

# DATA PACKAGE GENERAL CHEMISTRY

**PROJECT NAME: CON EDISON - EAST RIVER SITE 2** 

## PARSONS ENGINEERING OF NEW YORK, INC.

**301 Plainfield Road** 

**Suite 350** 

Syracuse, NY - 13212

Phone No: 315-451-9560

**ORDER ID: Q2592** 

**ATTENTION: Zohar Lavy** 





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# **Cover Page**

**Order ID:** Q2592

**Project ID:** Con Edison - East River Site 2

**Client:** PARSONS Engineering of New York, Inc.

**Lab Sample Number** 

**Client Sample Number** 

Q2592-01 WC-SOIL-20250711 Q2592-02 WC-SOIL-20250711

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: 7/18/2025

NYDOH CERTIFICATION NO - 11376 NJDEP CERTIFICATION NO - 20012

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### **CASE NARRATIVE**

PARSONS Engineering of New York, Inc. Project Name: Con Edison - East River Site 2

Project # N/A Order ID # Q2592

Test Name: Corrosivity, Ignitability, pH, Reactive Cyanide, Reactive Sulfide

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

2 Solid samples were received on 07/11/2025.

#### **B. Parameters:**

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

#### C. Analytical Techniques:

The analysis of Ignitability was based on method 1030, The analysis of Reactive Cyanide was based on method 9012B, The analysis of Reactive Sulfide was based on method 9034 and The analysis of Corrosivity,pH was based on method 9045D.

#### D. QA/ QC Samples:

The Holding Times were met for all samples except for WC-SOIL-20250711 of pH and for WC-SOIL-20250711 of Corrosivity as samples were received out of holding time.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

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			
Signature			
- 6	 	 	

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#### DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following "Results Qualifiers" are used:

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

QA Control # A3040961

Q

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# ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092 NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

#### GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDE	R ID: Q2592	MATRIX: Solid			
METH	OD: 1030,9012B,9034,9045D				
1.	Blank Contamination - If yes, list compounds and concentration	ns in each blank:	NA	NO ✓	YES
2.	Sample Duplicate Analysis Met QC Criteria				✓
	If not met, list those compounds and their recoveries which fall range.	outside the acceptable			
3.	Digestion Holding Time Met			$\checkmark$	
	If not met, list number of days exceeded for each sample:				
	The Holding Times were met for all samples except for WC-SO and for WC-SOIL-20250711 of Corrosivity as samples were retime.				
ADDIT	IONAL COMMENTS:				
QA RE	VIEW	Date			

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#### APPENDIX A

#### **QA REVIEW GENERAL DOCUMENTATION**

**Project #: Q2592** 

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

QA Review Signature: SOHIL JODHANI Date: 07/18/2025

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#### LAB CHRONICLE

OrderID: Q2592 OrderDate: 7/11/2025 3:05:25 PM

Client: PARSONS Engineering of New York, Inc. Project: Con Edison - East River Site 2

Contact: Zohar Lavy Location: D51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2592-01	WC-SOIL-20250711	SOIL			07/11/25 12:30			07/11/25
			рН	9045D			07/15/25 09:00	
Q2592-02	WC-SOIL-20250711	SOIL			07/11/25 12:30			07/11/25
			Corrosivity	9045D			07/15/25 09:00	
			Ignitability	1030			07/15/25 14:07	
			Reactive Cyanide	9012B		07/16/25	07/16/25 12:23	
			Reactive Sulfide	9034		07/16/25	07/16/25 14:38	

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# SAMPLE DATA

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Fax: 908 789 8922

#### **Report of Analysis**

 Client:
 PARSONS Engineering of New York, Inc.
 Date Collected:
 07/11/25 12:30

 Project:
 Con Edison - East River Site 2
 Date Received:
 07/11/25

Client Sample ID: WC-SOIL-20250711 SDG No.: Q2592

Lab Sample ID: Q2592-01 Matrix: SOIL

% Solid: 76.7

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
рН	6.94	Н	1	0	0	pН		07/15/25 09:00	9045D

Comments: pH result reported at temperature 22.8 °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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% Solid:

100

#### **Report of Analysis**

Client: PARSONS Engineering of New York, Inc. Date Collected: 07/11/25 12:30 Project: Con Edison - East River Site 2 Date Received: 07/11/25 Client Sample ID: WC-SOIL-20250711 SDG No.: Q2592 Lab Sample ID: Q2592-02 Matrix: **SOIL** 

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	6.94	Н	1	0	0	pН		07/15/25 09:00	9045D
Ignitability	NO		1	0	0	oC		07/15/25 14:07	1030
Reactive Cyanide	0.049	U	1	0.0083	0.049	mg/Kg	07/16/25 10:10	07/16/25 12:23	9012B
Reactive Sulfide	6.36	J	1	0.20	10.0	mg/Kg	07/16/25 12:10	07/16/25 14:38	9034

Comments: pH result reported at temperature 22.8 °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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# QC RESULT SUMMARY



Fax: 908 789 8922

## **Initial and Continuing Calibration Verification**

Client: PARSONS Engineering of New York, Inc. SDG No.: Q2592

**Project:** Con Edison - East River Site 2 RunNo.: LB136472

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV	рН	7.01	7	100	90-110	07/15/2025
Sample ID:	CCV1	рН	2.01	2.00	101	90-110	07/15/2025
Sample ID: pH	CCV2	рН	12.02	12.00	100	90-110	07/15/2025

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# **Initial and Continuing Calibration Verification**

Client: PARSONS Engineering of New York, Inc. SDG No.: Q2592

**Project:** Con Edison - East River Site 2 RunNo.: LB136475

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: Corrosivity	ICV	рН	7.00	7	100	90-110	07/15/2025
Sample ID: Corrosivity	CCV1	Нд	2.01	2.00	101	90-110	07/15/2025
Sample ID: Corrosivity	CCV2	рН	12.02	12.00	100	90-110	07/15/2025

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# **Initial and Continuing Calibration Verification**

Client: PARSONS Engineering of New York, Inc. SDG No.: Q2592

Project: Con Edison - East River Site 2 RunNo.: LB136502

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: Reactive	ICV1 Cyanide	mg/L	0.095	0.099	96	85-115	07/16/2025
Sample ID: Reactive	CCV1 Cyanide	mg/L	0.25	0.25	100	90-110	07/16/2025
Sample ID: Reactive	CCV2 Cyanide	mg/L	0.24	0.25	96	90-110	07/16/2025
Sample ID: Reactive	CCV3 Cyanide	mg/L	0.25	0.25	100	90-110	07/16/2025

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 $284 \; Sheffield \; Street, \; Mountainside, \; New \; Jersey \; 07092, \; Phone: \; 908 \; 789 \; 8900, \\$ 

Fax: 908 789 8922

## **Initial and Continuing Calibration Blank Summary**

Client: PARSONS Engineering of New York, Inc. SDG No.: Q2592

**Project:** Con Edison - East River Site 2 RunNo.: LB136502

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: Reactive	ICB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/16/2025
Sample ID: Reactive	CCB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/16/2025
Sample ID: Reactive	CCB2 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/16/2025
Sample ID: Reactive	CCB3 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/16/2025

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# **Preparation Blank Summary**

Client: PARSONS Engineering of New York, Inc. SDG No.: Q2592

**Project:** Con Edison - East River Site 2

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: PB1688 Reactive Cyanide	64BL mg/Kg	< 0.0250	0.0250	U	0.0084	0.05	07/16/2025
Sample ID: PB1688 Reactive Sulfide	65BL mg/Kg	< 5.0000	5.0000	U	0.201	10	07/16/2025

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# **Duplicate Sample Summary**

Client: PARSONS Engineering of New York, Inc. SDG No.: Q2592

**Project:** Con Edison - East River Site 2 Sample ID: Q2586-04

Client ID: TP-16DUP 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
Reactive Cyanide Reactive Sulfide	mg/Kg mg/Kg	+/-20 +/-20	0.0083 4.72	U J	0.0083 4.72	U J	1 1	0		07/16/2025 07/16/2025

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# **Duplicate Sample Summary**

Client: PARSONS Engineering of New York, Inc. SDG No.: Q2592

**Project:** Con Edison - East River Site 2 Sample ID: Q2592-01

Client ID: WC-SOIL-20250711DUP Percent Solids for Spike Sample: 76.7

	<b>T</b> T •.	Acceptance Limit	Sample Result	Conc. Oualifier	Duplicate Result	Conc. Oualifier	Dilution	RPD/	Qual	Analysis Date	
Analyte	Units	Lillit	Result	Quanner	Kesuit	Qualifier	Factor	AD	Quai	Date	_
pН	pН	+/-20	6.94		6.96		1	0.29		07/15/2025	

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# **Duplicate Sample Summary**

Client: PARSONS Engineering of New York, Inc. SDG No.: Q2592

**Project:** Con Edison - East River Site 2 Sample ID: Q2592-02

Client ID: WC-SOIL-20250711DUP 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	
Corrosivity	рН	+/-20	6.94		6.96		1	0.29		07/15/2025	

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# **Duplicate Sample Summary**

Client: PARSONS Engineering of New York, Inc. SDG No.: Q2592

**Project:** Con Edison - East River Site 2 Sample ID: Q2605-04

Client ID: V897DUP 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	
Ignitability	oC	+/-20	NO		NO		1	0		07/15/2025	

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# RAW DATA



#### Analytical Summary Report

Analysis Method: 9045D Analyst By : jignesh

Parameter: pH Supervisor Review By : Iwona

**Run Number:** LB136472 **Slope :** 98.6

BalanceID: WC SC-7 pH Meter ID : WC PH METER-1

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

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

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

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

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.2	4.01	07/15/2025	08:40
2	CAL2	1	Water	NA	NA	20.2	7.00	07/15/2025	08:41
3	CAL3	1	Water	NA	NA	20.2	10.02	07/15/2025	08:42
4	ICV	1	Water	NA	NA	20.2	7.01	07/15/2025	08:45
5	CCV1	1	Water	NA	NA	20.2	2.01	07/15/2025	08:47
6	Q2592-01	1	Solid	20.02	20	22.8	6.94	07/15/2025	09:00
7	Q2592-01DUP	1	Solid	20.03	20	22.9	6.96	07/15/2025	09:02
8	Q2600-01	1	Solid	20.02	20	24.6	7.55	07/15/2025	09:15
9	Q2600-05	1	Solid	20.03	20	24.4	7.68	07/15/2025	09:25
10	Q2600-09	1	Solid	20.02	20	24.1	7.24	07/15/2025	09:30
11	CCV2	1	Water	NA	NA	20.2	12.02	07/15/2025	09:33

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Reviewed By:Iwona On:7/15/2025 1:20:56 PM Inst Id :WC PH METER-1

