

DATA PACKAGE

GENERAL CHEMISTRY

PROJECT NAME : NEWPCP SLUDGE SCREEN 13923-GE-25

AMBRIC TECHNOLOGY CORPORATION

100 Pine Street

Colwyn, PA - 19023

Phone No: 215-928-8930

ORDER ID : Q2843

ATTENTION : Dan Mulvihill



Laboratory Certification ID # 20012



1) GENERAL CHEMISTRY DATA	2
2) Signature Page	3
3) Case Narrative	4
4) Qualifier Page	5
5) Conformance/Non Conformance	6
6) QA Checklist	7
7) Chronicle	8
8) Sample Data	10
8.1) NEWPCP-SS-1 14-16	11
8.2) NEWPCP-SS-2 8-10	12
8.3) NEWPCP-SS-2 6-8	13
8.4) NEWPCP-SS-5 12-14	14
9) QC Data Summary For Genchem	15
9.1) Initial and Continuing Calibration Verification	16
9.2) Initial and Continuing Calibration Blank Summary	18
9.3) Preparation Blank Summary	19
9.4) Duplicate Sample Summary	20
10) GENCHEM RAW DATA	22
10.1) GENCHEM RAW DATA - ANALYTICAL	23
10.1.1) LB136813	23
10.1.2) LB136823	25
10.1.3) LB136838	27
10.1.4) LB136844	31
10.2) GENCHEM RAW DATA - PREP	33
10.2.1) PB169252	33
10.2.2) PB169254	37
11) Analytical Runlogs	40
12) Standard Prep Logs	46
13) Percent Solid	88
14) Shipping Document	91
14.1) Chain Of Custody	92
14.2) Lab Certificate	93

Cover Page

Order ID : Q2843

Project ID : NEWPCP Sludge Screen 13923-GE-25

Client : Ambric Technology Corporation

Lab Sample Number

Q2843-01
Q2843-02
Q2843-03
Q2843-04

Client Sample Number

NEWPCP-SS-1 14-16
NEWPCP-SS-2 8-10
NEWPCP-SS-2 6-8
NEWPCP-SS-5 12-14

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

Signature :

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 8:25 am, Aug 22, 2025

Date: 8/21/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

Ambric Technology Corporation

Project Name: NEWPCP Sludge Screen 13923-GE-25

Project # N/A

Order ID # Q2843

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

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 08/13/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Ignitability, Reactive Cyanide, Reactive Sulfide. This data package contains results for Corrosivity, Ignitability, 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 was based on method 9045D.

D. QA/ QC Samples:

The Holding Times were met for all samples except for NEWPCP-SS-1 14-16 of Corrosivity, for NEWPCP-SS-2 6-8 of Corrosivity, for NEWPCP-SS-2 8-10 of Corrosivity and for NEWPCP-SS-5 12-14 of Corrosivity as samples were received out of holding time.

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:

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

The temperature of the samples at the time of receipt was 26.2°C.

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

APPROVED

Signature *By Nimisha Pandya, QA/QC Supervisor at 8:25 am, Aug 22, 2025*

DATA REPORTING QUALIFIERS- INORGANIC

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

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

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q2843

MATRIX: Solid

METHOD: 1030,9012B,9034,9045D

	NA	NO	YES
1. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
2. Sample Duplicate Analysis Met QC Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓
3. Digestion Holding Time Met If not met, list number of days exceeded for each sample: The Holding Times were met for all samples except for NEWPCP-SS-1 14-16 of Corrosivity, for NEWPCP-SS-2 6-8 of Corrosivity, for NEWPCP-SS-2 8-10 of Corrosivity and for NEWPCP-SS-5 12-14 of Corrosivity as samples were receive out of holding time.		✓	

ADDITIONAL COMMENTS:

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

The temperature of the samples at the time of receipt was 26.2°C.

QA REVIEW

REVIEWED

Sohil Jodhani, QA/QC Director , 8/22/2025, 8:20:06 AM

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2843

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 08/21/2025

LAB CHRONICLE

OrderID:	Q2843	OrderDate:	8/13/2025 10:28:42 AM
Client:	Ambric Technology Corporation	Project:	NEWPCP Sludge Screen 13923-GE-25
Contact:	Dan Mulvihill	Location:	J11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2843-01	NEWPCP-SS-1 14-16	SOIL			08/12/25 14:00			08/13/25
			Corrosivity	9045D			08/14/25 08:44	
			Ignitability	1030			08/14/25 12:00	
			Reactive Cyanide	9012B		08/15/25	08/15/25 12:52	
			Reactive Sulfide	9034		08/15/25	08/15/25 15:16	
Q2843-02	NEWPCP-SS-2 8-10	SOIL			08/12/25 14:00			08/13/25
			Corrosivity	9045D			08/14/25 08:50	
			Ignitability	1030			08/14/25 12:14	
			Reactive Cyanide	9012B		08/15/25	08/15/25 12:52	
			Reactive Sulfide	9034		08/15/25	08/15/25 15:18	
Q2843-03	NEWPCP-SS-2 6-8	SOIL			08/12/25 14:00			08/13/25
			Corrosivity	9045D			08/14/25 09:00	
			Ignitability	1030			08/14/25 12:22	
			Reactive Cyanide	9012B		08/15/25	08/15/25 12:52	
			Reactive Sulfide	9034		08/15/25	08/15/25 15:20	

LAB CHRONICLE

Q2843-04	NEWPCP-SS-5 12-14	SOIL		08/12/25 14:00		08/13/25
		Corrosivity	9045D			08/14/25 09:03
		Ignitability	1030			08/14/25 12:30
		Reactive Cyanide	9012B		08/15/25	08/15/25 12:52
		Reactive Sulfide	9034		08/15/25	08/15/25 15:23



SAMPLE DATA

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Report of Analysis

Client:	Ambric Technology Corporation	Date Collected:	08/12/25 14:00
Project:	NEWPCP Sludge Screen 13923-GE-25	Date Received:	08/13/25
Client Sample ID:	NEWPCP-SS-1 14-16	SDG No.:	Q2843
Lab Sample ID:	Q2843-01	Matrix:	SOIL
		% Solid:	89.8

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	7.00	H	1	0	0	pH		08/14/25 08:44	9045D
Ignitability	NO		1	0	0	oC		08/14/25 12:00	1030
Reactive Cyanide	0.0083	U	1	0.0083	0.050	mg/Kg	08/15/25 08:35	08/15/25 12:52	9012B
Reactive Sulfide	3.19	J	1	0.20	10.0	mg/Kg	08/15/25 12:40	08/15/25 15:16	9034

Comments: pH result reported at temperature 24.3 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Ambric Technology Corporation	Date Collected:	08/12/25 14:00
Project:	NEWPCP Sludge Screen 13923-GE-25	Date Received:	08/13/25
Client Sample ID:	NEWPCP-SS-2 8-10	SDG No.:	Q2843
Lab Sample ID:	Q2843-02	Matrix:	SOIL
		% Solid:	94.4

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	7.78	H	1	0	0	pH		08/14/25 08:50	9045D
Ignitability	NO		1	0	0	oC		08/14/25 12:14	1030
Reactive Cyanide	0.0084	U	1	0.0084	0.050	mg/Kg	08/15/25 08:35	08/15/25 12:52	9012B
Reactive Sulfide	4.73	J	1	0.20	10.0	mg/Kg	08/15/25 12:40	08/15/25 15:18	9034

Comments: pH result reported at temperature 24.6 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Ambric Technology Corporation	Date Collected:	08/12/25 14:00
Project:	NEWPCP Sludge Screen 13923-GE-25	Date Received:	08/13/25
Client Sample ID:	NEWPCP-SS-2 6-8	SDG No.:	Q2843
Lab Sample ID:	Q2843-03	Matrix:	SOIL
		% Solid:	93.4

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	7.30	H	1	0	0	pH		08/14/25 09:00	9045D
Ignitability	NO		1	0	0	oC		08/14/25 12:22	1030
Reactive Cyanide	0.0083	U	1	0.0083	0.049	mg/Kg	08/15/25 08:35	08/15/25 12:52	9012B
Reactive Sulfide	6.36	J	1	0.20	10.0	mg/Kg	08/15/25 12:40	08/15/25 15:20	9034

Comments: pH result reported at temperature 23.7 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Ambric Technology Corporation	Date Collected:	08/12/25 14:00
Project:	NEWPCP Sludge Screen 13923-GE-25	Date Received:	08/13/25
Client Sample ID:	NEWPCP-SS-5 12-14	SDG No.:	Q2843
Lab Sample ID:	Q2843-04	Matrix:	SOIL
		% Solid:	95.5

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	7.53	H	1	0	0	pH		08/14/25 09:03	9045D
Ignitability	NO		1	0	0	oC		08/14/25 12:30	1030
Reactive Cyanide	0.0083	U	1	0.0083	0.049	mg/Kg	08/15/25 08:35	08/15/25 12:52	9012B
Reactive Sulfide	6.37	J	1	0.20	10.0	mg/Kg	08/15/25 12:40	08/15/25 15:23	9034

