

DATA REPORTING QUALIFIERS- INORGANIC

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

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

LAB CHRONICLE

OrderID:	Q3028	OrderDate:	9/4/2025 2:45:00 PM
Client:	Holland Manufacturing Co.	Project:	Pre Treatment Plant 2025
Contact:	Todd Holland	Location:	J12

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3028-01	EFFLUENT	WATER			09/04/25 12:00			09/04/25
			Ammonia	SM4500-NH3		09/08/25	09/08/25 12:14	
			BOD5	SM5210 B			09/05/25 09:50	
			Oil and Grease	1664A			09/05/25 10:00	
			Phosphorus-Ortho	SM4500-P E			09/05/25 11:37	
			Phosphorus-Total	365.3		09/05/25	09/05/25 12:52	
			TSS	SM2540 D			09/08/25 14:00	
Q3028-01DL	EFFLUENTDL	WATER			09/04/25 12:00			09/04/25
			Ammonia	SM4500-NH3		09/08/25	09/08/25 12:58	
Q3028-04	AERATION	WATER			09/04/25 12:00			09/04/25
			TSS	SM2540 D			09/08/25 14:00	
Q3028-05	INFLUENT	WATER			09/04/25 12:00			09/04/25
			Ammonia	SM4500-NH3		09/08/25	09/08/25 12:14	
			BOD5	SM5210 B			09/05/25 09:50	

LAB CHRONICLE

Q3028-05DL

INFLUENTDL

WATER

**09/04/25
12:00**

09/04/25

Ammonia

SM4500-NH3

09/08/25

09/08/25
12:58



SAMPLE DATA

Report of Analysis

Client:	Holland Manufacturing Co.	Date Collected:	09/04/25 12:00
Project:	Pre Treatment Plant 2025	Date Received:	09/04/25
Client Sample ID:	EFFLUENT	SDG No.:	Q3028
Lab Sample ID:	Q3028-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	422	OR	1	1.50	5.00	mg/L	09/08/25 08:05	09/08/25 12:14	SM 4500-NH3 B plus G-21
BOD5	36900		1	0.20	2.00	mg/L		09/05/25 09:50	SM 5210 B-16
Oil and Grease	10.3		1	0.29	5.00	mg/L		09/05/25 10:00	1664A
Orthophosphate as P	0.037	J	1	0.0040	0.050	mg/L		09/05/25 11:37	SM 4500-P E-21
Phosphorus, Total	0.063		1	0.0050	0.050	mg/L	09/05/25 10:15	09/05/25 12:52	365.3
TSS	4280		1	1.00	4.00	mg/L		09/08/25 14:00	SM 2540 D-20

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:	Holland Manufacturing Co.	Date Collected:	09/04/25 12:00
Project:	Pre Treatment Plant 2025	Date Received:	09/04/25
Client Sample ID:	EFFLUENTDL	SDG No.:	Q3028
Lab Sample ID:	Q3028-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	404	D	10	15.0	50.0	mg/L	09/08/25 08:05	09/08/25 12:58	SM 4500-NH3 B plus G-21

Comments:

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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:	Holland Manufacturing Co.	Date Collected:	09/04/25 12:00
Project:	Pre Treatment Plant 2025	Date Received:	09/04/25
Client Sample ID:	AERATION	SDG No.:	Q3028
Lab Sample ID:	Q3028-04	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TSS	4000		1	1.00	4.00	mg/L		09/08/25 14:00	SM 2540 D-20

Comments:

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LOQ = Limit of Quantitation

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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:	Holland Manufacturing Co.	Date Collected:	09/04/25 12:00
Project:	Pre Treatment Plant 2025	Date Received:	09/04/25
Client Sample ID:	INFLUENT	SDG No.:	Q3028
Lab Sample ID:	Q3028-05	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	326	OR	1	1.50	5.00	mg/L	09/08/25 08:05	09/08/25 12:14	SM 4500-NH3 B plus G-21
BOD5	48600		1	0.20	2.00	mg/L		09/05/25 09:50	SM 5210 B-16

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:	Holland Manufacturing Co.	Date Collected:	09/04/25 12:00
Project:	Pre Treatment Plant 2025	Date Received:	09/04/25
Client Sample ID:	INFLUENTDL	SDG No.:	Q3028
Lab Sample ID:	Q3028-05DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	304	D	5	7.50	25.0	mg/L	09/08/25 08:05	09/08/25 12:58	SM 4500-NH3 B plus G-21

Comments: _____

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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

Initial and Continuing Calibration Verification

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

RunNo.: LB137099

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Orthophosphate as P	mg/L	0.488	0.50	98	90-110	09/05/2025
Sample ID: CCV1 Orthophosphate as P	mg/L	0.494	0.5	99	90-110	09/05/2025
Sample ID: CCV2 Orthophosphate as P	mg/L	0.490	0.5	98	90-110	09/05/2025

Initial and Continuing Calibration Verification

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

RunNo.: LB137100

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Phosphorus, Total	mg/L	0.509	0.50	102	90-110	09/05/2025
Sample ID: CCV1 Phosphorus, Total	mg/L	0.501	0.50	100	90-110	09/05/2025
Sample ID: CCV2 Phosphorus, Total	mg/L	0.498	0.50	100	90-110	09/05/2025

Initial and Continuing Calibration Verification

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

RunNo.: LB137105

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Ammonia as N	mg/L	1	1	100	90-110	09/08/2025
Sample ID: CCV1 Ammonia as N	mg/L	0.99	1	99	90-110	09/08/2025
Sample ID: CCV2 Ammonia as N	mg/L	1	1	100	90-110	09/08/2025
Sample ID: CCV3 Ammonia as N	mg/L	1	1	100	90-110	09/08/2025
Sample ID: CCV4 Ammonia as N	mg/L	1	1	100	90-110	09/08/2025

Initial and Continuing Calibration Blank Summary

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

RunNo.: LB137099

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Orthophosphate as P	mg/L	0.008	0.0250	J	0.0038	0.05	09/05/2025
Sample ID: CCB1 Orthophosphate as P	mg/L	0.006	0.0250	J	0.0038	0.05	09/05/2025
Sample ID: CCB2 Orthophosphate as P	mg/L	0.009	0.0250	J	0.0038	0.05	09/05/2025

Initial and Continuing Calibration Blank Summary

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

RunNo.: LB137100

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Phosphorus, Total	mg/L	0.009	0.0250	J	0.0045	0.05	09/05/2025
Sample ID: CCB1 Phosphorus, Total	mg/L	0.006	0.0250	J	0.0045	0.05	09/05/2025
Sample ID: CCB2 Phosphorus, Total	mg/L	0.008	0.0250	J	0.0045	0.05	09/05/2025

Initial and Continuing Calibration Blank Summary

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

RunNo.: LB137105

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	09/08/2025
Sample ID: CCB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	09/08/2025
Sample ID: CCB2 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	09/08/2025
Sample ID: CCB3 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	09/08/2025
Sample ID: CCB4 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	09/08/2025

Preparation Blank Summary

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB137083BL Oil and Grease	mg/L	< 2.5000	2.5000	U	0.29	5.0	09/05/2025
Sample ID: LB137092BL BOD5	mg/L	< 0.2000	0.2000	U	0.20	2.0	09/05/2025
Sample ID: LB137099BL Orthophosphate as P	mg/L	0.008	0.0250	J	0.004	0.05	09/05/2025
Sample ID: LB137104BL TSS	mg/L	1	2.0000	J	1	4	09/08/2025
Sample ID: PB169579BL Phosphorus, Total	mg/L	0.009	0.0250	J	0.005	0.05	09/05/2025
Sample ID: PB169587BL Ammonia as N	mg/L	< 0.0500	0.0500	U	0.03	0.1	09/08/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3020-01
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
Ammonia as N	mg/L	75-125	1.20		0.30		1	1	90		09/08/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3020-01
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
Ammonia as N	mg/L	75-125	1.20		0.30		1	1	90		09/08/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3020-02
Client ID:	WATER-TREATMEN 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	30.8		10.7		20.0	1	101		09/05/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3020-02
Client ID:	WATER-TREATMEN 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	30.9		10.7		20.0	1	101		09/05/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3028-01
Client ID:	EFFLUENTMS	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
Orthophosphate as P	mg/L	90-110	0.50		0.037	J	0.5	1	93		09/05/2025
Phosphorus, Total	mg/L	90-110	0.53		0.063		0.5	1	93		09/05/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3028-01
Client ID:	EFFLUENTMSD	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
Orthophosphate as P	mg/L	90-110	0.50		0.037	J	0.5	1	93		09/05/2025
Phosphorus, Total	mg/L	90-110	0.53		0.063		0.5	1	93		09/05/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3028-01
Client ID:	Q3028-1MS	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	30.5		10.3		20.0	1	101		09/05/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3028-01
Client ID:	Q3028-1MSD	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	30.6		10.3		20.0	1	102		09/05/2025

Duplicate Sample Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3007-02
Client ID:	CompDUP	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	846		827		1	2.23		09/05/2025
TSS	mg/L	+/-5	228		226		1	0.88		09/08/2025

Duplicate Sample Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3020-01
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
Ammonia as N	mg/L	+/-20	0.30		0.30		1	0		09/08/2025

Duplicate Sample Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3020-01
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
Ammonia as N	mg/L	+/-20	1.20		1.20		1	0		09/08/2025

Duplicate Sample Summary

Client: Holland Manufacturing Co.	SDG No.: Q3028
Project: Pre Treatment Plant 2025	Sample ID: Q3028-01
Client ID: EFFLUENTDUP	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
Orthophosphate as P	mg/L	+/-20	0.037	J	0.037	J	1	0		09/05/2025
Phosphorus, Total	mg/L	+/-20	0.063		0.063		1	0		09/05/2025

