EM(WOC)
 Raw Sample Relinquished by: J. Wiley

Date/Time 07/24/2025 12:50
 Raw Sample Received by: Muee
 Raw Sample Relinquished by: EM(WOC)

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136593

Review By	jignesh	Review On	7/24/2025 12:18:27 PM
Supervise By	Iwona	Supervise On	7/24/2025 1:11:14 PM
SubDirectory	LB136593	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	07/24/25 11:50		Jignesh	OK
2	CAL2	CAL2	CAL	07/24/25 11:51		Jignesh	OK
3	CAL3	CAL3	CAL	07/24/25 11:55		Jignesh	OK
4	ICV	ICV	ICV	07/24/25 11:57		Jignesh	OK
5	CCV1	CCV1	CCV	07/24/25 11:59		Jignesh	OK
6	Q2681-01	NYPA-POUCH-SPEN	SAM	07/24/25 12:15		Jignesh	OK
7	Q2681-01DUP	NYPA-POUCH-SPEN	DUP	07/24/25 12:19		Jignesh	OK
8	CCV2	CCV2	CCV	07/24/25 12:20		Jignesh	OK

Instrument ID: FLAME

Daily Analysis Runlog For Sequence/QC Batch ID # LB136606

Review By	Eman	Review On	7/24/2025 2:59:48 PM
Supervise By	Iwona	Supervise On	7/24/2025 3:03:10 PM
SubDirectory	LB136606	Test	Ignitability
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	Q2681-01	NYPA-POUCH-SPEN	SAM	07/24/25 09:40		Eman	OK
2	Q2681-01DUP	NYPA-POUCH-SPEN	DUP	07/24/25 09:47		Eman	OK
3	Q2685-01	COMP-1	SAM	07/24/25 09:52		Eman	OK
4	Q2685-02	COMP-2	SAM	07/24/25 10:00		Eman	OK
5	Q2685-03	COMP-3	SAM	07/24/25 10:07		Eman	OK
6	Q2685-04	COMP-4	SAM	07/24/25 10:15		Eman	OK
7	Q2688-01	COMP-1	SAM	07/24/25 10:23		Eman	OK
8	Q2688-02	COMP-2	SAM	07/24/25 10:30		Eman	OK
9	Q2688-03	COMP-3	SAM	07/24/25 10:38		Eman	OK
10	Q2688-04	COMP-4	SAM	07/24/25 10:45		Eman	OK
11	Q2688-05	COMP-5	SAM	07/24/25 10:52		Eman	OK
12	Q2688-06	COMP-6	SAM	07/24/25 11:00		Eman	OK
13	Q2688-07	COMP-7	SAM	07/24/25 11:08		Eman	OK
14	Q2688-08	COMP-8	SAM	07/24/25 11:15		Eman	OK
15	Q2688-10	SOM-103	SAM	07/24/25 11:30		Eman	OK
16	Q2688-11	SOM-77	SAM	07/24/25 11:37		Eman	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2681

Test : Ignitability, Percent Solids, pH

Prepbatch ID :

Sequence ID/Qc Batch ID: LB136593, LB136606,

Standard ID :

Chemical ID :

W3093, W3161, W3178, W3191, W3200, W3217,

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

**RICCA CHEMICAL COMPANY®**

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Certificate of Analysis

W3093
094121
04/03/2024
16

Buffer, Reference Standard, pH 7.00 ± 0.01 at 25°C (Color Coded Yellow)**Lot Number:** 4401F99**Product Number:** 1551**Manufacture Date:** JAN 08, 2024**Expiration Date:** DEC 2025

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

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

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

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

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

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

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

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

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

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



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

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Certificate of Analysis

021758 58

Buffer, Reference Standard, pH 4.00 ± 0.01 at 25°C (Color Coded Red)

Lot Number: 2411A93

Product Number: 1501

Manufacture Date: NOV 04, 2024

Expiration Date: OCT 2026

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

°C	0	5	10	15	20	25	30	35	40	45	50
pH	4.00	4.00	4.00	4.00	4.00	4.00	4.01	4.02	4.03	4.04	4.06

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Acid Phthalate	877-24-7	Buffer
Preservative	Proprietary	Commercial
Red Dye	Proprietary	Purified

Test	Specification	Result
Appearance	Red liquid	Passed

*Not a certified value.

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

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

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

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

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



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Certificate of Analysis

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

Lot Number: 2410F80

Product Number: 1601

Manufacture Date: OCT 09, 2024

Expiration Date: MAR 2026

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

°C	0	5	10	15	20	25	30	35	40	50
pH	10.31	10.23	10.17	10.11	10.05	10.00	9.95	9.91	9.87	9.81

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

Test	Specification	Result
Appearance	Blue liquid	Passed

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

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1601-1	4 L natural poly	18 months
1601-16	500 mL natural poly	18 months
1601-1CT	4 L Cubitainer®	18 months
1601-2.5	10 L Cubitainer®	18 months
1601-32	1 L natural poly	18 months
1601-5	20 L Cubitainer®	18 months

Version: 1.3

Lot Number: 2410F80

Product Number: 1601

Page 1 of 2



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)



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: 7/24/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:35
In Date: 07/23/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:33
Out Date: 07/24/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136583