Cth36141	Date: 07-15-2025 08:20:24	Raw Sample Storage Collect Date Method Location	THE REAL PROPERTY OF THE PARTY		UST 07/11/2025 9045D	D41 07/14/2025 9045D		D41 07/14/2025 9045D	D41 07/14/2025 9045D	
iain)	Department: Wet-Chemistry	Customer (		DAPONO		TACO01	LOCOAL LOCOAL		TACO01	
WORKLIST(Hardcopy Internal Chain)	Department :	Preservative		Cool 4 dea C		Cool 4 deg C	Cool 4 dea C		Cool 4 deg C	
WORKLIST(H	WorkList ID: 190717	Matrix Test		Solid pH	Pilos:		Solid pH		Hd pilos	
	phs q2600	Customer Sample	WO COLL DOCUM	WG-301E-202307 TI	TRENCH	T :: 0 / 10 CF 0	STOCK-PILE	END-OF-TRENCH		
Q2592-0	SWorkList Name:	Sample M	Q2592-01		Q2600-01	02800_0E	4. CO-000-20	Q2600-09		

Date/Time 04/15/25

Raw Sample Received by:

Raw Sample Relinquished by: 10 11

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Raw Sample Relinquished by: Raw Sample Received by:



#### Analytical Summary Report

Analysis Method: 9045D Analyst By: jignesh

Parameter: Corrosivity Supervisor Review By : Iwona

**Run Number:** LB136475 **Slope :** 98.6

BalanceID: WC SC-7 pH Meter ID : WC PH METER-1

Calibration Standards	Chemtech Log#
PH 4 BUFFER SOLUTION	W3178
BUFFER PH 7.00 GREEN 1PINT PK6	W3093
PH 10.01 BUFFER, COLOR CD 475ML	W3191
buffer solution pH 7 yellow	W3217
Buffer Solution, PH2 (500ml)	W3161
pH 12.00 Buffer	w3200

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

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

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

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.2	4.01	07/15/2025	08:40
2	CAL2	1	Water	NA	NA	20.2	7.00	07/15/2025	08:41
3	CAL3	1	Water	NA	NA	20.2	10.02	07/15/2025	08:42
4	ICV	1	Water	NA	NA	20.2	7.00	07/15/2025	08:41
5	CCV1	1	Water	NA	NA	20.2	2.01	07/15/2025	08:45
6	Q2592-02	1	Solid	20.02	20	22.8	6.94	07/15/2025	09:00
7	Q2592-02DUP	1	Solid	20.03	20	22.9	6.96	07/15/2025	09:02
8	CCV2	1	Water	NA	NA	20.3	12.02	07/15/2025	09:33

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Reviewed By:Iwona On:7/15/2025 1:20:29 PM Inst Id :WC PH METER-1

-26 wolc,

13:30

Date/Time 07/15/1-5

Raw Sample Received by:

WORKLIST(Hardcopy Internal Chain)

WorkList ID: 190719

corrsovity q2600

.: WorkList Name : ON 205250

Department: Wet-Chemistry

Raw Sample

Customer

Preservative

Test

Matrix

**Customer Sample** 

Sample

Location Storage

54 4781 QM

Date: 07-15-2025 08:30:13

Collect Date Method

07/11/2025 9045D

**D51** 

PARS02

Cool 4 deg C

Corrosivity

Solid

WC-SOIL-20250711

Q2592-02

Raw Sample Relinquished by:

Page 1 of 1

Date/Time 07/15/1/5 68:33 Raw Sample Relinquished by: Raw Sample Received by:

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#### Analytical Summary Report

Analysis Method: 1030 Reviewed By: rubina

Parameter: Ignitability Supervisor Review By: Iwona

Run Number: LB136483

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Anal Time
1	Q2571-04	TP-18	1	Solid	NO	0.00	07/15/2025	14:00
2	Q2592-02	WC-SOIL-20250711	1	Solid	NO	0.00	07/15/2025	14:07
3	Q2600-02	TRENCH	1	Solid	NO	0.00	07/15/2025	14:15
4	Q2600-06	STOCK-PILE	1	Solid	NO	0.00	07/15/2025	14:23
5	Q2600-10	END-OF-TRENCH	1	Solid	NO	0.00	07/15/2025	14:30
6	Q2605-01	V908	1	Solid	NO	0.00	07/15/2025	14:38
7	Q2605-02	VB16135	1	Solid	NO	0.00	07/15/2025	14:45
8	Q2605-03	VB15061	1	Solid	NO	0.00	07/15/2025	14:52
9	Q2605-04	V897	1	Solid	NO	0.00	07/15/2025	15:00
10	Q2605-04DUP	V897DUP	1	Solid	NO	0.00	07/15/2025	15:08

Burning Rate = Length (mm)

Total Time(sec)

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***	5	•
8	€	)
0	(	)
-	_	_
_	(	)
-	-	١
	-	_

# WORKLIST(Hardcopy Internal Chain)

					·		,	
WorkList Name :	IGN-7-15	WorkList ID:	ID: 190740	Department:	Wet-Chemistry	Ž	1	
Sample		Motric				Raw Sample	Date: 0/-15-20	07-15-2025 11:24:32
	customer Sample	Y	Isal	Preservative	Customer	Storage	Collect Date Method	Method
Q2571-04	TP-18	Solid	111111111111111111111111111111111111111					
Q2592-02 v	THE COUNTY OF TH		griitability	Cool 4 deg C	PSEG03		07/40/2025 4020	1000
70 700	WC-501L-20250711	Solid	Ignitability	Cool 4 dea C			6707/01/10	1030
Q2600-02 ·	TRENCH	pilos.	lonitabilit.	S S S S S S S S S S S S S S S S S S S	FAKS02	D51	07/11/2025 1030	1030
20 00200		Piloo	grintability	Cool 4 deg C	TACO01	D41	4,000,000	
1 00-000	STOCK-PILE	Solid	anitability				07/14/2025 1030	1030
Q2600-10 ·	END OF TREES.		S. measure,	Cool 4 deg C	TACO01	D41	07/14/2025	1030
	LIND-OF-I REINCH	Solid	Ignitability	Cool 4 dos			20711100	0001
Q2605-01	V908	1100		Coul 4 deg C	TACO01	D41	07/14/2025	1030
00000		DIIIO	Ignitability	Cool 4 deg C	PSEG03	2		
Z0-600270	VB16135	Solid	lanitahility			3	07/15/2025 1030	1030
Q2605-03	VB15061		(maxime)	Cool 4 deg C	PSEG03	D41	07/15/2025	1030
		Solid	Ignitability	Cool 4 dea C				200
Q2605-04	7897	1 2		O fian + moo	PSEG03	D41	07/15/2025	1030
		Diloc	Ignitability	Cool 4 deg C	PSEG03	D41	10000174	
						-	07/15/2025 1030	1030

Date/Time 07/15/2025 Raw Sample Relinquished by: Raw Sample Received by:

Page 1 of 1

2502/51/50

Date/Time

Raw Sample Relinquished by: Raw Sample Received by:

Reviewed By:lwona
On:7/16/2025 4:30:20
PM Inst Id :Konelab 20 LB :LB136502

10

Test results

Aquakem 7.2AQ1

Page:

Alliance Technical Group 284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : 2M Instrument ID : Konelab

7/16/2025 12:50

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	94.677	0.0	0.076	
ICB1	0.265	0.0	0.001	
CCV1	246.441	0.0	0.198	
CCB1	0.042	0.0	0.001	
PB168863BL	0.115	0.0	0.001	
Q2602-01	-0.037	0.0	0.001	
Q2602-01DUP	0.132	0.0	0.001	
Q2608-05	0.297	0.0	0.001	
PB168864BL	0.121	0.0	0.001	
Q2586-04	-0.026	0.0	0.001	
Q2586-04DUP	0.102	0.0	0.001	
Q2592-02	0.156	0.0	0.001	
Q2605-01	0.049	0.0	0.001	
Q2605-02	0.185	0.0	0.001	
CCV2	242.781	0.0	0.195	
CCB2	0.286	0.0	0.001	
Q2605-03	0.355	0.0	0.001	
Q0605-04	0.290	0.0	0.001	
Q2608-04	0.599	0.0	0.001	
Q2609-02	0.250	0.0	0.001	
Q2609-06	0.244	0.0	0.001	
Q2614-06	0.210	0.0	0.001	
CCV3	252.563	0.0	0.202	
CCB3	0.454	0.0	0.001	
N	24			
Mean	35.023			
SD	84.1816			
C379	04.1016			

Q2592-GENCHEM

CV%

240.36

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Aquakem v. 7.2AQ1

Results from time period:

Wed Jul 16 12:15:42 2025

Wed Jul 16 12:36:09 2025

		0 2020			
Sample Id	Sa	m/Ctr/c/ Test sho	rt r Test typ	e Result F	Result unit Result date and time Stat
0.0PPBCN	Α	Total CN	Р	-0.1261 µ	
5.0PPBCN	Α	Total CN	Р	4.7043 µ	g/l 7/16/2025 8:53:49
10PPBCN	Α	Total CN	Р	9.9066 µ	g/l 7/16/2025 8:53:50
50PPBCN	Α	Total CN	Р	50.521 μ	g/l 7/16/2025 8:53:51
100PPBCN	Α	Total CN	Р	100.0666 μ	
250PPBCN	Α	Total CN	Р	249.9766 μ	g/l 7/16/2025 8:53:53
500PPBCN	Α	Total CN	Р	499.9511 μ	g/l 7/16/2025 8:53:54
ICV1	S	Total CN	Р	94.6766 μ	
ICB1	S	Total CN	Р	0.2652 μ	g/l 7/16/2025 12:15:45
CCV1	S	Total CN	Р	246.4408 µį	g/l 7/16/2025 12:15:46
CCB1	S	Total CN	P	0.0419 μլ	g/l 7/16/2025 12:15:49
PB168863BL	S	Total CN	Р	0.1154 με	g/l 7/16/2025 12:15:50
Q2602-01	S	Total CN	Р	-0.0374 μg	7/16/2025 12:23:16
Q2602-01DUP	S	Total CN	Р	0.1316 μg	
Q2608-05	S	Total CN	Р	<b>0.2968</b> μg	7/16/2025 12:23:19
PB168864BL	S	Total CN	Р	0.1211 μg	/l 7/16/2025 12:23:20
Q2586-04	S	Total CN	Р	-0.0261 µg	
Q2586-04DUP	S	Total CN	Р	0.1024 µg	/l 7/16/2025 12:23:22
Q2592-02	S	Total CN	Р	0.156 μg	/l 7/16/2025 12:23:23
Q2605-01	S	Total CN	Р	0.049 µg	/l 7/16/2025 12:23:24
Q2605-02	S	Total CN	Р	0.1854 μg	/l 7/16/2025 12:23:25
CCV2	S	Total CN	P	242.7811 μg/	/l 7/16/2025 12:30:51
CCB2	S	Total CN	Р	0.2856 μg/	7/16/2025 12:30:52
Q2605-03	S	Total CN	Р	0.3554 μg/	7/16/2025 12:30:54
Q0605-04	S	Total CN	Р	0.2897 μg/	
Q2608-04	S	Total CN	Р	0.5987 μg/	7/16/2025 12:30:56
Q2609-02	S	Total CN	P	0.2497 μg/	7/16/2025 12:30:57
Q2609-06	S	Total CN	P	0.2436 µg/	l 7/16/2025 12:30:58
Q2614-06	S	Total CN	Р	0.2096 µg/	
	S	Total CN	Р	252.5635 μg/l	7/16/2025 12:36:06
CCB3	S	Total CN	Р	0.4535 µg/l	