Duplicate Sample Summary

Client: Holland Manufacturing Co.	SDG No.: Q3028
Project: Pre Treatment Plant 2025	Sample ID: Q3028-01
Client ID: EFFLUENTMSD	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
Orthophosphate as P	mg/L	+/-20	0.50		0.50		1	0.8		09/05/2025
Phosphorus, Total	mg/L	+/-20	0.53		0.53		1	0.19		09/05/2025
Oil and Grease	mg/L	+/-18	30.5		30.6		1	0.33		09/05/2025

Duplicate Sample Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q3028
Project:	Pre Treatment Plant 2025	Sample ID:	Q3020-02
Client ID:	WATER-TREATMEN 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	30.8		30.9		1	0.32		09/05/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

Run No.: LB137083

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137083BS							
Oil and Grease	mg/L	20.0	17.0		85	1	78-114	09/05/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

Run No.: LB137092

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137092BS							
BOD5	mg/L	198	201		102	1	84.6-115.4	09/05/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

Run No.: LB137099

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137099BS							
Orthophosphate as P	mg/L	0.5	0.50		101	1	90-110	09/05/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

Run No.: LB137104

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB137104BS							
TSS	mg/L	550	531		96	1	90-110	09/08/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

Run No.: LB137100

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB169579BS							
Phosphorus, Total	mg/L	0.50	0.51		101	1	90-110	09/05/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q3028

Project: Pre Treatment Plant 2025

Run No.: LB137105

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB169587BS							
Ammonia as N	mg/L	1	1.00		100	1	90-110	09/08/2025



RAW DATA

Extraction and Analytical Summary Report

Analysis Method: 1664A
Test: Oil and Grease
Run Number: LB137083
Analysis Date: 09/05/2025
BalanceID: WC SC-5
OvenID: EXT OVEN-3

ANALYST: JIGNESH
REVIEWED BY: Iwona
Extraction Date: 09/05/2025
Extraction IN Time: 08:15
Extraction OUT Time: 09:15
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	LB137083BL	LB137083BL	WATER	1.3	1000	100	3.0234	3.0234	0	3.0235	3.0235	0.0001	0.1
2	LB137083BS	LB137083BS	WATER	1.3	1000	100	3.1471	3.1471	0	3.1641	3.1641	0.0170	17
3	Q3020-02	WATER-TREATMEN DISCHAR	WATER	1.6	1000	100	3.0467	3.0467	0	3.0574	3.0574	0.0107	10.7
4	Q3020-03	Q3020-02MS	WATER	1.6	1000	100	3.1906	3.1906	0	3.2214	3.2214	0.0308	30.8
5	Q3020-04	Q3020-02MSD	WATER	1.6	1000	100	2.7411	2.7411	0	2.7720	2.7720	0.0309	30.9
6	Q3028-01	EFFLUENT	WATER	1.6	1000	100	3.0754	3.0754	0	3.0857	3.0857	0.0103	10.3
7	Q3028-02	Q3028-1MS	WATER	1.6	1000	100	3.1932	3.1932	0	3.2237	3.2237	0.0305	30.5
8	Q3028-03	Q3028-1MSD	WATER	1.6	1000	100	2.9974	2.9974	0	3.0280	3.0280	0.0306	30.6

QC Batch# LB137083

Test: Oil and Grease

Analysis Date: 09/05/2025

Chemicals Used:

Chemical Name	Chemical Lot #
HEXANE	W3204
pH Paper 0-14	M6069
Sodium Sulfate	EP2636
1:1 HCL	WP112782
Silica Gel	NA
Sand	NA

Standards Used:

Standard Name	Amount Used	Standard Lot #
LCSW	2.5 ML	WP112783
LCSWD	N/A	N/A
MS/MSD	2.5 ML	WP112784

BALANCE CALIBRATION / OVEN Dessicator Data

Analytical Balance ID # : WC SC-6

Before Analysis

0.0020 gram Balance: 0.0019 (0.0018-0.0022) In OVEN TEMP1 : 71 °C Dessicator Time In1 : 10:41

1.0000 gram Balance: 1.0004 (0.9950-1.0050) In Time1: 10:00

Bal Check Time: 08:20 Out OVEN TEMP1: 71 °C Dessicator Time Out1: 11:00

Out Time1: 10:40

After Analysis

0.0020 gram Balance: 0.0018 (0.0018-0.0022) In OVEN TEMP2 : 70 °C Dessicator Time In2 : 12:01

1.0000 gram Balance: 1.0005 (0.9950-1.0050) In Time2: 11:30

Bal Check Time: 12:40 Out OVEN TEMP2: 70 °C Dessicator Time Out2: 12:37

Out Time2: 12:00

WORKLIST(Hardcopy Internal Chain)

VP 134083

WorkList Name : OIL & GREASE Q3020 WorkList ID : 191683 Department : Wet-Chemistry Date : 09-05-2025 07:50:28

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3020-02	WATER-TREATMEN DISCHAR	Water	Oil and Grease	Conc H2SO4 to pH < 2	VERI01	J11	09/04/2025	1664A
Q3020-03	Q3020-02MS	Water	Oil and Grease	Conc H2SO4 to pH < 2	VERI01	J11	09/04/2025	1664A
Q3020-04	Q3020-02MSD	Water	Oil and Grease	Conc H2SO4 to pH < 2	VERI01	J11	09/04/2025	1664A
Q3028-01	EFFLUENT	Water	Oil and Grease	Conc H2SO4 to pH < 2	HOLL01	J12	09/04/2025	1664A
Q3028-02	Q3028-1MS	Water	Oil and Grease	Conc H2SO4 to pH < 2	HOLL01	J12	09/04/2025	1664A
Q3028-03	Q3028-1MSD	Water	Oil and Grease	Conc H2SO4 to pH < 2	HOLL01	J12	09/04/2025	1664A

Date/Time 09/05/25 08:10
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 09/05/25 14:00
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

BOD5 LOG

ANALYST: rubin

SUPERVISOR: Iwona

Analysis Date: 09/05/2025

MANGANOUS SULFATE SOLUTION: W3103

Alkaline Iodide Azide: W3109

Sodium Thiosulfate, 0.025N: W3105

NaOH, 1N: WP113878

IncubatorID: INCUBATOR #3

GuageID: 0511064

Zero DO: WP114418

QC BATCH ID: LB137092

BOD Water: WP114623

Starch: W3149

Sulfuric acid, 1N: WP112832

POLYSEED: WP112625

GGA: WP112624

Chlorine Strips: W3155

pH Strips: W3215

Lab SampleID	Client ID	Bottle No.	VOL. ML	Initial Reading (ML)	Final Reading (ML)	Difference	Average
WINKLER 1	WINKLER 1	1	300	0.0	10.1	10.1	10.1
WINKLER 2	WINKLER 2	2	300	10.3	20.4	10.1	10.1

Meter Calibration1: 9.14 Zero DO Reading1: 0.15 mg/L (<=0.2 Criteria)

Barometric Pressure1: 755 mmHg DO Meter BOD fluid reading for winkler comparison: 10.28

After Incubation

Meter Calibration2: 8.57 Zero DO Reading2: 0.14 mg/L (<=0.2 Criteria)

Barometric Pressure2: 765 mmHg

QC BATCH ID: LB137092

INCUBATOR TEMP IN(C): 20.2

INCUBATOR TEMP OUT(C): 20.0

TIME IN: 09:50

TIME OUT: 09:00

DATE IN: 09/05/2025

DATE OUT: 09/10/2025

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
LB137092BL	1	No	6.65	N/A	20.90	300	10.27	10.26	0.01	0.01	0.01	
POLYSEED	1					10	10.25	7.23	3.02	0.6	0.65	
POLYSEED	2					15	10.20	5.11	5.09	0.68		
POLYSEED	3					20	10.13	3.48	6.65	0.67		
GGA	1					6	10.21	5.63	4.58	196.5	201.33	
GGA	2					6	10.17	5.48	4.69	202		
GGA	3					6	10.17	5.41	4.76	205.5		
Q3007-02	1	No	9.30	7.33	20.10	5	10.21	7.66	2.55	1140	845.5	pH Adjusted
Q3007-02	2					10	10.15	7.26	2.89	672		
Q3007-02	3					20	10.09	4.10	5.99	801		
Q3007-02	4					30	10.04	1.70	8.34	769		
Q3007-02DUP	1	No	9.30	7.33	20.10	5	10.20	7.76	2.44	1074	826.88	pH Adjusted
Q3007-02DUP	2					10	10.16	7.18	2.98	699		
Q3007-02DUP	3					20	10.08	4.28	5.8	772.5		
Q3007-02DUP	4					30	10.04	1.77	8.27	762		
Q3020-01	1	No	8.80	7.01	20.00	5	10.21	8.26	-	0	51.05	pH Adjusted
Q3020-01	2					20	10.15	5.65	4.5	57.75		
Q3020-01	3					50	10.06	2.02	8.04	44.34		
Q3020-01	4					150	9.58	0.96	-	0		
Q3022-01	1	No	7.45	N/A	20.00	5	10.22	8.36	-	0	51.24	
Q3022-01	2					20	10.15	5.6	4.55	58.5		
Q3022-01	3					50	10.00	2.02	7.98	43.98		
Q3022-01	4					150	8.04	0.59	-	0		
Q3025-01	1	No	7.00	N/A	20.00	5	10.24	8.51	-	0	17.42	
Q3025-01	2					20	10.22	8.28	-	0		
Q3025-01	3					50	10.18	6.28	3.9	19.5		
Q3025-01	4					150	10.17	1.85	8.32	15.34		
Q3025-03	1	No	6.92	N/A	20.00	5	10.23	8.26	-	0	17.47	
Q3025-03	2					20	10.20	8.15	2.05	21		
Q3025-03	3					50	10.18	6.91	3.27	15.72		
Q3025-03	4					150	10.12	1.62	8.5	15.7		
Q3025-05	1	No	6.79	N/A	20.00	5	10.21	8.24	-	0	18.76	
Q3025-05	2					20	10.18	8.60	-	0		
Q3025-05	3					50	10.15	5.93	4.22	21.42		
Q3025-05	4					150	10.11	1.41	8.7	16.1		
Q3028-01	1	No	8.38	7.29	20.20	1	10.20	7.28	2.92	68100	36870	pH Adjusted
Q3028-01	2					5	10.15	5.31	4.84	25140		
Q3028-01	3					10	10.09	3.65	6.44	17370		
Q3028-01	4					50	10.04	0.77	-	0		
Q3028-01	5					100	9.84	0.45	-	0		
Q3028-05	1	No	4.63	7.19	20.20	1	10.22	6.18	4.04	101700	48560	pH Adjusted

Q3028-05	2					5	10.13	5.29	4.84	25140		
Q3028-05	3					10	10.05	3.12	6.93	18840		
Q3028-05	4					50	10.00	0.34	-	0		
Q3028-05	5					100	9.68	0.12	-	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.

