

Cover Page

Order ID : Q1519

Project ID : Rotor Clip NJ WTD - 2025

Client : VERINA CONSULTING GROUP, LLC

Lab Sample Number

Q1519-01
Q1519-02
Q1519-03
Q1519-04

Client Sample Number

WATER TREATMENT DISCHARGE
WATER TREATMENT DISCHARGE
Q1519-02MS
Q1519-02MSD

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

Signature : _____

Date: 3/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1519

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: KETAN PATEL

Date: 03/17/2025

LAB CHRONICLE

OrderID:	Q1519	OrderDate:	3/6/2025 2:23:00 PM
Client:	VERINA CONSULTING GROUP, LLC	Project:	Rotor Clip NJ WTD - 2025
Contact:	Michael Valenzi	Location:	F11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1519-01	WATER TREATMENT DISCHARGE	WATER			03/06/25 10:55			03/06/25
			Ammonia	SM4500-NH3		03/12/25	03/12/25 15:46	
			BOD5	SM5210 B			03/07/25 10:30	
			COD	SM5220 D			03/10/25 14:35	
			Residual Chlorine	SM4500 Cl G			03/06/25 16:27	
			TSS	SM2540 D			03/10/25 10:00	
Q1519-02	WATER TREATMENT DISCHARGE	WATER			03/06/25 10:50			03/06/25
			Oil and Grease	1664A			03/07/25 11:40	



SAMPLE DATA

Report of Analysis

Client:	VERINA CONSULTING GROUP, LLC	Date Collected:	03/06/25 10:55
Project:	Rotor Clip NJ WTD - 2025	Date Received:	03/06/25
Client Sample ID:	WATER TREATMENT DISCHARGE	SDG No.:	Q1519
Lab Sample ID:	Q1519-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	0.83		1	0.045	0.10	mg/L	03/12/25 10:05	03/12/25 15:46	SM 4500-NH3 B plus G-11
BOD5	19.8		1	0.17	2.00	mg/L		03/07/25 10:30	SM 5210 B-16
COD	127		1	2.35	10.0	mg/L		03/10/25 14:35	SM 5220 D-11
Residual Chlorine	0.058	HJ	1	0.016	0.10	mg/L		03/06/25 16:27	SM 4500-Cl G-11
TSS	22.1		1	1.00	4.00	mg/L		03/10/25 10:00	SM 2540 D-15

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	VERINA CONSULTING GROUP, LLC	Date Collected:	03/06/25 10:50
Project:	Rotor Clip NJ WTD - 2025	Date Received:	03/06/25
Client Sample ID:	WATER TREATMENT DISCHARGE	SDG No.:	Q1519
Lab Sample ID:	Q1519-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Oil and Grease	4.60	J	1	0.40	5.00	mg/L		03/07/25 11:40	1664A

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits



QC RESULT SUMMARY



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

Initial and Continuing Calibration Verification

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1519

Project: Rotor Clip NJ WTD - 2025

RunNo.: LB134926

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: COD	ICV	mg/L	49.329	50	99	95-105	01/22/2025
Sample ID: COD	CCV1	mg/L	50.319	50	101	95-105	03/10/2025
Sample ID: COD	CCV2	mg/L	48.339	50	97	95-105	03/10/2025

Initial and Continuing Calibration Verification

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1519

Project: Rotor Clip NJ WTD - 2025

RunNo.: LB134932

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Residual Chlorine	mg/L	0.399	0.4	100	90-110	03/06/2025
Sample ID: CCV1 Residual Chlorine	mg/L	0.409	0.4	102	90-110	03/06/2025
Sample ID: CCV2 Residual Chlorine	mg/L	0.409	0.4	102	90-110	03/06/2025

Initial and Continuing Calibration Verification

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1519

Project: Rotor Clip NJ WTD - 2025

RunNo.: LB135012

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Ammonia as N	mg/L	1	1	100	90-110	03/12/2025
Sample ID: CCV1 Ammonia as N	mg/L	0.95	1	95	90-110	03/12/2025
Sample ID: CCV2 Ammonia as N	mg/L	0.97	1	97	90-110	03/12/2025
Sample ID: CCV3 Ammonia as N	mg/L	0.95	1	95	90-110	03/12/2025



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

Initial and Continuing Calibration Blank Summary

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1519

Project: Rotor Clip NJ WTD - 2025

RunNo.: LB134926

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	ICB							
COD		mg/L	< 5.0000	5.0000	U	2.35	10	01/22/2025
Sample ID:	CCB1							
COD		mg/L	< 5.0000	5.0000	U	2.35	10	03/10/2025
Sample ID:	CCB2							
COD		mg/L	< 5.0000	5.0000	U	2.35	10	03/10/2025

Initial and Continuing Calibration Blank Summary

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1519

Project: Rotor Clip NJ WTD - 2025

RunNo.: LB134932

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB							
Residual Chlorine	mg/L	< 0.0500	0.0500	U	0.016	0.1	03/06/2025
Sample ID: CCB1							
Residual Chlorine	mg/L	< 0.0500	0.0500	U	0.016	0.1	03/06/2025
Sample ID: CCB2							
Residual Chlorine	mg/L	< 0.0500	0.0500	U	0.016	0.1	03/06/2025

Initial and Continuing Calibration Blank Summary

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1519

Project: Rotor Clip NJ WTD - 2025

RunNo.: LB135012

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	03/12/2025
Sample ID: CCB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	03/12/2025
Sample ID: CCB2 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	03/12/2025
Sample ID: CCB3 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	03/12/2025

Preparation Blank Summary

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1519

Project: Rotor Clip NJ WTD - 2025

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB134926BL COD	mg/L	< 5.0000	5.0000	U	2.35	10.0	03/10/2025
Sample ID: LB134930BL BOD5	mg/L	< 0.2000	0.2000	U	0.17	2.0	03/07/2025
Sample ID: LB134932BL Residual Chlorine	mg/L	< 0.0500	0.0500	U	0.016	0.1	03/06/2025
Sample ID: LB134949BL Oil and Grease	mg/L	< 2.5000	2.5000	U	0.4	5.0	03/07/2025
Sample ID: LB134975BL TSS	mg/L	1	2.0000	J	1	4	03/10/2025
Sample ID: PB167063BL Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	03/12/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1513-01
Client ID:	DSN002MS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
COD	mg/L	75-125	117		74.1		50.0	1	86		03/10/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1513-01
Client ID:	DSN002MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
COD	mg/L	75-125	119		74.1		50.0	1	90		03/10/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1519-01
Client ID:	WATER TREATMENT DISCHARGEMS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Residual Chlorine	mg/L	71-148	0.39		0.058	J	0.4	1	83		03/06/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1519-01
Client ID:	WATER TREATMENT DISCHARGEMSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Residual Chlorine	mg/L	71-148	0.40		0.058	J	0.4	1	85		03/06/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1519-02
Client ID:	WATER TREATMENT DISCHARGEMS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Oil and Grease	mg/L	78-114	24.6		4.60	J	20.0	1	100		03/07/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1519-02
Client ID:	WATER TREATMENT DISCHARGEMSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Oil and Grease	mg/L	78-114	24.8		4.60	J	20.0	1	101		03/07/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1539-02
Client ID:	TAPFTA-MW01I-031025-00-T2MS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/L	75-125	1.20		0.23		1	1	97		03/12/2025

Matrix Spike Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1539-02
Client ID:	TAPFTA-MW01I-031025-00-T2MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/L	75-125	1.20		0.23		1	1	97		03/12/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1494-01
Client ID:	PURGE-WATERDUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
BOD5	mg/L	+/-20	5.64		5.80		1	2.8		03/07/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1513-01
Client ID:	DSN002DUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
COD	mg/L	+/-20	74.1		73.1		1	1.36		03/10/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1513-01
Client ID:	DSN002MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
COD	mg/L	+/-20	117		119		1	1.69		03/10/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1513-05
Client ID:	DSN003DUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
TSS	mg/L	+/-5	12.4		12.5		1	0.8		03/10/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1519-01
Client ID:	WATER TREATMENT DISCHARGEDUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Residual Chlorine	mg/L	+/-20	0.058	J	0.058	J	1	0		03/06/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1519-01
Client ID:	WATER TREATMENT DISCHARGEMSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Residual Chlorine	mg/L	+/-20	0.39		0.40		1	2.54		03/06/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1519-02
Client ID:	WATER TREATMENT DISCHARGEMSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Oil and Grease	mg/L	+/-18	24.6		24.8		1	0.81		03/07/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1539-02
Client ID:	TAPFTA-MW01I-031025-00-T2DUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ammonia as N	mg/L	+/-20	0.23		0.23		1	0		03/12/2025

Duplicate Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Sample ID:	Q1539-02
Client ID:	TAPFTA-MW01I-031025-00-T2MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ammonia as N	mg/L	+/-20	1.20		1.20		1	0		03/12/2025

Laboratory Control Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Run No.:	LB134926

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB134926BS							
COD	mg/L	50	49.3		99	1	90-110	03/10/2025

Laboratory Control Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Run No.:	LB134930

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB134930BS							
BOD5	mg/L	198	184		93	1	84.6-115.4	03/07/2025

Laboratory Control Sample Summary

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1519

Project: Rotor Clip NJ WTD - 2025

Run No.: LB134932

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB134932BS							
Residual Chlorine	mg/L	0.4	0.41		102	1	90-110	03/06/2025

Laboratory Control Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Run No.:	LB134949

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB134949BS							
Oil and Grease	mg/L	20.0	16.7		84	1	78-114	03/07/2025

Laboratory Control Sample Summary

Client: VERINA CONSULTING GROUP, LLC

SDG No.: Q1519

Project: Rotor Clip NJ WTD - 2025

Run No.: LB134975

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB134975BS							
TSS	mg/L	550	532		97	1	90-110	03/10/2025

Laboratory Control Sample Summary

Client:	VERINA CONSULTING GROUP, LLC	SDG No.:	Q1519
Project:	Rotor Clip NJ WTD - 2025	Run No.:	LB135012

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB167063BS							
Ammonia as N	mg/L	1	0.98		98	1	90-110	03/12/2025



RAW DATA

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Niha

Parameter: COD

SUPERVISOR REVIEW BY: Iwona

Run Number: LB134926

Reagent/Standard	Lot/Log #
COD ICV-LCS std, 50ppm	WP111522
COD calibration std. 100 ppm	WP111519
COD calibration std. 10 ppm	WP111517
COD calibration std. 150 ppm	WP111520
COD calibration std. 50 ppm	WP111518
COD calibration std. 0 ppm	WP111516
COD Digestion Vials Low Level 0-150Mg/L	W3126
COD ICV-LCS std, 50ppm	WP112204
COD CCV std, 50ppm	WP112203

Temp In (C): 148	Date In: 03/10/2025	Time In: 10:40
Temp Out (C): 150	Date Out: 03/10/2025	Time Out: 12:40