Q2592-GENCHEM **30 of 94** 

2

3

5

7

10

12

13

10

Calibration results

Aquakem 7.2AQ1

Page:

Alliance Technical Group 284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM

Instrument ID : Konelab

7/16/2025 8:58

Test Total CN

Accepted

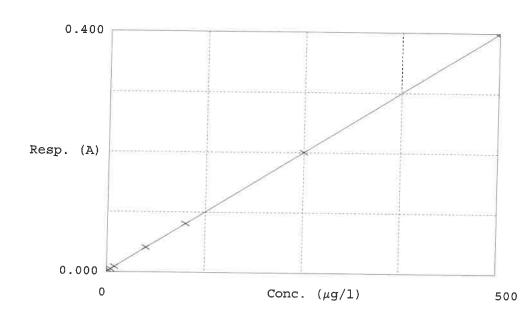
7/16/2025 8:58

Factor Bias

1253 0.001

Coeff. of det. 0.999998

Errors



	Calibrator	Response	Calc. con.	Conc.	Re Errors	
1 2 3 4 5 6 7	0.0PPBCN 5.0PPBCN 10PPBCN 50PPBCN 100PPBCN 250PPBCN 500PPBCN	0.001 0.005 0.009 0.041 0.081 0.200 0.400	-0.1261 4.7043 9.9066 50.5210 100.0666 249.9766 499.9511	0.0000 5.0000 10.0000 50.0000 100.0000 250.0000 500.0000	-5.9 1.0 0.1 0.0	071 16/2025 RM

Q2592-GENCHEM

Analysis Method: 9034

Parameter: Reactive Sulfide

Run Number: LB136510

ANALYST: rubina

SUPERVISOR REVIEW BY: Iwona

Constant: 16000

Normality1: 0.025

Normality2: 0.025

Reagent/Standard	Lot/Log #
SODIUM THIOSULFATE, 0.025N, 4LITRE	W3105
IODINE SOLUTION .025N 1L	W3213
Starch Solution, 4L	W3149

Seq	Lab ID	True Value (mg/l)	DF	Initial Weight (g)	Final Volume (ml)	T1 (ml)	T2 Initial	T2 Final	T2 Diff. (ml)	T1 - T2 Diff (mL)	Value Corrected With Blank	Result (ppm)	Anal Date	Anal Time
1	PB168865BL		1	5.00	50	2.00	0.00	1.94	1.94	0.06	0.00	0.00	07/16/2025	14:30
2	Q2586-04		1	5.08	50	2.00	0.00	1.88	1.88	0.12	0.06	4.72	07/16/2025	14:33
3	Q2586-04DUP		1	5.08	50	2.00	0.00	1.88	1.88	0.12	0.06	4.72	07/16/2025	14:36
4	Q2592-02		1	5.03	50	2.00	0.00	1.86	1.86	0.14	0.08	6.36	07/16/2025	14:38
5	Q2605-01		1	5.01	50	2.00	0.00	1.90	1.90	0.10	0.04	3.19	07/16/2025	14:40
6	Q2605-02		1	5.04	50	2.00	0.00	1.88	1.88	0.12	0.06	4.76	07/16/2025	14:42
7	Q2605-03		1	5.04	50	2.00	0.00	1.86	1.86	0.14	0.08	6.35	07/16/2025	14:45
8	Q2605-04		1	5.07	50	2.00	0.00	1.90	1.90	0.10	0.04	3.16	07/16/2025	14:48
9	Q2608-04		1	5.06	50	2.00	0.00	1.86	1.86	0.14	0.08	6.32	07/16/2025	14:50
10	Q2609-02		1	5.03	50	2.00	0.00	1.86	1.86	0.14	0.08	6.36	07/16/2025	14:53
11	Q2609-06		1	5.05	50	2.00	0.00	1.88	1.88	0.12	0.06	4.75	07/16/2025	14:55
12	Q2614-06		1	5.07	50	2.00	0.00	1.86	1.86	0.14	0.08	6.31	07/16/2025	14:58

T1 = Titrant1

T2 = Titrant2

T2 Diff = T2 Final - T2 Initial

Value Corrected With Blank = ((T1 - T2 Diff) - Blank Correction(BL))

Result = ((T1 \* Normality1) - ((T1 - Value Corrected With Blank) \* Normality2)) \* Constant / Initial Volume

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# Soil/Sludge Reactive Cyanide Preparation Sheet

PB168864

10

SOP ID:	M9012B-Total, Amenable and Reactive Cyanide-21

SDG No: N/A

Matrix: SOIL Start Digest Date: 07/16/2025

Time: 10:10 Temp: N/A

Pippete ID: N/A

**End Digest Date:** 07/16/2025 Time: 11:40 Temp: N/A

Balance ID: WC SC-7

Hood ID: HOOD#1

**Digestion tube ID:** M5595

**Block Thermometer ID:** N/A

Block ID: MC-1,MC-2 Filter paper ID: N/A Prep Technician Signature: RH Weigh By: RM pH Meter ID: N/A

Supervisor Signature: 12 **Standared Name** MLS USED STD REF. # FROM LOG PBS003 50.0ML W3112

N/A N/A

Chemical Used ML/SAMPLE USED **Lot Number** 0.25N NaOH 50.0ML WP113836 N/A N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Comment	

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

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
116/2025 11-50	RM cwt)	RM (w)
	Preparation Group	Analysis Group



# Soll/Sludge Reactive Cyanide Preparation Sheet

PB168864

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vo (ml)	рН	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Pre
PB168864BL	PBS864	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2586-04DUP	TP-16DUP	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2586-04	TP-16	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2592-02	WC-SOIL-20250711	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
22605-01	V908	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
2605-02	VB16135	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
2605-03	VB15061	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
2605-04	V897	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
2608-04	60271	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
609-02	710-ABC	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A
609-06	709-AB	5.06	50	N/A	N/A	N/A	N/A [	N/A	N/A
614-06	HR-MCN-COMP-01	5.07	50 1	N/A	N/A	N/A		N/A	NA

# WORKLIST (Hardcopy Internal Chain)

	WorkList Name :	RCN-7-16	WorkList ID :	190770	Department :	Distillation	à		
IEM	Sample	Customer Sample	Matrix Te	est	Preservative	Customer	Raw Sample Storage Location	Collect Date Method	or-16-2025 08:08:29
	Q2586-04	TP-16	Solid	Reactive Overide					
	Q2592-02	WC-SOII -20250711		don't cyallide	Cool 4 deg C	PSEG03	D41	07/11/2025 9012B	9012B
	20000		Solid	eactive Cyanide	Cool 4 deg C	PARS02	D51	07/11/2025 00120	90420
	-C2002-0.1	V908	Solid Re	Reactive Cyanide	Cool 4 deg C	PSEG03	24	2000	90 125
	Q2605-02	VB16135	Solid Re	Reactive Cvanide	O solv Place		5	07/15/2025	9012B
	Q2605-03	VB15061	Filod	2011-16	o fian t roop	PSEG03	D41	07/15/2025 9012B	9012B
-	02605-04	70071		Reactive Cyanide	Cool 4 deg C	PSEG03	D41	07/15/2025	9012B
	400000	/600	Solid Re	Reactive Cyanide	Cool 4 deg C	PSEG03	25	1 000	
	Q2608-04	60271	Solid	Reactive Cvanide	0 200		5	07/15/2025	9012B
	Q2609-02	710-ABC			opon + neg	PSEG03	D41	07/15/2025 9012B	9012B
	00800	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D41	07/15/2025	9012B
	2003-00	/us-AB	Solid Re	Reactive Cyanide	Cool 4 deg C	PSEG03	24		
	Q2614-06	HR-MCN-COMP-01	Solid Re	Reactive Cyanide	Cool 4 dea C		Ē	U//15/2025 9012B	9012B
					200	PSEG03	D41	07/15/2025	9012B

07/15/2025 9012B

Date/Time 07/16/2225 Raw Sample Relinquished by: Raw Sample Received by:

man

Page 1 of 1

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time 07/16/2025



# Soil/Sludge Reactive Sulfide Preparation Sheet



SOP ID:

M9030B-Sulfide-13

SDG No:

N/A

Start Digest Date: 07/16/2025

**End Digest Date:** 07/16/2025

Time: 12:10

Time: 13:40

Temp: N/A

Temp: N/A

Matrix: Pippete ID:

WC

**SOIL** 

Balance ID: **Hood ID:** 

WC SC-7 HOOD#1

Digestion tube ID: M5595

**Block Thermometer ID:** N/A

10

Block ID:

MC-1,MC-2

Filter paper ID: N/A

Prep Technician Signature:

Rr

Weigh By:

RM

pH Meter ID: N/A

Supervisor Signature:

Standared Name	MLS USED	STD REF. # FROM LOG
PBS003	50.0ML	W3112
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
0.5M ZINC ACETATE	5.0ML	
FORMALDEHYDE		WP113086
	2.0ML	W2725
V/A	N/A	N/A
I/A	N/A	
/A	N/A	N/A
/A		N/A
/A	N/A	N/A
	N/A	N/A
/A	N/A	
/A	N/A	N/A
A		N/A
	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

ate / Time	Prepped Sample Relinquished By/Location	Received By/Location
NCHEM		Dy/ Edition
	Preparation Group	Analysis Group 26 of 0.4