WORKLIST(Hardcopy Internal Chain)

6137092

WorkList Name : BOD5-09-04 WorkList ID : 191678 Department : Wet-Chemistry Date : 09-04-2025 16:41:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3007-02	Comp	Water	BOD5	Cool 4 deg C	ARAM01	J42	09/03/2025	SM5210 B
Q3020-01	WATER-TREATMEN DISCHAR	Water	BOD5	Cool 4 deg C	VERI01	J11	09/04/2025	SM5210 B
Q3022-01	1413	Water	BOD5	Cool 4 deg C	PSEG03	D31	09/04/2025	SM5210 B
Q3025-01	DSN002	Water	BOD5	Cool 4 deg C	PSEG04	D31	09/04/2025	SM5210 B
Q3025-03	DSN001	Water	BOD5	Cool 4 deg C	PSEG04	D31	09/04/2025	SM5210 B
Q3025-05	DSN003	Water	BOD5	Cool 4 deg C	PSEG04	D31	09/04/2025	SM5210 B
Q3028-01	EFFLUENT	Water	BOD5	Cool 4 deg C	HOLL01	J12	09/04/2025	SM5210 B
Q3028-05	INFLUENT	Water	BOD5	Cool 4 deg C	HOLL01	J12	09/04/2025	SM5210 B

Date/Time 09/05/2025 07:30
 Raw Sample Received by: RM CWG
 Raw Sample Relinquished by: JSCW

Date/Time 09/05/2025 10:11
 Raw Sample Received by: JSCW
 Raw Sample Relinquished by: RM CWG

Analysis Method: SM4500-P E

ANALYST: Iwona

Parameter: Phosphorus-Ortho

SUPERVISOR REVIEW BY: JIGNESH

Run Number: LB137099

Reagent/Standard	Lot/Log #
calibration std. phosphate 1 ppm	WP114614
calibration std. phosphate 0.5 ppm	WP114613
calibration std. phosphate 0.3 ppm	WP114612
calibration std. phosphate 0.1 ppm	WP114611
calibration std. phosphate 0.05 ppm	WP114610
calibration std. 0 ppm	WP114609
phosphate CCV std.	WP114615
5N sulfuric acid	WP112831
Combined reagent	WP114622
Phenolphthalein indicator	WP113378
Sodium hydroxide, 1N	WP113878
Phosphosphate LOQ std, 0.05PPM	WP114619
Phosphate ICV-LCS Std	WP114616
Phosphate LOD-MDL Std 0.025ppm	WP114620
Phosphate RL CHECK	WP114617

Intercept: -0.003

Slope: 0.6534

Regression: 0.999714

Seq	Lab ID	True Value (mg/L)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	%D	AnalDate	AnalTime
1	CAL1	0.00	1	50	50	0.000	0.005		09/05/2025	11:30
2	CAL2	0.05	1	50	50	0.031	0.052	4	09/05/2025	11:30
3	CAL3	0.10	1	50	50	0.065	0.104	4	09/05/2025	11:31
4	CAL4	0.30	1	50	50	0.181	0.282	-6	09/05/2025	11:31
5	CAL5	0.50	1	50	50	0.327	0.505	1	09/05/2025	11:32
6	CAL6	1.00	1	50	50	0.652	1.002	0.2	09/05/2025	11:32

Analytical Summary Report

Analysis Method: SM4500-P E

ANALYST: Iwona

Parameter: Phosphorus-Ortho

SUPERVISOR REVIEW BY: JIGNESH

Run Number: LB137099

Seq	Lab ID	True Value (mg/l)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	AnalDate	AnalTime
1	ICV	0.50	1	50	50	0.316	0.488	09/05/2025	11:33
2	ICB		1	50	50	0.002	0.008	09/05/2025	11:33
3	CCV1	0.5	1	50	50	0.320	0.494	09/05/2025	11:34
4	CCB1		1	50	50	0.001	0.006	09/05/2025	11:34
5	RL Check	0.05	1	50	50	0.026	0.044	09/05/2025	11:35
6	LB137099BL		1	50	50	0.002	0.008	09/05/2025	11:35
7	LB137099BS	0.5	1	50	50	0.326	0.504	09/05/2025	11:36
8	Q2893-07		1	50	50	0.012	0.023	09/05/2025	11:36
9	Q2893-08		1	50	50	0.028	0.047	09/05/2025	11:37
10	Q3028-01		1	50	50	0.021	0.037	09/05/2025	11:37
11	Q3028-01DUP		1	50	50	0.021	0.037	09/05/2025	11:38
12	Q3028-01MS	0.5	1	50	50	0.324	0.500	09/05/2025	11:38
13	Q3028-01MSD	0.5	1	50	50	0.326	0.504	09/05/2025	11:39
14	CCV2	0.5	1	50	50	0.317	0.490	09/05/2025	11:39
15	CCB2		1	50	50	0.003	0.009	09/05/2025	11:40

LB 137099

WORKLIST(Hardcopy Internal Chain)

WorkList Name : ORTHO PH- 090425

WorkList ID : 191695

Department : Wet-Chemistry

Date : 09-04-2025 15:19:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2893-07	LOD-MDL-WATER-01-QT3-202	Water	Phosphorus-Ortho	NONE	ALLI03	QA Of	08/18/2025	SM4500-P E
Q2893-08	LOQ-WATER-02-QT3-2025	Water	Phosphorus-Ortho	NONE	ALLI03	QA Of	08/18/2025	SM4500-P E
Q3028-01	EFFLUENT	Water	Phosphorus-Ortho	Cool 4 deg C	HOLL01	J12	09/04/2025	SM4500-P E

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

Page 1 of 1

Analysis Method: 365.3
Parameter: Phosphorus-Total
Run Number: LB137100

ANALYST: Iwona
SUPERVISOR REVIEW BY: JIGNESH

Reagent/Standard	Lot/Log #
calibration std. phosphate 1 ppm	WP114614
calibration std. phosphate 0.5 ppm	WP114613
calibration std. phosphate 0.3 ppm	WP114612
calibration std. phosphate 0.1 ppm	WP114611
calibration std. phosphate 0.05 ppm	WP114610
calibration std. 0 ppm	WP114609
phosphate CCV std.	WP114615
5N sulfuric acid	WP112831
Combined reagent	WP114622
Phenolphthalein indicator	WP113378
Sodium hydroxide, 1N	WP113878
Phosphosphate LOQ std, 0.05PPM	WP114619
Phosphate ICV-LCS Std	WP114616
Phosphate LOD-MDL Std 0.025ppm	WP114620

Intercept: -0.0029 Slope: 0.6521 Regression: 0.999803

Seq	Lab ID	True Value (mg/L)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	%D	AnalDate	AnalTime
1	CAL1	0.00	1	50	50	0.000	0.004		09/05/2025	12:45
2	CAL2	0.05	1	50	50	0.033	0.055	10	09/05/2025	12:45
3	CAL3	0.10	1	50	50	0.062	0.1	0	09/05/2025	12:46
4	CAL4	0.30	1	50	50	0.183	0.285	-5	09/05/2025	12:46
5	CAL5	0.50	1	50	50	0.325	0.503	0.6	09/05/2025	12:47
6	CAL6	1.00	1	50	50	0.651	1.003	0.3	09/05/2025	12:47

Analysis Method: 365.3

ANALYST: Iwona

Parameter: Phosphorus-Total

SUPERVISOR REVIEW BY: JIGNESH

Run Number: LB137100

Seq	Lab ID	True Value (mg/l)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	AnalDate	AnalTime
1	ICV	0.50	1	50	50	0.329	0.509	09/05/2025	12:48
2	ICB		1	50	50	0.003	0.009	09/05/2025	12:48
3	CCV1	0.50	1	50	50	0.324	0.501	09/05/2025	12:49
4	CCB1		1	50	50	0.001	0.006	09/05/2025	12:49
5	RL Check	0.05	1	50	50	0.029	0.049	09/05/2025	12:50
6	PB169579BL		1	50	50	0.003	0.009	09/05/2025	12:50
7	PB169579BS	0.50	1	50	50	0.327	0.506	09/05/2025	12:51
8	Q2893-07		1	50	50	0.016	0.029	09/05/2025	12:51
9	Q2893-08		1	50	50	0.036	0.060	09/05/2025	12:52
10	Q3028-01		1	50	50	0.038	0.063	09/05/2025	12:52
11	Q3028-01DUP		1	50	50	0.038	0.063	09/05/2025	12:53
12	Q3028-01MS	0.50	1	50	50	0.341	0.527	09/05/2025	12:53
13	Q3028-01MSD	0.50	1	50	50	0.340	0.526	09/05/2025	12:54
14	CCV2	0.50	1	50	50	0.322	0.498	09/05/2025	12:54
15	CCB2		1	50	50	0.002	0.008	09/05/2025	12:55