Intercept: 0.1675

Slope: 1.0102

Regression: 1

Seq	Lab ID	TrueValue (mg/l)	DF	MATRIX	Reading	Result (mg/l)	%D	Anal Date	Anal Time
1	CAL1	0	1	Water	0.000	-0.166		01/22/2025	13:30
2	CAL2	10	1	Water	11.000	10.723	7.2	01/22/2025	13:30
3	CAL3	50	1	Water	50.000	49.329	-1.3	01/22/2025	13:31
4	CAL4	100	1	Water	101.000	99.814	-0.2	01/22/2025	13:31
5	CAL5	150	1	Water	152.000	150.299	0.2	01/22/2025	13:32

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Niha

Parameter: COD

SUPERVISOR REVIEW BY: Iwona

Run Number: LB134926

Seq	Lab ID	True Value (mg/l)	Initial Weight (g)	Final Vol (ml)	DF	MATRIX	Reading	Result	AnalDate	AnalTime
1	ICV	50	NA	NA	1	Water	50.000	49.329	01/22/2025	13:32
2	ICB		NA	NA	1	Water	0.000	-0.166	01/22/2025	13:33
3	CCV1	50	NA	NA	1	Water	51.000	50.319	03/10/2025	14:30
4	CCB1		NA	NA	1	Water	0.000	-0.166	03/10/2025	14:30
5	LB134926BL		NA	NA	1	Water	0.000	-0.166	03/10/2025	14:31
6	LB134926BS	50	NA	NA	1	Water	50.000	49.329	03/10/2025	14:31
7	Q1468-06		NA	NA	100	Water	74.000	73.087	03/10/2025	14:32
8	Q1513-01		NA	NA	1	Water	75.000	74.077	03/10/2025	14:32
9	Q1513-01DUP		NA	NA	1	Water	74.000	73.087	03/10/2025	14:33
10	Q1513-01MS	50	NA	NA	1	Water	118.000	116.643	03/10/2025	14:33
11	Q1513-01MSD	50	NA	NA	1	Water	120.000	118.623	03/10/2025	14:34
12	Q1513-03		NA	NA	1	Water	94.000	92.885	03/10/2025	14:34
13	Q1513-05		NA	NA	1	Water	46.000	45.370	03/10/2025	14:35
14	Q1519-01		NA	NA	1	Water	128.000	126.542	03/10/2025	14:35
15	CCV2	50	NA	NA	1	Water	49.000	48.339	03/10/2025	14:36
16	CCB2		NA	NA	1	Water	0.000	-0.166	03/10/2025	14:36

LB134926

WORKLIST(Hardcopy Internal Chain)

WorkList Name : COD-03072025

WorkList ID : 188100

Department : Wet-Chemistry

Date : 03-07-2025 08:16:53

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1488-06	COD	Water	COD	Conc H2SO4 to pH < 2	AMER08	H11	02/28/2025	SM5220 D
Q1513-01 - A	DSN002	Water	COD	Conc H2SO4 to pH < 2	PSEG04	I21	03/06/2025	SM5220 D
Q1513-03 - A	DSN001	Water	COD	Conc H2SO4 to pH < 2	PSEG04	I21	03/06/2025	SM5220 D
Q1513-05 - A	DSN003	Water	COD	Conc H2SO4 to pH < 2	PSEG04	I21	03/06/2025	SM5220 D
Q1519-01 - K	WATER TREATMENT DISCHAF	Water	COD	Conc H2SO4 to pH < 2	VERI01	F11	03/06/2025	SM5220 D

Date/Time 03.10.2025, 10:15
Raw Sample Received by: NF(wc)
Raw Sample Relinquished by: NF(wc)

Date/Time 03.10.2025, 12:45
Raw Sample Received by: NF(wc)
Raw Sample Relinquished by: NF(wc)

BOD5 LOG

ANALYST: rubin

SUPERVISOR: Iwona

Analysis Date: 03/07/2025

MANGANOUS SULFATE SOLUTION: W3103

Alkaline Iodide Azide: W3109

Sodium Thiosulfate, 0.025N: W3105

NaOH, 1N: WP111323

IncubatorID: INCUBATOR #3

GuageID: 0511062

Zero DO: WP111875

QC BATCH ID: LB134930

BOD Water: WP112227

Starch: W3149

Sulfuric acid, 1N: WP110386

POLYSEED: WP112229

GGA: WP112228

Chlorine Strips: W3155

pH Strips: W3140

Lab SampleID	Client ID	Bottle No.	VOL. ML	Initial Reading (ML)	Final Reading (ML)	Difference	Average
WINKLER 1	WINKLER 1	1	300	0.0	9.4	9.4	9.4
WINKLER 2	WINKLER 2	2	300	9.7	19.1	9.4	9.4

Meter Calibration1: 9.45 Zero DO Reading1: 0.08 mg/L (<=0.2 Criteria)

Barometric Pressure1: 755 mmHg DO Meter BOD fluid reading for winkler comparison: 9.48

After Incubation

Meter Calibration2: 7.68 Zero DO Reading2: 0.10 mg/L (<=0.2 Criteria)

Barometric Pressure2: 760 mmHg

QC BATCH ID: LB134930

INCUBATOR TEMP IN (C): 20.0

INCUBATOR TEMP OUT (C): 20.0

TIME IN: 10:30

TIME OUT: 11:20

DATE IN: 03/07/2025

DATE OUT: 03/12/2025

Lab SampleID	Bottle No.	Check CL	Initial PH	Final PH	Temp °C	Sam Vol. (mL)	D.O.1 Initial	D.O.2 Final	Depletion	BOD Result (mg/L)	Avg Result (mg/L)	Comment
LB134930BL	1	No	6.59	N/A	20.80	300	9.48	9.46	0.02	0.02	0.02	
POLYSEED	1					10	9.43	6.77	2.66	0.53	0.54	
POLYSEED	2					15	9.40	5.16	4.24	0.57		
POLYSEED	3					20	9.37	4.13	5.24	0.52		
GGA	1					6	9.45	5.35	4.1	178	184.17	
GGA	2					6	9.41	5.22	4.19	182.5		
GGA	3					6	9.40	5.02	4.38	192		
Q1494-01	1	No	7.00	N/A	20.60	5	9.39	8.79	-	0	5.64	
Q1494-01	2					20	9.37	8.64	-	0		
Q1494-01	3					50	9.32	8.24	-	0		
Q1494-01	4					150	9.11	5.75	3.36	5.64		
Q1494-01DUP	1	No	7.00	N/A	20.60	5	9.39	8.88	-	0	5.8	
Q1494-01DUP	2					20	9.37	8.59	-	0		
Q1494-01DUP	3					50	9.34	8.05	-	0		
Q1494-01DUP	4					150	9.13	5.69	3.44	5.8		
Q1513-01	1	No	7.13	N/A	20.90	5	9.40	8.98	-	0		
Q1513-01	2					20	9.35	8.71	-	0		
Q1513-01	3					50	9.34	8.28	-	0		
Q1513-01	4					150	9.32	8.02	-	0		
Q1513-03	1	No	6.88	N/A	20.90	5	9.37	7.47	-	0	13.44	
Q1513-03	2					20	9.35	7.37	-	0		
Q1513-03	3					50	9.30	6.52	2.78	13.44		
Q1513-03	4					150	9.04	0.55	-	0		
Q1513-05	1	No	6.79	N/A	20.80	5	9.38	8.91	-	0	25.86	
Q1513-05	2					20	9.26	8.21	-	0		
Q1513-05	3					50	9.08	4.23	4.85	25.86		
Q1513-05	4					150	8.33	0.35	-	0		
Q1519-01	1	No	9.03	7.31	20.80	5	9.45	8.73	-	0	19.8	pH Adjusted
Q1519-01	2					20	9.32	8.02	-	0		
Q1519-01	3					50	8.71	4.87	3.84	19.8		
Q1519-01	4					150	6.09	0.14	-	0		

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

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

Analytical Summary Report

Analysis Method: SM4500 Cl G

ANALYST: Niha

Parameter: Residual Chlorine

SUPERVISOR REVIEW BY: Iwona

Run Number: LB134932

Reagent/Standard	Lot/Log #
Residual chlorine ICV-LCS, 0.4PPM	WP112217
Chlorine Calibration std, 0.1ppm	WP112212
Chlorine Calibration std, 0.2ppm	WP112213
Chlorine Calibration std, 0.8ppm	WP112214
Chlorine Calibration std, 0.0ppm	WP112211
Chlorine Calibration std, 1.6ppm	WP112215
Residual Chlorine Calibration and CCV std, 0	WP112216
Total Chlorine Powder Pillows	W3147

Intercept: 0.0026

Slope: 0.9950

Regression: 0.999901

Seq	Lab ID	True Val (mg/l)	DF	Initial Reading	Final Reading	Difference	Result (mg/l)	%D	AnalDate	Anal Time
1	CAL1	0	1	0.000	0.000	0.000	0.00		03/06/2025	15:50
2	CAL2	0.1	1	0.000	0.110	0.110	0.11	8	03/06/2025	15:53
3	CAL3	0.2	1	0.000	0.210	0.210	0.21	4	03/06/2025	15:56
4	CAL4	0.4	1	0.000	0.390	0.390	0.39	-2.8	03/06/2025	15:59
5	CAL5	0.8	1	0.000	0.790	0.790	0.79	-1.1	03/06/2025	16:02
6	CAL6	1.6	1	0.000	1.600	1.600	1.61	0.3	03/06/2025	16:05

Analytical Summary Report

Analysis Method: SM4500 Cl G

ANALYST: Niha

Parameter: Residual Chlorine

SUPERVISOR REVIEW BY: Iwona

Run Number: LB134932

Seq	Lab ID	Initial Weight	Final Vol	True Value (mg/L)	DF	Initial Reading	Final Reading	Diff.	Result (mg/L)	Anal Date	Anal Time
1	ICV			0.4	1	0.0000	0.4000	0.4000	0.3990	03/06/2025	16:08
2	ICB				1	0.0000	0.0000	0.0000	-0.0030	03/06/2025	16:11
3	CCV1			0.4	1	0.0000	0.4100	0.4100	0.4090	03/06/2025	16:14
4	CCB1				1	0.0000	0.0000	0.0000	-0.0030	03/06/2025	16:17
5	LB134932BL	50	50		1	0.0000	0.0000	0.0000	-0.0030	03/06/2025	16:20
6	LB134932BS	50	50	0.4	1	0.0000	0.4100	0.4100	0.4090	03/06/2025	16:23
7	Q1519-01	50	50		1	0.0000	0.0600	0.0600	0.0580	03/06/2025	16:27
8	Q1519-01DUP	50	50		1	0.0000	0.0600	0.0600	0.0580	03/06/2025	16:30
9	Q1519-01MS	50	50	0.4	1	0.0000	0.3900	0.3900	0.3890	03/06/2025	16:33
10	Q1519-01MSD	50	50	0.4	1	0.0000	0.4000	0.4000	0.3990	03/06/2025	16:36
11	CCV2			0.4	1	0.0000	0.4100	0.4100	0.4090	03/06/2025	16:39
12	CCB2				1	0.0000	0.0000	0.0000	-0.0030	03/06/2025	16:42