Comments: pH result reported at temperature 24.6 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits



QC RESULT SUMMARY

- 1
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Initial and Continuing Calibration Verification

Client: Ambric Technology Corporation

SDG No.: Q2843

Project: NEWPCP Sludge Screen 13923-GE-25

RunNo.: LB136813

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Corrosivity	pH	7.00	7	100	90-110	08/14/2025
Sample ID: CCV1 Corrosivity	pH	2.01	2.00	101	90-110	08/14/2025
Sample ID: CCV2 Corrosivity	pH	12.02	12.00	100	90-110	08/14/2025
Sample ID: CCV3 Corrosivity	pH	2.02	2.00	101	90-110	08/14/2025

Initial and Continuing Calibration Verification

Client: Ambric Technology Corporation

SDG No.: Q2843

Project: NEWPCP Sludge Screen 13923-GE-25

RunNo.: LB136838

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Reactive Cyanide	mg/L	0.098	0.099	99	85-115	08/15/2025
Sample ID: CCV1 Reactive Cyanide	mg/L	0.25	0.25	100	90-110	08/15/2025
Sample ID: CCV2 Reactive Cyanide	mg/L	0.24	0.25	96	90-110	08/15/2025
Sample ID: CCV3 Reactive Cyanide	mg/L	0.24	0.25	96	90-110	08/15/2025
Sample ID: CCV4 Reactive Cyanide	mg/L	0.25	0.25	100	90-110	08/15/2025

Initial and Continuing Calibration Blank Summary

Client:	Ambric Technology Corporation	SDG No.:	Q2843
Project:	NEWPCP Sludge Screen 13923-GE-25	RunNo.:	LB136838

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	08/15/2025
Sample ID: CCB1 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	08/15/2025
Sample ID: CCB2 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	08/15/2025
Sample ID: CCB3 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	08/15/2025
Sample ID: CCB4 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	08/15/2025

Preparation Blank Summary

Client: Ambric Technology Corporation

SDG No.: Q2843

Project: NEWPCP Sludge Screen 13923-GE-25

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: PB169252BL							
Reactive Cyanide	mg/Kg	< 0.0250	0.0250	U	0.0084	0.05	08/15/2025
Sample ID: PB169254BL							
Reactive Sulfide	mg/Kg	< 5.0000	5.0000	U	0.201	10	08/15/2025

Duplicate Sample Summary

Client:	Ambric Technology Corporation	SDG No.:	Q2843
Project:	NEWPCP Sludge Screen 13923-GE-25	Sample ID:	Q2843-01
Client ID:	NEWPCP-SS-1 14-16DUP	Percent Solids for Spike Sample:	89.8

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Corrosivity	pH	+/-20	7.00		7.01		1	0.14		08/14/2025
Ignitability	oC	+/-20	NO		NO		1	0		08/14/2025

Duplicate Sample Summary

Client:	Ambric Technology Corporation	SDG No.:	Q2843
Project:	NEWPCP Sludge Screen 13923-GE-25	Sample ID:	Q2874-02
Client ID:	ELI-25-0086DUP	Percent Solids for Spike Sample:	63.4

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Reactive Cyanide	mg/Kg	+/-20	0.0083	U	0.0083	U	1	0		08/15/2025
Reactive Sulfide	mg/Kg	+/-20	6.31	J	6.31	J	1	0		08/15/2025



RAW DATA

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Analytical Summary Report

Analysis Method: 9045D

Analyst By : jignesh

Parameter: Corrosivity

Supervisor Review By : rubina

Run Number: LB136813

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].

True Value of CCV3 = 2.00 Control Limits[+/- 0.05].

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.3	4.01	08/14/2025	08:25
2	CAL2	1	Water	NA	NA	20.2	7.01	08/14/2025	08:26
3	CAL3	1	Water	NA	NA	20.3	10.02	08/14/2025	08:30
4	ICV	1	Water	NA	NA	20.2	7.00	08/14/2025	08:33
5	CCV1	1	Water	NA	NA	20.2	2.01	08/14/2025	08:35
6	Q2843-01	1	Solid	20.02	20	24.3	7.00	08/14/2025	08:44
7	Q2843-01DUP	1	Solid	20.03	20	24.5	7.01	08/14/2025	08:46
8	Q2843-02	1	Solid	20.02	20	24.6	7.78	08/14/2025	08:50
9	Q2843-03	1	Solid	20.03	20	23.7	7.30	08/14/2025	09:00
10	Q2843-04	1	Solid	20.02	20	24.6	7.53	08/14/2025	09:03
11	Q2844-03	1	Solid	20.04	20	23.2	6.34	08/14/2025	09:10
12	Q2844-05	1	Solid	20.03	20	23.1	7.74	08/14/2025	09:15
13	Q2844-08	1	Solid	20.04	20	22.6	6.98	08/14/2025	09:20
14	Q2844-10	1	Solid	20.02	20	22.8	6.68	08/14/2025	09:30
15	Q2844-12	1	Solid	20.01	20	23.6	6.62	08/14/2025	09:33
16	CCV2	1	Water	NA	NA	20.3	12.02	08/14/2025	09:35
17	Q2855-02	1	Solid	20.03	20	24.6	8.62	08/14/2025	09:40
18	CCV3	1	Water	NA	NA	20.2	2.02	08/14/2025	09:44

WORKLIST(Hardcopy Internal Chain)

136813

WorkList Name : corrosivity q2844 WorkList ID : 191259 Department : Wet-Chemistry Date : 08-14-2025 08:13:14

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2843-01	NEWPCP-SS-1 14-16	Solid	Corrosivity	Cool 4 deg C	AMBR01	J11	08/12/2025	9045D
Q2843-02	NEWPCP-SS-2 8-10	Solid	Corrosivity	Cool 4 deg C	AMBR01	J11	08/12/2025	9045D
Q2843-03	NEWPCP-SS-2 6-8	Solid	Corrosivity	Cool 4 deg C	AMBR01	J11	08/12/2025	9045D
Q2843-04	NEWPCP-SS-5 12-14	Solid	Corrosivity	Cool 4 deg C	AMBR01	J11	08/12/2025	9045D
Q2844-03	MOO-25-0224-0225	Solid	Corrosivity	Cool 4 deg C	PSEG03		08/13/2025	9045D
Q2844-05	MOO-25-0234-0235	Solid	Corrosivity	Cool 4 deg C	PSEG03		08/13/2025	9045D
Q2844-08	MOO-25-0223	Solid	Corrosivity	Cool 4 deg C	PSEG03		08/13/2025	9045D
Q2844-10	MOO-25-0226	Solid	Corrosivity	Cool 4 deg C	PSEG03		08/13/2025	9045D
Q2844-12	MOO-25=0228	Solid	Corrosivity	Cool 4 deg C	PSEG03		08/13/2025	9045D
Q2855-02	#454	Solid	Corrosivity	Cool 4 deg C	PSEG03	J63	08/13/2025	9045D

Date/Time 08-14-25 08:20
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Date/Time 08-14-25
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Analytical Summary Report

Analysis Method: 1030
Parameter: Ignitability
Run Number: LB136823

Reviewed By: Eman
Supervisor Review By: jignesh

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Anal Time
1	Q2843-01	NEWPCP-SS-1 14-16	1	Solid	NO	0.00	08/14/2025	12:00
2	Q2843-01DUP	NEWPCP-SS-1 14-16DUP	1	Solid	NO	0.00	08/14/2025	12:07
3	Q2843-02	NEWPCP-SS-2 8-10	1	Solid	NO	0.00	08/14/2025	12:14
4	Q2843-03	NEWPCP-SS-2 6-8	1	Solid	NO	0.00	08/14/2025	12:22
5	Q2843-04	NEWPCP-SS-5 12-14	1	Solid	NO	0.00	08/14/2025	12:30
6	Q2844-03	MOO-25-0224-0225	1	Solid	NO	0.00	08/14/2025	12:37
7	Q2844-05	MOO-25-0234-0235	1	Solid	NO	0.00	08/14/2025	12:45
8	Q2844-08	MOO-25-0223	1	Solid	NO	0.00	08/14/2025	12:52
9	Q2844-10	MOO-25-0226	1	Solid	NO	0.00	08/14/2025	13:00
10	Q2844-12	MOO-25=0228	1	Solid	NO	0.00	08/14/2025	13:07
11	Q2847-01	BUR-25-0069	1	Solid	NO	0.00	08/14/2025	13:15
12	Q2847-02	BUR-25-0070	1	Solid	NO	0.00	08/14/2025	13:22
13	Q2855-02	#454	1	Solid	NO	0.00	08/14/2025	13:30
14	Q2865-02	ARS10-0047	1	Solid	NO	0.00	08/14/2025	13:37

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

WORKLIST(Hardcopy Internal Chain)