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
Q2675-01	SU-03-07222025	1	1.15	10.54	11.69	10.93	92.8	
Q2675-02	SU-03-07222025-E2	2	1.16	10.31	11.47	10.88	94.3	
Q2676-01	HD-01-07222025	3	1.18	10.17	11.35	10.66	93.2	
Q2676-02	HD-01-07222025-E2	4	1.18	10.70	11.88	11.5	96.4	
Q2676-03	HD-02-07222025	5	1.13	10.71	11.84	11.41	96.0	
Q2676-04	HD-02-07222025-E2	6	1.15	10.65	11.8	11.35	95.8	
Q2677-01	OK-02-07222025	7	1.18	10.81	11.99	11.54	95.8	
Q2677-02	OK-02-07222025-E2	8	1.16	10.50	11.66	11.37	97.2	
Q2677-03	OK-03-07222025	9	1.14	10.71	11.85	11.54	97.1	
Q2677-04	OK-03-07222025-E2	10	1.18	10.50	11.68	11.32	96.6	
Q2678-01	I-1361-USED-OIL	11	1.00	1.00	2.00	2.00	100.0	oil sample
Q2679-01	M2239	12	1.00	1.00	2.00	2.00	100.0	oil sample
Q2681-01	NYP-POUCH-SPENT-CARBON	13	1.18	10.18	11.36	10.65	93.0	
Q2685-01	COMP-1	14	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2685-02	COMP-2	15	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2685-03	COMP-3	16	1.18	10.93	12.11	6.89	52.2	
Q2685-04	COMP-4	17	1.12	11.08	12.2	10.2	81.9	
Q2686-01	Y2310-0410-1-1	18	1.00	1.00	2.00	2.00	100.0	PILC
Q2686-02	Y2310-0410-1-2	19	1.00	1.00	2.00	2.00	100.0	PILC
Q2686-03	Y2310-0410-2-1	20	1.00	1.00	2.00	2.00	100.0	PILC
Q2686-04	Y2310-0410-2-2	21	1.00	1.00	2.00	2.00	100.0	PILC
Q2687-01	VNJ-251	22	1.13	11.47	12.6	10.88	85.0	
Q2687-02	VNJ-251-E2	23	1.17	10.34	11.51	10.4	89.3	
Q2688-01	COMP-1	24	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2688-02	COMP-2	25	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2688-03	COMP-3	26	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2688-04	COMP-4	27	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2688-05	COMP-5	28	1.00	1.00	2.00	2.00	100.0	oily-debris



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/24/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:35
In Date: 07/23/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:33
Out Date: 07/24/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136583

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
Q2688-06	COMP-6	29	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2688-07	COMP-7	30	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2688-08	COMP-8	31	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2688-09	SOM-81	32	1.00	1.00	2.00	2.00	100.0	OIL SAMPLE
Q2688-10	SOM-103	33	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2688-11	SOM-77	34	1.00	1.00	2.00	2.00	100.0	oily-debris

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

WORKLIST(Hardcopy Internal Chain)

136583

WorkList Name : %1-072325 WorkList ID : 190888 Department : Wet-Chemistry Date : 07-23-2025 08:00:26

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2675-01	SU-03-07222025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	07/22/2025	Chemtech -SO
Q2675-02	SU-03-07222025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	07/22/2025	Chemtech -SO
Q2676-01	HD-01-07222025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	07/22/2025	Chemtech -SO
Q2676-02	HD-01-07222025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	07/22/2025	Chemtech -SO
Q2676-03	HD-02-07222025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	07/22/2025	Chemtech -SO
Q2676-04	HD-02-07222025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	07/22/2025	Chemtech -SO
Q2677-01	OK-02-07222025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	07/22/2025	Chemtech -SO
Q2677-02	OK-02-07222025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	07/22/2025	Chemtech -SO
Q2677-03	OK-03-07222025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	07/22/2025	Chemtech -SO
Q2677-04	OK-03-07222025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	07/22/2025	Chemtech -SO
Q2678-01	I-1361-USED-OIL	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/23/2025	Chemtech -SO
Q2679-01	M2239	Solid	Percent Solids	Cool 4 deg C	PSEG03	D22	07/23/2025	Chemtech -SO
Q2681-01	NYPA-POUCH-SPENT-CARBO	Solid	Percent Solids	Cool 4 deg C	CORE02	D21	07/23/2025	Chemtech -SO
Q2685-01	COMP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2685-02	COMP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2685-03	COMP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2685-04	COMP-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2686-01	Y2310-0410-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2686-02	Y2310-0410-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2686-03	Y2310-0410-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2686-04	Y2310-0410-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO

Date/Time 07/23/25 16:00
 Raw Sample Received by: J.C. (JWC)
 Raw Sample Relinquished by: J.C. (JWC)

Date/Time 07/23/25 17:40
 Raw Sample Received by: J.C. (JWC)
 Raw Sample Relinquished by: J.C. (JWC)

WORKLIST(Hardcopy Internal Chain)

136583

WorkList Name : %1-072325

WorkList ID : 190888

Department : Wet-Chemistry

Date : 07-23-2025 08:00:26

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2687-01	VNJ-251	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2687-02	VNJ-251-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-01	COMP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-02	COMP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-03	COMP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-04	COMP-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-05	COMP-5	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-06	COMP-6	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-07	COMP-7	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-08	COMP-8	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-09	SOM-81	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-10	SOM-103	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO
Q2688-11	SOM-77	Solid	Percent Solids	Cool 4 deg C	PSEG03	D21	07/23/2025	Chemtech -SO

Date/Time 07/23/25 16:00
 Raw Sample Received by: JWC
 Raw Sample Relinquished by: JWC

Date/Time

07/23/25

Raw Sample Received by:

JWC

Raw Sample Relinquished by:

JWC



SHIPPING DOCUMENTS



BILLING INFORMATION

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

Laboratory Certification

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