WORKLIST(Hardcopy Internal Chain)

LB134932

WorkList Name : RESIDUAL CHLORINE-C

WorkList ID : 188092

Department : Wet-Chemistry

Date : 03-06-2025 15:19:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1519-01	WATER TREATMENT DISCHAF	Water	Residual Chlorine	Cool 4 deg C	VER101	F11	03/06/2025	SM4500 Cl G

Date/Time 03.06.2025, 15:45

Raw Sample Received by: NF(WC)

Raw Sample Relinquished by: [Signature]

Date/Time 03.06.2025, 16:45

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: NF(WC)

Extraction and Analytical Summary Report

Analysis Method: 1664A
Test: Oil and Grease
Run Number: LB134949
Analysis Date: 03/07/2025
BalanceID: WC SC-6
OvenID: EXT OVEN-3

ANALYST: jignesh
REVIEWED BY: Iwona
Extraction Date: 03/07/2025
Extraction IN Time: 10:30
Extraction OUT Time: 11:00
Thermometer ID: EXT OVEN#3

Dish #	Lab ID	Client ID	Matrix	pH	Sample Vol (ml)	Final Volume (ml)	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Silica Gel Weight (g)	Weight After Drying (g)	Final Weight After Drying (g)	Change Weight (g)	Result in ppm
1	LB134949BL	LB134949BL	WATER	1.3	1000	100	2.8563	2.8563	0	2.8564	2.8564	0.0001	0.1
2	LB134949BS	LB134949BS	WATER	1.3	1000	100	2.9304	2.9304	0	2.9471	2.9471	0.0167	16.7
3	Q1495-01	001-WILLETS-PT-BLVD (MA)	WATER	1.3	1000	100	3.0729	3.0729	0	3.0766	3.0766	0.0037	3.7
4	Q1495-02	002-35TH-AVE (MAR)	WATER	1.3	1000	100	3.0195	3.0195	0	3.0237	3.0237	0.0042	4.2
5	Q1519-02	WATER TREATMENT DISCHA	WATER	1.6	1000	100	3.0290	3.0290	0	3.0336	3.0336	0.0046	4.6
6	Q1519-03	Q1519-02MS	WATER	1.6	1000	100	3.1563	3.1563	0	3.1809	3.1809	0.0246	24.6
7	Q1519-04	Q1519-02MSD	WATER	1.6	1000	100	3.1987	3.1987	0	3.2235	3.2235	0.0248	24.8

QC Batch# LB134949

Test: Oil and Grease

Analysis Date: 03/07/2025

Chemicals Used:

Chemical Name	Chemical Lot #
HEXANE	W3177
pH Paper 0-14	M6069
Sodium Sulfate	EP2590
1:1 HCL	WP110826
Silica Gel	NA
Sand	NA

Standards Used:

Standard Name	Amount Used	Standard Lot #
LCSW	2.5 ML	WP110827
LCSWD	NA	NA
MS/MSD	2.5 ML	WP110828

BALANCE CALIBRATION / OVEN Dessicator Data

Analytical Balance ID # : WC SC-6

Before Analysis

0.0020 gram Balance: 0.0018 (0.0018-0.0022) In OVEN TEMP1 : 70 °C Dessicator Time In1 : 12:26

1.0000 gram Balance: 1.0004 (0.9950-1.0050) In Time1: 11:40

Bal Check Time: 10:40 Out OVEN TEMP1: 70 °C Dessicator Time Out1: 13:00

Out Time1: 12:25

After Analysis

0.0020 gram Balance: 0.0021 (0.0018-0.0022) In OVEN TEMP2 : 71 °C Dessicator Time In2 : 14:01

1.0000 gram Balance: 1.0005 (0.9950-1.0050) In Time2: 13:30

Bal Check Time: 14:40 Out OVEN TEMP2: 71 °C Dessicator Time Out2: 14:37

Out Time2: 14:00

WORKLIST(Hardcopy Internal Chain)

13134949

WorkList Name : oil & grease p1519

WorkList ID : 188116

Department : Wet-Chemistry

Date : 03-07-2025 10:13:13

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1495-01	001-WILLETS-PT-BLVD(MAR)	Water	Oil and Grease	Conc H2SO4 to pH < 2	TULL01	I21	03/04/2025	1664A
Q1495-02	002-35TH-AVE(MAR)	Water	Oil and Grease	Conc H2SO4 to pH < 2	TULL01	I21	03/04/2025	1664A
Q1519-02	WATER TREATMENT DISCHAI	Water	Oil and Grease	Conc H2SO4 to pH < 2	VERI01	F11	03/06/2025	1664A
Q1519-03	Q1519-02MS	Water	Oil and Grease	Conc H2SO4 to pH < 2	VERI01	F11	03/06/2025	1664A
Q1519-04	Q1519-02MS	Water	Oil and Grease	Conc H2SO4 to pH < 2	VERI01	F11	03/06/2025	1664A

03/07/25 10:20

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

18 gwg
18 gwg

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

03/07/25 13:30

18 gwg

18 gwg

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 03/07/2025

Run Number: LB134975

BalanceID: WC SC-6

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 03/07/2025 14:00 TEMP1 OUT: 104 °C 03/07/2025 15:00
 TEMP2 IN: 103 °C 03/07/2025 15:30 TEMP2 OUT: 104 °C 03/07/2025 16:30
 TEMP3 IN: 104 °C 03/10/2025 10:00 TEMP3 OUT: 103 °C 03/10/2025 11:40
 TEMP4 IN: 104 °C 03/10/2025 12:25 TEMP4 OUT: 103 °C 03/10/2025 14:20

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Sample Volume (ml)	1st Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	2nd Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Final Empty Dish+Sample weight after 1.5hr drying @103-@105°C (g)	Weight (g)	Result mg/L
1	LB134975BL	LB134975BL	1.3562	1.3562	100	1.3563	1.3563	1.3563	0.0001	1
2	LB134975BS	LB134975BS	1.4893	1.4893	100	1.5425	1.5425	1.5425	0.0532	532
3	Q1512-01	TOWERS-1	1.3575	1.3575	1000	1.3618	1.3618	1.3618	0.0043	4.3
4	Q1512-02	TOWERS-2	1.4010	1.4010	2000	1.4102	1.4102	1.4102	0.0092	4.6
5	Q1513-01	DSN002	1.3591	1.3591	1000	1.3729	1.3729	1.3729	0.0138	13.8
6	Q1513-03	DSN001	1.3558	1.3558	1000	1.3823	1.3823	1.3823	0.0265	26.5
7	Q1513-05	DSN003	1.4855	1.4855	1000	1.4979	1.4979	1.4979	0.0124	12.4
8	Q1513-05DUP	DSN003DUP	1.4995	1.4995	1000	1.5120	1.5120	1.5120	0.0125	12.5
9	Q1519-01	WATER TREATMENT DISCHARGE	1.4162	1.4162	1000	1.4383	1.4383	1.4383	0.0221	22.1
10	Q1522-01	TW-WTS-03	1.3951	1.3951	950	1.3971	1.3971	1.3971	0.0020	2.1
11	Q1522-02	TW-WTS-04	1.5016	1.5016	500	1.5028	1.5028	1.5028	0.0012	2.4

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

$$\text{Weight (g)} = C - B$$

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

WORKLIST(Hardcopy Internal Chain)

JB 134975

WorkList Name : tss q1519 WorkList ID : 188127 Department : Wet-Chemistry Date : 03-10-2025 07:58:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1512-01	B TOWERS-1	Water	TSS	Cool 4 deg C	PSEG04	I21	03/06/2025	SM2540 D
Q1512-02	B,C TOWERS-2	Water	TSS	Cool 4 deg C	PSEG04	I21	03/06/2025	SM2540 D
Q1513-01	F DSN002	Water	TSS	Cool 4 deg C	PSEG04	I21	03/06/2025	SM2540 D
Q1513-03	F DSN001	Water	TSS	Cool 4 deg C	PSEG04	I21	03/06/2025	SM2540 D
Q1513-05	F,D DSN003	Water	TSS	Cool 4 deg C	PSEG04	I21	03/06/2025	SM2540 D
Q1519-01	F WATER TREATMENT DISCHAF	Water	TSS	Cool 4 deg C	VERI01	F11	03/06/2025	SM2540 D
Q1522-01	TW-WTS-03	Water	TSS	Cool 4 deg C	ENTA05	H31	03/06/2025	SM2540 D
Q1522-02	D TW-WTS-04	Water	TSS	Cool 4 deg C	ENTA05	H31	03/06/2025	SM2540 D

Date/Time 03/10/25 08:10
 Raw Sample Received by: JB 134975
 Raw Sample Relinquished by: CP SR

Date/Time 03/10/25 13:30
 Raw Sample Received by: CP SR
 Raw Sample Relinquished by: JB 134975

LB13501

Test results

Aquakem 7.2AQ1

Page: 1

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

3/12/2025 16:35

Reviewed by : RM

Instrument ID : Konelab

Test: Ammonia-N

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	1.006	0.0	0.172	
ICB1	0.022	0.0	0.016	
CCV1	0.946	0.0	0.162	
CCB1	0.019	0.0	0.015	
RL CHECK	0.108	0.0	0.029	
PB167063BL	0.013	0.0	0.014	
PB167063BS	0.980	0.0	0.168	
Q1505-11	3.069	0.0	0.499	
Q1519-01	0.827	0.0	0.143	
Q1539-01	0.004	0.0	0.013	
Q1539-02	0.231	0.0	0.049	
Q1539-02DUP	0.227	0.0	0.048	
Q1539-02MS	1.169	0.0	0.198	
Q1539-02MSD	1.184	0.0	0.200	
CCV2	0.971	0.0	0.166	
CCB2	0.022	0.0	0.016	
Q1505-11DLX2	1.454	0.0	0.243	
CCV3	0.951	0.0	0.163	
CCB3	0.017	0.0	0.015	

108% (50-150)
03/12/2025
RM
Test limit high

N 19
Mean 0.696
SD 0.7680
CV% 110.39

Aquakem v. 7.2AQ1

Results from time period:

Wed Mar 12 13:43:22 2025

Wed Mar 12 16:29:03 2025

Sample Id	Sam/Ctr/c/	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	Ammonia-† P		0.0196	mg/l	3/12/2025 14:51:16	
0.1PPM	A	Ammonia-† P		0.1113	mg/l	3/12/2025 14:51:17	
0.2PPM	A	Ammonia-† P		0.1995	mg/l	3/12/2025 14:51:18	
0.4PPM	A	Ammonia-† P		0.3937	mg/l	3/12/2025 14:51:19	
1.0PPM	A	Ammonia-† P		0.9734	mg/l	3/12/2025 14:51:20	
1.3PPM	A	Ammonia-† P		1.2989	mg/l	3/12/2025 14:51:21	
2.0PPM	A	Ammonia-† P		2.0371	mg/l	3/12/2025 14:51:22	
ICV1	S	Ammonia-† P		1.0064	mg/l	3/12/2025 15:25:16	
ICB1	S	Ammonia-† P		0.0224	mg/l	3/12/2025 15:25:19	
CCV1	S	Ammonia-† P		0.9457	mg/l	3/12/2025 15:25:21	
CCB1	S	Ammonia-† P		0.0187	mg/l	3/12/2025 15:25:23	
RL CHECK	S	Ammonia-† P		0.1082	mg/l	3/12/2025 15:25:24	
PB167063BL	S	Ammonia-† P		0.0134	mg/l	3/12/2025 15:25:27	
PB167063BS	S	Ammonia-† P		0.98	mg/l	3/12/2025 15:36:01	
Q1505-11	S	Ammonia-† P		3.0686	mg/l	3/12/2025 15:36:02	
Q1519-01	S	Ammonia-† P		0.8268	mg/l	3/12/2025 15:46:44	
Q1539-01	S	Ammonia-† P		0.0037	mg/l	3/12/2025 15:46:50	
Q1539-02	S	Ammonia-† P		0.2312	mg/l	3/12/2025 15:46:52	
Q1539-02DUP	S	Ammonia-† P		0.2274	mg/l	3/12/2025 15:46:53	
Q1539-02MS	S	Ammonia-† P		1.169	mg/l	3/12/2025 15:55:42	
Q1539-02MSD	S	Ammonia-† P		1.1836	mg/l	3/12/2025 15:55:43	
CCV2	S	Ammonia-† P		0.9708	mg/l	3/12/2025 15:55:44	
CCB2	S	Ammonia-† P		0.0218	mg/l	3/12/2025 15:55:48	
Q1505-11DLX2	S	Ammonia-† P		1.4544	mg/l	3/12/2025 16:25:51	
CCV3	S	Ammonia-† P		0.951	mg/l	3/12/2025 16:25:57	
CCB3	S	Ammonia-† P		0.0165	mg/l	3/12/2025 16:29:03	

Calibration results

Aquakem 7.2AQ1

Page: 1

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

3/12/2025 14:51

Reviewed by : RM

Instrument ID : Konelab

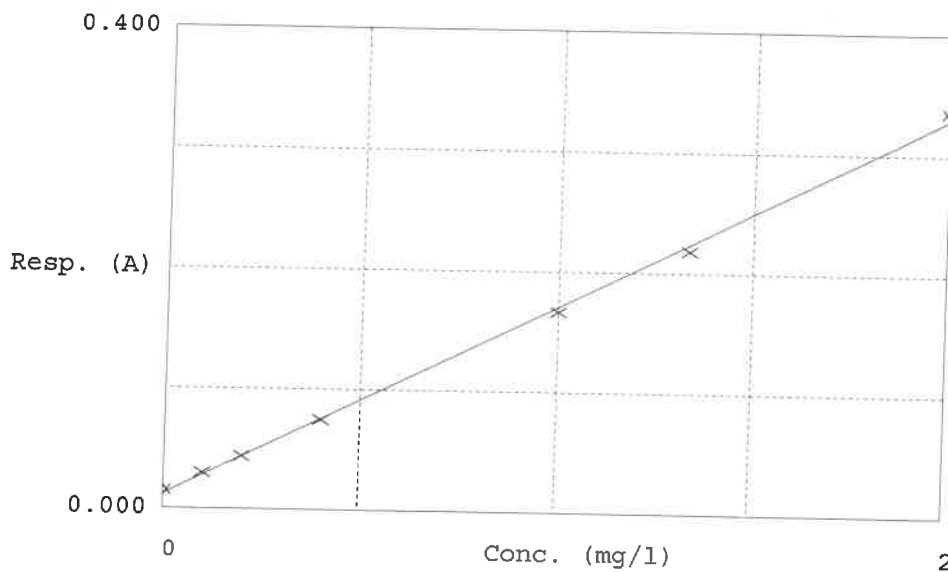
Test Ammonia-N

Accepted 3/12/2025 14:51

Factor 6.3
Bias 0.012

Coeff. of det. 0.998866

Errors



	Calibrator	Response	Calc. con.	Conc.	Re Errors
1	0.00PPM	0.015	0.0196	0.0000	-
2	NH3-2PPM	0.030	0.1113	0.1000	11.3
3	NH3-2PPM	0.044	0.1995	0.2000	-0.3
4	NH3-2PPM	0.075	0.3937	0.4000	-1.6
5	NH3-2PPM	0.167	0.9734	1.0000	-2.7
6	NH3-2PPM	0.218	1.2989	1.3333	-0.1
7	NH3-2PPM	0.336	2.0371	2.0000	1.9

03/12/2025
RM

SOP ID : MSM4500-NH3 B,G-Ammonia-17

SDG No : N/A

Start Digest Date: 03/12/2025 **Time :** 10:05 **Temp :** 150 °C

Matrix : WATER

End Digest Date: 03/12/2025 **Time :** 11:05 **Temp :** 158 °C

Pipette ID : WC

Balance ID : N/A

Hood ID : HOOD#2

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Block ID : WC-DIST-BLOCK-1

Filter paper ID : N/A

Prep Technician Signature: RM

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature: /2

Standard Name	MLS USED	STD REF. # FROM LOG
LCSW	1.0ML	WP111947
MS/MSD SPIKE SOL.	1.0ML	WP111946
PBW	50.0ML	W3112
RL CHECK	N/A	AS PER PB167083
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
BORATE BUFFER	2.5ML	WP111325
NAOH 6N	0.5-2.0ML	WP111318
H2SO4 0.04N	5.0ML	WP110335
pH strip-Ammonia	N/A	W3133
KI-starch paper	N/A	W3155
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

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

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
03/12/2025 11:15	RM CWL	RM CWL
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167063BL	PBW063	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
PB167063BS	LCS063	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1505-11	PT-NUT1-WP	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1519-01	WATER TREATMENT DISCHARGE	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1539-01	TAPIAL3-MW03D-031025-00-T1	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1539-02	TAPFTA-MW01I-031025-00-T2	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1539-02DUP	TAPFTA-MW01I-031025-00-T2DUP	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1539-02MS	TAPFTA-MW01I-031025-00-T2MS	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1539-02MSD	TAPFTA-MW01I-031025-00-T2MSD	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB134926

Review By	Niha	Review On	3/10/2025 2:48:08 PM
Supervise By	Iwona	Supervise On	3/10/2025 2:56:48 PM
SubDirectory	LB134926	Test	COD
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	WP111522,WP111519,WP111517,WP111520,WP111518,WP111516,W3126,WP112204,WP112203		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	01/22/25 13:30		Niha	OK
2	CAL2	CAL2	CAL	01/22/25 13:30		Niha	OK
3	CAL3	CAL3	CAL	01/22/25 13:31		Niha	OK
4	CAL4	CAL4	CAL	01/22/25 13:31		Niha	OK
5	CAL5	CAL5	CAL	01/22/25 13:32		Niha	OK
6	ICV	ICV	ICV	01/22/25 13:32		Niha	OK
7	ICB	ICB	ICB	01/22/25 13:33		Niha	OK
8	CCV1	CCV1	CCV	03/10/25 14:30		Niha	OK
9	CCB1	CCB1	CCB	03/10/25 14:30		Niha	OK
10	LB134926BL	LB134926BL	MB	03/10/25 14:31		Niha	OK
11	LB134926BS	LB134926BS	LCS	03/10/25 14:31		Niha	OK
12	Q1468-06	COD	SAM	03/10/25 14:32		Niha	OK
13	Q1513-01	DSN002	SAM	03/10/25 14:32		Niha	OK
14	Q1513-01DUP	DSN002DUP	DUP	03/10/25 14:33		Niha	OK
15	Q1513-01MS	DSN002MS	MS	03/10/25 14:33	0.5ml WP112201 + 9.5ml Sample	Niha	OK
16	Q1513-01MSD	DSN002MSD	MSD	03/10/25 14:34	0.5ml WP112201 + 9.5ml Sample	Niha	OK
17	Q1513-03	DSN001	SAM	03/10/25 14:34		Niha	OK
18	Q1513-05	DSN003	SAM	03/10/25 14:35		Niha	OK

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB134926

Review By	Niha	Review On	3/10/2025 2:48:08 PM
Supervise By	Iwona	Supervise On	3/10/2025 2:56:48 PM
SubDirectory	LB134926	Test	COD
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	WP111522,WP111519,WP111517,WP111520,WP111518,WP111516,W3126,WP112204,WP112203		

19	Q1519-01	WATER TREATMENT	SAM	03/10/25 14:35		Niha	OK
20	CCV2	CCV2	CCV	03/10/25 14:36		Niha	OK
21	CCB2	CCB2	CCB	03/10/25 14:36		Niha	OK

Instrument ID: DO METER

Daily Analysis Runlog For Sequence/QC Batch ID # LB134930

Review By	rubina	Review On	3/12/2025 12:32:19 PM
Supervise By	Iwona	Supervise On	3/12/2025 12:34:10 PM
SubDirectory	LB134930	Test	BOD5
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP112227,W3149,W310386,W3103,W3109,W3105,WP112229,WP112228,WP111323		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB134930BL	LB134930BL	MB	03/07/25 10:30			OK
2	LB134930BS	LB134930BS	LCS	03/07/25 10:30			OK
3	Q1494-01	PURGE-WATER	SAM	03/07/25 10:30			OK
4	Q1494-01DUP	PURGE-WATERDUP	DUP	03/07/25 10:30			OK
5	Q1513-01	DSN002	SAM	03/07/25 10:30			OK
6	Q1513-03	DSN001	SAM	03/07/25 10:30			OK
7	Q1513-05	DSN003	SAM	03/07/25 10:30			OK
8	Q1519-01	WATER TREATMENT	SAM	03/07/25 10:30			OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB134932