16136823

WorkList Name : IGN-081425

WorkList ID : 191254

Department : Wet-Chemistry

Date : 08-14-2025 08:08:14

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2843-01	NEWPCP-SS-1 14-16	Solid	Ignitability	Cool 4 deg C	AMBR01	J11	08/12/2025	1030
Q2843-02	NEWPCP-SS-2 8-10	Solid	Ignitability	Cool 4 deg C	AMBR01	J11	08/12/2025	1030
Q2843-03	NEWPCP-SS-2 6-8	Solid	Ignitability	Cool 4 deg C	AMBR01	J11	08/12/2025	1030
Q2843-04	NEWPCP-SS-5 12-14	Solid	Ignitability	Cool 4 deg C	AMBR01	J11	08/12/2025	1030
Q2844-03	MOO-25-0224-0225	Solid	Ignitability	Cool 4 deg C	PSEG03		08/13/2025	1030
Q2844-05	MOO-25-0234-0235	Solid	Ignitability	Cool 4 deg C	PSEG03		08/13/2025	1030
Q2844-08	MOO-25-0223	Solid	Ignitability	Cool 4 deg C	PSEG03		08/13/2025	1030
Q2844-10	MOO-25-0226	Solid	Ignitability	Cool 4 deg C	PSEG03		08/13/2025	1030
Q2844-12	MOO-25-0228	Solid	Ignitability	Cool 4 deg C	PSEG03		08/13/2025	1030
Q2847-01	BUR-25-0069	Solid	Ignitability	Cool 4 deg C	PSEG03	J41	08/13/2025	1030
Q2847-02	BUR-25-0070	Solid	Ignitability	Cool 4 deg C	PSEG03	J41	08/13/2025	1030
Q2855-02	#454	Solid	Ignitability	Cool 4 deg C	PSEG03	J63	08/13/2025	1030
Q2865-02	ARS10-0047	Solid	Ignitability	Cool 4 deg C	PSEG03	J41	08/13/2025	1030

Date/Time 08/14/25 09:00
 Raw Sample Received by: EM(WC)
 Raw Sample Relinquished by: [Signature]

Date/Time 08/14/25 09:00

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: EM(WC)

Test results

Aquakem 7.2AQ1

Page:

Alliance Technical Group
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM Instrument ID : Konelab

8/15/2025 13:18

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	97.808	0.0	0.080	
ICB1	0.385	0.0	0.001	
CCV1	247.216	0.0	0.201	
CCB1	0.473	0.0	0.001	
PB169273BL	0.343	0.0	0.001	
Q2856-03	0.207	0.0	0.001	
Q2857-01	0.240	0.0	0.001	
Q2857-02	0.245	0.0	0.001	
Q2864-02	0.193	0.0	0.001	
Q2864-04	0.243	0.0	0.001	
Q2865-03	0.275	0.0	0.001	
Q2874-04	0.498	0.0	0.001	
Q2856-01	0.398	0.0	0.001	
Q2856-01DUP	0.316	0.0	0.001	
CCV2	243.825	0.0	0.198	
CCB2	0.241	0.0	0.001	
PB169252BL	0.185	0.0	0.001	
Q2791-01	0.215	0.0	0.001	
Q2843-01	0.198	0.0	0.001	
Q2843-02	0.379	0.0	0.001	
Q2843-03	0.240	0.0	0.001	
Q2843-04	0.299	0.0	0.001	
Q2844-03	0.153	0.0	0.001	
Q2844-05	0.088	0.0	0.001	
Q2844-08	0.238	0.0	0.001	
Q2844-10	0.110	0.0	0.001	
CCV3	243.432	0.0	0.198	
CCB3	0.466	0.0	0.001	
Q2844-12	0.375	0.0	0.001	
Q2855-02	0.312	0.0	0.001	
Q2856-05	0.456	0.0	0.001	
Q2865-02	0.462	0.0	0.001	
Q2874-01	0.485	0.0	0.001	
Q2874-02	0.452	0.0	0.001	
Q2874-02DUP	0.499	0.0	0.001	
CCV4	246.070	0.0	0.200	
CCB4	0.463	0.0	0.001	

N 37
Mean 29.418
SD 77.8040
CV% 264.47

Aquakem v. 7.2AQ1

Results from time period:

Fri Aug 15 09:58:27 2025

Fri Aug 15 13:11:57 2025

Sample Id	Sam/Ctr/c	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	-0.3268	µg/l	8/15/2025 10:55:22	
5.0PPBCN	A	Total CN	P	5.4282	µg/l	8/15/2025 10:55:23	
10PPBCN	A	Total CN	P	10.1705	µg/l	8/15/2025 10:55:24	
50PPBCN	A	Total CN	P	48.0436	µg/l	8/15/2025 10:55:25	
100PPBCN	A	Total CN	P	101.3457	µg/l	8/15/2025 10:55:26	
250PPBCN	A	Total CN	P	250.8401	µg/l	8/15/2025 10:55:27	
500PPBCN	A	Total CN	P	499.4987	µg/l	8/15/2025 10:55:28	
ICV1	S	Total CN	P	97.8082	µg/l	8/15/2025 12:36:44	
ICB1	S	Total CN	P	0.3851	µg/l	8/15/2025 12:36:45	
CCV1	S	Total CN	P	247.2158	µg/l	8/15/2025 12:36:48	
CCB1	S	Total CN	P	0.4731	µg/l	8/15/2025 12:36:49	
PB169273BL	S	Total CN	P	0.3428	µg/l	8/15/2025 12:36:51	
Q2856-03	S	Total CN	P	0.2073	µg/l	8/15/2025 12:44:20	
Q2857-01	S	Total CN	P	0.2401	µg/l	8/15/2025 12:44:21	
Q2857-02	S	Total CN	P	0.2451	µg/l	8/15/2025 12:44:22	
Q2864-02	S	Total CN	P	0.1935	µg/l	8/15/2025 12:44:23	
Q2864-04	S	Total CN	P	0.2427	µg/l	8/15/2025 12:44:24	
Q2865-03	S	Total CN	P	0.2752	µg/l	8/15/2025 12:44:25	
Q2874-04	S	Total CN	P	0.498	µg/l	8/15/2025 12:44:26	
Q2856-01	S	Total CN	P	0.3977	µg/l	8/15/2025 12:44:27	
Q2856-01DUP	S	Total CN	P	0.3162	µg/l	8/15/2025 12:44:28	
CCV2	S	Total CN	P	243.8248	µg/l	8/15/2025 12:51:53	
CCB2	S	Total CN	P	0.2409	µg/l	8/15/2025 12:51:56	
PB169252BL	S	Total CN	P	0.1851	µg/l	8/15/2025 12:51:57	
Q2791-01	S	Total CN	P	0.2155	µg/l	8/15/2025 12:51:59	
Q2843-01	S	Total CN	P	0.1979	µg/l	8/15/2025 12:52:00	
Q2843-02	S	Total CN	P	0.3786	µg/l	8/15/2025 12:52:01	
Q2843-03	S	Total CN	P	0.2399	µg/l	8/15/2025 12:52:02	
Q2843-04	S	Total CN	P	0.2988	µg/l	8/15/2025 12:52:03	
Q2844-03	S	Total CN	P	0.1526	µg/l	8/15/2025 12:56:40	
Q2844-05	S	Total CN	P	0.0882	µg/l	8/15/2025 12:56:41	
Q2844-08	S	Total CN	P	0.238	µg/l	8/15/2025 12:56:42	
Q2844-10	S	Total CN	P	0.1095	µg/l	8/15/2025 12:56:43	
CCV3	S	Total CN	P	243.4321	µg/l	8/15/2025 13:04:13	
CCB3	S	Total CN	P	0.4664	µg/l	8/15/2025 13:04:15	
Q2844-12	S	Total CN	P	0.3754	µg/l	8/15/2025 13:04:17	
Q2855-02	S	Total CN	P	0.312	µg/l	8/15/2025 13:04:18	
Q2856-05	S	Total CN	P	0.4558	µg/l	8/15/2025 13:04:19	
Q2865-02	S	Total CN	P	0.4623	µg/l	8/15/2025 13:04:20	

Q2874-01	S	Total CN	P	0.4846 µg/l	8/15/2025 13:04:21
Q2874-02	S	Total CN	P	0.4518 µg/l	8/15/2025 13:11:49
Q2874-02DUP	S	Total CN	P	0.4986 µg/l	8/15/2025 13:11:50
CCV4	S	Total CN	P	246.0703 µg/l	8/15/2025 13:11:54
CCB4	S	Total CN	P	0.4635 µg/l	8/15/2025 13:11:57

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Calibration results

Aquakem 7.2AQ1

Page: 1

Alliance Technical Group
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM Instrument ID : Konelab