Q25

07/16/2025 RIV



Sample ID	Weight (g)	Final Vol	pН	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Pre
PBS865	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
TP-16DUP	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A
TP-16	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A
WC-SOIL-20250711	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
V908	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
VB16135	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
VB15061	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
V897	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
60271	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
710-ABC	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
709-ABC	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
HR-MCN-COMP-01	5.07	50	N/A	N/A	N/A	N/A		N/A
	TP-16DUP  TP-16  WC-SOIL-20250711  V908  VB16135  VB15061  V897  60271  710-ABC  709-ABC	TP-16DUP 5.08  TP-16 5.08  WC-SOIL-20250711 5.03  V908 5.01  VB16135 5.04  VB15061 5.04  V897 5.07  60271 5.06  710-ABC 5.05	TP-16DUP 5.08 50  TP-16 5.08 50  WC-SOIL-20250711 5.03 50  V908 5.01 50  VB16135 5.04 50  VB15061 5.04 50  V897 5.07 50  60271 5.06 50  710-ABC 5.05 50	TP-16DUP 5.08 50 N/A  TP-16 5.08 50 N/A  WC-SOIL-20250711 5.03 50 N/A  V908 5.01 50 N/A  VB16135 5.04 50 N/A  VB15061 5.04 50 N/A  V897 5.07 50 N/A  V897 5.07 50 N/A  710-ABC 5.03 50 N/A	TP-16DUP 5.08 50 N/A N/A  TP-16 5.08 50 N/A N/A  WC-SOIL-20250711 5.03 50 N/A N/A  V908 5.01 50 N/A N/A  VB16135 5.04 50 N/A N/A  VB15061 5.04 50 N/A N/A  V897 5.07 50 N/A N/A  60271 5.06 50 N/A N/A  710-ABC 5.03 50 N/A N/A  HR-MCN-COMP 01	TP-16DUP 5.08 50 N/A N/A N/A  TP-16 5.08 50 N/A N/A N/A  WC-SOIL-20250711 5.03 50 N/A N/A N/A  V908 5.01 50 N/A N/A N/A  VB16135 5.04 50 N/A N/A N/A  VB15061 5.04 50 N/A N/A N/A  V897 5.07 50 N/A N/A N/A  V897 5.06 50 N/A N/A N/A  T10-ABC 5.03 50 N/A N/A N/A  N/A  N/A  N/A  N/A  N/A  N	TP-16DUP 5.08 50 N/A N/A N/A N/A N/A  TP-16 5.08 50 N/A N/A N/A N/A  WC-SOIL-20250711 5.03 50 N/A N/A N/A N/A  V908 5.01 50 N/A N/A N/A N/A  VB16135 5.04 50 N/A N/A N/A N/A  VB15061 5.04 50 N/A N/A N/A N/A  V897 5.07 50 N/A N/A N/A N/A  O271 5.06 50 N/A N/A N/A N/A  T10-ABC 5.03 50 N/A N/A N/A N/A  T10-ABC 5.05 50 N/A N/A N/A N/A  HR-MCN-COMP-01 5.07 50 N/A N/A N/A N/A	TP-16DUP 5.08 50 N/A N/A N/A N/A N/A N/A  TP-16 5.08 50 N/A N/A N/A N/A N/A  WC-SOIL-20250711 5.03 50 N/A N/A N/A N/A N/A  V908 5.01 50 N/A N/A N/A N/A N/A  VB16135 5.04 50 N/A N/A N/A N/A N/A  VB15061 5.04 50 N/A N/A N/A N/A N/A  V897 5.07 50 N/A N/A N/A N/A N/A  FOR The state of the state

# WORKLIST(Hardcopy Internal Chain)

	WorkList Name :	RSUL-7-16	WorkList ID:	ID: 190771	Denartment	Oice Carried			
	Sample					Disulation	Date	Date: 07-16-2025 08:08:35	08:35
		Customer Sample	Matrix	Test	Preservative	Customer	Kaw Sample Storage Location	Collect Date Method	, bo
	Q2586-04	TP-16	Solid	Posotive Suita					
	Q2592-02	WC-SOL SOCIOE		reactive Suilide	Cool 4 deg C	PSEG03	D41	07/11/2025 9034	
		11 /000/2-2000	Solid	Reactive Sulfide	Cool 4 den C	0		1000	
	Q2605-01	V908	Solid	Dooding Outer	S S S S S S S S S S S S S S S S S S S	PAKS02	D51	07/11/2025 9034	
	Q2605-02	VR16125		ivedelive Suinge	Cool 4 deg C	PSEG03	D41	07/15/2025 anav	
			Solid	Reactive Sulfide	Con 4 dea C	2000		- 1	
	Q2605-03	VB15061	Solid	Reactive Cultido		PSEG03	D41	07/15/2025 9034	
	Q2605-04	V897		apilino pariopora	Cool 4 deg C	PSEG03	D41	07/15/2025 9034	
_			Solid	Reactive Sulfide	Cool 4 dea C	200100		- 1	
	Q2608-04	60271	Solid	Reactive Cultide		F3EG03	D41	07/15/2025 9034	
	Q2609-02	710-ABC		aplino akaona	Cool 4 deg C	PSEG03	D41	07/15/2025 anax	
-			Solid	Reactive Sulfide	Cool 4 dea C	DOLLOGO			
	Q2609-06	709-AB	Solid	Resorting Cultura		13EG03	D41	07/15/2025 9034	
	Q2614-06	HR-MCN-COMP of		Aniino aknama	Cool 4 deg C	PSEG03	D41	07/15/2025 anav	
1			Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	2		T
							÷	07/15/2025 9034	_

07/15/2025 9034

Date/Time 07/16/202 Raw Sample Received by:

Raw Sample Relinquished by:

Page 1 of 1

WorkList Name: RSUL-7-16

Date/Time 07/16/2025

Raw Sample Relinquished by: Raw Sample Received by:



WC PH METER-1

### Daily Analysis Runlog For Sequence/QCBatch ID # LB136472

Review By	jignesh	Review On	7/15/2025 10:37:41 AM
Supervise By	Iwona	Supervise On	7/15/2025 1:20:56 PM
SubDirectory	LB136472	Test	рН
STD. NAME	ME 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,W	3093,W3191,W3217,W3161,W3200	

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	07/15/25 08:40		Jignesh	ОК
2	CAL2	CAL2	CAL	07/15/25 08:41		Jignesh	ОК
3	CAL3	CAL3	CAL	07/15/25 08:42		Jignesh	ок
4	ICV	ICV	ICV	07/15/25 08:45		Jignesh	ок
5	CCV1	CCV1	CCV	07/15/25 08:47		Jignesh	ОК
6	Q2592-01	WC-SOIL-20250711	SAM	07/15/25 09:00		Jignesh	ОК
7	Q2592-01DUP	WC-SOIL-20250711D	DUP	07/15/25 09:02		Jignesh	ОК
8	Q2600-01	TRENCH	SAM	07/15/25 09:15		Jignesh	ОК
9	Q2600-05	STOCK-PILE	SAM	07/15/25 09:25		Jignesh	ок
10	Q2600-09	END-OF-TRENCH	SAM	07/15/25 09:30		Jignesh	ОК
11	CCV2	CCV2	CCV	07/15/25 09:33		Jignesh	ок

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WC PH METER-1

### Daily Analysis Runlog For Sequence/QCBatch ID # LB136475

Review By	jignesh	Review (	On	7/15/2025 10:43:59 AM
Supervise By	Iwona	Supervis	e On	7/15/2025 1:20:29 PM
SubDirectory	LB1364	75 Test		Corrosivity
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	W31	78,W3093,W3191,W3217,W3161	,W3200	

	<u>'</u>						
Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	07/15/25 08:40		Jignesh	ок
2	CAL2	CAL2	CAL	07/15/25 08:41		Jignesh	ОК
3	ICV	ICV	ICV	07/15/25 08:41		Jignesh	ОК
4	CAL3	CAL3	CAL	07/15/25 08:42		Jignesh	ОК
5	CCV1	CCV1	CCV	07/15/25 08:45		Jignesh	ОК
6	Q2592-02	WC-SOIL-20250711	SAM	07/15/25 09:00		Jignesh	ОК
7	Q2592-02DUP	WC-SOIL-20250711D	DUP	07/15/25 09:02		Jignesh	ОК
8	CCV2	CCV2	CCV	07/15/25 09:33		Jignesh	ок

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**FLAME** 

### Daily Analysis Runlog For Sequence/QCBatch ID # LB136483

Review By	rubina	Review On	7/15/2025 3:32:12 PM	
Supervise By	lwona	Supervise On	7/15/2025 3:33:00 PM	
SubDirectory	LB136483	Test	Ignitability	
STD. NAME	STD REF	T.#		
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#	Sampleld	ClientID	QcType	Date	Comment	Operator	Status
1	Q2571-04	TP-18	SAM	07/15/25 14:00		rubina	ОК
2	Q2592-02	WC-SOIL-20250711	SAM	07/15/25 14:07		rubina	ОК
3	Q2600-02	TRENCH	SAM	07/15/25 14:15		rubina	ок
4	Q2600-06	STOCK-PILE	SAM	07/15/25 14:23		rubina	ОК
5	Q2600-10	END-OF-TRENCH	SAM	07/15/25 14:30		rubina	ОК
6	Q2605-01	V908	SAM	07/15/25 14:38		rubina	ОК
7	Q2605-02	VB16135	SAM	07/15/25 14:45		rubina	ОК
8	Q2605-03	VB15061	SAM	07/15/25 14:52		rubina	ОК
9	Q2605-04	V897	SAM	07/15/25 15:00		rubina	ОК
10	Q2605-04DUP	V897DUP	DUP	07/15/25 15:08		rubina	ОК

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KONELAB

### Daily Analysis Runlog For Sequence/QCBatch ID # LB136502

Review By	rub	ina	Review On	7/16/2025 3:47:12 PM
Supervise By	lwc	ona	Supervise On	7/16/2025 4:30:20 PM
SubDirectory	LB	136502	Test	Reactive Cyanide
STD. NAME STD REF.#				
ICAL Standard WP113957,WP113958,WP11			WP113959,WP113960,WP113961,WP1	13962,WP113963
ICV Standard WP113964				
CCV Standard		WP113958		
ICSA Standard		N/A		
CRI Standard		N/A		
LCS Standard		N/A		
Chk Standard		WP112643,WP112900,	WP113965	

Sr#	Sampleld	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	07/16/25 08:53		rubina	ОК
2	5.0PPBCN	5.0PPBCN	CAL2	07/16/25 08:53		rubina	ОК
3	10PPBCN	10PPBCN	CAL3	07/16/25 08:53		rubina	ОК
4	50PPBCN	50PPBCN	CAL4	07/16/25 08:53		rubina	ОК
5	100PPBCN	100PPBCN	CAL5	07/16/25 08:53		rubina	ОК
6	250PPBCN	250PPBCN	CAL6	07/16/25 08:53		rubina	ОК
7	500PPBCN	500PPBCN	CAL7	07/16/25 08:53		rubina	ОК
8	ICV1	ICV1	ICV	07/16/25 12:15		rubina	ОК
9	ICB1	ICB1	ICB	07/16/25 12:15		rubina	ОК
10	CCV1	CCV1	CCV	07/16/25 12:15		rubina	ОК
11	CCB1	CCB1	ССВ	07/16/25 12:15		rubina	ОК
12	PB168863BL	PB168863BL	MB	07/16/25 12:15		rubina	ОК
13	Q2602-01	FRAC-TANK-266380	SAM	07/16/25 12:23		rubina	ОК
14	Q2602-01DUP	FRAC-TANK-2663800	DUP	07/16/25 12:23		rubina	ОК
15	Q2608-05	60265	SAM	07/16/25 12:23		rubina	ОК
16	PB168864BL	PB168864BL	MB	07/16/25 12:23		rubina	ОК
17	Q2586-04	TP-16	SAM	07/16/25 12:23		rubina	ОК
18	Q2586-04DUP	TP-16DUP	DUP	07/16/25 12:23		rubina	ОК

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KONELAB

### Daily Analysis Runlog For Sequence/QCBatch ID # LB136502

Review By	rub	ina	Review On	7/16/2025 3:47:12 PM
Supervise By	lwc	ona	Supervise On	7/16/2025 4:30:20 PM
SubDirectory	ory LB136502		Test	Reactive Cyanide
STD. NAME STD REF.#				
ICAL Standard WP113957,WP113958,V		WP113959,WP113960,WP113961,WP1	13962,WP113963	
ICV Standard	, , , , , , , , , , , , , , , , , , ,			
CCV Standard		WP113958		
ICSA Standard		N/A		
CRI Standard		N/A		
LCS Standard		N/A		
Chk Standard		WP112643,WP112900,\	WP113965	