Review By	Niha	Review On	3/7/2025 8:24:33 AM
Supervise By	Iwona	Supervise On	3/7/2025 9:01:03 AM
SubDirectory	LB134932	Test	Residual Chlorine
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	WP112217,WP112212,WP112213,WP112214,WP112211,WP112215,WP112216,W3147		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	03/06/25 15:50		Niha	OK
2	CAL2	CAL2	CAL	03/06/25 15:53		Niha	OK
3	CAL3	CAL3	CAL	03/06/25 15:56		Niha	OK
4	CAL4	CAL4	CAL	03/06/25 15:59		Niha	OK
5	CAL5	CAL5	CAL	03/06/25 16:02		Niha	OK
6	CAL6	CAL6	CAL	03/06/25 16:05		Niha	OK
7	ICV	ICV	ICV	03/06/25 16:08		Niha	OK
8	ICB	ICB	ICB	03/06/25 16:11		Niha	OK
9	CCV1	CCV1	CCV	03/06/25 16:14		Niha	OK
10	CCB1	CCB1	CCB	03/06/25 16:17		Niha	OK
11	LB134932BL	LB134932BL	MB	03/06/25 16:20		Niha	OK
12	LB134932BS	LB134932BS	LCS	03/06/25 16:23		Niha	OK
13	Q1519-01	WATER TREATMENT	SAM	03/06/25 16:27		Niha	OK
14	Q1519-01DUP	WATER TREATMENT	DUP	03/06/25 16:30		Niha	OK
15	Q1519-01MS	WATER TREATMENT	MS	03/06/25 16:33		Niha	OK
16	Q1519-01MSD	WATER TREATMENT	MSD	03/06/25 16:36		Niha	OK
17	CCV2	CCV2	CCV	03/06/25 16:39		Niha	OK
18	CCB2	CCB2	CCB	03/06/25 16:42		Niha	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB134949

Review By	jignesh	Review On	3/7/2025 2:29:21 PM
Supervise By	Iwona	Supervise On	3/10/2025 9:37:09 AM
SubDirectory	LB134949	Test	Oil and Grease
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	W3177,M6069,EP2590,WP110826,NA,NA,WP110827,NA,WP110828		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB134949BL	LB134949BL	MB	03/07/25 11:40		jignesh	OK
2	LB134949BS	LB134949BS	LCS	03/07/25 11:40		jignesh	OK
3	Q1495-01	001-WILLETS-PT-BL	SAM	03/07/25 11:40		jignesh	OK
4	Q1495-02	002-35TH-AVE(MAR)	SAM	03/07/25 11:40		jignesh	OK
5	Q1519-02	WATER TREATMENT	SAM	03/07/25 11:40		jignesh	OK
6	Q1519-03	Q1519-02MS	MS	03/07/25 11:40		jignesh	OK
7	Q1519-04	Q1519-02MSD	MSD	03/07/25 11:40		jignesh	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB134975

Review By	jignesh	Review On	3/11/2025 8:50:13 AM
Supervise By	Iwona	Supervise On	3/11/2025 10:13:18 AM
SubDirectory	LB134975	Test	TSS
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleID	ClientID	QcType	Date	Comment	Operator	Status
1	LB134975BL	LB134975BL	MB	03/10/25 10:00		jignesh	OK
2	LB134975BS	LB134975BS	LCS	03/10/25 10:00	55 mg w2576 + 100ml w3112	jignesh	OK
3	Q1512-01	TOWERS-1	SAM	03/10/25 10:00		jignesh	OK
4	Q1512-02	TOWERS-2	SAM	03/10/25 10:00		jignesh	OK
5	Q1513-01	DSN002	SAM	03/10/25 10:00		jignesh	OK
6	Q1513-03	DSN001	SAM	03/10/25 10:00		jignesh	OK
7	Q1513-05	DSN003	SAM	03/10/25 10:00		jignesh	OK
8	Q1513-05DUP	DSN003DUP	DUP	03/10/25 10:00		jignesh	OK
9	Q1519-01	WATER TREATMENT	SAM	03/10/25 10:00		jignesh	OK
10	Q1522-01	TW-WTS-03	SAM	03/10/25 10:00		jignesh	OK
11	Q1522-02	TW-WTS-04	SAM	03/10/25 10:00		jignesh	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135012

Review By	rubina	Review On	3/13/2025 1:18:04 PM
Supervise By	Iwona	Supervise On	3/13/2025 1:50:26 PM
SubDirectory	LB135012	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP112278		
ICV Standard	WP112280		
CCV Standard	WP112279		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111947		
Chk Standard	WP112163,WP111745,WP111385,WP111660		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	03/12/25 14:51		rubina	OK
2	0.1PPM	0.1PPM	CAL2	03/12/25 14:51		rubina	OK
3	0.2PPM	0.2PPM	CAL3	03/12/25 14:51		rubina	OK
4	0.4PPM	0.4PPM	CAL4	03/12/25 14:51		rubina	OK
5	1.0PPM	1.0PPM	CAL5	03/12/25 14:51		rubina	OK
6	1.3PPM	1.3PPM	CAL6	03/12/25 14:51		rubina	OK
7	2.0PPM	2.0PPM	CAL7	03/12/25 14:51		rubina	OK
8	ICV1	ICV1	ICV	03/12/25 15:25		rubina	OK
9	ICB1	ICB1	ICB	03/12/25 15:25		rubina	OK
10	CCV1	CCV1	CCV	03/12/25 15:25		rubina	OK
11	CCB1	CCB1	CCB	03/12/25 15:25		rubina	OK
12	RL	RL	SAM	03/12/25 15:25		rubina	OK
13	PB167063BL	PB167063BL	MB	03/12/25 15:25		rubina	OK
14	PB167063BS	PB167063BS	LCS	03/12/25 15:36		rubina	OK
15	Q1505-11	PT-NUT1-WP	SAM	03/12/25 15:36	High	rubina	Dilution
16	Q1519-01	WATER TREATMENT	SAM	03/12/25 15:46		rubina	OK
17	Q1539-01	TAPIAL3-MW03D-031	SAM	03/12/25 15:46		rubina	OK
18	Q1539-02	TAPFTA-MW011-0310	SAM	03/12/25 15:46		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135012

Review By	rubina	Review On	3/13/2025 1:18:04 PM
Supervise By	Iwona	Supervise On	3/13/2025 1:50:26 PM
SubDirectory	LB135012	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP112278		
ICV Standard	WP112280		
CCV Standard	WP112279		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111947		
Chk Standard	WP112163,WP111745,WP111385,WP111660		

19	Q1539-02DUP	TAPFTA-MW01I-0310	DUP	03/12/25 15:46		rubina	OK
20	Q1539-02MS	TAPFTA-MW01I-0310	MS	03/12/25 15:55		rubina	OK
21	Q1539-02MSD	TAPFTA-MW01I-0310	MSD	03/12/25 15:55		rubina	OK
22	CCV2	CCV2	CCV	03/12/25 15:55		rubina	OK
23	CCB2	CCB2	CCB	03/12/25 15:55		rubina	OK
24	Q1505-11DL	PT-NUT1-WPDL	SAM	03/12/25 16:25	Report 2X	rubina	Confirms
25	CCV3	CCV3	CCV	03/12/25 16:25		rubina	OK
26	CCB3	CCB3	CCB	03/12/25 16:29		rubina	OK

Prep Standard - Chemical Standard Summary

Order ID : Q1519

Test : Ammonia,BOD5,COD,Oil and Grease,Residual Chlorine,TSS

Prepbatch ID : PB167063,

Sequence ID/Qc Batch ID: LB134926,LB134930,LB134932,LB134949,LB134975,LB135012,

Standard ID :

EP2590,WP110149,WP110150,WP110335,WP110386,WP110826,WP110827,WP110828,WP111317,WP111318,WP111323,WP111325,WP111385,WP111514,WP111515,WP111516,WP111517,WP111518,WP111519,WP111520,WP111522,WP111660,WP111745,WP111946,WP111947,WP112163,WP112201,WP112202,WP112203,WP112204,WP112209,WP112210,WP112211,WP112212,WP112213,WP112214,WP112215,WP112216,WP112217,WP112227,WP112228,WP112229,WP112278,WP112279,WP112280,

Chemical ID :

AS PER

PB167083,E3551,E3788,M5673,M6069,M6121,W1992,W1993,W2653,W2654,W2666,W2700,W2784,W2817,W2858,W2871,W3009,W3059,W3082,W3103,W3105,W3109,W3112,W3113,W3126,W3130,W3131,W3132,W3133,W3144,W3147,W3149,W3155,W3169,W3174,W3177,



<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>
3923	Baked Sodium Sulfate	EP2590	02/26/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 02/26/2025
<u>FROM</u> 4000.00000gram of E3551 = Final Quantity: 4000.000 gram								

<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>
153	Ammonia Stock Std. (1000 ppm)	WP110149	10/11/2024	04/08/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 10/14/2024
<u>FROM</u> 3.81900gram of W1993 + 996.18100ml 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>
1895	Ammonia Stock Std, 1000PPM-SS	WP110150	10/11/2024	04/08/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych 10/14/2024
<u>FROM</u>	3.81900gram of W1992 + 996.18100ml 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>
1597	0.04 N H2SO4	WP110335	10/22/2024	04/22/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 10/22/2024
<u>FROM</u> 1.00000ml of M5673 + 999.00000ml of W3112 = Final Quantity: 1000.000 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>
1841	Sulfuric Acid, 1N	WP110386	10/24/2024	04/24/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 10/24/2024

FROM 2.80000ml of M5673 + 97.20000ml of W3112 = Final Quantity: 100.000 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>
229	1:1 HCL	WP110826	11/22/2024	05/13/2025	Jignesh Parikh	None	None	Iwona Zarych 11/22/2024

FROM 500.00000ml of M6121 + 500.00000ml of W3112 = Final Quantity: 1.000 L



<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>
2470	1664A SPIKING SOLN	WP110827	11/22/2024	04/23/2025	Jignesh Parikh	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych
<u>FROM</u> 1000.00000ml of E3788 + 4.00000gram of W2817 + 4.00000gram of W2871 = 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>
3374	1664A QCS spiking solution-SS	WP110828	11/22/2024	04/23/2025	Jignesh Parikh	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 11/22/2024
<u>FROM</u> 1000.00000ml of E3788 + 4.00000gram of W3009 + 4.00000gram of W3082 = 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>
1796	NaOH, 0.1N	WP111317	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_7 (WC SC-6)	None	Iwona Zarych 01/09/2025
<u>FROM</u>	4.00000gram of W3113 + 996.00000ml 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>
1471	NaOH Solution, 6N	WP111318	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_7 (WCS-6)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 240.00000gram of W3113 + 760.00000ml of W3112 = Final Quantity: 1000.000 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>
1571	Sodium hydroxide, 1N	WP111323	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych
								01/09/2025

FROM 4.00000gram of W3113 + 96.00000ml of W3112 = Final Quantity: 100.000 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>
1494	BORATE BUFFER	WP111325	01/09/2025	07/09/2025	Rubina Mughal	None	None	Iwona Zarych
								01/09/2025

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



<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>
290	Phenol reagent for Ammonia	WP111385	01/13/2025	07/13/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 01/13/2025
<u>FROM</u> 3.20000gram of W3113 + 8.30000gram of W2858 + 88.80000ml of W3112 = Final Quantity: 100.000 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>
2456	COD Stock std, 1000ppm	WP111514	01/22/2025	01/29/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 01/22/2025
<u>FROM</u> 0.08500gram of W3169 + 100.00000ml of W3112 = Final Quantity: 100.000 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>
2457	COD Stock std-SS, 1000ppm	WP111515	01/22/2025	01/29/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 01/22/2025