8/15/2025 11:07

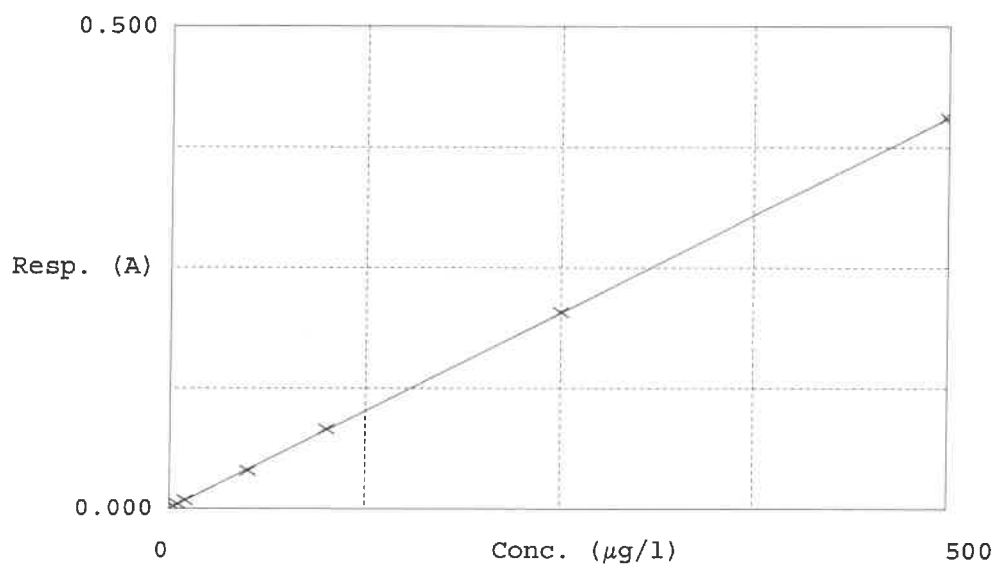
Test Total CN

Accepted 8/15/2025 11:07

Factor 1234
Bias 0.001

Coeff. of det. 0.999966

Errors



	Calibrator	Response	Calc. con.	Conc.	Re Errors
1	0.0PPBCN	0.000	-0.3268	0.0000	-
2	5.0PPBCN	0.005	5.4282	5.0000	8.6
3	10PPBCN	0.009	10.1705	10.0000	1.7
4	50PPBCN	0.040	48.0436	50.0000	-3.9
5	100PPBCN	0.083	101.3457	100.0000	1.3
6	250PPBCN	0.204	250.8401	250.0000	0.3
7	500PPBCN	0.405	499.4987	500.0000	-0.1

08/15/2025
RM

Analysis Method: 9034

Parameter: Reactive Sulfide

Run Number: LB136844

ANALYST: rubina

SUPERVISOR REVIEW BY: jignesh

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	PB169254BL		1	5.00	50	2.00	0.00	1.94	1.94	0.06	0.00	0.00	08/15/2025	15:10
2	Q2791-01		1	5.04	50	2.00	0.00	1.90	1.90	0.10	0.04	3.17	08/15/2025	15:13
3	Q2843-01		1	5.02	50	2.00	0.00	1.90	1.90	0.10	0.04	3.19	08/15/2025	15:16
4	Q2843-02		1	5.07	50	2.00	0.00	1.88	1.88	0.12	0.06	4.73	08/15/2025	15:18
5	Q2843-03		1	5.03	50	2.00	0.00	1.86	1.86	0.14	0.08	6.36	08/15/2025	15:20
6	Q2843-04		1	5.02	50	2.00	0.00	1.86	1.86	0.14	0.08	6.37	08/15/2025	15:23
7	Q2844-03		1	5.02	50	2.00	0.00	1.86	1.86	0.14	0.08	6.37	08/15/2025	15:26
8	Q2844-05		1	5.07	50	2.00	0.00	1.90	1.90	0.10	0.04	3.16	08/15/2025	15:28
9	Q2844-08		1	5.05	50	2.00	0.00	1.88	1.88	0.12	0.06	4.75	08/15/2025	15:30
10	Q2844-10		1	5.01	50	2.00	0.00	1.86	1.86	0.14	0.08	6.39	08/15/2025	15:32
11	Q2844-12		1	5.06	50	2.00	0.00	1.86	1.86	0.14	0.08	6.32	08/15/2025	15:34
12	Q2855-02		1	5.02	50	2.00	0.00	1.90	1.90	0.10	0.04	3.19	08/15/2025	15:36

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

Analysis Method: 9034

Parameter: Reactive Sulfide

Run Number: LB136844

ANALYST: rubina

SUPERVISOR REVIEW BY: jignesh

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
13	Q2856-05		1	5.03	50	2.00	0.00	1.90	1.90	0.10	0.04	3.18	08/15/2025	15:39
14	Q2865-02		1	5.03	50	2.00	0.00	1.88	1.88	0.12	0.06	4.77	08/15/2025	15:42
15	Q2874-01		1	5.05	50	2.00	0.00	1.90	1.90	0.10	0.04	3.17	08/15/2025	15:45
16	Q2874-02		1	5.07	50	2.00	0.00	1.86	1.86	0.14	0.08	6.31	08/15/2025	15:48
17	Q2874-02DUP		1	5.07	50	2.00	0.00	1.86	1.86	0.14	0.08	6.31	08/15/2025	15:51
18	Q2884-04		1	5.07	50	2.00	0.00	1.86	1.86	0.14	0.08	6.31	08/15/2025	15:53

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

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

SDG No : N/A

Start Digest Date: 08/15/2025 Time : 08:35 Temp : N/A

Matrix : SOIL

End Digest Date: 08/15/2025 Time : 11:15 Temp : N/A

Pipette ID : 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: RM

Weigh By : RM

pH Meter ID : N/A

Supervisor Signature: SO

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

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

LAB SAMPLE ID	CLIENT SAMPLE ID	Comment

Extraction Conformance/Non-Conformance Comments:

Q2791-01 WAS Added to perp beth @9:45 am

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
08/15/2025 10:15	RM (WC)	RM (WC)
08/15/2025 11:26	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB169252BL	PBS252	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2791-01	SLUDGE	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2843-01	NEWPCP-SS-1 14-16	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2843-02	NEWPCP-SS-2 8-10	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2843-03	NEWPCP-SS-2 6-8	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2843-04	NEWPCP-SS-5 12-14	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2844-03	MOO-25-0224-0225	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2844-05	MOO-25-0234-0235	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2844-08	MOO-25-0223	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2844-10	MOO-25-0226	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2844-12	MOO-25=0228	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2855-02	#454	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2856-05	#455	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2865-02	ARS10-0047	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2874-01	COMP-1	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2874-02	ELI-25-0086	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2874-02DUP	ELI-25-0086DUP	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : RCN-SOIL-8-14

WorkList ID : 191278

Department : Distillation

Date : 08-14-2025 14:36:52

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2843-01	NEWPCP-SS-1 14-16	Solid	Reactive Cyanide	Cool 4 deg C	AMBR01	J11	08/12/2025	9012B
Q2843-02	NEWPCP-SS-2 8-10	Solid	Reactive Cyanide	Cool 4 deg C	AMBR01	J11	08/12/2025	9012B
Q2843-03	NEWPCP-SS-2 6-8	Solid	Reactive Cyanide	Cool 4 deg C	AMBR01	J11	08/12/2025	9012B
Q2843-04	NEWPCP-SS-5 12-14	Solid	Reactive Cyanide	Cool 4 deg C	AMBR01	J11	08/12/2025	9012B
Q2844-03	MOO-25-0224-0225	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03		08/13/2025	9012B
Q2844-05	MOO-25-0234-0235	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03		08/13/2025	9012B
Q2844-08	MOO-25-0223	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03		08/13/2025	9012B
Q2844-10	MOO-25-0226	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03		08/13/2025	9012B
Q2844-12	MOO-25-0228	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03		08/13/2025	9012B
Q2855-02	#454	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	J63	08/13/2025	9012B
Q2856-05	#455	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03		08/13/2025	9012B
Q2865-02	ARS10-0047	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	J41	08/13/2025	9012B
Q2874-01	COMP-1	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D21	08/14/2025	9012B
Q2874-02	ELI-25-0086	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D21	08/14/2025	9012B

Date/Time 08/15/2025 08:00
 Raw Sample Received by: RY (w/c)
 Raw Sample Relinquished by: JH (w/c)

Date/Time 08/15/2025 13:00
 Raw Sample Received by: JH (w/c)
 Raw Sample Relinquished by: RY (w/c)

WORKLIST(Hardcopy Internal Chain)

WorkList Name : rcn-2791 **WorkList ID :** 191331 **Department :** Distillation **Date :** 08-15-2025 09:35:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2791-01	SLUDGE	Solid	Reactive Cyanide	Cool 4 deg C	ARAM01		08/07/2025	9012B

Date/Time 08/15/2025 09:40
 Raw Sample Received by: RM (w/c)
 Raw Sample Relinquished by: RM (w/c)

Date/Time 08/15/2025 13:00
 Raw Sample Received by: RM (w/c)
 Raw Sample Relinquished by: RM (w/c)