TOTAL SUSPENDED SOLIDS - SM2540D

TEMP1 IN: 104 °C 09/08/2025 08:00 **TEMP1 OUT:** 103 °C 09/08/2025 09:00
TEMP2 IN: 104 °C 09/08/2025 09:30 **TEMP2 OUT:** 103 °C 09/08/2025 10:30
TEMP3 IN: 104 °C 09/08/2025 14:00 **TEMP3 OUT:** 103 °C 09/08/2025 15:30
TEMP4 IN: 104 °C 09/08/2025 16:00 **TEMP4 OUT:** 103 °C 09/08/2025 17:30

SUPERVISOR: Iwona

ANALYST: JIGNESH

Date: 09/08/2025

Run Number: LB137104

BalanceID: WC SC-5

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

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	LB137104BL	LB137104BL	1.3526	1.3526	100	1.3527	1.3527	1.3527	0.0001	1
2	LB137104BS	LB137104BS	1.5987	1.5988	100	1.6519	1.6519	1.6519	0.0531	531
3	Q3007-02	Comp	1.4811	1.4812	100	1.5039	1.5040	1.5040	0.0228	228
4	Q3007-02DUP	CompDUP	1.4921	1.4921	100	1.5147	1.5147	1.5147	0.0226	226
5	Q3020-01	WATER-TREATMENT DISCHARGE	1.4874	1.4874	1000	1.5036	1.5036	1.5036	0.0162	16.2
6	Q3022-01	1413	1.4931	1.4931	1000	1.5647	1.5647	1.5647	0.0716	71.6
7	Q3024-01	TOWERS-1	1.4896	1.4897	3000	1.4998	1.4999	1.4999	0.0102	3.4
8	Q3024-02	TOWERS-2	1.4795	1.4797	2000	1.4896	1.4897	1.4897	0.0100	5
9	Q3025-01	DSN002	1.5008	1.5008	1000	1.5216	1.5216	1.5216	0.0208	20.8
10	Q3025-03	DSN001	1.4890	1.4890	2000	1.5080	1.5080	1.5080	0.0190	9.5
11	Q3025-05	DSN003	1.4733	1.4733	2000	1.4818	1.4819	1.4819	0.0086	4.3
12	Q3028-01	EFFLUENT	1.4750	1.4751	25	1.5820	1.5821	1.5821	0.1070	4280
13	Q3028-04	AERATION	1.4941	1.4942	25	1.5943	1.5943	1.5943	0.1001	4004
14	Q3041-01	001 Willets Pt Blvd (Sep))	1.4782	1.4783	400	1.5214	1.5214	1.5214	0.0431	107.8
15	Q3041-04	002 35th Ave (sep)	1.4755	1.4755	1000	1.5213	1.5213	1.5213	0.0458	45.8

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: JIGNESH

Date: 09/08/2025

Run Number: LB137104

BalanceID: WC SC-5

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 104 °C 09/08/2025 08:00 **TEMP1 OUT:** 103 °C 09/08/2025 09:00
TEMP2 IN: 104 °C 09/08/2025 09:30 **TEMP2 OUT:** 103 °C 09/08/2025 10:30
TEMP3 IN: 104 °C 09/08/2025 14:00 **TEMP3 OUT:** 103 °C 09/08/2025 15:30
TEMP4 IN: 104 °C 09/08/2025 16:00 **TEMP4 OUT:** 103 °C 09/08/2025 17:30

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

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)

Weight (g) = C - B

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

WORKLIST(Hardcopy Internal Chain)

137104

WorkList Name : tss q3022 WorkList ID : 191716 Department : Wet-Chemistry Date : 09-08-2025 07:50:04

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3007-02	Comp	Water	TSS	Cool 4 deg C	ARAM01	J42	09/03/2025	SM2540 D
Q3020-01	D WATER-TREATMENT DISCHAI	Water	TSS	Cool 4 deg C	VERI01	J11	09/04/2025	SM2540 D
Q3022-01	1413	Water	TSS	Cool 4 deg C	PSEG03	D31	09/04/2025	SM2540 D
Q3024-01	TOWERS-1 B, C, D	Water	TSS	Cool 4 deg C	PSEG04	D21	09/04/2025	SM2540 D
Q3024-02	TOWERS-2 B, C	Water	TSS	Cool 4 deg C	PSEG04	D21	09/04/2025	SM2540 D
Q3025-01	DSN002 E	Water	TSS	Cool 4 deg C	PSEG04	D31	09/04/2025	SM2540 D
Q3025-03	DSN001 C, E,	Water	TSS	Cool 4 deg C	PSEG04	D31	09/04/2025	SM2540 D
Q3025-05	E, C DSN003	Water	TSS	Cool 4 deg C	PSEG04	D31	09/04/2025	SM2540 D
Q3028-01	D EFFLUENT	Water	TSS	Cool 4 deg C	HOLL01	J12	09/04/2025	SM2540 D
Q3028-04	AERATION	Water	TSS	Cool 4 deg C	HOLL01	J12	09/04/2025	SM2540 D
Q3041-01	F 001 Willets Pt Blvd (Sep))	Water	TSS	Cool 4 deg C	TULL01	J11	09/04/2025	SM2540 D
Q3041-04	E 002 35th Ave(sep)	Water	TSS	Cool 4 deg C	TULL01	J11	09/04/2025	SM2540 D

Date/Time 09/08/25 11:45
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 09/08/25 17:30
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

2613710

Test results

Aquakem 7.2AQ1

Page:

Alliance Technical Group

284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM

Instrument ID : Konelab

9/8/2025 13:00

Test: Ammonia-N

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	0.996	0.0	0.209	
ICB1	0.015	0.0	0.019	
CCV1	0.991	0.0	0.208	
CCB1	0.014	0.0	0.019	
RL CHECK	0.093	0.0	0.034	
PB169587BL	0.012	0.0	0.019	
PB169587BS	0.995	0.0	0.209	
Q3020-01	0.304	0.0	0.075	
Q3020-01DUP	0.303	0.0	0.075	
Q3020-01MS	1.192	0.0	0.247	
Q3020-01MSD	1.190	0.0	0.247	
Q3022-01	5.242	0.0	1.032	Test limit high
Q3025-01	0.711	0.0	0.154	
Q3025-03	0.880	0.0	0.187	
CCV2	1.002	0.0	0.210	
CCB2	0.015	0.0	0.019	
Q3025-05	0.562	0.0	0.125	
Q3028-01	8.441	0.0	1.651	Test limit high
Q3028-05	6.526	0.0	1.280	Test limit high
Q2893-07	0.097	0.0	0.035	
Q2893-08	0.112	0.0	0.038	
PB169602BL	0.018	0.0	0.020	
PB169602BS	0.996	0.0	0.209	
Q2893-01	0.096	0.0	0.035	
Q2893-02	0.108	0.0	0.037	
CCV3	1.006	0.0	0.211	
CCB3	0.016	0.0	0.019	
Q3022-01DLX5	1.024	0.0	0.214	
Q3028-01DLX10	0.807	0.0	0.172	
Q3028-05DLX5	1.216	0.0	0.252	
CCV4	1.001	0.0	0.210	
CCB4	0.013	0.0	0.019	

93% (50-150) 09/08/2025 RM

N 32
Mean 1.125
SD 1.9315
CV% 171.71

Aquakem v. 7.2AQ1

Results from time period:

Mon Sep 08 10:38:17 2025

Mon Sep 08 12:58:41 2025

Sample Id	Sam/Ctr/c/	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	Ammonia-† P		0.0169	mg/l	9/8/2025 10:38:17	
0.1PPM	A	Ammonia-† P		0.1101	mg/l	9/8/2025 10:38:18	
0.2PPM	A	Ammonia-† P		0.2029	mg/l	9/8/2025 10:38:19	
0.4PPM	A	Ammonia-† P		0.3947	mg/l	9/8/2025 10:38:20	
1.0PPM	A	Ammonia-† P		0.9965	mg/l	9/8/2025 10:38:21	
1.3PPM	A	Ammonia-† P		1.2642	mg/l	9/8/2025 10:38:22	
2.0PPM	A	Ammonia-† P		2.0481	mg/l	9/8/2025 10:38:23	
ICV1	S	Ammonia-† P		0.9964	mg/l	9/8/2025 11:52:32	
ICB1	S	Ammonia-† P		0.0151	mg/l	9/8/2025 11:52:35	
CCV1	S	Ammonia-† P		0.9914	mg/l	9/8/2025 11:52:37	
CCB1	S	Ammonia-† P		0.0143	mg/l	9/8/2025 11:52:39	
RL CHECK	S	Ammonia-† P		0.0929	mg/l	9/8/2025 11:52:43	
PB169587BL	S	Ammonia-† P		0.0124	mg/l	9/8/2025 12:03:16	
PB169587BS	S	Ammonia-† P		0.9954	mg/l	9/8/2025 12:03:19	
Q3020-01	S	Ammonia-† P		0.3043	mg/l	9/8/2025 12:03:20	
Q3020-01DUP	S	Ammonia-† P		0.3032	mg/l	9/8/2025 12:03:23	
Q3020-01MS	S	Ammonia-† P		1.1925	mg/l	9/8/2025 12:03:24	
Q3020-01MSD	S	Ammonia-† P		1.1902	mg/l	9/8/2025 12:03:25	
Q3022-01	S	Ammonia-† P		5.2421	mg/l	9/8/2025 12:14:00	
Q3025-01	S	Ammonia-† P		0.7105	mg/l	9/8/2025 12:14:01	
Q3025-03	S	Ammonia-† P		0.8799	mg/l	9/8/2025 12:14:02	
CCV2	S	Ammonia-† P		1.0023	mg/l	9/8/2025 12:14:04	
CCB2	S	Ammonia-† P		0.0154	mg/l	9/8/2025 12:14:06	
Q3025-05	S	Ammonia-† P		0.562	mg/l	9/8/2025 12:14:07	
Q3028-01	S	Ammonia-† P		8.441	mg/l	9/8/2025 12:14:08	
Q3028-05	S	Ammonia-† P		6.5257	mg/l	9/8/2025 12:14:09	
Q2893-07	S	Ammonia-† P		0.0966	mg/l	9/8/2025 12:14:11	
Q2893-08	S	Ammonia-† P		0.1121	mg/l	9/8/2025 12:24:45	
PB169602BL	S	Ammonia-† P		0.018	mg/l	9/8/2025 12:24:46	
PB169602BS	S	Ammonia-† P		0.9957	mg/l	9/8/2025 12:24:48	
Q2893-01	S	Ammonia-† P		0.096	mg/l	9/8/2025 12:24:50	
Q2893-02	S	Ammonia-† P		0.1083	mg/l	9/8/2025 12:24:52	
CCV3	S	Ammonia-† P		1.0056	mg/l	9/8/2025 12:33:11	
CCB3	S	Ammonia-† P		0.0158	mg/l	9/8/2025 12:33:13	
Q3022-01DLX5	S	Ammonia-† P		1.024	mg/l	9/8/2025 12:58:32	
Q3028-01DLX10	S	Ammonia-† P		0.8071	mg/l	9/8/2025 12:58:35	
Q3028-05DLX5	S	Ammonia-† P		1.2155	mg/l	9/8/2025 12:58:36	
CCV4	S	Ammonia-† P		1.0006	mg/l	9/8/2025 12:58:39	
CCB4	S	Ammonia-† P		0.0128	mg/l	9/8/2025 12:58:41	