FROM 0.08500gram of W2784 + 100.00000ml of W3112 = Final Quantity: 100.000 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>
139	COD calibration std. 0 ppm	WP111516	01/22/2025	01/29/2025	Niha Farheen Shaik	None	None	Iwona Zarych 01/22/2025

FROM 10.00000ml of W3112 = Final Quantity: 10.000 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>
138	COD calibration std. 10 ppm	WP111517	01/22/2025	01/29/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3	Iwona Zarych 01/22/2025
<u>FROM</u> 9.90000ml of W3112 + 0.10000ml of WP111514 = Final Quantity: 10.000 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>
137	COD calibration std. 50 ppm	WP111518	01/22/2025	01/29/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3	Iwona Zarych
FROM 9.50000ml of W3112 + 0.50000ml of WP111514 = Final Quantity: 10.000 ml <div></div>								



<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>
136	COD calibration std. 100 ppm	WP111519	01/22/2025	01/29/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3	Iwona Zarych 01/22/2025
<u>FROM</u> 9.00000ml of W3112 + 1.00000ml of WP111514 = Final Quantity: 10.000 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>
135	COD calibration std. 150 ppm	WP111520	01/22/2025	01/29/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3	Iwona Zarych 01/22/2025
<u>FROM</u> 8.50000ml of W3112 + 1.50000ml of WP111514 = Final Quantity: 10.000 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>
2459	COD ICV-LCS std, 50ppm	WP111522	01/22/2025	01/29/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3	Iwona Zarych 01/22/2025
<u>FROM</u> 9.50000ml of W3112 + 0.50000ml of WP111515 = Final Quantity: 10.000 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>
635	EDTA BUFFER FOR AMMONIA	WP111660	01/28/2025	07/28/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 01/28/2025
<u>FROM</u> 5.50000gram of W3113 + 50.00000gram of W3132 + 950.00000ml of W3112 = Final Quantity: 1000.000 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>
289	Sodium Hypochlorite for Ammonia	WP111745	02/03/2025	07/31/2025	Rubina Mughal	None	None	Iwona Zarych
								02/03/2025

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

<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>
1322	Ammonia Intermediate Std, 50PPM	WP111946	02/17/2025	03/17/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych
								02/19/2025

FROM 95.00000ml of W3112 + 5.00000ml of WP110149 = Final Quantity: 100.000 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>
1639	Ammonia Intermediate Std-Second source, 50PPM	WP111947	02/17/2025	03/17/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 02/19/2025
<u>FROM</u> 95.00000ml of W3112 + 5.00000ml of WP110150 = Final Quantity: 100.000 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>
740	sodium nitroferricyanide for ammonia	WP112163	02/27/2025	03/27/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 03/04/2025
<u>FROM</u> 0.05000gram of W2666 + 99.95000ml of W3112 = Final Quantity: 100.000 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>
2456	COD Stock std, 1000ppm	WP112201	03/06/2025	03/13/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 03/11/2025
<u>FROM</u> 0.08500gram of W3169 + 100.00000ml of W3112 = Final Quantity: 100.000 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>
2457	COD Stock std-SS, 1000ppm	WP112202	03/06/2025	03/13/2025	Niha Farheen Shaik	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych 03/11/2025
<u>FROM</u>	0.08500gram of W2784 + 100.00000ml of W3112 = Final Quantity: 100.000 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>
2458	COD CCV std, 50ppm	WP112203	03/06/2025	03/13/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3	Iwona Zarych
FROM		9.50000ml of W3112 + 0.50000ml of WP112201 = Final Quantity: 10.000 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>
2459	COD ICV-LCS std, 50ppm	WP112204	03/06/2025	03/13/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3	Iwona Zarych
<u>FROM</u>		9.50000ml of W3112 + 0.50000ml of WP112202 = Final Quantity: 10.000 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>
3443	Residual chlorine std, Intermediate 10PPM	WP112209	03/06/2025	03/07/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/11/2025

FROM 42.75000ml of W3112 + 7.25000ml of W3130 = 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>
3444	Residual chlorine std, Intermediate-SS 10PPM	WP112210	03/06/2025	03/07/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/11/2025

FROM 42.50000ml of W3112 + 7.50000ml of W3131 = 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>
3710	Chlorine Calibration std, 0.0ppm	WP112211	03/06/2025	03/07/2025	Niha Farheen Shaik	None	None	Iwona Zarych
								03/11/2025

FROM 50.00000ml of W3112 = 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>
3707	Chlorine Calibration std, 0.1ppm	WP112212	03/06/2025	03/07/2025	Niha Farheen Shaik	None	WETCHEM_FIPETTE_3	Iwona Zarych
							(WC)	03/11/2025

FROM 49.50000ml of W3112 + 0.50000ml of WP112209 = 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>
3708	Chlorine Calibration std, 0.2ppm	WP112213	03/06/2025	03/07/2025	Niha Farheen Shaik	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 03/11/2025

FROM 49.00000ml of W3112 + 1.00000ml of WP112209 = 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>
3709	Chlorine Calibration std, 0.8ppm	WP112214	03/06/2025	03/07/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/11/2025

FROM 46.00000ml of W3112 + 4.00000ml of WP112209 = 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>
3711	Chlorine Calibration std, 1.6ppm	WP112215	03/06/2025	03/07/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/11/2025

FROM 42.00000ml of W3112 + 8.00000ml of WP112209 = 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>
3799	Residual Chlorine Calibration and CCV std, 0.4PPM	WP112216	03/06/2025	03/07/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/11/2025

FROM 96.00000ml of W3112 + 4.00000ml of WP112209 = Final Quantity: 100.000 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>
3452	Residual chlorine ICV-LCS, 0.4PPM	WP112217	03/06/2025	03/07/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/11/2025

FROM 48.00000ml of W3112 + 2.00000ml of WP112210 = 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>
127	BOD Dilution fluid	WP112227	03/07/2025	03/08/2025	Rubina Mughal	None	None	Iwona Zarych 03/11/2025

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

<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>
129	Glutamic acid-glucose mix for BOD	WP112228	03/07/2025	03/08/2025	Rubina Mughal	WETCHEM_SCALE_7 (WCS-6)	None	Iwona Zarych 03/11/2025
<u>FROM</u> 0.15000gram of W2653 + 0.15000gram of W2654 + 1000.00000ml 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>
128	polyseed seed control	WP112229	03/07/2025	03/08/2025	Rubina Mughal	None	None	Iwona Zarych 03/11/2025
<u>FROM</u> 1.00000PILLOW of W3059 + 300.00000ml of WP112227 = Final Quantity: 300.000 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>
275	Ammonia Calibration Std. (2 ppm)	WP112278	03/12/2025	03/13/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 03/13/2025
FROM 48.00000ml of W3112 + 2.00000ml of WP111946 = 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>
285	Ammonia CCV Std. (1 ppm)	WP112279	03/12/2025	03/13/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 03/13/2025
FROM 49.00000ml of W3112 + 1.00000ml of WP111946 = 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>
286	Ammonia ICV Std. (1 ppm)	WP112280	03/12/2025	03/13/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/13/2025
<u>FROM</u> 49.00000ml of W3112 + 1.00000ml of WP111947 = Final Quantity: 50.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/01/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	23H1462005	04/23/2025	08/13/2024 / Rajesh	08/13/2024 / Rajesh	E3788

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	09/21/2023 / mohan	09/05/2023 / mohan	M5673

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140440 / TEST PAPERS,PH,0-2.5,.2SENSI, 100PK	80A0441	02/29/2028	09/03/2024 / jignesh	08/19/2024 / Jaswal	M6069

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)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	WL13B	04/08/2025	04/08/2015 / apatel	04/08/2015 / apatel	W1992

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	XE09B	04/08/2025	04/08/2015 / apatel	04/08/2015 / apatel	W1993

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

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	201089	06/30/2025	12/23/2020 / apatel	12/16/2020 / apatel	W2784

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A12244 / Stearic acid, 98%, 100 g	U20E006	04/02/2026	04/02/2021 / apatel	04/02/2021 / apatel	W2817

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	H223-57 / Hexadecane, 99.0%	0000266903	05/04/2027	09/07/2021 / apatel	08/26/2021 / apatel	W2871

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	H223-57 / Hexadecane, 99.0%	SHBP8192	02/27/2028	02/27/2023 / lwona	02/27/2023 / lwona	W3009

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	136742-80 / POLYSEED	152305	05/30/2025	02/15/2024 / Rubina	10/18/2023 / lwona	W3059

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A12244 / Stearic acid, 98%, 100 g	U23E020	02/26/2029	02/26/2024 / lwona	02/26/2024 / lwona	W3082

CHEMICAL RECEIPT LOG BOOK

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / 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 #
Environmental Express LTD	B1010 / COD Digestion Vials Low Level 0-150Mg/L	13798	09/30/2027	02/17/2025 / Niha	07/25/2024 / lwona	W3126

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
HACH	14268-10 / Chlorine Std, Pk of 16	A4144	01/31/2026	07/25/2024 / lwona	07/25/2024 / lwona	W3130

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
HACH	14268-10 / Chlorine Std, Pk of 16	A4166	02/28/2026	07/25/2024 / lwona	07/25/2024 / lwona	W3131

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
HACH	14064-99 / Total Chlorine Powder Pillows	A4230	08/31/2029	10/01/2024 / lwona	10/01/2024 / lwona	W3147

CHEMICAL RECEIPT LOG BOOK

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.	140730 / TEST PAPER,POT.IOD-STRCH,P K100,CS12	14-860	12/02/2029	12/02/2024 / lwona	12/02/2024 / lwona	W3155

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	24H0956262	04/28/2026	01/03/2025 / lwona	01/03/2025 / lwona	W3169

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24G1962003	08/22/2025	02/03/2025 / jignesh	01/31/2025 / jignesh	W3177

Certificate of Analysis



Date of Release: 12/18/2013

Product: Ammonium Chloride GR ACS

Catalog No.: AX1270 all
size codes

Grade: Meets ACS Specifications

CAS #: 12125-02-9

Country of Origin: India

FW: 53.49

Lot No.: WL13B



Characteristic	Requirement		Results	UOM
	Minimum	Maximum		
Assay (argentometric)	99.5		99.9	%
Calcium (Ca)		0.001	0.0001	%
Form	White crystals		White crystals	
Heavy metals (as Pb)		5	5	ppm
Identification	To pass test		Passes	
Insoluble matter		0.005	0.002	%
Iron (Fe)		2	2	ppm
Loss on drying (105 C)		0.5	0.21	%
Magnesium (Mg)		5	0.6	ppm
pH of a 5% solution at 25 C	4.5	5.5	4.76	
Phosphate (PO4)		2	2	ppm
Residue after ignition		0.01	0.002	%
Sulfate (SO4)		0.002	0.002	%