SOP ID : M9030B-Sulfide-13

SDG No : N/A

Start Digest Date: 08/15/2025 Time : 12:40 Temp : N/A

Matrix : SOIL

End Digest Date: 08/15/2025 Time : 14:10 Temp : N/A

Pipette ID : WC

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: *JP*

Weigh By : JP

pH Meter ID : N/A

Supervisor Signature: *RM*

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

Chemical Used	ML/SAMPLE USED	Lot Number
0.5M ZINC ACETATE	5.0ML	WP113086
FORMALDEHYDE	2.0ML	W3220
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

JP
08/15/2025

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

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB169254BL	PBS254	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2791-01	SLUDGE	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2843-01	NEWPCP-SS-1 14-16	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2843-02	NEWPCP-SS-2 8-10	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2843-03	NEWPCP-SS-2 6-8	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2843-04	NEWPCP-SS-5 12-14	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2844-03	MOO-25-0224-0225	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2844-05	MOO-25-0234-0235	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2844-08	MOO-25-0223	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2844-10	MOO-25-0226	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2844-12	MOO-25=0228	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2855-02	#454	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2856-05	#455	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2865-02	ARS10-0047	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2874-01	COMP-1	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2874-02	ELI-25-0086	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2874-02DUP	ELI-25-0086DUP	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2884-04	302	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : RSUL SOIL-8-14 WorkList ID : 191281 Department : Distillation Date : 08-14-2025 14:39:03

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2791-01	SLUDGE	Solid	Reactive Sulfide	Cool 4 deg C	ARAM01		08/07/2025	9034
Q2843-01	NEWPCP-SS-1 14-16	Solid	Reactive Sulfide	Cool 4 deg C	AMBR01	J11	08/12/2025	9034
Q2843-02	NEWPCP-SS-2 8-10	Solid	Reactive Sulfide	Cool 4 deg C	AMBR01	J11	08/12/2025	9034
Q2843-03	NEWPCP-SS-2 6-8	Solid	Reactive Sulfide	Cool 4 deg C	AMBR01	J11	08/12/2025	9034
Q2843-04	NEWPCP-SS-5 12-14	Solid	Reactive Sulfide	Cool 4 deg C	AMBR01	J11	08/12/2025	9034
Q2844-03	MOO-25-0224-0225	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03		08/13/2025	9034
Q2844-05	MOO-25-0234-0235	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03		08/13/2025	9034
Q2844-08	MOO-25-0223	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03		08/13/2025	9034
Q2844-10	MOO-25-0226	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03		08/13/2025	9034
Q2844-12	MOO-25-0228	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03		08/13/2025	9034
Q2855-02	#454	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	J63	08/13/2025	9034
Q2856-05	#455	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03		08/13/2025	9034
Q2865-02	ARS10-0047	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	J41	08/13/2025	9034
Q2874-01	COMP-1	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	D21	08/14/2025	9034
Q2874-02	ELI-25-0086	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	D21	08/14/2025	9034
Q2884-04	302	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	D31	08/15/2025	9034

Date/Time 08/15/2025 12:00
Raw Sample Received by: JH WLCJ
Raw Sample Relinquished by: CHS

Date/Time 08/15/2025 13:00
Raw Sample Received by: JH WLCJ
Raw Sample Relinquished by: JH WLCJ

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136813

Review By	jignesh	Review On	8/14/2025 10:42:06 AM
Supervise By	rubina	Supervise On	8/14/2025 11:21:16 AM
SubDirectory	LB136813	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	W3178,W3093,W3191,W3217,W3161,W3200		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	08/14/25 08:25		Jignesh	OK
2	CAL2	CAL2	CAL	08/14/25 08:26		Jignesh	OK
3	CAL3	CAL3	CAL	08/14/25 08:30		Jignesh	OK
4	ICV	ICV	ICV	08/14/25 08:33		Jignesh	OK
5	CCV1	CCV1	CCV	08/14/25 08:35		Jignesh	OK
6	Q2843-01	NEWPCP-SS-1 14-16	SAM	08/14/25 08:44		Jignesh	OK
7	Q2843-01DUP	NEWPCP-SS-1 14-16	DUP	08/14/25 08:46		Jignesh	OK
8	Q2843-02	NEWPCP-SS-2 8-10	SAM	08/14/25 08:50		Jignesh	OK
9	Q2843-03	NEWPCP-SS-2 6-8	SAM	08/14/25 09:00		Jignesh	OK
10	Q2843-04	NEWPCP-SS-5 12-14	SAM	08/14/25 09:03		Jignesh	OK
11	Q2844-03	MOO-25-0224-0225	SAM	08/14/25 09:10		Jignesh	OK
12	Q2844-05	MOO-25-0234-0235	SAM	08/14/25 09:15		Jignesh	OK
13	Q2844-08	MOO-25-0223	SAM	08/14/25 09:20		Jignesh	OK
14	Q2844-10	MOO-25-0226	SAM	08/14/25 09:30		Jignesh	OK
15	Q2844-12	MOO-25-0228	SAM	08/14/25 09:33		Jignesh	OK
16	CCV2	CCV2	CCV	08/14/25 09:35		Jignesh	OK
17	Q2855-02	#454	SAM	08/14/25 09:40		Jignesh	OK
18	CCV3	CCV3	CCV	08/14/25 09:44		Jignesh	OK

Instrument ID: FLAME

Daily Analysis Runlog For Sequence/QC Batch ID # LB136823

Review By	Eman	Review On	8/14/2025 3:10:05 PM
Supervise By	jignesh	Supervise On	8/14/2025 3:25:06 PM
SubDirectory	LB136823	Test	Ignitability
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	Q2843-01	NEWPCP-SS-1 14-16	SAM	08/14/25 12:00		Eman	OK
2	Q2843-01DUP	NEWPCP-SS-1 14-16	DUP	08/14/25 12:07		Eman	OK
3	Q2843-02	NEWPCP-SS-2 8-10	SAM	08/14/25 12:14		Eman	OK
4	Q2843-03	NEWPCP-SS-2 6-8	SAM	08/14/25 12:22		Eman	OK
5	Q2843-04	NEWPCP-SS-5 12-14	SAM	08/14/25 12:30		Eman	OK
6	Q2844-03	MOO-25-0224-0225	SAM	08/14/25 12:37		Eman	OK
7	Q2844-05	MOO-25-0234-0235	SAM	08/14/25 12:45		Eman	OK
8	Q2844-08	MOO-25-0223	SAM	08/14/25 12:52		Eman	OK
9	Q2844-10	MOO-25-0226	SAM	08/14/25 13:00		Eman	OK
10	Q2844-12	MOO-25-0228	SAM	08/14/25 13:07		Eman	OK
11	Q2847-01	BUR-25-0069	SAM	08/14/25 13:15		Eman	OK
12	Q2847-02	BUR-25-0070	SAM	08/14/25 13:22		Eman	OK
13	Q2855-02	#454	SAM	08/14/25 13:30		Eman	OK
14	Q2865-02	ARS10-0047	SAM	08/14/25 13:37		Eman	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB136838

Review By	rubina	Review On	8/15/2025 4:45:13 PM
Supervise By	Sohil	Supervise On	8/18/2025 1:29:19 PM
SubDirectory	LB136838	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP114295,WP114296,WP114297,WP114298,WP114299,WP114300,WP114301		
ICV Standard	WP114302		
CCV Standard	WP114296		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP112643,WP112900,WP114303		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	08/15/25 10:55		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	08/15/25 10:55		rubina	OK
3	10PPBCN	10PPBCN	CAL3	08/15/25 10:55		rubina	OK
4	50PPBCN	50PPBCN	CAL4	08/15/25 10:55		rubina	OK
5	100PPBCN	100PPBCN	CAL5	08/15/25 10:55		rubina	OK
6	250PPBCN	250PPBCN	CAL6	08/15/25 10:55		rubina	OK
7	500PPBCN	500PPBCN	CAL7	08/15/25 10:55		rubina	OK
8	ICV1	ICV1	ICV	08/15/25 12:36		rubina	OK
9	ICB1	ICB1	ICB	08/15/25 12:36		rubina	OK
10	CCV1	CCV1	CCV	08/15/25 12:36		rubina	OK
11	CCB1	CCB1	CCB	08/15/25 12:36		rubina	OK
12	PB169273BL	PB169273BL	MB	08/15/25 12:36		rubina	OK
13	Q2856-03	#456	SAM	08/15/25 12:44		rubina	OK
14	Q2857-01	4023	SAM	08/15/25 12:44		rubina	OK
15	Q2857-02	3919	SAM	08/15/25 12:44		rubina	OK
16	Q2864-02	LAW-25-122-126	SAM	08/15/25 12:44		rubina	OK
17	Q2864-04	LAW-25-113-121	SAM	08/15/25 12:44		rubina	OK
18	Q2865-03	LAW-25-0109	SAM	08/15/25 12:44		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB136838