19	Q2592-02	WC-SOIL-20250711	SAM	07/16/25 12:23	rubina	ОК
20	Q2605-01	V908	SAM	07/16/25 12:23	rubina	ОК
21	Q2605-02	VB16135	SAM	07/16/25 12:23	rubina	ОК
22	CCV2	CCV2	CCV	07/16/25 12:30	rubina	ОК
23	CCB2	CCB2	ССВ	07/16/25 12:30	rubina	ОК
24	Q2605-03	VB15061	SAM	07/16/25 12:30	rubina	ОК
25	Q2605-04	V897	SAM	07/16/25 12:30	rubina	ОК
26	Q2608-04	60271	SAM	07/16/25 12:30	rubina	ОК
27	Q2609-02	710-ABC	SAM	07/16/25 12:30	rubina	ОК
28	Q2609-06	709-AB	SAM	07/16/25 12:30	rubina	ОК
29	Q2614-06	HR-MCN-COMP-01	SAM	07/16/25 12:30	rubina	ОК
30	CCV3	CCV3	CCV	07/16/25 12:36	rubina	ОК
31	ССВ3	CCB3	ССВ	07/16/25 12:36	rubina	ок

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TITRAMETRIC

### Daily Analysis Runlog For Sequence/QCBatch ID # LB136510

Review By	rubina		Review On	7/16/2025 4:30:47 PM
Supervise By	lwona		Supervise On	7/16/2025 4:31:03 PM
SubDirectory	LB136510		Test	Reactive Sulfide
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		W3105,W3213,W3149		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	PB168865BL	PB168865BL	МВ	07/16/25 14:30		rubina	ОК
2	Q2586-04	TP-16	SAM	07/16/25 14:33		rubina	ОК
3	Q2586-04DUP	TP-16DUP	DUP	07/16/25 14:36		rubina	ок
4	Q2592-02	WC-SOIL-20250711	SAM	07/16/25 14:38		rubina	ок
5	Q2605-01	V908	SAM	07/16/25 14:40		rubina	ок
6	Q2605-02	VB16135	SAM	07/16/25 14:42		rubina	ок
7	Q2605-03	VB15061	SAM	07/16/25 14:45		rubina	ОК
8	Q2605-04	V897	SAM	07/16/25 14:48		rubina	ОК
9	Q2608-04	60271	SAM	07/16/25 14:50		rubina	ок
10	Q2609-02	710-ABC	SAM	07/16/25 14:53		rubina	ОК
11	Q2609-06	709-AB	SAM	07/16/25 14:55		rubina	ОК
12	Q2614-06	HR-MCN-COMP-01	SAM	07/16/25 14:58		rubina	ок

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### **Prep Standard - Chemical Standard Summary**

Order ID: Q2592

Test: Corrosivity, Ignitability, Percent Solids, pH, Reactive Cyanide, Reactive Sulfide

**Prepbatch ID:** PB168864,PB168865,

**Sequence ID/Qc Batch ID:** LB136472,LB136475,LB136483,LB136502,LB136510,

### Standard ID:

WP112643,WP112900,WP113086,WP113836,WP113838,WP113956,WP113957,WP113958,WP113959,WP113960,WP113961,WP113962,WP113963,WP113965,

### Chemical ID:

M6151,W2668,W2725,W2926,W3019,W3093,W3105,W3112,W3113,W3139,W3149,W3161,W3178,W3191,W3200,W3 203,W3213,W3214,W3217,W3224,

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Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
539	CN BUFFER	WP112643	04/09/2025	10/09/2025	Niha Farheen Shaik	WETCHEM_S CALE 5 (WC		
					Snark	- \		04/09/2025
FROM	138.00000gram of W2668 + 862.000	00ml of W3	112 = Final Q	uantity: 1000.0	000 ml	SC-5)		

Recipe ID	NAME_	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
607	PYRIDINE-BARBITURIC ACID	WP112900	05/01/2025	08/18/2025		WETCHEM_S		
						CALE_8 (WC	Pipette-A	05/01/2025

FROM 145.00000ml of W3112 + 15.00000gram of W3203 + 15.00000ml of M6151 + 75.00000ml of W3019 = Final Quantity: 250.000

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Recipe ID	NAME.	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
160	0.5M ZINC ACETATE	WP113086	05/15/2025	08/18/2025	Rubina Mughal	WETCHEM_S	None	1
						CALE_8 (WC		05/15/2025
EPOM	0.88900L of W3112 + 1.00000mL of M	/6151 + 110	00000gram (	of W2926 = Fir	nal Quantity: 100	SC-7)		

<u>FROM</u>	0.88900L of W3112 + 1.00000ml of M6151 + 110.00000gran	n of W2926 = Final Quantity: 1000.000 ml

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
11	Sodium hydroxide absorbing	WP113836	07/08/2025	12/31/2025	Rubina Mughal	WETCHEM_S	None	•
	solution 0.25 N					CALE_8 (WC		07/08/2025

FROM 21.00000L of W3112 + 210.00000gram of W3113 = Final Quantity: 21.000 L

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Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych		
3371	Cyanide LCS Spike Solution, 5PPM	<u>WP113838</u>	07/08/2025	12/24/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3	07/08/2025		
FROM	(WC)									

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Iwona Zarych
3456	Cyanide Intermediate Working Std, 5PPM	<u>WP113956</u>	07/16/2025	07/17/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3	07/17/2025

0.25000ml of W3214 + 49.75000ml of WP113836  $\,$  = Final Quantity: 50.000  $\,$  ml  $\,$ **FROM** 

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Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Iwona Zarych		
4	Calibation standard 500 ppb	WP113957	07/16/2025	07/17/2025	Rubina Mughal	None	WETCHEM_P IPETTE_3	07/17/2025		
FROM	**ROM 45.00000ml of WP113836 + 5.00000ml of WP113956 = Final Quantity: 50.000 ml									

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Iwona Zarych
3761	Calibration-CCV CN Standard 250 ppb	<u>WP113958</u>	07/16/2025	07/17/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3	07/17/2025
-					<u> </u>		(WC)	

**FROM** 2.50000ml of WP113956 + 47.50000ml of WP113836 = Final Quantity: 50.000 ml

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Recipe				Expiration	<u>Prepared</u>			Supervised By		
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych		
6	Calibration Standard 100 ppb	WP113959	07/16/2025	07/17/2025	Rubina Mughal	None	WETCHEM_P	•		
							IPETTE_3	07/17/2025		
FROM	FROM 1.00000ml of WP113956 + 49.0000ml of WP113836 = Final Quantity: 50.000 ml (WC)									

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Iwona Zarvch
7	Calibration Standard 50 ppb	WP113960	07/16/2025	07/17/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3	, .

FROM 0.50000ml of WP113956 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml

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Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	NO.	Prep Date	<u>Date</u>	By	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych
8	Calibration Standard 10 ppb	<u>WP113961</u>	07/16/2025	07/17/2025	Rubina Mughal	None	WETCHEM_F	
							IPETTE_3	07/17/2025
FROM	1.00000ml of WP113957 + 49.00000	ml of WP11	3836 = Final	Quantity: 50.00	00 ml		(WC)	

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Iwona Zarvch
9	Calibration Standard 5 ppb	WP113962	07/16/2025	07/17/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3	, .

FROM 0.50000ml of WP113957 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml

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Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych
167	0 ppb CN calibration std	WP113963	07/16/2025	07/17/2025	Rubina Mughal	None	None	•
								07/17/2025
FROM	50.00000ml of WP113836 = Final Q	uantitv: 50.0	00 ml					

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarvch
2168	RCN ICV STD, 100 PPB	WP113964	07/16/2025	07/17/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3	, .

FROM 1.00000ml of WP113838 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml

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Recipe <u>ID</u> 1582	NAME Chloramine T solution, 0.014M	NO. WP113965	Prep Date 07/16/2025		<u>Prepared</u> <u>By</u> Rubina Mughal	CALE_5 (WC		Supervised By Iwona Zarych 07/17/2025
FROM	0.08000gram of W3139 + 20.00000n	I nl of W3112	= Final Quan	ntity: 20.000 ml		<del>sc</del> -5)	·	07/17/2020

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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-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3818-5 / SODIUM PHOSPHATE, MONOBAS/HYD, CRYS, ACS, 2.5 KG	0000225799	12/03/2025	04/05/2021 / Alexander	02/10/2020 / apatel	W2668
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EMD-FX0410-5 / FORMALDEHYDE SOLUTION 450ML	60045	06/30/2025	08/19/2024 / Iwona	06/22/2020 / apatel	W2725
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J4296-1 / ZINC ACETATE,DIHYD,CRYS,AC S,500G	383058	07/05/2027	07/05/2022 / ketankumar	07/05/2022 / ketankumar	W2926
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	270970-1L / Pyridine 1L	SHBQ2113	04/03/2028	04/03/2023 / Iwona	04/03/2023 / Iwona	W3019
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	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

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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.	AL69870-8 / SODIUM THIOSULFATE,0.025N,4LIT RE	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 #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-7 / Sodium Hydroxide Pellets 12 Kg	23B1556310	12/31/2025	07/08/2024 / Iwona	07/08/2024 / Iwona	W3113
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	Chemtech Lot #
PCI Scientific Supply, Inc.	JTE494-6 / CHLORAMINE-T BAKER 250GM	10239484	09/09/2029	09/09/2024 / Iwona	09/09/2024 / Iwona	W3139
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL70850-8 / Starch Solution, 4L	4408P62	08/31/2026	10/16/2024 / Iwona	10/16/2024 / Iwona	W3149
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL13850-1 / Buffer Solution, PH2 (500ml)	2411E26	10/31/2026	12/09/2024 / Iwona	12/09/2024 / Iwona	W3161

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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.	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 / 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.	EM-BX0035-3 / Barbituric Acid, 100 gms	WXBF3271V	05/16/2029	04/21/2025 / Iwona	04/21/2025 / Iwona	W3203
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	Chemtech Lot #
PCI Scientific Supply, Inc.	AL35830-4 / IODINE SOLUTION .025N 1L	MK25A21527	01/20/2029	05/21/2025 / Iwona	05/21/2025 / Iwona	W3213
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	RC2543-4 / CYANIDE STD 1000PPM 4OZ	1505H73	11/30/2025	05/21/2025 / Iwona	05/21/2025 / lwona	W3214

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Q2592-GENCHEM

### **CHEMICAL RECEIPT LOG BOOK**

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	LC135457 / Cyanide Standard, 1000 PPM, Second Source	45060288	12/24/2025	07/07/2025 / Iwona	07/07/2025 / Iwona	W3224

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W3019 Rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com Email USA: techserv@sial.com

Outside USA: eurtechserv@sial.com

Product Name:

**Certificate of Analysis** 

Pyridine - anhydrous, 99.8%

**Product Number:** 

270970

**Batch Number:** 

SHBQ2113

Brand:

SIAL

CAS Number:

110-86-1

MDL Number:

MFCD00011732

Formula:

C5H5N

Formula Weight:

79.10 g/mol

Quality Release Date:

15 DEC 2022



Test	Specification	Result
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
nfrared Spectrum	Conforms to Structure	Conforms
Purity (GC)	> 99.75 %	99.99 %
Vater (by Karl Fischer)	- < 0.003 %	0.002 %
Residue on Evaporation	< 0.0005 %	< 0.0001 %

Larry Coers, Director **Quality Control** 

Sheboygan Falls, 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.