Calibration results

Aquakem 7.2AQ1

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Alliance Technical Group
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM Instrument ID : Konelab

9/8/2025 10:56

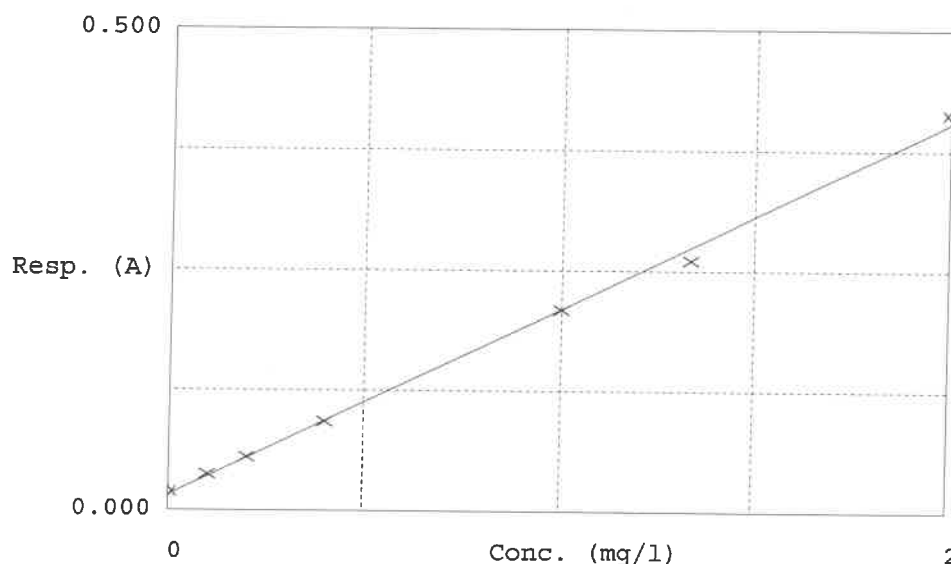
Test Ammonia-N

Accepted 9/8/2025 10:56

Factor 5.163
Bias 0.016

Coeff. of det. 0.997772

Errors



	Calibrator	Response	Calc. con.	Conc.	^{Re} Errors
1	0.00PPM	0.019	0.0169	0.0000	-
2	NH3-2PPM	0.037	0.1101	0.1000	10.1
3	NH3-2PPM	0.055	0.2029	0.2000	1.4
4	NH3-2PPM	0.093	0.3947	0.4000	-1.3
5	NH3-2PPM	0.209	0.9965	1.0000	-0.3
6	NH3-2PPM	0.261	1.2642	1.3333	-2.8
7	NH3-2PPM	0.413	2.0481	2.0000	2.4

09/08/2025
RM

SOP ID : M365.3 & SM4500-P E-19

SDG No : N/A

Start Digest Date: 09/05/2025 Time : 10:15 Temp : 95 °C

Matrix : WATER

End Digest Date: 09/05/2025 Time : 11:20 Temp : 96 °C

Pipette ID : WC

Balance ID : N/A

Hood ID : HOOD#3

Digestion tube ID : M5595

Block Thermometer ID : WC-BLOCK#1

Block ID : WC S-1, WC S-2

Filter paper ID : 400213

Prep Technician Signature: 12

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature: 28

Standardized Name	MLS USED	STD REF. # FROM LOG
LCSW	0.5ML	WP112914
MS/MSD SPIKE SOL.	0.5ML	WP112913
PBW	50.ML	W3112
RL CHECK	50.0ML	WP114617
LOQ	50.ML	WP114619

Chemical Used	ML/SAMPLE USED	Lot Number
11N H2SO4	1ML	WP112615
AMMONIUM PERSULFATE	0.4g	W3035
pH Paper 0-14	N/A	W3215
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
CAL1	CAL1	50.0ML	WP114609
CAL2	CAL2	50.0ML	WP114610
CAL3	CAL3	50.0ML	WP114611
CAL4	CAL4	50.0ML	WP114612
CAL5	CAL5	50.0ML	WP114613
CAL6	CAL6	50.0ML	WP114614
ICV	ICV	50.0ML	WP114616
ICB	ICB	50.0ML	W3112
CCV	CCV	50.0ML	WP114615
CCB	CCB	50.0ML	W3112

Extraction Conformance/Non-Conformance Comments:

LOD; WP114620; 50ML

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

9/5/25

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB169579BL	PBW579	50	50	<2	N/A	N/A	N/A	N/A	N/A
PB169579BS	LCS579	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2893-07	LOD-MDL-WATER-01-QT3-2025	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2893-08	LOQ-WATER-02-QT3-2025	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q3028-01	EFFLUENT	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q3028-01DUP	EFFLUENTDUP	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q3028-01MS	EFFLUENTMS	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q3028-01MSD	EFFLUENTMSD	50	50	<2	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TotalPhos-090525

WorkList ID : 191696

Department : Distillation

Date : 09-05-2025 09:19:38

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2893-07	LOD-MDL-WATER-01-QT3-202	Water	Phosphorus-Total	NONE	ALLI03	QA Of	08/18/2025	365.3
Q2893-08	LOQ-WATER-02-QT3-2025	Water	Phosphorus-Total	NONE	ALLI03	QA Of	08/18/2025	365.3
Q3028-01	EFFLUENT	Water	Phosphorus-Total	Conc H2SO4 to pH < 2	HOLL01	J12	09/04/2025	365.3

Date/Time 09/05/25 09:25
 Raw Sample Received by: 12(25)
 Raw Sample Relinquished by: 20(25)

Date/Time 09/05/25 10:30
 Raw Sample Received by: 20(25)
 Raw Sample Relinquished by: 12(25)

SOP ID : MSM4500-NH3 B,G-Ammonia-18

SDG No : N/A

Matrix : WATER

Pipette ID : WC

Balance ID : N/A

Hood ID : HOOD#2

Block ID : WC-DIST-BLOCK-1

Weigh By : N/A

Start Digest Date: 09/08/2025 Time : 08:05 Temp : 150 °C

End Digest Date: 09/08/2025 Time : 09:05 Temp : 160 °C

Batch 09/08/2025 09-25 150 °C
09/08/2025 10-25 157 °C

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Filter paper ID : N/A

Prep Technician Signature: RM

pH Meter ID : N/A

Supervisor Signature: 12

Standard Name	MLS USED	STD REF. # FROM LOG
LCSW	1.0ML	WP114257
MS/MSD SPIKE SOL.	1.0ML	WP114256
PBW	50.0ML	W3112
RL CHECK	0.1ML	WP114256
LOD	0.8ML	WP114651

Chemical Used	ML/SAMPLE USED	Lot Number
BORATE BUFFER	2.5ML	WP113886
NAOH 6N	0.5-2.0ML	WP113887
H2SO4 0.04N	5.0ML	WP112828
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 WP114104. Due to bad matrix and client history 1ML was taken as an initial volume for Q3028-01,05,LOQ WP114651 1.0ML, 09/08/25 RM

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
09/08/2025 10:35	RM (WC)	RM (WC)
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB169587BL	PBW587	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
PB169587BS	LCS587	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2893-07	LOD-MDL-WATER-01-QT3-20 25	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2893-08	LOQ-WATER-02-QT3-2025	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3020-01DUP	WATER-TREATMEN DISCHARGEDUP	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3020-01MS	WATER-TREATMEN DISCHARGEMS	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3020-01MSD	WATER-TREATMEN DISCHARGEMSD	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3020-01	WATER-TREATMENT DISCHARGE	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3022-01	1413	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3025-01	DSN002	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3025-03	DSN001	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3025-05	DSN003	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3028-01	EFFLUENT	1	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q3028-05	INFLUENT	1	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : AMMONIA-9-05 WorkList ID : 191713 Department : Distillation Date : 09-05-2025 15:50:54