Review By	rubina	Review On	8/15/2025 4:45:13 PM
Supervise By	Sohil	Supervise On	8/18/2025 1:29:19 PM
SubDirectory	LB136838	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP114295,WP114296,WP114297,WP114298,WP114299,WP114300,WP114301		
ICV Standard	WP114302		
CCV Standard	WP114296		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP112643,WP112900,WP114303		

19	Q2874-04	ELI-25-0087	SAM	08/15/25 12:44		rubina	OK
20	Q2856-01	#452	SAM	08/15/25 12:44		rubina	OK
21	Q2856-01DUP	#452DUP	DUP	08/15/25 12:44		rubina	OK
22	CCV2	CCV2	CCV	08/15/25 12:51		rubina	OK
23	CCB2	CCB2	CCB	08/15/25 12:51		rubina	OK
24	PB169252BL	PB169252BL	MB	08/15/25 12:51		rubina	OK
25	Q2791-01	SLUDGE	SAM	08/15/25 12:51		rubina	OK
26	Q2843-01	NEWPCP-SS-1 14-16	SAM	08/15/25 12:52		rubina	OK
27	Q2843-02	NEWPCP-SS-2 8-10	SAM	08/15/25 12:52		rubina	OK
28	Q2843-03	NEWPCP-SS-2 6-8	SAM	08/15/25 12:52		rubina	OK
29	Q2843-04	NEWPCP-SS-5 12-14	SAM	08/15/25 12:52		rubina	OK
30	Q2844-03	MOO-25-0224-0225	SAM	08/15/25 12:56		rubina	OK
31	Q2844-05	MOO-25-0234-0235	SAM	08/15/25 12:56		rubina	OK
32	Q2844-08	MOO-25-0223	SAM	08/15/25 12:56		rubina	OK
33	Q2844-10	MOO-25-0226	SAM	08/15/25 12:56		rubina	OK
34	CCV3	CCV3	CCV	08/15/25 13:04		rubina	OK
35	CCB3	CCB3	CCB	08/15/25 13:04		rubina	OK
36	Q2844-12	MOO-25-0228	SAM	08/15/25 13:04		rubina	OK
37	Q2855-02	#454	SAM	08/15/25 13:04		rubina	OK
38	Q2856-05	#455	SAM	08/15/25 13:04		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB136838

Review By	rubina	Review On	8/15/2025 4:45:13 PM
Supervise By	Sohil	Supervise On	8/18/2025 1:29:19 PM
SubDirectory	LB136838	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP114295,WP114296,WP114297,WP114298,WP114299,WP114300,WP114301		
ICV Standard	WP114302		
CCV Standard	WP114296		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP112643,WP112900,WP114303		

39	Q2865-02	ARS10-0047	SAM	08/15/25 13:04		rubina	OK
40	Q2874-01	COMP-1	SAM	08/15/25 13:04		rubina	OK
41	Q2874-02	ELI-25-0086	SAM	08/15/25 13:11		rubina	OK
42	Q2874-02DUP	ELI-25-0086DUP	DUP	08/15/25 13:11		rubina	OK
43	CCV4	CCV4	CCV	08/15/25 13:11		rubina	OK
44	CCB4	CCB4	CCB	08/15/25 13:11		rubina	OK

Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QC Batch ID # LB136844

Review By	rubina	Review On	8/15/2025 4:28:36 PM
Supervise By	jignesh	Supervise On	8/15/2025 4:44:59 PM
SubDirectory	LB136844	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	PB169254BL	PB169254BL	MB	08/15/25 15:10		rubina	OK
2	Q2791-01	SLUDGE	SAM	08/15/25 15:13		rubina	OK
3	Q2843-01	NEWPCP-SS-1 14-16	SAM	08/15/25 15:16		rubina	OK
4	Q2843-02	NEWPCP-SS-2 8-10	SAM	08/15/25 15:18		rubina	OK
5	Q2843-03	NEWPCP-SS-2 6-8	SAM	08/15/25 15:20		rubina	OK
6	Q2843-04	NEWPCP-SS-5 12-14	SAM	08/15/25 15:23		rubina	OK
7	Q2844-03	MOO-25-0224-0225	SAM	08/15/25 15:26		rubina	OK
8	Q2844-05	MOO-25-0234-0235	SAM	08/15/25 15:28		rubina	OK
9	Q2844-08	MOO-25-0223	SAM	08/15/25 15:30		rubina	OK
10	Q2844-10	MOO-25-0226	SAM	08/15/25 15:32		rubina	OK
11	Q2844-12	MOO-25-0228	SAM	08/15/25 15:34		rubina	OK
12	Q2855-02	#454	SAM	08/15/25 15:36		rubina	OK
13	Q2856-05	#455	SAM	08/15/25 15:39		rubina	OK
14	Q2865-02	ARS10-0047	SAM	08/15/25 15:42		rubina	OK
15	Q2874-01	COMP-1	SAM	08/15/25 15:45		rubina	OK
16	Q2874-02	ELI-25-0086	SAM	08/15/25 15:48		rubina	OK
17	Q2874-02DUP	ELI-25-0086DUP	DUP	08/15/25 15:51		rubina	OK
18	Q2884-04	302	SAM	08/15/25 15:53		rubina	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2843
Test : Corrosivity,Ignitability,Percent Solids,Reactive Cyanide,Reactive Sulfide
Prepbatch ID : PB169252,PB169254,
Sequence ID/Qc Batch ID: LB136813,LB136823,LB136838,LB136844,

Standard ID :
WP112643,WP112900,WP113086,WP113836,WP113838,WP114294,WP114295,WP114296,WP114297,WP114298,WP114299,WP114300,WP114301,WP114302,WP114303,

Chemical ID :
M6151,W2668,W2926,W3019,W3093,W3105,W3112,W3113,W3139,W3149,W3161,W3178,W3191,W3200,W3203,W3213,W3214,W3217,W3220,W3224,

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Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
539	CN BUFFER	WP112643	04/09/2025	10/09/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 04/09/2025
FROM 138.00000gram of W2668 + 862.00000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
607	PYRIDINE-BARBITURIC ACID	WP112900	05/01/2025	08/18/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	Glass Pipette-A	Iwona Zarych 05/01/2025
FROM 145.00000ml of W3112 + 15.00000gram of W3203 + 15.00000ml of M6151 + 75.00000ml of W3019 = Final Quantity: 250.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
160	0.5M ZINC ACETATE	WP113086	05/15/2025	08/18/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 05/15/2025
FROM 0.88900L of W3112 + 1.00000ml of M6151 + 110.00000gram of W2926 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
11	Sodium hydroxide absorbing solution 0.25 N	WP113836	07/08/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 07/08/2025
FROM 21.00000L of W3112 + 210.00000gram of W3113 = Final Quantity: 21.000 L								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3371	Cyanide LCS Spike Solution, 5PPM	WP113838	07/08/2025	12/24/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 07/08/2025
FROM 1.00000ml of W3224 + 199.00000ml of WP113836 = Final Quantity: 200.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3456	Cyanide Intermediate Working Std, 5PPM	WP114294	08/15/2025	08/16/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 08/21/2025
FROM 0.25000ml of W3214 + 49.75000ml of WP113836 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4	Calibration standard 500 ppb	WP114295	08/15/2025	08/16/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 08/21/2025
FROM 45.00000ml of WP113836 + 5.00000ml of WP114294 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3761	Calibration-CCV CN Standard 250 ppb	WP114296	08/15/2025	08/16/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 08/21/2025
FROM 2.50000ml of WP114294 + 47.50000ml of WP113836 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
6	Calibration Standard 100 ppb	WP114297	08/15/2025	08/16/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 08/21/2025
FROM 1.00000ml of WP114294 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
7	Calibration Standard 50 ppb	WP114298	08/15/2025	08/16/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 08/21/2025
FROM 0.50000ml of WP114294 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
8	Calibration Standard 10 ppb	WP114299	08/15/2025	08/16/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 08/21/2025
FROM 1.00000ml of WP114295 + 49.00000ml of WP113836 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
9	Calibration Standard 5 ppb	WP114300	08/15/2025	08/16/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 08/21/2025
FROM 0.50000ml of WP114295 + 49.50000ml of WP113836 = Final Quantity: 50.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
167	0 ppb CN calibration std	WP114301	08/15/2025	08/16/2025	Rubina Mughal	None	None	Jignesh Parikh
08/21/2025								

FROM 50.00000ml of WP113836 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2168	RCN ICV STD, 100 PPB	WP114302	08/15/2025	08/16/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3	Jignesh Parikh
08/21/2025								

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

(WC)

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1582	Chloramine T solution, 0.014M	WP114303	08/15/2025	08/16/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	Glass Pipette-A	Jignesh Parikh 08/21/2025
FROM 0.08000gram of W3139 + 20.00000ml of W3112 = Final Quantity: 20.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	02/17/2026	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, CRYST, 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.	J4296-1 / ZINC ACETATE,DIHYD,CRYST,ACS,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 / lwona	04/03/2023 / lwona	W3019

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

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

CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	JTE494-6 / CHLORAMINE-T BAKER 250GM	10239484	09/09/2029	09/09/2024 / lwona	09/09/2024 / lwona	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 / lwona	10/16/2024 / lwona	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 / lwona	12/09/2024 / lwona	W3161

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

CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-BX0035-3 / Barbituric Acid, 100 gms	WXBF3271V	05/16/2029	04/21/2025 / lwona	04/21/2025 / lwona	W3203

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL35830-4 / IODINE SOLUTION .025N 1L	MK25A21527	01/20/2029	05/21/2025 / lwona	05/21/2025 / lwona	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 / lwona	05/21/2025 / lwona	W3214

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

CHEMICAL RECEIPT LOG BOOK

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	MKCW7614	12/31/2026	06/26/2025 / Iwona	06/26/2025 / Iwona	W3220

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

W3019
rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA

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

Certificate of Analysis

Product Name:

Pyridine - anhydrous, 99.8%

Product Number:

270970

Batch Number:

SHBQ2113

Brand:

SIAL

CAS Number:

110-86-1

MDL Number:

MFCD00011732

Formula:

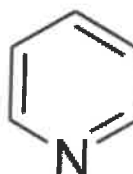
C₅H₅N

Formula Weight:

79.10 g/mol

Quality Release Date:

15 DEC 2022



Test	Specification	Result
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 99.75 %	99.99 %
Water (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.