Date of Release: 2/26/2020

Name: Formaldehyde Solution

GR ACS

Meets ACS Specifications

Item No: FX0410 all size codes

Lot / Batch No: 60045

Country of Origin: USA

Characteristic	Requirement		Results	Units
	Min.	Max.		
Assay	36.5	38.0	36.71	%
Chloride (CI)		5	<5	ppm
Color (APHA)		10	<10	
Form			Passes test	
Heavy metals (as Pb)		5	<5	ppm
Iron (Fe)		5	0.6	ppm
Residue after ignition		0.005	<0.0050	%
Sulfate (SO4)		0.002	<0.0020	%
Titrable acid		0.006	<0.0060	meq/g

Heather Sinn,

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**Quality Control Manager** 

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EMD Millipore Corporation, an affiliate of Merck KGaA, Darmstadt, Germany 290 Concord Road Billerica, MA 01821 U.S.A

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the U.S. and Canada.

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M 6151

R-> 1/15/25

Material No.: 9530-33

Batch No.: 22G2862015 Manufactured Date: 2022-06-15

Retest Date: 2027-06-14

Revision No.: 0

# Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCI) (by acid-base titrn)	36.5 - 38.0 %	
ACS - Color (APHA)	≤ 10	37.9 %
ACS - Residue after Ignition	≤ 3 ppm	5
ACS - Specific Gravity at 60°/60°F	≥ 3 ppm 1.185 – 1.192	< 1 ppm
ACS – Bromide (Br)	≤ 0.005 %	1.191
ACS - Extractable Organic Substances		< 0.005 %
ACS - Free Chlorine (as Cl <sub>2</sub> )	≤ 5 ppm	< 1 ppm
Phosphate (PO <sub>4</sub> )	≤ 0.5 ppm	< 0.5 ppm
Sulfate (SO <sub>4</sub> )	≤ 0.05 ppm	< 0.03 ppm
Sulfite (SO <sub>3</sub> )	≤ 0.5 ppm	< 0.3 ppm
Ammonium (NH <sub>4</sub> )	≤ 0.8 ppm	0.3 ppm
Trace Impurities - Arsenic (As)	≤ 3 ppm	< 1 ppm
Trace Impurities – Aluminum (AI)	≤ 0.010 ppm	< 0.003 ppm
Arsenic and Antimony (as As)	≤ 10.0 ppb	1.3 ppb
Trace Impurities - Barium (Ba)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 20.0 ppb	< 5.0 ppb
	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Frace Impurities - Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Frace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Frace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
race Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
race Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
leavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
race Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0% BAKER INSTRA-ANALYZED® Reagent For Trace Metal Analysis





Material No.: 9530-33 Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities - Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities - Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities - Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities - Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities - Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities - Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities – Thallium (TI)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Frace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Frace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Frace Impurities – Zirconium (Zr)		

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5-38.0% BAKER INSTRA-ANALYZED® Reagent For Trace Metal Analysis





Material No.: 9530-33 Batch No.: 22G2862015

Test Specification Result

For Laboratory, Research, or Manufacturing Use Product Information (not specifications): Appearance (clear, fuming liquid) Meets ACS Specifications Storage Condition: Store below 25 °C.

Country of Origin: USA

Packaging Site: Phillipsburg Mfg Ctr & DC



Sodium Phosphate, Monobasic, Monohydrate, Crystal BAKER ANALYZED® A.C.S. Reagent



(sodium dihydrogen phosphate, monohydrate)

Material No.: 3818-05 Batch No.: 0000225799

Manufactured Date: 2018/12/05 Retest Date: 2025/12/03

Revision No: 1

# Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Specification	Result
98.0 - 102.0 %	99.5
4.1 - 4.5	4.3
<= 0.01 %	< 0.01
<= 5 ppm	< 5
<= 0.003 %	< 0.003
<= 0.005 %	<0.005
<= 0.01 %	< 0.01
<= 0.001 %	< 0.001
<= 0.001 %	< 0.001
	98.0 - 102.0 %  4.1 - 4.5  <= 0.01 %  <= 5 ppm  <= 0.003 %  <= 0.005 %  <= 0.01 %  <= 0.01 %

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

Country of Origin: IN

Packaging Site: Paris Mfg Ctr & DC



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3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

Email USA:

techserv@sial.com

Outside USA: eurtechserv@sial.com

Product Name:

Certificate of Analysis

Zinc acetate dihydrate - ACS reagent, ≥98%

Product Number:

383058

Batch Number:

MKCQ9159

Brand:

SIGALD

CAS Number:

5970-45-6

MDL Number:

MEODO000000

MDL Number.

MFCD00066961

Formula:

C4H6O4Zn · 2H2O

- Ommaia.

J4H0U4ZII - ZHZI

Formula Weight:

219.51 g/mol

Quality Release Date:

06 JAN 2022

H<sub>3</sub>C O 2 Zr<sup>2</sup>· 2H<sub>2</sub>O

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystal or Chunk(s)	Powder
Infrared Spectrum	Conforms to Structure	Conforms
Insoluble Matter	< 0.005 %	0.003 %
Calcium (Ca)	< 0.005 %	0.003 %
Chloride (CI)	< 5 ppm	< 5 ppm
Iron (Fe)	< 5 ppm	< 5 ppm
Potassium (K)	< 0.01 %	0.00 %
Magnesium (Mg)	< 0.005 %	0.003 %
Sodium (Na)	< 0.05 %	0.03 %
Lead (Pb)	< 0.002 %	< 0.001 %
рН	6.0 - 7.0	6.1
Sulfate (SO4)	< 0.005 %	< 0.005 %
Complexometric EDTA	98.0 - 101.0 %	100.3 %
Meets ACS Requirements	Meets Requirements	Meets Requirements

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.



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Buffer, Reference Standard, pH  $7.00 \pm 0.01$  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  $\pm 0.01$  at 25 °C only. All other pH values at their corresponding temperatures are accurate to  $\pm 0.05$ .

5 10 15 20 25 30 35 40 45 50 7.12 pН 7.09 7.06 7.02 7.04 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
		V

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

Version: 1.3 Lot Number: 4401F99 Product Number: 1551 Page 1 of 2

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Paul Brandon

Paul Brandon (01/08/2024)

**Production Manager** 

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

# This product was tested in an ISO 17025 Accredited Laboratory

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

Version: 1.3

Lot Number: 4401F99

Product Number: 1551

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Q2592-GENCHEM

W3105 Received on 4/22/24 by IZ

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customerservice@riccachemical.com

# 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	$0.02501~\mathrm{N}~\mathrm{at}~20^{\circ}\mathrm{C}$	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-C1 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)

Version: 1.3 Lot Number: 4403S13 Product Number: 7900 Page 1 of 2

Q2592-GENCHEM 67 of 94

tand Drandon

Paul Brandon (03/29/2024)

**Production Manager** 

This document is designed to comply with ISO Guide 31 "Reference Materials  $^{\rm --}$  Contents of Certificates and Labels."

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Version: 1.3 Lot Number: 4403S13 Product Number: 7900 Page 2 of 2

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12/14/2022

12/31/2025

# **Sodium Hydroxide (Pellets)**

Material: 0583

Grade: ACS GRADE Batch Number: 23B1556310

Chemical Formula: NaOH Molecular Weight: 40

CAS #: 1310-73-2

Appearance: Storage: Room Temperature

**Pellets** 

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

Manufacture Date:

**Expiration Date:** 

Internal ID #: 710

### Signature Additional Information

We certify that this batch conforms to the specifications listed.

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

Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC.

28600 Fountain Parkway, Solon OH 44139 USA

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

Product meets analytical specifications of the grades listed.

VWR International LLC, Radnor Corporate Center, Suite 200, 100 Matsonford Road, Radnor, PA 19087, USA

Date Printed: 02/15/2023

Page 1 of 2

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# **Sodium Hydroxide (Pellets)**

Material: 0583

Grade: ACS GRADE Batch Number: 23B1556310

Chemical Formula: NaOH Molecular Weight: 40

CAS #: 1310-73-2

Appearance:

**Pellets** 

Spec Set: 0583ACS

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

Storage: Room Temperature

Internal ID #: 710

Signature

Additional Information

We certify that this batch conforms to the specifications listed.

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

Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC.

28600 Fountain Parkway, Solon OH 44139 USA

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

Product meets analytical specifications of the grades listed.

VWR International LLC, Radnor Corporate Center, Suite 200, 100 Matsonford Road, Radnor, PA 19087, USA

Date Printed:

02/15/2023

Page 2 of 2

Q2592-GENCHEM **70 of 94** 



W3139 Received on 9/9/24 by IZ

Product No.: A12044

Product: Chloramine-T trihydrate, 98%

Lot No.: 10239484

Appearance: White powder Melting Point: 166°C(dec)
Assay (Iodometric titration): 100.5% Identification (FTIR): Conforms

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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	Passed
	(Iodine present)	

Specification	Reference
Starch Solution	APHA (4500-S2- F)
Starch Indicator Solution	APHA (4500-C1 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-C1 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)

Version: 1.3 Lot Number: 4408P62 Product Number: 8000 Page 1 of 2

Q2592-GENCHEM 72 of 94

Paul Brandon (08/28/2024) Production Manager

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Version: 1.3 Lot Number: 4408P62 Product Number: 8000 Page 2 of 2

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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  $2.00 \pm 0.01$  at  $25^{\circ}$ 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.

25 30 35 40 45 50 1.93 1.98 1.98 2.00 2.01 2.03 2.03 2.04 2.04 pН

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)

Version: 1.3 Lot Number: 2411E26 Product Number: 1493 Page 1 of 2

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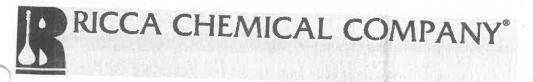
Jose Pena (11/11/2024) Operations Manager

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

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Version: 1.3 Lot Number: 2411E26 Product Number: 1493 Page 2 of 2

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customerservice@riccachemical.com

# Certificate of Analysis

Buffer, Reference Standard, pH  $4.00 \pm 0.01$  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  $\pm 0.01$  at 25 °C only. All other pH values at their corresponding temperatures are accurate to  $\pm 0.05$ .