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2893-07	LOD-MDL-WATER-01-QT3-202	Water	Ammonia	NONE	ALLI03	QA Of	08/18/2025	SM4500-NH3
Q2893-08	LOQ-WATER-02-QT3-2025	Water	Ammonia	NONE	ALLI03	QA Of	08/18/2025	SM4500-NH3
Q3020-01	WATER-TREATMEN DISCHAR	Water	Ammonia	Conc H2SO4 to pH < 2	VERI01	J11	09/04/2025	SM4500-NH3
Q3022-01	1413	Water	Ammonia	Conc H2SO4 to pH < 2	PSEG03	D31	09/04/2025	SM4500-NH3
Q3025-01	DSN002	Water	Ammonia	Conc H2SO4 to pH < 2	PSEG04	D31	09/04/2025	SM4500-NH3
Q3025-03	DSN001	Water	Ammonia	Conc H2SO4 to pH < 2	PSEG04	D31	09/04/2025	SM4500-NH3
Q3025-05	DSN003	Water	Ammonia	Conc H2SO4 to pH < 2	PSEG04	D31	09/04/2025	SM4500-NH3
Q3028-01	EFFLUENT	Water	Ammonia	Conc H2SO4 to pH < 2	HOLL01	J12	09/04/2025	SM4500-NH3
Q3028-05	INFLUENT	Water	Ammonia	Conc H2SO4 to pH < 2	HOLL01	J12	09/04/2025	SM4500-NH3

Date/Time 09/08/2025 07:25
Raw Sample Received by: RM (wlc)
Raw Sample Relinquished by: JPC (wlc)

Date/Time 09/08/2025 13:30
Raw Sample Received by: JPC (wlc)
Raw Sample Relinquished by: RM (wlc)

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB137083

Review By	JIGNESH	Review On	9/5/2025 9:03:21 AM
Supervise By	Iwona	Supervise On	9/5/2025 11:20:30 AM
SubDirectory	LB137083	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	W3204,M6069,EP2636,WP112782,NA,NA,WP112783,N/A,WP112784		

Sr#	SampleID	ClientID	QcType	Date	Comment	Operator	Status
1	LB137083BL	LB137083BL	MB	09/05/25 10:00		JIGNESH	OK
2	LB137083BS	LB137083BS	LCS	09/05/25 10:00		JIGNESH	OK
3	Q3020-02	WATER-TREATMENT	SAM	09/05/25 10:00		JIGNESH	OK
4	Q3020-03	Q3020-02MS	MS	09/05/25 10:00		JIGNESH	OK
5	Q3020-04	Q3020-02MSD	MSD	09/05/25 10:00		JIGNESH	OK
6	Q3028-01	EFFLUENT	SAM	09/05/25 10:00		JIGNESH	OK
7	Q3028-02	Q3028-1MS	MS	09/05/25 10:00		JIGNESH	OK
8	Q3028-03	Q3028-1MSD	MSD	09/05/25 10:00		JIGNESH	OK

Instrument ID: DO METER

Daily Analysis Runlog For Sequence/QC Batch ID # LB137092

Review By	rubina	Review On	9/11/2025 9:28:17 AM
Supervise By	Iwona	Supervise On	9/11/2025 10:03:12 AM
SubDirectory	LB137092	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	WP114623,W3149,WP112832,W3103,W3109,W3105,WP112625,WP112624,WP113878		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB137092BL	LB137092BL	MB	09/05/25 09:50		rubina	OK
2	LB137092BS	LB137092BS	LCS	09/05/25 09:50		rubina	OK
3	Q3007-02	Comp	SAM	09/05/25 09:50	Due to bad matrix difference between highest and lowest results is >30% for	rubina	OK
4	Q3007-02DUP	CompDUP	DUP	09/05/25 09:50	Due to bad matrix difference between highest and lowest results is >30% for	rubina	OK
5	Q3020-01	WATER-TREATMENT	SAM	09/05/25 09:50		rubina	OK
6	Q3022-01	1413	SAM	09/05/25 09:50		rubina	OK
7	Q3025-01	DSN002	SAM	09/05/25 09:50		rubina	OK
8	Q3025-03	DSN001	SAM	09/05/25 09:50		rubina	OK
9	Q3025-05	DSN003	SAM	09/05/25 09:50		rubina	OK
10	Q3028-01	EFFLUENT	SAM	09/05/25 09:50	Due to bad matrix difference between highest and lowest results is >30% for	rubina	OK
11	Q3028-05	INFLUENT	SAM	09/05/25 09:50	Due to bad matrix difference between highest and lowest results is >30% for	rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137099

Review By	Iwona	Review On	9/5/2025 2:50:50 PM
Supervise By	JIGNESH	Supervise On	9/8/2025 10:57:32 AM
SubDirectory	LB137099	Test	Phosphorus-Ortho
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	WP114614,WP114613,WP114612,WP114611,WP114610,WP114609,WP114615,WP112831,WP114622,WP113378,V		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	09/05/25 11:30		Iwona	OK
2	CAL2	CAL2	CAL	09/05/25 11:30		Iwona	OK
3	CAL3	CAL3	CAL	09/05/25 11:31		Iwona	OK
4	CAL4	CAL4	CAL	09/05/25 11:31		Iwona	OK
5	CAL5	CAL5	CAL	09/05/25 11:32		Iwona	OK
6	CAL6	CAL6	CAL	09/05/25 11:32		Iwona	OK
7	ICV	ICV	ICV	09/05/25 11:33		Iwona	OK
8	ICB	ICB	ICB	09/05/25 11:33		Iwona	OK
9	CCV1	CCV1	CCV	09/05/25 11:34		Iwona	OK
10	CCB1	CCB1	CCB	09/05/25 11:34		Iwona	OK
11	RL Check	RL Check	RL	09/05/25 11:35		Iwona	OK
12	LB137099BL	LB137099BL	MB	09/05/25 11:35		Iwona	OK
13	LB137099BS	LB137099BS	LCS	09/05/25 11:36		Iwona	OK
14	Q2893-07	LOD-MDL-WATER-01	SAM	09/05/25 11:36		Iwona	OK
15	Q2893-08	LOQ-WATER-02-QT3	SAM	09/05/25 11:37		Iwona	OK
16	Q3028-01	EFFLUENT	SAM	09/05/25 11:37		Iwona	OK
17	Q3028-01DUP	EFFLUENTDUP	DUP	09/05/25 11:38		Iwona	OK
18	Q3028-01MS	EFFLUENTMS	MS	09/05/25 11:38		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137099

Review By	Iwona	Review On	9/5/2025 2:50:50 PM
Supervise By	JIGNESH	Supervise On	9/8/2025 10:57:32 AM
SubDirectory	LB137099	Test	Phosphorus-Ortho
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	WP114614,WP114613,WP114612,WP114611,WP114610,WP114609,WP114615,WP112831,WP114622,WP113378,V		

19	Q3028-01MSD	EFFLUENTMSD	MSD	09/05/25 11:39		Iwona	OK
20	CCV2	CCV2	CCV	09/05/25 11:39		Iwona	OK
21	CCB2	CCB2	CCB	09/05/25 11:40		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137100

Review By	Iwona	Review On	9/5/2025 3:29:12 PM
Supervise By	JIGNESH	Supervise On	9/8/2025 10:57:13 AM
SubDirectory	LB137100	Test	Phosphorus-Total
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	WP114614,WP114613,WP114612,WP114611,WP114610,WP114609,WP114615,WP112831,WP114622,WP113378,V		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	09/05/25 12:45		Iwona	OK
2	CAL2	CAL2	CAL	09/05/25 12:45		Iwona	OK
3	CAL3	CAL3	CAL	09/05/25 12:46		Iwona	OK
4	CAL4	CAL4	CAL	09/05/25 12:46		Iwona	OK
5	CAL5	CAL5	CAL	09/05/25 12:47		Iwona	OK
6	CAL6	CAL6	CAL	09/05/25 12:47		Iwona	OK
7	ICV	ICV	ICV	09/05/25 12:48		Iwona	OK
8	ICB	ICB	ICB	09/05/25 12:48		Iwona	OK
9	CCV1	CCV1	CCV	09/05/25 12:49		Iwona	OK
10	CCB1	CCB1	CCB	09/05/25 12:49		Iwona	OK
11	RL Check	RL Check	RL	09/05/25 12:50		Iwona	OK
12	PB169579BL	PB169579BL	MB	09/05/25 12:50		Iwona	OK
13	PB169579BS	PB169579BS	LCS	09/05/25 12:51		Iwona	OK
14	Q2893-07	LOD-MDL-WATER-01	SAM	09/05/25 12:51		Iwona	OK
15	Q2893-08	LOQ-WATER-02-QT3	SAM	09/05/25 12:52		Iwona	OK
16	Q3028-01	EFFLUENT	SAM	09/05/25 12:52		Iwona	OK
17	Q3028-01DUP	EFFLUENTDUP	DUP	09/05/25 12:53		Iwona	OK
18	Q3028-01MS	EFFLUENTMS	MS	09/05/25 12:53		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB137100

Review By	Iwona	Review On	9/5/2025 3:29:12 PM
Supervise By	JIGNESH	Supervise On	9/8/2025 10:57:13 AM
SubDirectory	LB137100	Test	Phosphorus-Total
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	WP114614,WP114613,WP114612,WP114611,WP114610,WP114609,WP114615,WP112831,WP114622,WP113378,V		

19	Q3028-01MSD	EFFLUENTMSD	MSD	09/05/25 12:54		Iwona	OK
20	CCV2	CCV2	CCV	09/05/25 12:54		Iwona	OK
21	CCB2	CCB2	CCB	09/05/25 12:55		Iwona	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB137104