Joe Schoellkopff

Quality Control Manager

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Certificate of Analysis



Date of Release: 5/12/2014

Product: Ammonium Chloride GR ACS

Catalog No.: AX1270 all
size codes

Grade: Meets ACS Specifications

CAS #: 12125-02-9

Country of Origin: India

FW: 53.49

Lot No.: XE09B



Characteristic	Requirement		Results	UOM
	Minimum	Maximum		
Assay (argentometric)	99.5		99.8	%
Calcium (Ca)		0.001	0.0001	%
Form	White crystals		White crystals	
Heavy metals (as Pb)		5	5	ppm
Identification	To pass test		Passes	
Insoluble matter		0.005	0.002	%
Iron (Fe)		2	2	ppm
Loss on drying (105 C)		0.5	0.22	%
Magnesium (Mg)		5	0.7	ppm
pH of a 5% solution at 25 C	4.5	5.5	4.95	
Phosphate (PO4)		2	2	ppm
Residue after ignition		0.01	0.002	%
Sulfate (SO4)		0.002	0.002	%

Joe Schoellkopf

Quality Control Manager

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Hexadecane, 99.0%



Material No.: H223-57
Batch No.: 0000266903
Manufactured Date: 2020/05/05
Retest Date: 2027/05/04
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay ($\text{CH}_3(\text{CH}_2)_{14}\text{CH}_3$) (by GC)	$\geq 99.0 \%$	99.3
Infrared Spectrum	Passes Test	PT

For Laboratory, Research or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality

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

W2858 Received by AP on 07/07/2021

Product No.: 33213
Product: Phenol, ACS, 99+%, stab.
Lot No.: M13H048

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

Retest date: January 7, 2026

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W2666 Recived on 02/10/2020 by AP

Product No.: 87683

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


Lot No.: W12F013

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

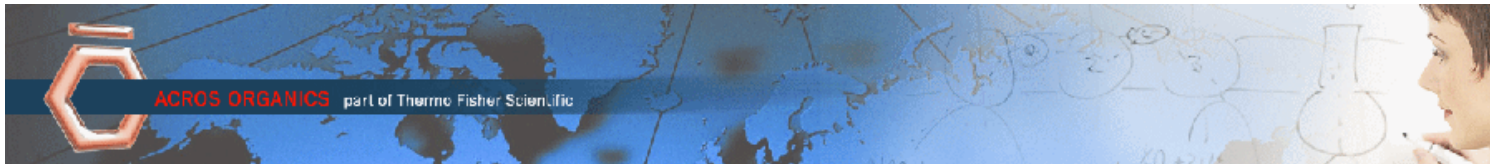
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ACROS ORGANICS
part of Thermo Fisher Scientific





Version 0

Molecular weight 147.13

Molecular formula C5 H9 N O4

CAS No 56-86-0

Linear formula HO2CCH2CH2CH(NH2)CO2H

Flash point (°C)

Certificate of Analysis

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Catalog Number	15621	Quality Test / Release Date	13 March 2019
Lot Number	A0405990	Suggested Retest Date	March 2022
Description	L(+)-Glutamic acid, 99%		
Country of Origin	CHINA		
Declaration of Origin	plant		

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

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



A handwritten signature in black ink, which appears to read "L. Van den Broek".

L. Van den Broek, QA Manager

Issued: 24 January 2020

Acros Organics

ENA23, zone 1, nr 1350, Janssen Pharmaceuticaaan 3a, B-2440 Geel, Belgium

Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: <http://www.acros.com>

1 Reagent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

W2817

REC. 04/02/2021

Product Name: Stearic acid, 98%, Thermo Scientific Chemicals
Catalog Number: A12244.14

CAS Number: 57-11-4
Molecular Formula: C₁₈H₃₆O₂
Molecular Weight: 284.48
InChI Key: QIQXTHQIDYTRH-UHFFFAOYSA-N
SMILES: CCCCCCCCCCCCCCCC(O)=O
Synonym: stearic acid acide stearique hydrofol acid 1855 hydrofol acid 1655 industrene 5016
stearic acid, ion(1-) (8Cl) glycon TP glycon DP acidum stearinicum hydrofol acid 150

Product Specification

Appearance (Color): White
Form: Crystals or powder or crystalline powder or flakes or waxy solid
Assay (Silylated GC): ≥97.5%
Melting Point (clear melt): 67.0-74.0°C

Date Of Print: 11/30/2023

Product Specifications are subject to amendment and may change over time. Data contained is accurate as of the date printed.

W3009
rec. 2/27/2023 12

Product Name:

Hexadecane - ReagentPlus®, 99%

Certificate of Analysis

Product Number:

H6703

Batch Number:

SHBP8192

 $\text{CH}_3(\text{CH}_2)_{14}\text{CH}_3$

Brand:

SIAL

CAS Number:

544-76-3

MDL Number:

MFCD00008998

Formula:

C16H34

Formula Weight:

226.44 g/mol

Quality Release Date:

04 AUG 2022

Test	Specification	Result
Appearance (Color)	Colorless or White	Colorless
Appearance (Form)	Liquid or Solid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Refractive index at 20 ° C	1.432 - 1.436	1.435
Purity (GC)	≥ 98.5 %	99.3 %
Color Test	≤ 20 APHA	< 5 APHA


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.





CERTIFICATE OF ANALYSIS

PO BOX 130549 Spring, TX 77393
Phone: (281) 298-9410 Fax: (281) 298-9411

W 3059
REC. 10/18/23 12

FINISHED PRODUCT, LOT NUMBER, MFG. /EXP DATE:

PolySeed® • Part No. P-110 • Lot 152305 • Mfg. Date: 05/2023 • Exp. Date: 05/2025

FORMULATION:

The formulation for this product contains a range of naturally occurring microorganisms, which are known to be non-pathogenic to man or animals.

VIABLE COUNT, FINAL TEST RESULT:

The product has been fully tested in accordance with Finished Product Specifications and contains a minimum viable count of 4.00×10^9 cfu/g.

GLUCOSE/GLUTAMIC-ACID RESULTS:

Tested results within acceptable range 198 ± 30.5 mg/L (167.5 - 228.5 mg/L). GGA Lot# L257-09 – Average Test Result: 203.4

See www.polyseed.com for details.

SEED CONTROL FACTOR:

Tested results within acceptable range 0.6 – 1.0 see www.polyseed.com for details

SALMONELLA TEST RESULT:

The product has been shown to be Salmonella negative using procedures recommended in the Microbiology Laboratory Guidebook, published by the USDA Food Safety and Inspection Service.

The purpose of this document is to assure that the Finished Product conforms to the above specification.

Signature: _____

Quality Control Department

Date: 05/15/2023

POLYSEED.Ref.1.19

Revised Jan 23

InterLab®
International Laboratory Supply



Certificate Of Analysis



Date of Release: 11/14/2019

W2700 Recived by AP on 3/11/2020

Name: **Sodium Borate, Decahydrate**
ACS

Item No: **SX0355 All Sizes**

Lot / Batch No: **2019111354**

Country of Origin: **India**

Item	Specifications	Analysis
Assay (Na ₂ B ₄ O ₇ • 10H ₂ O)	99.5 - 105.0%	101.7%
Calcium (Ca)	0.005% max.	0.003%
Chloride (Cl)	0.001% max.	<0.001%
Color	White	Passes Test
Form	Crystals	Passes Test
Heavy Metals (as Pb)	0.001% max.	<0.001%
Insoluble Matter	0.005% max.	0.002%
Iron (Fe)	5 ppm max.	<5 ppm
pH of a 0.01 M solution at 25C	9.15 - 9.20	9.17
Phosphate (PO ₄)	0.001% max.	<0.001%
Sulfate (SO ₄)	0.005% max.	<0.005%

Joe Schoellkopf

Quality Control Manager

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

EMD Millipore Corporation

400 Summit Drive
Burlington, MA 01803
U.S.A.

Form number: 00005624CA, Rev. 2.0



Certificate of Analysis

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

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

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

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

Jerisa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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

*Based on suggested storage condition.

Certificate of Analysis

ThermoFisher
SCIENTIFIC

Certificate of Analysis

1 Reagent Lane

Fair Lawn, NJ 07410

201.796.7100 tel

201.796.1329 fax

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Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

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Catalog Number	P243	Quality Test / Release Date	06/19/2020
Lot Number	201089		
Description	POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, A.C.S.		
Country of Origin	Spain	Suggested Retest Date	Jun/2025
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	WHITE CRYSTALS
ASSAY POTASSIUM HYDROGEN PHTHALATE	%	Inclusive Between 99.95 - 100.05	100.03
CHLORINE COMPOUNDS	%	<= 0.003	<0.003
HEAVY METALS (as Pb)	ppm	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.005	<0.005
IRON (Fe)	ppm	<= 5	<5
PH OF 0.05M SOLUTION		Inclusive Between 4.00 - 4.02	4.00
SODIUM (Na)	%	<= 0.005	<0.005
SULFUR COMPOUNDS	%	<= 0.002	<0.002%
TRACEABLE TO NIST	SOD CARBONATE	= LOT 351a	351a
TRACEABLE TO NIST KHP STD	POT. ACID PHTHALATE	= LOT 84L	84L



Julian Burton - Quality Control Manager – Fair Lawn

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

*Based on suggested storage condition.



**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %
COMMENTS		
QC: PhC Irma Belmares		

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3

Acetone

BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

Avantor™



Material No.: 9254-03
Batch No.: 23H1462005
Manufactured Date: 2023-07-26
Expiration Date: 2026-07-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.4 %	99.7 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	≤ 0.3	0.1
Titration Base (μeq/g)	≤ 0.6	< 0.1
Water (H ₂ O)	≤ 0.5 %	0.3 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 8/13/24

E 3788

Ken Koehnlein
Sr. Manager, Quality Assurance

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

 **avantor**™



Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO ₂)	≤ 2 ppm	< 2 ppm
Ammonium (NH ₄)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO ₃)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO ₄)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

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



Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities – Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities – Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory, Research, or Manufacturing Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality



Certificate of Analysis

Product information

Product	pH-Fix 0.3-2.3
REF	92180
LOT	80A0441
Expiration date:	29.02.2028
Date of examination:	23.01.2024
Gradation:	pH 0.3-0.7-1.0-1.3-1.6-1.9-2.3

Confirmation

Hereby we confirm, that the above mentioned product has successfully passed our quality control system in accordance with ISO 9001 and meets the specific quality criteria.