5 10 15 20 25 30 35 45 pH 50 4.00 4.00 4.00 4.00 4.004.00 4.01 4.024.03 4.04 4.06

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

Test				
	Specification	Result		
Appearance	Red liquid	Passed	*Not a certified value.	
	Certified Value	Uncertainty	NIST SRM#	
pH at 25°C (Method: SQCP027, SQCP033)	4.008	2.22		

185i, 186-I-g, 186-II-g

Specification	STOC TO STOCK THE STOCK TH	
Commercial Buffer Solutions	Reference	18
Buffor B	ASTM (D 1293 B)	N.
Buffer B	(B 5101)	
pH magazinomant	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. Batcl: records document raw material traceability and production and testing

Part Number	Size / Dockson II	
1501-16	Size / Package Type	Shelf Life (Unopened Container)
1501-2.5	500 mL natural poly	24 months
1501-5	10 L Cubitainer®	24 months
Recommended Storage: 15°C	20 L Cubitainer® 30°C (59°F - 86°F)	24 months

Version: 1.3

Lot Number: 2411A93

Product Number: 1501

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# RICCA CHEMICAL COMPANY 33191

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Certificate of Analysis

Buffer, Reference Standard, pH  $10.00 \pm 0.01$  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  $\pm 0.01$  at 25 °C only. All other pH values at their corresponding temperatures are accurate to  $\pm 0.05$ .

20 25 30 pΗ 10.31 10.23 35 40 50 10.1710.11 10.05 10.00 9.95 9.91 9.87

Name		04.13	
Water	CAS#	Grade	
Sodium Carbonate	7732-18-5	ACS/ASTM/USP/EP	
Sodium Bicarbonate	497-19-8	ACS	
Sodium Hydrovida	144-55-8	ACS	
Preservative	-010 10 2	Keagent.	
Blue Dye	Proprieta	1888 F F F F F F F F F F F F F F F F F F	
	Proprietary	11-18 k 11 (Att A 22) — 111 (A	Service of the service

Test			PER HOUSE DE NAMES AND ASSESSMENT
Appearance	Specification	Result	
Test	Blue liquid	Passed	*Not a certified value.
	Certified Value	Uncertainty	
pH at 25°C (Method: SQCP027, SQCP033)	10.009	THE RESERVE THE PROPERTY AND ADDRESS OF THE PERSON OF THE	NIST SRM#
Specification of the second of		0.02	186-I-g, 186-II-g, 191d

Specification	100 1 g, 100-11-g, 191d		
Commercial D. 66 G.	Reference		
Ruffer C	ASTM (D 1293 B)		
Buffer C	ASTM (D 5464)		
pH measurements were performed in our Pocomolo City, MD 1	ACTIVITY FLOOR		

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

Part Number		and production and testing
1601-1	Size / Package Type	Shelf Life (Unopened Container)
1601-16	4 L natural poly 500 mL natural poly	10 17
1001 101	500 mL natural poly 4 L Cubitainer®	18 months
1601-2.5 1601-32	10 L Cubitainer®	18 months
1601-5	1 L natural poly	18 months
Version: 1.3	20 L Cubitainer®	18 months
0131011. 1.3	Lot Number: 2410E90	The state of the s

Lot Number: 2410F80

Product Number: 1601

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# Certificate of Analysis

Buffer, Reference Standard, pH  $12.00 \pm 0.01$  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	$\mathbf{Result}$	1
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)

Version: 1.3 Lot Number: 2504F20 Product Number: 1615 Page 1 of 2

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Jose Pena (04/08/2025) Operations Manager

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

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Version: 1.3 Lot Number: 2504F20 Product Number: 1615 Page 2 of 2

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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

Barbituric acid - ReagentPlus®, 99%

Product Name:

**Product Number:** 185698 Batch Number: WXBF3271V

Brand: SIAL CAS Number: 67-52-7 Formula: C4H4N2O3 Formula Weight: 128,09 g/mol Quality Release Date: 16 MAY 2024

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	H	

Test	Specification	Result	
Appearance (Colour)	White to Off-White	White	
Appearance (Form)	Pow der	Pow der	
Infrared spectrum	Conforms to Structure	Conforms	
Purity (Titration by NaOH)	98.5 - 101.5 %	100.4 %	
GC (area %)	> 98 %	100 %	
VPCT			

Kang Chen Quality Manager Wuxi, China CN

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.

Version Number: 1 Page 1 of 1

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# W3213 Deceived on 5/21/25 6y 12 Certificate of Analysis

W

Material

Material Description

Lot

Expires end of

Molecular mass

Last Quality Control

Date of manufacture

Made in

Manufacturer Source Batch

Additional infomation

BDHVBDH7206-1

**IODINE SOLUTION 0.025N** 

25A2461008

2029-Jan-20

0

2025-Jan-24

2025-Jan-21

**United States** 

MK25A21527

Characteristics	Specifications	Measured values	1550
Prepared to formulation on file	Confirmed	Confirmed	
Appearance	Passes Test	Passes Test	
Normality, N	0.0200 - 0.0300	0.0268	

### Signature

We certify that this batch conforms to the specifications listed above.

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

Michelle Bales - Sr. Manager Quality Assurance Avantor Performance Materials, LLC

For Professional use in Laboratory or Manufacturing. Not for use as an Active Pharmaceutical Ingredient or Food or Animal Feed. Suitability and intended use of the product remains the responsibility of the user

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

customerservice@riccachemical.com

# Certificate of Analysis

Cyanide Standard, 1000 ppm CN

Lot Number: 1505H73 Product Number: 2543

Manufacture Date: MAY 08, 2025

Expiration Date: NOV 2025

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.

Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225% (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

Name	CAS#	Grade	
Water	7732-18-5	ACS/ASTM/USP/EP	
Potassium Cyanide	151-50-8	ACS	
Sodium Hydroxide	1310-73-2	Reagent (from ACS)	

Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN)	995-1005 ppm	1000 ppm

Specification	Reference	
Stock Standard Cyanide Solution	APHA (4500-CN- F)	
Stock Cyanide Solution	APHA (4500-CN- E)	
Stock Cyanide Solution	APHA (4500-CN- K)	
Stock Cyanide Solution	APHA (4500-CN- H)	
Cyanide Reference Solution (1000 mg/L)	EPA (SW-846) (7.3.3.2)	
Cyanide Calibration Stock Solution (1,000 mg/L CN-)	EPA (SW-846) (9213)	
Stock Cyanide Solution	EPA (335.3)	
Stock Cyanide Solution	EPA (335.2)	
Cyanide Solution Stock	ASTM (D 4282)	
Simple Cyanide Solution, Stock (1.0 g/L CN)	ASTM (D 4374)	

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)
2543-16	500 mL amber poly	6 months
2543-32	1 L amber poly	6 months
2543-4	120 mL amber poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

Version: 1.3 Lot Number: 1505H73 Product Number: 2543 Page 1 of 2

Q2592-GENCHEM 82 of 94

Ernest Mahan (05/08/2025)

Plant Manager

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Version: 1.3 Lot Number: 1505H73 Product Number: 2543 Page 2 of 2

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# Certificate of Analysis

Buffer, Reference Standard, pH  $7.00 \pm 0.01$  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.

15 20 30 35 45 50 рH 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#
nH at 25°C (Mothod: SOCP027, SOCP033)	7 003	0.02	186-I-g 186-II-g 101d

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:  $15^{\circ}\text{C} - 30^{\circ}\text{C} (59^{\circ}\text{F} - 86^{\circ}\text{F})$ 

Version: 1.3 Lot Number: 2504D34 Product Number: 1551 Page 1 of 2

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Jose Pena (04/03/2025) Operations Manager

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

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Version: 1.3 Lot Number: 2504D34 Product Number: 1551 Page 2 of 2

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### Part of TCP Analytical Group

Jackson's Pointe Commerce Park- Building 1000 1010 Jackson's Pointe Court, Zelienople, PA 16063

### **Certificate of Analysis**

### Cyanide Standard 1000 ppm (1ml = 1mg CN)

Product Code: LC13545 Manufacture Date: June 25, 2025

Lot Number: 45060288 Expiration Date: December 24, 2025

Test	Specification	Result	
Appearance (clarity)	clear solution	clear solution	
Appearance (color)	colorless	colorless	
Concentration (CN)	0.990 - 1.010mg/mL	1.000mg/mL	
Concentration (CN)	990 - 1,010ppm	1,000ppm	
Traceable to NIST SRM	Report	999b	

**Intended Use** - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

**Storage Information** - Unless noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

**Instructions for Handling and Use -** Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

**Preparation -** All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST

\*The suffix of the product code may differ from what is on your product label. The suffix will designate the size and be associated with a numeric digit(s). Visit LabChem.com for more information\*

Suffix	1	2	3/3S/36/36S	4/4C	5	6	7	8	9	20	44	200	246	486
Size	500mL or g	1L or 1kg	2.5L/2.5L Coated/6x2.5L/6x2.5L Coated	4L	20L	10L	125mL	25g	100g	20x20mL	4x4L	200L	24x6mL	48x6mL

ISO9001:2015 Registration #0306-01

2

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10

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13

11

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### PERCENT SOLID

Supervisor: Iwona Analyst: jignesh

Date: 7/16/2025

OVENTEMP OUT Celsius(°C): 104OVENTEMP IN Celsius(°C): 107 Time IN: 17:15 Time OUT: 08:25

**In Date:** 07/15/2025 **Out Date:** 07/16/2025

Weight Check 1.0g: 1.00 Weight Check 1.0g: 1.00 Weight Check 10g: 10.00 Weight Check 10g: 10.00 OvenID: M OVEN#1 BalanceID: M SC-4

Thermometer ID: % SOLID-OVEN

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
Q2592-01	WC-SOIL-20250711	1	1.15	10.84	11.99	9.46	76.7	
Q2605-01	V908	2	1.13	10.70	11.83	11.13	93.5	
Q2605-02	VB16135	3	1.14	10.66	11.8	11.09	93.3	
Q2605-03	VB15061	4	1.18	10.55	11.73	10.99	93.0	
Q2605-04	V897	5	1.17	10.79	11.96	11.76	98.1	
Q2607-01	VNJ-257-1	6	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2607-02	VNJ-257-2	7	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2607-03	ETGI-359-1	8	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2607-04	ETGI-359-2	9	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2608-04	60271	10	1.14	10.65	11.79	9.61	79.5	
Q2609-01	710-ABC	11	1.18	10.37	11.55	11.5	99.5	
Q2609-03	710-C	12	1.13	10.29	11.42	11.37	99.5	
Q2609-05	709-AB	13	1.16	10.26	11.42	11.39	99.7	
Q2609-07	709-A	14	1.14	10.28	11.42	11.4	99.8	
Q2610-01	2010	15	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2610-02	2011	16	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2610-03	2012	17	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2610-04	2013	18	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2610-05	2014	19	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2611-01	EO-02-071525	20	1.16	10.17	11.33	10.83	95.1	
Q2611-02	EO-02-071525-E2	21	1.14	10.39	11.53	10.68	91.8	
Q2612-01	OR-02-071525	22	1.18	10.49	11.67	10.1	85.0	
Q2612-02	OR-02-071525-E2	23	1.12	10.61	11.73	9.89	82.7	
Q2614-01	HR-MCN-COMP-01	24	1.15	10.70	11.85	9.61	79.1	
Q2614-02	HR-MCN-VOC-01	25	1.15	10.29	11.44	9.14	77.6	
Q2614-03	HR-MCN-01	26	1.11	10.71	11.82	9.35	76.9	
Q2614-04	HR-MCN-02	27	1.19	10.40	11.59	8.94	74.5	
Q2614-05	HR-MCN-03	28	1.14	10.58	11.72	9.89	82.7	