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

avantor™



M6151

R → 11/15/25

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 HCl) (by acid–base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO ₃)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH ₄)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 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
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace 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

 **avantorsm**



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 (Tl)	≤ 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
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

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

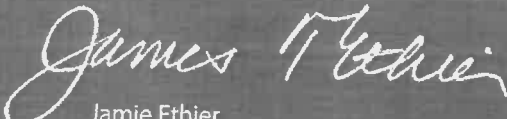


Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
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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


Jamie Ethier
Vice President Global Quality

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,

Test	Specification	Result
Assay ($\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$)	98.0 – 102.0 %	99.5
pH of 5% Solution at 25°C	4.1 – 4.5	4.3
Insoluble Matter	≤ 0.01 %	< 0.01
Chloride (Cl)	≤ 5 ppm	< 5
ACS – Sulfate (SO_4)	≤ 0.003 %	< 0.003
Calcium (Ca)	≤ 0.005 %	< 0.005
Potassium (K)	≤ 0.01 %	< 0.01
Heavy Metals (as Pb)	≤ 0.001 %	< 0.001
Trace Impurities – Iron (Fe)	≤ 0.001 %	< 0.001

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

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


Jamie Ethier
Vice President Global Quality

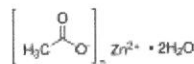
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Certificate of Analysis

Product Name:

Zinc acetate dihydrate - ACS reagent, $\geq 98\%$

Product Number: 383058
Batch Number: MKCQ9159
Brand: SIGALD
CAS Number: 5970-45-6
MDL Number: MFCD00066961
Formula: $C_4H_6O_4Zn \cdot 2H_2O$
Formula Weight: 219.51 g/mol
Quality Release Date: 06 JAN 2022



W2926
Open 7/5/22
received
on 7/5/22

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystal or Chunk(s)	Powder
Infrared Spectrum	Conforms to Structure	Conforms
Insoluble Matter	$\leq 0.005 \%$	0.003 %
Calcium (Ca)	$\leq 0.005 \%$	0.003 %
Chloride (Cl)	$\leq 5 \text{ ppm}$	$< 5 \text{ ppm}$
Iron (Fe)	$\leq 5 \text{ ppm}$	$< 5 \text{ ppm}$
Potassium (K)	$\leq 0.01 \%$	0.00 %
Magnesium (Mg)	$\leq 0.005 \%$	0.003 %
Sodium (Na)	$\leq 0.05 \%$	0.03 %
Lead (Pb)	$\leq 0.002 \%$	$< 0.001 \%$
pH	6.0 - 7.0	6.1
Sulfate (SO ₄)	$\leq 0.005 \%$	$< 0.005 \%$
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.





Certificate of Analysis

W3093
094121
04/03/2024
16

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

Lot Number: 4401F99

Product Number: 1551

Manufacture Date: JAN 08, 2024

Expiration Date: DEC 2025

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

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

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

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

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

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

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

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

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

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



Paul Brandon (01/08/2024)

Production Manager

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

This product was tested in an ISO 17025 Accredited Laboratory

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

Certificate of Analysis

Sodium Thiosulfate, 0.0250 Normal (N/40)

Lot Number: 4403S13

Product Number: 7900

Manufacture Date: MAR 29, 2024

Expiration Date: SEP 2025

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

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

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

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

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

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

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



Paul Brandon (03/29/2024)

Production Manager

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

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

Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

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

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

Storage: Room Temperature

Pellets

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

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

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

Product meets analytical specifications of the grades listed.



Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

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

Pellets

Spec Set: 0583ACS

Internal ID #: 710

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

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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Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.



Certificate of Analysis

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

Lot Number: 4408P62

Product Number: 8000

Manufacture Date: AUG 28, 2024

Expiration Date: AUG 2026

This product is Mercury-free.

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

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

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

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Certificate of Analysis

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

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

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

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

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

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

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

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

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



Jose Pena (11/11/2024)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

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

Certificate of Analysis

W31758 58

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

Lot Number: 2411A93

Product Number: 1501

Manufacture Date: NOV 04, 2024

Expiration Date: OCT 2026

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

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

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

Test	Specification	Result
Appearance	Red liquid	Passed

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

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

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

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

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



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Certificate of Analysis

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

Lot Number: 2410F80

Product Number: 1601

Manufacture Date: OCT 09, 2024

Expiration Date: MAR 2026

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

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

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

Test	Specification	Result
Appearance	Blue liquid	Passed

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

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

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

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

Version: 1.3

Lot Number: 2410F80

Product Number: 1601

Page 1 of 2



Certificate of Analysis

Buffer, Reference Standard, pH 12.00 ± 0.01 at 25°C**Lot Number:** 2504F20**Product Number:** 1615**Manufacture Date:** APR 08, 2025**Expiration Date:** SEP 2026

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

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

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

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

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

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

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



Jose Pena (04/08/2025)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

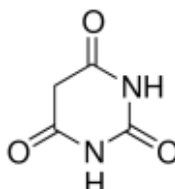
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Certificate of Analysis

Product Name:

Barbituric acid - ReagentPlus®, 99%

Product Number: 185698
Batch Number: WXBFB3271V
Brand: SIAL
CAS Number: 67-52-7
Formula: C₄H₄N₂O₃
Formula Weight: 128,09 g/mol
Quality Release Date: 16 MAY 2024



Test	Specification	Result
Appearance (Colour)	White to Off-White	White
Appearance (Form)	Powder	Powder
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.





Material	BDHVBDH7206-1
Material Description	IODINE SOLUTION 0.025N
Lot	25A2461008
Expires end of	2029-Jan-20
Molecular mass	0
Last Quality Control	2025-Jan-24
Date of manufacture	2025-Jan-21
Made in	United States
Manufacturer Source Batch	MK25A21527

Additional information

Characteristics	Specifications	Measured values
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.

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

VWR International bv, Haasrode Research Park Zone 2020, Geldenaaksebaan 464, 3001 Leuven, Belgium

BDHVBDH72 25A2461008 Page 1 of 3

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)

Certificate of Analysis

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

Lot Number: 2504D34

Product Number: 1551

Manufacture Date: APR 03, 2025

Expiration Date: MAR 2027

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

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

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

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

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

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

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

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

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

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



Jose Pena (04/03/2025)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

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Certificate of Analysis

Product Name:

Formaldehyde solution - ACS reagent, 37 wt. % in H₂O, contains 10-15% Methanol as stabilizer (to prevent polymerization)

Product Number: 252549

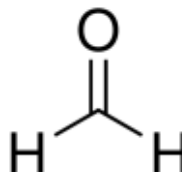
Batch Number: MKCW7614

Brand: SIAL

MDL Number: MFCD00003274

Quality Release Date: 05 DEC 2024

Recommended Retest Date: DEC 2026



Test	Specification	Result
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Titration by H ₂ SO ₄	36.5 - 38.0 %	36.6 %
Residue on ignition (Ash)	≤ 0.005 %	0.004 %
Color Test	≤ 10 APHA	5 APHA
Chloride (Cl)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 5 ppm	< 1 ppm
Heavy Metals	≤ 5 ppm	2 ppm
by ICP-OES		
Sulfate (SO ₄)	< = 0.002%	< = 0.002%
Titrateable Acid (meq/g)	≤ 0.006	< 0.006
Note	Confirmed	Conforms
Stabilized with 10% to 15% Methanol		
Meets ACS Requirements	Current ACS Specification	Conforms
Recommended Retest Period	-----	-----
2 Years		

Larry Coers, Director
Quality Control
Milwaukee, WI US

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



Certificate of Analysis

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 org	1L or 1kg	2.5L/2.5L Coated/6x2.5L/6x2.5L Coated	4L	20L	10L	125mL	25g	100g	20x20mL	4x4L	200L	24x6mL	48x6mL