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



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

avantor™



R → 16/13/24
Met dig

M 6121

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.6
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	1
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.190
ACS – Bromide (Br)	≤ 0.005 %	< 0.005
ACS – Extractable Organic Substances	≤ 5 ppm	1
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.03
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3
Sulfite (SO ₃)	≤ 0.8 ppm	0.3
Ammonium (NH ₄)	≤ 3 ppm	< 1
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	≤ 5 ppb	< 3
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	29.7
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2

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

Material No.: 9530-33
Batch No.: 0000275677

Test	Specification	Result
Trace Impurities – Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities – Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities – Iron (Fe)	<= 15.0 ppb	< 1
Trace Impurities – Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities – Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities – Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities – Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities – Selenium (Se), For Information Only	ppb	1.0
Trace Impurities – Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities – Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities – Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities – Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities – Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities – Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities – Titanium (Ti)	<= 1.0 ppb	0.2
Trace Impurities – Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities – Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities – Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use

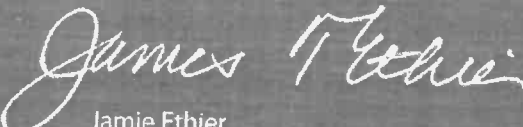
Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg 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

W3082 Received on 2/26/2026 by IZ

Product No.: A12244
Product: Stearic acid, 98%
Lot No.: U23E020

Appearance White flakes
Assay 98.7 %

This document has been electronically generated and does not require a signature.

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ThermoFisher
S C I E N T I F I C



Certificate of Analysis

Manganous Sulfate Solution, 364 g/L**Lot Number:** 2403J02**Product Number:** 4620**Manufacture Date:** MAR 15, 2024**Expiration Date:** MAR 2026

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

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

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

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

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

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



Jose Pena (03/15/2024)

Operations Manager

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.

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

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Contents of Certificates and Labels."

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Certificate of Analysis

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

Lot Number: 1405D67

Product Number: 535

Manufacture Date: APR 05, 2024

Expiration Date: APR 2026

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

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

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

Specification	Reference
Alkaline Iodide-Sodium Azide Solution II	ASTM (D 888 A)
Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.	

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

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



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

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Certificate of Analysis



Sodium Hydroxide (Pellets)

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

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

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
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

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

Storage: Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.

W 3122 . fee. 7/25/24
W 3123 12
W 3124
W 3125 Exp. 9/30/27
W 3126

ENVIRONMENTAL EXPRESS
Charleston, SC USA
www.envexp.com
(800) 343-5319

October 20, 2022

CERTIFICATE OF ANALYSIS

Environmental Express certifies that the following COD Reagent Vials have been rigorously checked against NIST Traceable standards and also compared for conformance to another major brand name product. Environmental Express COD Vial performance is evaluated using bench top spectrophotometers. Acceptance guidelines are strict and ensure dependable, quality results.

Environmental Express further certifies that the COD products listed below are recognized by the United States Environmental Protection Agency (USEPA) as equivalent to an approved Water Pollutant Testing Procedure for COD (Federal Register, Vol. 45, No. 78, Monday, April 20th, 1980, page 26811) and as such can be used for National Pollution Discharge Elimination System (NPDES) reporting.

<u>Cat. No.</u>	<u>Lot No.</u>	<u>Product Description</u>
B1010	13798	COD Reagent Vials, 0 - 150 ppm



An ISO 9001 Certified Company

Loveland, CO 80539

(970) 669-3050

Certificate of Analysis

PRODUCT: Chlorine Solution Ampule 50-75 mg/l

PRODUCT NUMBER: 1426810

LOT NUMBER: A4144

MANUFACTURE DATE: 05/28/2024

DATE OF ANALYSIS: 05/30/2024

TEST	SPECIFICATIONS	RESULTS
Standard Deviation for the ampules sampled	0 to 0.4 mg/L	0.10 mg/L
Mean Chlorine Concentration ampules sampled.	50 to 75 mg/L	60.9 mg/L

The expiration date is Jan 2026

Certified by: *Scott Als*

Analytical Services Chemist



An ISO 9001 Certified Company

Loveland, CO 80539

(970) 669-3050

Certificate of Analysis

PRODUCT: Chlorine Solution Ampule 50-75 mg/l

PRODUCT NUMBER: 1426810

LOT NUMBER: A4166

MANUFACTURE DATE: 06/24/2024

DATE OF ANALYSIS: 06/25/2024

TEST	SPECIFICATIONS	RESULTS
Standard Deviation for the ampules sampled	0 to 0.4 mg/L	0.10 mg/L
Mean Chlorine Concentration ampules sampled.	50 to 75 mg/L	61.9 mg/L

The expiration date is Feb 2026

Certified by: *Scott Als*

Analytical Services Chemist

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

TEST	SPECIFICATION		RESULT
	MIN	MAX	
ASSAY (DRIED BASIS)	99.0	101.0 %	99.5 %
pH OF A 5% SOLUTION @ 25°C	4.0	6.0	4.6
LOSS ON DRYING	8.7	11.4 %	8.90 %
CALCIUM (Ca)	NO PRECIPITATE IS FORMED		NO PRECIPITATE IS FORMED
ELEMENTAL IMPURITIES:			.
NICKEL (Ni)	AS REPORTED		<0.3 ppm
CHROMIUM (Cr)	AS REPORTED		<0.3 ppm
NITRILOTRIACETIC ACID[n[(HOCOCH ₂) ₃ N]		0.1 %	<0.10 %
IDENTIFICATION A	MATCHES REFERENCE		MATCHES REFERENCE
IDENTIFICATION B	RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION		RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION
IDENTIFICATION C	MEETS THE REQUIREMENTS FOR SODIUM		MEETS THE REQUIREMENTS FOR SODIUM
CERTIFIED HALAL			CERTIFIED HALAL
EXPIRATION DATE			10-JUL-2026
DATE OF MANUFACTURE			11-JUL-2023
APPEARANCE			WHITE CRYSTALLINE POWDER
RESIDUAL SOLVENTS		AS REPORTED	NO RESIDUAL SOLVENTS PRESENT
MONOGRAPH EDITION			USP 2024

Certificate of Analysis Results Entered By:

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

Certificate of Analysis Results Approved By:

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

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ



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

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

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



An ISO 9001 Certified Company

Loveland, CO 80539

(970) 669-3050

Certificate of Analysis

This is a Component of 1486266 / LOT A4169

PRODUCT: BOD Nutrient Buffer Pillows

PRODUCT NUMBER: 1486227

LOT NUMBER: A4169

MANUFACTURE DATE: 06/24/2024

DATE OF ANALYSIS: 07/03/2024

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

The expiration date is Jun 2029

Certified by: *Scott Als*

Analytical Services Chemist



An ISO 9001 Certified Company

Loveland, CO 80539

(970) 669-3050

Certificate of Analysis

PRODUCT: DPD Total Chlorine Reagent

PRODUCT NUMBER: 1406499

LOT NUMBER: A4230

MANUFACTURE DATE: 08/27/2024

DATE OF ANALYSIS: 08/28/2024

TEST	SPECIFICATIONS	RESULTS
Percent Recovery for a 2.5 ppm Standard. Chlorine concentration determined using DPD compared to the actual concentration.	93 to 107 %	95.7 %
pH of reagent in 50 mL of DI water.	6.2 to 6.5	6.40
Percent Recovery for a 5.0 ppm Standard. Chlorine concentration determined using DPD compared to the actual concentration.	93 to 107 %	96.2 %
Hardness Blank: 1000 ppm as Calcium Carbonate Hardness standard vs DI water measured at 530 nm in 1 cm cells.	0 to 0.009 abs	0.0020 abs

The expiration date is Aug 2029

Certified by: *Scott Als*

Analytical Services Chemist



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)

A handwritten signature in blue ink that reads "Paul Brandon". The signature is fluid and cursive, with the first name "Paul" and last name "Brandon" clearly distinguishable.

Paul Brandon (08/28/2024)
Production Manager

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Material	BDH9260-500G
Material Description	BDH POTASS HYDRGN PHTHLTE 500G
Grade	ACS GRADE
Batch	24H0956262
Reassay Date	04/28/2026
CAS Number	877-24-7
Molecular Formula	HOCC6H4COOK
Molecular Mass	204.22
Date of Manufacture	04/29/2023
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	White crystals.	White crystals.
Assay (dried basis)	99.95 - 100.05 %	99.98 %
Chlorine Compounds	<= 0.003 %	<0.003 %
Heavy Metals (as Pb)	<= 5 ppm	<5 ppm
Insoluble Matter	<= 0.005 %	0.003 %
Iron	<= 5 ppm	<5 ppm
pH (0.05M, Water) @25C	4.00 - 4.02	4.00
Sodium	<= 0.005 %	<0.005 %
Sulfur Compounds	<= 0.002 %	<0.002 %

Internal ID #: 322

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

Certificate of Analysis

Sodium Hypochlorite Solution, 5% available Chlorine

Lot Number: 2501J28**Product Number:** 7495.5**Manufacture Date:** JAN 17, 2025**Expiration Date:** JUL 2025

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

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

Test	Specification	Result	NIST SRM#
Appearance	Colorless to greenish-yellow liquid	Passed	
Assay (vs. Sodium Thiosulfate/Starch)	4.75-5.25 % (w/w) Cl ₂	5.17 % (w/w) Cl ₂	136

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

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

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

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

Jose Pena (01/17/2025)
Operations Manager

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

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis



Material No.: 9262-03
Batch No.: 24G1962003
Manufactured Date: 2024-05-23
Expiration Date: 2025-08-22
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: VERINA CONSULTING GROUP
ADDRESS: 1011 US-22, SUITE 302
CITY BRIDGEWATER STATE: NJ ZIP: 08807
ATTENTION: MICHAEL VALENZI
PHONE: 908-864-4400 FAX: 908-864-4401

CLIENT PROJECT INFORMATION

PROJECT NAME: ROTOR CLIP
PROJECT NO.: 5183-0001 LOCATION: NJ
PROJECT MANAGER: MICHAEL VALENZI
e-mail: mvaenzi@vcg-llc.com
PHONE: 908-864-4400 FAX: 908-864-4401

CLIENT BILLING INFORMATION

BILL TO: SEE LEFT PO#: 5183-0001
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) 5 DAYS*
HARDCOPY (DATA PACKAGE): 5 DAYS*
EDD: 5 DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other
☐ EDD FORMAT

1. TPH-SGT
2. BOD
3. TSS
4. Cr, Cu, Ni, Zn
5. Chloride Demand
6. COD
7. Ammonia
8.
9.

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			COMP	GRAB	DATE	TIME		C	E	E	B	E	C	C			
1.	Water Treatment Discharge	WW	X		3/6/25	10:55	6		X	X	X	X	X	X			
2.	Water Treatment Discharge	WW		X	3/6/25	10:50	3	X									MS/MSD completed for SG TPH-SGT Analysis
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. <u>Much/Val</u>	DATE/TIME: <u>3/6/25 11:21</u>	RECEIVED BY: <u>[Signature]</u> <u>1331</u> <u>3-6-25</u>	Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP <u>3.2</u> °C
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY:	Comments: <u>Flow Rate = 60</u> <u>pH = 9.8</u> <u>Temperature = 72.3</u> <u>Cr, Cu, Ni, Zn = Metals Group 4</u>
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: <u>3-6-25</u>	RECEIVED BY:	CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other

Page 1 of 1

Shipment Complete
☐ YES ☐ NO

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