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### PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh

**Date:** 7/16/2025

OVENTEMP IN Celsius (°C): 107 OVENTEMP OUT Celsius (°C): 104

Time IN: 17:15 Time OUT: 08:25

In Date: 07/15/2025 Out Date: 07/16/2025

Weight Check 1.0g: 1.00 Weight Check 1.0g: 1.00 Weight Check 10g: 10.00 Weight Check 10g: 10.00 OvenID: M OVEN#1 BalanceID: M SC-4

Thermometer ID: % SOLID-OVEN

Qc:LB136481

QC:LBI3648	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g)(B)	Dish+Dry Sample Wt(g)(C)	% Solid	Comments

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

Q2592-GENCHEM

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	07-15-2025 08:40:15	Method		Chemtech -SO	Chemtech -SO	Chemtech -SO	Chemtech -SO	Chemtech -SO	Chemtech -SO	Chemtoch CO		Chemtech -SO	Chemtech -SO	Chemtech -SO	Chemtech CO	C- Heading	OS- USBILLIAND	Cnemtech -SO	Chemtech -SO	Chemtech -SO	Chemtech -SO	Chemtech -SO	Chemtech -SO	Chemtech -SO	Chemtech -SO	Chemtech -SO
100	Date: 07-15-20	Collect Date		07/11/2025	07/15/2025	07/15/2025	07/15/2025	07/15/2025	07/15/2025	07/15/2025	07/14/2002	07/12/2025	07/15/2025	07/15/2025	07/15/2025	07/15/2025	07/46/2005	07/45/0005	6202/61/10	07/15/2025	07/15/2025	07/15/2025	07/15/2025	07/15/2025	07/15/2025	07/15/2025
1847616		Raw Sample Storage Location		D51	D41	D41	D41	D41	D41	D41	D41		D41	D41	D41	D41	D41	D41	2	1	D41	D41	D41	D41	D41	D41
	Wet-Chemistry	Customer		PARS02	PSEG03	PSEG03	PSEG03	PSEG03	PSEG03	PSEG03	PSEG03		LSEG03	PSEG03	PSEG03	PSEG03	PSEG03	PSEG03	PSEG03		PSEG03	PSEG03	PSEG03	PSEG03	PSEG05	PSEG05
WORKLIST(Hardcopy Internal Chain)	Department: Wet	Preservative		Cool 4 deg C	Cool 4 deg C	Cool 4 deg C	Cool 4 deg C	Cool 4 deg C	Cool 4 deg C	Cool 4 deg C	Cool 4 deg C	Cool 4 dea C		Cool 4 deg C	Cool 4 deg C	Cool 4 deg C	Cool 4 deg C	Cool 4 deg C	Cool 4 deg C		Cool 4 deg C	Cool 4 deg C				
)RKLIST(Hardco	190721	ă	Percent Solide	Percent Collida	Percent Solids	20000	reicent sollds	Percent Solids		Percent Solids						Percent Solids										
W	WorkList ID:	Matrix Test																								
	Wor	Ma	Solid	bilos	Solid	rilo	5 0	DIIOO	Diloc	Solid	Solid	Solid	Solid	100	Diloc	Solid	Solid	Solid	Solid	Solid	Solid	Filos	rilov.		Solid	Solid
	%1-071525	Customer Sample	WC-SOIL-20250711	V908	VB16135	VB15061	V897	VNJ-257-1	VN I-267 2	2-162-041V	E1GI-359-1	ETGI-359-2	60271	710-ABC	740	710-0	709-ABC	709-C	2010	2011	2012	2013	2014	EO.09.074696	EO-02-07 1323	Z=-02-01-020-EZ
Q2592-0	WorkList Name:	Sample	Q2592-01	Q2605-01	Q2605-02	Q2605-03	Q2605-04	Q2607-01	Q2607-02	00 2002	GZ907-03	Q2607-04	Q2608-04	Q2609-01	02800.03	20-0020	GC-608-02	70-60970	QZ610-01	Q2610-02	Q2610-03	Q2610-04	Q2610-05	Q2611-01	Jo 62611-02	

Date/Time 07:15:25 18:15 Raw Sample Received by:

Raw Sample Relinquished by:

Raw Sample Received by:

07-15-25

Date/Time

Raw Sample Relinquished by:





# WORKLIST(Hardcopy Internal Chain)

Sample

18496181

					,		
%1-071525	WorkList ID:	ID: 190721	Department :	Wet-Chemistry		07 15 20	7.00
					80	Jac : 0/-15-2025 08:40:15	25 U8:4U:15
Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date Method	Method
OR-02-071525							
017-02-01 1023	Solid	Percent Solids	Cool 4 dea C	DOECOR	3		
OR-02-071525-E2	rilog	Description of the control of the co		LOEGOS	D41	07/15/2025	07/15/2025 Chemtech -S
		reiceill sollds	Cool 4 deg C	PSEG05	D41	300031100	
HR-MCN-COMP-01	Solid	Percent Solids	0 - 4 4 1000			6702/61770	UV 13/2023 Chemtech -S
			C001 4 deg C	PSEG03	D41	07/15/2025	07/15/2025 Chemtech -S
HK-MCN-VOC-01	Solid	Percent Solids	Cool 4 dea C	200			
HR-MCN-01			0 000	PSEG03	D41	07/15/2025	07/15/2025 Chemtech -S
	Solid	Percent Solids	Cool 4 dea C	000000	3		
HR-MCN-02	1		0	LOEGUS	D41	07/15/2025	07/15/2025 Chemtech -S
30.40	Solid	Percent Solids	Cool 4 dea C	000000	2		
HR-MCN-03	33.00		)	135603	D41	07/15/2025	07/15/2025 Chemtech -S
	Dilloc	Percent Solids	Cool 4 dea C	PSEGO	77		

Q2612-02

Q2614-01 Q2614-02 Q2614-03

Q2612-01

Q2614-04

Q2614-05

Chemtech -SO Chemtech -SO

Chemtech -SO

07/15/2025 Chemtech -SO

D41

PSEG03

Cool 4 deg C

Chemtech -SO

Chemtech -SO Chemtech -SO

> Date/Time ロデットインス Raw Sample Received by:

Raw Sample Relinquished by:







Page 2 of 2

Raw Sample Relinquished by: Date/Time 07.15.25 Raw Sample Received by:

90 of 94



# SHIPPING DOCUMENTS

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Q2592-GENCHEM 91 of 94



<sup>C</sup>Q2592-GENCHEM

### 284 Sheffield Street, Mountainside, NJ 07092 (908) 789-8900 • Fax (908) 789-8922 www.chemtech.net

ALLIANCE PROJECT NO. QUOTE NO.

Q 7592

COC Number

2047546

. 2 0 , . , . , . ,	2 011001		CLIENT PROJECT INFORMATION									OLIENT BILLING INCORMATION							
	IENT INFORMATION					CLIENT PR	ROJECT IN	FORMA	TION		File.	CLIENT BILLING INFORMATION							
COMPANY: Parsons	EPORT TO BE SENT TO:		PROJE	CT.N	IAME	: Con E	d East	Riv	er S	3		BILL T	o: P	arso	กร			PO#: 4	54534
ADDRESS: 301 Plai	nfield Road		PROJEC	OT NO	).: 4	5453	LOCA	TION:	Hanr	natto	in	ADDR	ESS: 2	301	Plair	here	J RO	ad	
CITY Syracuse		ZIP: 13212	PROJEC	T MA	NAG	er: 70	har L	OVY				CITY	Syr	acus	se		STAT	E:NY	:ZIP: 1321
ATTENTION: Zonay			e-mail: Zongr. Lavy @ parsons. Com ATTE									ATTENTION: 70 May Lavy PHONE: (732)-796-5536							
PHONE: (732)796-	3.																LYSIS		
	NAROUND INFORMATION	ON	PHONE.	PHONE: (732)-796-5536 FAX:  DATA DELIVERABLE INFORMATION															
FAX (RUSH) HARDCOPY (DATA PACKA EDD: *TO BE APPROVED BY CH STANDARD HARDCOPY T	☐ Level☐ Level☐	2 (Re 3 (Re w Dat	sults + sults + a)	-QC) 🗆 I -QC 💷 I	evel 4 (QC NJ Reduced NYS ASP A Other	d 🗆 US	S EPA CL	a) P C 5		SING A	SERVA	TC 6	LINE T	Jania Jania	P. Little	dituit di	MMENTS		
ALLIANCE				SAM	IPLE		IPLE ECTION	TES				PRE	JEITVA	IIVEO				- 00	fy Preservatives
SAMPLE	PROJECT SAMPLE IDENTIFICA	TION	SAMPLE MATRIX	_	GRAB	DATE	TIME	OF BOTTLES	E	E	E	E	E	E	E	E		A-HCI B-HN03	D-NaOH E-ICE
ID				COMP	8	( )		0 #	1	2	3	4	5	6	7	8	9	C-H2SO4	F-OTHER
1. WC-S	011-20250711		S	X		7/11/25	1230	9	X	X	X	X	X	$\times$	X	X			
2.								_											
3.																			
4.																			
5.																			
5.						1													
7.																			
3.																			
Э.																			
10.																			
100	SAMPLE CUSTOD									_							Υ	216	
ELINQUISHED BY SAMPLER . EMMA SAVER ELINQUISHED BY SAMPLER .	7/11/75 DATE/TIME:	RECEIVED BY:	P	7-1	1-2	Commer	ons of bottles ots: In Clu	UL	s at receip Cohar, I	19446	Parso	NS_C	OVVI OY	nt o	COOLER T	EMP	ntini	@parson	is. Com
ELANGUISHED BY SAMPLE						CLIENT: ☐ Hand Delivered ☐ O								ther	er Shipment Complete				



### 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
· ion colocy	
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

QA Control Code: A2070148

Q2592-GENCHEM 93 of 94

3

6

9

11

14

13



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

Fax: 908 789 8922

### LOGIN REPORT/SAMPLE TRANSFER

Order ID: Q2592

PARS02

Order Date: 7/11/2025 3:05:25 PM

Project Mgr:

Client Name: PARSONS Engineering of 1

Project Name: Con Edison - East River Sit

Report Type: NYS ASP B

Client Contact: Zohar Lavy

Receive DateTime: 7/11/2025-12:00:00 AM-

EDD Type: NYSDEC EDD V-3

Invoice Name: PARSONS Engineering of 1

Purchase Order:

Hard Copy Date:

Invoice Contact: Zohar Lavy

Date Signoff:

LAB ID	CLIENT ID	MATRIX SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DAT	E DUE DATES
Q2592-01	WC-SOIL-20250711	Solid 07/11/2025	12:30					
				VOCMS Group1		8260D	5 Bus. Days	

04:39:00 PM

DP 07/15/2025

Relinguished By:

Date/Time: 7/14/25 0725

SAMPLES PLACED IN 5M-REF-Z

Received By:

10:01 Not 6

Storage Area: VOA Refridgerator Room