Review By	JIGNESH	Review On	9/9/2025 3:06:22 PM
Supervise By	Iwona	Supervise On	9/9/2025 3:16:50 PM
SubDirectory	LB137104	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	LB137104BL	LB137104BL	MB	09/08/25 14:00		JIGNESH	OK
2	LB137104BS	LB137104BS	LCS	09/08/25 14:00		JIGNESH	OK
3	Q3007-02	Comp	SAM	09/08/25 14:00		JIGNESH	OK
4	Q3007-02DUP	CompDUP	DUP	09/08/25 14:00		JIGNESH	OK
5	Q3020-01	WATER-TREATMENT	SAM	09/08/25 14:00		JIGNESH	OK
6	Q3022-01	1413	SAM	09/08/25 14:00		JIGNESH	OK
7	Q3024-01	TOWERS-1	SAM	09/08/25 14:00		JIGNESH	OK
8	Q3024-02	TOWERS-2	SAM	09/08/25 14:00		JIGNESH	OK
9	Q3025-01	DSN002	SAM	09/08/25 14:00		JIGNESH	OK
10	Q3025-03	DSN001	SAM	09/08/25 14:00		JIGNESH	OK
11	Q3025-05	DSN003	SAM	09/08/25 14:00		JIGNESH	OK
12	Q3028-01	EFFLUENT	SAM	09/08/25 14:00		JIGNESH	OK
13	Q3028-04	AERATION	SAM	09/08/25 14:00		JIGNESH	OK
14	Q3041-01	001 Willets Pt Blvd (S	SAM	09/08/25 14:00		JIGNESH	OK
15	Q3041-04	002 35th Ave(sep)	SAM	09/08/25 14:00		JIGNESH	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137105

Review By	rubina	Review On	9/9/2025 11:26:45 AM
Supervise By	Iwona	Supervise On	9/9/2025 1:28:02 PM
SubDirectory	LB137105	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP114648		
ICV Standard	WP114650		
CCV Standard	WP114649		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP114257		
Chk Standard	WP114258,WP114133,WP113929,WP114132,WP114651		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	09/08/25 10:38		rubina	OK
2	0.1PPM	0.1PPM	CAL2	09/08/25 10:38		rubina	OK
3	0.2PPM	0.2PPM	CAL3	09/08/25 10:38		rubina	OK
4	0.4PPM	0.4PPM	CAL4	09/08/25 10:38		rubina	OK
5	1.0PPM	1.0PPM	CAL5	09/08/25 10:38		rubina	OK
6	1.3PPM	1.3PPM	CAL6	09/08/25 10:38		rubina	OK
7	2.0PPM	2.0PPM	CAL7	09/08/25 10:38		rubina	OK
8	ICV1	ICV1	ICV	09/08/25 11:52		rubina	OK
9	ICB1	ICB1	ICB	09/08/25 11:52		rubina	OK
10	CCV1	CCV1	CCV	09/08/25 11:52		rubina	OK
11	CCB1	CCB1	CCB	09/08/25 11:52		rubina	OK
12	RL	RL	LOQ	09/08/25 11:52		rubina	OK
13	PB169587BL	PB169587BL	MB	09/08/25 12:03		rubina	OK
14	PB169587BS	PB169587BS	LCS	09/08/25 12:03		rubina	OK
15	Q3020-01	WATER-TREATMENT	SAM	09/08/25 12:03		rubina	OK
16	Q3020-01DUP	WATER-TREATMENT	DUP	09/08/25 12:03		rubina	OK
17	Q3020-01MS	WATER-TREATMENT	MS	09/08/25 12:03		rubina	OK
18	Q3020-01MSD	WATER-TREATMENT	MSD	09/08/25 12:03		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137105

Review By	rubina	Review On	9/9/2025 11:26:45 AM
Supervise By	Iwona	Supervise On	9/9/2025 1:28:02 PM
SubDirectory	LB137105	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP114648		
ICV Standard	WP114650		
CCV Standard	WP114649		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP114257		
Chk Standard	WP114258,WP114133,WP113929,WP114132,WP114651		

19	Q3022-01	1413	SAM	09/08/25 12:14	NH3 is high	rubina	Dilution
20	Q3025-01	DSN002	SAM	09/08/25 12:14		rubina	OK
21	Q3025-03	DSN001	SAM	09/08/25 12:14		rubina	OK
22	CCV2	CCV2	CCV	09/08/25 12:14		rubina	OK
23	CCB2	CCB2	CCB	09/08/25 12:14		rubina	OK
24	Q3025-05	DSN003	SAM	09/08/25 12:14		rubina	OK
25	Q3028-01	EFFLUENT	SAM	09/08/25 12:14	NH3 is high	rubina	Dilution
26	Q3028-05	INFLUENT	SAM	09/08/25 12:14	NH3 is high	rubina	Dilution
27	Q2893-07	LOD-MDL-WATER-01	SAM	09/08/25 12:14		rubina	OK
28	Q2893-08	LOQ-WATER-02-QT3	LOQ	09/08/25 12:24		rubina	OK
29	PB169602BL	PB169602BL	MB	09/08/25 12:24		rubina	OK
30	PB169602BS	PB169602BS	LCS	09/08/25 12:24		rubina	OK
31	Q2893-01	LOD-MDL-SOIL-01-Q	SAM	09/08/25 12:24		rubina	OK
32	Q2893-02	LOQ-SOIL-02-QT3-20	LOQ	09/08/25 12:24		rubina	OK
33	CCV3	CCV3	CCV	09/08/25 12:33		rubina	OK
34	CCB3	CCB3	CCB	09/08/25 12:33		rubina	OK
35	Q3022-01DL	1413DL	SAM	09/08/25 12:58	5X For NH3	rubina	Confirms
36	Q3028-01DL	EFFLUENTDL	SAM	09/08/25 12:58	10X For NH3	rubina	Confirms
37	Q3028-05DL	INFLUENTDL	SAM	09/08/25 12:58	5X For NH3	rubina	Confirms
38	CCV4	CCV4	CCV	09/08/25 12:58		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB137105

Review By	rubina	Review On	9/9/2025 11:26:45 AM
Supervise By	Iwona	Supervise On	9/9/2025 1:28:02 PM
SubDirectory	LB137105	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP114648		
ICV Standard	WP114650		
CCV Standard	WP114649		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP114257		
Chk Standard	WP114258,WP114133,WP113929,WP114132,WP114651		

39	CCB4	CCB4	CCB	09/08/25 12:58		rubina	OK
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Prep Standard - Chemical Standard Summary

Order ID : Q3028

Test : Ammonia,BOD5,Oil and Grease,Phosphorus-Ortho,Phosphorus-Total,TSS

Prepbatch ID : PB169579,PB169587,

Sequence ID/Qc Batch ID: LB137083,LB137092,LB137099,LB137100,LB137104,LB137105,

Standard ID :

EP2636,WP111315,WP112611,WP112612,WP112615,WP112624,WP112625,WP112782,WP112783,WP112784,WP112828,WP112831,WP112832,WP112913,WP112914,WP113112,WP113113,WP113378,WP113878,WP113885,WP113886,WP113887,WP113929,WP114132,WP114133,WP114256,WP114257,WP114258,WP114609,WP114610,WP114611,WP114612,WP114613,WP114614,WP114615,WP114616,WP114617,WP114618,WP114619,WP114620,WP114621,WP114622,WP114623,WP114648,WP114649,WP114650,WP114651,

Chemical ID :

E3875,E3917,M6041,M6069,M6151,W2306,W2650,W2651,W2663,W2664,W2666,W2788,W2817,W2871,W3009,W3035,W3074,W3082,W3103,W3105,W3109,W3112,W3113,W3132,W3133,W3149,W3155,W3195,W3196,W3198,W3201,W3204,W3206,W3215,W3222,W3233,



<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	EP2636	08/27/2025	01/28/2026	Riteshkumar Patel	Extraction_SC ALE_2 (EX-SC-2)	None	Evelyn Huang 08/27/2025
<u>FROM</u> 4000.00000gram of E3875 = 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>
1993	HEXAVALENTCHROMIUM STOCK STD 1, 50PPM	WP111315	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 01/09/2025
<u>FROM</u>	0.14140gram of W2651 + 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>
153	Ammonia Stock Std. (1000 ppm)	WP112611	04/07/2025	10/07/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 04/07/2025
<u>FROM</u> 3.81900gram of W3196 + 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	WP112612	04/07/2025	10/07/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 04/07/2025
<u>FROM</u> 3.81900gram of W3195 + 996.18100ml 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>
1211	11 N sulfuric acid	WP112615	04/03/2025	10/07/2025	Niha Farheen Shaik	None	None	Iwona Zarych
								04/07/2025

FROM 306.00000ml of M6041 + 694.00000ml 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>
3808	Calibration and CCV std HexChrome 0.5PPM	WP112624	04/07/2025	04/08/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3	Iwona Zarych
							(WC)	04/09/2025

FROM 99.00000ml of W3112 + 1.00000ml of WP111315 = 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>
3809	Calibration std HexChrome 1.0PPM	WP112625	04/07/2025	04/08/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 04/09/2025

FROM 98.00000ml of W3112 + 2.00000ml of WP111315 = 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	WP112782	04/22/2025	08/18/2025	Jignesh Parikh	None	None	Iwona Zarych 04/22/2025

FROM 500.00000ml of M6151 + 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	WP112783	04/22/2025	10/03/2025	Jignesh Parikh	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 04/22/2025
<u>FROM</u>	1000.00000ml of E3917 + 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	WP112784	04/22/2025	10/03/2025	Jignesh Parikh	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 04/22/2025
<u>FROM</u>	1000.00000ml of E3917 + 4.00000gram of W3009 + 4.00000gram of W3082 = 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>
1597	0.04 N H2SO4	WP112828	04/25/2025	10/25/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 04/25/2025

FROM 1.00000ml of M6041 + 999.00000ml 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>
126	5N sulfuric acid	WP112831	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych 04/25/2025