Michael Monteleone
Chemistry Supervisor - Quality Control

ISO9001:2015 Registration #0306-01

PERCENT SOLID

Supervisor: rubina
Analyst: jignesh
Date: 8/14/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:30
In Date: 08/13/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 08/14/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136809

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
Q2843-01	NEWPCP-SS-1 14-16	1	1.18	10.22	11.4	10.36	89.8	
Q2843-02	NEWPCP-SS-2 8-10	2	1.18	10.24	11.42	10.85	94.4	
Q2843-03	NEWPCP-SS-2 6-8	3	1.19	10.68	11.87	11.17	93.4	
Q2843-04	NEWPCP-SS-5 12-14	4	1.17	10.33	11.5	11.04	95.5	
Q2849-02	BUR-25-0072	24	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2854-01	DBA6471-END 1-1	5	1.00	1.00	2.00	2.00	100.0	PILC
Q2854-02	DBA6471-END 1-2	6	1.00	1.00	2.00	2.00	100.0	PILC
Q2855-01	#454	7	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2855-02	#454	8	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2857-03	72-12002	9	1.18	10.40	11.58	10.09	85.7	
Q2857-04	72-12002-EPH-2	10	1.19	10.36	11.55	9.77	82.8	
Q2857-05	BC 271327-A	11	1.00	1.00	2.00	2.00	100.0	PILC
Q2857-06	BC 271237-B	12	1.00	1.00	2.00	2.00	100.0	PILC
Q2857-07	KHM339-A	13	1.00	1.00	2.00	2.00	100.0	PILC
Q2857-08	KHM339-B	14	1.00	1.00	2.00	2.00	100.0	PILC
Q2857-09	BC 223764-A	15	1.00	1.00	2.00	2.00	100.0	PILC
Q2857-10	BC 223764-B	16	1.00	1.00	2.00	2.00	100.0	PILC
Q2858-01	VNJ 216	17	1.18	11.02	12.2	11.58	94.4	
Q2858-02	VNJ 216-EPH-2	18	1.13	10.70	11.83	11.22	94.3	
Q2863-01	L14A	19	1.00	1.00	2.00	2.00	100.0	PILC
Q2863-02	L14B	20	1.00	1.00	2.00	2.00	100.0	PILC
Q2863-03	L15A	21	1.00	1.00	2.00	2.00	100.0	PILC
Q2863-04	245F95-1-1	22	1.00	1.00	2.00	2.00	100.0	PILC
Q2863-05	245F95-1-2	23	1.00	1.00	2.00	2.00	100.0	PILC

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

WORKLIST(Hardcopy Internal Chain)

136809

WorkList Name : %1-081325

WorkList ID : 191239

Department : Wet-Chemistry

Date : 08-13-2025 07:55:38

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2843-01	NEWPCP-SS-1 14-16	Solid	Percent Solids	Cool 4 deg C	AMBR01	J11	08/12/2025	Chemtech -SO
Q2843-02	NEWPCP-SS-2 8-10	Solid	Percent Solids	Cool 4 deg C	AMBR01	J11	08/12/2025	Chemtech -SO
Q2843-03	NEWPCP-SS-2 6-8	Solid	Percent Solids	Cool 4 deg C	AMBR01	J11	08/12/2025	Chemtech -SO
Q2843-04	NEWPCP-SS-5 12-14	Solid	Percent Solids	Cool 4 deg C	AMBR01	J11	08/12/2025	Chemtech -SO
Q2849-02	BUR-25-0072	Solid	Percent Solids	Cool 4 deg C	PSEG03	J22	08/12/2025	Chemtech -SO
Q2854-01	DBA6471-END 1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	J42	08/13/2025	Chemtech -SO
Q2854-02	DBA6471-END 1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	J42	08/13/2025	Chemtech -SO
Q2855-01	#454	Solid	Percent Solids	Cool 4 deg C	PSEG03	J63	08/13/2025	Chemtech -SO
Q2855-02	#454	Solid	Percent Solids	Cool 4 deg C	PSEG03	J63	08/13/2025	Chemtech -SO
Q2857-03	72-12002	Solid	Percent Solids	Cool 4 deg C	PSEG03	J12	08/13/2025	Chemtech -SO
Q2863-04	245F95-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I63	08/13/2025	Chemtech -SO
Q2863-05	245F95-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I63	08/13/2025	Chemtech -SO
Q2857-10	BC 223764-B	Solid	Percent Solids	Cool 4 deg C	PSEG03	J12	08/13/2025	Chemtech -SO
Q2858-01	VNJ 216	Solid	Percent Solids	Cool 4 deg C	PSEG03	J32	08/13/2025	Chemtech -SO
Q2858-02	VNJ 216-EPH-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	J32	08/13/2025	Chemtech -SO
Q2863-01	L14A	Solid	Percent Solids	Cool 4 deg C	PSEG03	I63	08/13/2025	Chemtech -SO
Q2863-02	L14B	Solid	Percent Solids	Cool 4 deg C	PSEG03	I63	08/13/2025	Chemtech -SO
Q2863-03	L15A	Solid	Percent Solids	Cool 4 deg C	PSEG03	I63	08/13/2025	Chemtech -SO
Q2857-04	72-12002-EPH-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	J12	08/13/2025	Chemtech -SO
Q2857-05	BC 271327-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	J12	08/13/2025	Chemtech -SO
Q2857-06	BC 271237-B	Solid	Percent Solids	Cool 4 deg C	PSEG03	J12	08/13/2025	Chemtech -SO

Date/Time

08-13-25 15:00

Raw Sample Received by:

88 wqg

Raw Sample Relinquished by:

88 wqg

Date/Time

08-13-25

Raw Sample Received by:

88 wqg

Raw Sample Relinquished by:

88 wqg

WORKLIST(Hardcopy Internal Chain)

17136809

WorkList Name : %1-081325

WorkList ID : 191239

Department : Wet-Chemistry

Date : 08-13-2025 07:55:38

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2857-07	KHM339-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	J12	08/13/2025	Chemtech -SO
Q2857-08	KHM339-B	Solid	Percent Solids	Cool 4 deg C	PSEG03	J12	08/13/2025	Chemtech -SO
Q2857-09	BC 223764-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	J12	08/13/2025	Chemtech -SO

Date/Time 08-13-25 15:00

Raw Sample Received by: SP (WCC)

Raw Sample Relinquished by: SP (WCC)

Date/Time 08-13-25

Raw Sample Received by: SP (WCC)

Raw Sample Relinquished by: SP (WCC)



SHIPPING DOCUMENTS

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



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

Alliance Project Number:

Q 2843

CHAIN OF CUSTODY RECORD

COC Number:

CLIENT INFORMATION

PROJECT INFORMATION

BILLING INFORMATION

COMPANY: Ambric Technology Corporation
ADDRESS: 100 Pine Street
CITY: Colwyn STATE: PA ZIP: 19023
ATTENTION: Daniel Mulvihill
PHONE: 214-928-8930 FAX: 215-928-8980

PROJECT NAME: NEWPCP Sludge Screens
PROJECT #: 13923-GE-25 LOCATION: 3899 Richmond Street
PROJECT MANAGER: Dan Mulvihill
E-MAIL: danm@ambrictech.com

BILL TO: Ambric Technology Corporation PO#
ADDRESS: 100 Pine Street
CITY: Colwyn STATE: PA ZIP: 19023
ATTENTION: Michele Heinehman PHONE: 215-928-8930

DATA TURNAROUND INFORMATION

DATA DELIVERABLE INFORMATION

ANALYSIS

FAX: _____ DAYS*
HARD COPY: _____ DAYS*
EDD _____ DAYS*
* TO BE APPROVED BY ALLIANCE
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other _____
☐ EDD Format

1	2	3	4	5	6	7	8	9	

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID PROJECT SAMPLE IDENTIFICATION

SAMPLE MATRIX

SAMPLE TYPE

SAMPLE COLLECTION

of Bottles

DATE TIME

1	2	3	4	5	6	7	8	9	

Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

1. NEWPCP SS-1 14-16
2. NEWPCP SS-2 8-10
3. NEWPCP SS-2 6-8
4. NEWPCP SS-5 12-14
5.
6.
7.
8.
9.
10.

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY: Dan Mulvihill
DATE/TIME: 8/12 2:00
RECEIVED BY: _____
DATE/TIME: 9:55
8/13/25
RECEIVED BY: _____
DATE/TIME: _____
RECEIVED FOR LAB BY: _____

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 26.2°C
MeOH extraction requires an additional 4oz. Jar for percent solid
Comments: _____
Ice in Cooler?: NO

IR-Gun #1

Page _____ of _____

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
ALLIANCE: ☐ Picked Up ☐ Overnight

Shipment Complete
☐ YES ☐ NO

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

Test for all RCRA Characteristics
- Corrosivity
- Ignitability
- Reactive Cyanide
- Reactive Sulfide

Laboratory Certification

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