FROM 140.00000ml of M6041 + 860.00000ml 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>
1841	Sulfuric Acid, 1N	WP112832	04/25/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/25/2025
<u>FROM</u> 2.80000ml of M6041 + 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>
115	Phosphate Stock Std. (50 ppm)	WP112913	05/01/2025	11/01/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 05/06/2025
<u>FROM</u>	0.11000gram of W3198 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
2790	Phosphate Stock std, 50PPM-SS	WP112914	05/01/2025	11/01/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 05/06/2025
<u>FROM</u>	0.11000gram of W3206 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
648	Ammonium molybdate solution	WP113112	05/16/2025	11/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC-5)	None	Jignesh Parikh
FROM 20.00000gram of W2664 + 480.00000ml of W3112 = Final Quantity: 500.000 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>
588	Potassium Antimonyl Tartrate	WP113113	05/16/2025	11/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 05/16/2025
<u>FROM</u>	1.37150gram of W2306 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
1213	Phenolphthalein indicator	WP113378	06/04/2025	12/04/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 06/05/2025
<u>FROM</u> 0.10000gram of W2650 + 50.00000ml of W2788 + 50.00000ml 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>
1571	Sodium hydroxide, 1N	WP113878	07/09/2025	12/31/2025	Iwona Zarych	WETCHEM_SCALE_7 (WCS-6)	None	Jignesh Parikh
<u>FROM</u> 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>
1796	NaOH, 0.1N	WP113885	07/10/2025	12/31/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 07/10/2025
<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>
1494	BORATE BUFFER	WP113886	07/10/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 07/10/2025
<u>FROM</u>	0.90250L of W3112 + 9.50000gram of W3201 + 88.00000ml of WP113885 = 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>
1471	NaOH Solution, 6N	WP113887	07/10/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC-7)	None	Iwona Zarych 07/10/2025
<u>FROM</u> 240.00000gram of W3113 + 760.00000ml 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>
290	Phenol reagent for Ammonia	WP113929	07/14/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 07/15/2025
<u>FROM</u>	3.20000gram of W3113 + 8.30000gram of W2663 + 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>
635	EDTA BUFFER FOR AMMONIA	WP114132	07/31/2025	12/31/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC-7)	None	Iwona Zarych 07/31/2025
<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	WP114133	07/31/2025	12/31/2025	Rubina Mughal	None	None	Iwona Zarych
								08/04/2025

FROM 50.00000ml of W3112 + 50.00000ml of W3222 = 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	WP114256	08/11/2025	09/11/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh
								08/21/2025

FROM 95.00000ml of W3112 + 5.00000ml of WP112611 = 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	WP114257	08/11/2025	09/11/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 08/21/2025
<u>FROM</u> 95.00000ml of W3112 + 5.00000ml of WP112612 = 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	WP114258	08/11/2025	09/11/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 08/21/2025
<u>FROM</u> 0.05000gram of W2666 + 99.95000ml 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>
122	calibration std. 0 ppm	WP114609	09/05/2025	09/12/2025	Iwona Zarych	None	None	Jignesh Parikh
								09/05/2025

FROM 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>
121	calibration std. phosphate 0.05 ppm	WP114610	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh
								09/05/2025

FROM 99.90000ml of W3112 + 0.10000ml of WP112913 = 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>
120	calibration std. phosphate 0.1 ppm	WP114611	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.80000ml of W3112 + 0.20000ml of WP112913 = 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>
119	calibration std. phosphate 0.3 ppm	WP114612	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.40000ml of W3112 + 0.60000ml of WP112913 = 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>
118	calibration std. phosphate 0.5 ppm	WP114613	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112913 = 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>
117	calibration std. phosphate 1 ppm	WP114614	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 98.00000ml of W3112 + 2.00000ml of WP112913 = 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>
124	phosphate CCV std.	WP114615	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112913 = 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>
3805	Phosphate ICV-LCS Std	WP114616	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP112914 = 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>
4212	Phosphate RL CHECK	WP114617	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.80000ml of W3112 + 0.20000ml of WP112913 = 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>
3907	Phosphate MDL-LOD-LOQ spike solution, 5ppm	WP114618	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 9.00000ml of W3112 + 1.00000ml of WP112913 = 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>
3730	Phosphatase LOQ std, 0.05PPM	WP114619	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.00000ml of W3112 + 1.00000ml of WP114618 = 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>
3814	Phosphate LOD-MDL Std 0.025ppm	WP114620	09/05/2025	09/12/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 09/05/2025
FROM 99.50000ml of W3112 + 0.50000ml of WP114618 = 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>
590	Ascorbic Acid	WP114621	09/05/2025	09/06/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 09/05/2025

FROM 0.52800gram of W3074 + 30.00000ml of W3112 = Final Quantity: 30.000 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>
658	Combined reagent	WP114622	09/05/2025	09/06/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 09/05/2025

FROM 15.00000ml of WP113112 + 30.00000ml of WP114621 + 5.00000ml of WP113113 + 50.00000ml of WP112831 = 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>
127	BOD Dilution fluid	WP114623	09/05/2025	09/06/2025	Rubina Mughal	None	None	Jignesh Parikh
								09/08/2025

FROM 18.00000L of W3112 + 3.00000PILLOW of W3233 = 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>
275	Ammonia Calibration Std. (2 ppm)	WP114648	09/08/2025	09/09/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3	Iwona Zarych
							(WC)	09/09/2025

FROM 48.00000ml of W3112 + 2.00000ml of WP114256 = 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)	WP114649	09/08/2025	09/09/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 09/09/2025
FROM 49.00000ml of W3112 + 1.00000ml of WP114256 = 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)	WP114650	09/08/2025	09/09/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 09/09/2025
<u>FROM</u> 49.00000ml of W3112 + 1.00000ml of WP114257 = 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>
3906	Ammonia MDL-LOD-LOQ spiking solution -5ppm	WP114651	09/08/2025	09/09/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC) FROM 45.00000ml of W3112 + 5.00000ml of WP114256 = 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	417203	01/28/2026	07/28/2025 / RUPESH	01/29/2025 / Rajesh	E3875

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)	24H2762008	10/03/2025	04/03/2025 / Rajesh	03/31/2025 / Rajesh	E3917

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	08/16/2024 / mohan	08/16/2024 / mohan	M6041

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)	22G2862015	02/17/2026	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A1561-500GM / POTASSIUM ANTIMONY TARTRATE TRIHYDRATE, 500G	2GH0057	12/11/2027	12/11/2017 / apatel	12/11/2017 / apatel	W2306

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J2870-1 / PHENOLPHTHALEIN, INDICATOR F/TITRATION, 500G	0000235350	06/04/2025	01/31/2020 / AMANDEEP	01/20/2020 / apatel	W2650

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA13450-36 / Potassium Dichromate, 500g(NEW)	T15F019	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2651

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	2HD0179	01/27/2030	01/27/2020 / apatel	01/27/2020 / apatel	W2663

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J07716-1 / Ammonium Molybdate 500G	0000234410	02/11/2026	02/10/2020 / AMANDEEP	01/31/2020 / apatel	W2664

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.	PC16721-3 / Isopropanol, 99%	C20F23007	06/30/2025	12/30/2020 / apatel	12/30/2020 / apatel	W2788

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 #
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.	BDH0214-500G / Ammonium Persulfate Crystal, 500g	MKCR9319	06/30/2028	03/05/2024 / lwona	06/06/2023 / lwona	W3035

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0938-7 / Ascorbic Acid, 500 gms	MKCS4627	09/30/2025	01/16/2024 / lwona	01/16/2024 / lwona	W3074

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 #
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

CHEMICAL RECEIPT LOG BOOK

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 #
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.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	24L0356561	08/31/2027	03/19/2025 / lwona	03/19/2025 / lwona	W3195

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	MKCV1009	09/30/2026	03/19/2025 / lwona	03/19/2025 / lwona	W3196

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRY, ACS, 500G	MKCW6723	10/31/2028	04/11/2025 / lwona	04/11/2025 / lwona	W3198

CHEMICAL RECEIPT LOG BOOK

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	BCCL9613	05/31/2029	04/16/2025 / lwona	04/16/2025 / lwona	W3201

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)	25c0362005	04/30/2026	04/22/2025 / jignesh	04/18/2025 / jignesh	W3204

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRY, ACS, 500G	MKCX1379	01/31/2029	04/29/2025 / lwona	04/29/2025 / lwona	W3206

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140444 / TEST PAPERS,PH 0-14,.5 SENSI,100PK	10D3242	12/31/2028	06/09/2025 / lwona	06/09/2025 / lwona	W3215

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	2506M51	12/31/2025	07/02/2025 / lwona	07/02/2025 / lwona	W3222

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	A5105	05/31/2030	08/14/2025 / rubina	07/21/2025 / lwona	W3233



CERTIFICATE OF ANALYSIS

Printed: 12/8/2017

Page 1 of 1

Customer No : 30017
Order Number : 3008126
Catalog : A1561

Customer : PCI SCIENTIFIC
Delivery # : 58495347
Potassium Antimony Tartrate Trihydrate,
Reagent, ACS

Customer PO : 6035343

Lot : 2GH0057

Chemical Formula : $C_8H_4K_2O_{12}Sb_2 \cdot 3H_2O$
CAS# : 28300-74-5

Formula Weight : 667.87

W2306
received
12/11/17
AB

Test

Limit
Min. Max.

Results

ASSAY ($C_8H_4K_2O_{12}Sb_2 \cdot 3HO$)	99.0 - 103.0 %	101.0 %
TITRATABLE ACID OR BASE	-- 0.020 meq/g	<0.020 meq/g
LOSS ON DRYING	-- 2.7 %	<2.7 %
ARSENIC (As)	-- 0.015 %	<0.015 %
APPEARANCE		WHITE POWDER
DATE OF MANUFACTURE		29-DEC-2015

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

Read and understand label and MSDS/SDS before handling any chemical. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. The customer must ensure to provide its users adequate hazardous material training and appropriate protective gears before handling our chemicals.

Certificate of Analysis Results Certified By:

Product No.: 13450
Product: Potassium dichromate, ACS, 99.0% min
Lot No.: T15F019

Test	Limits	Results
Appearance	Orange-red crystals	Orange-red crystals
Identification	To Pass	Passes
Purity	99.0 % min	99.67 %
Insoluble matter	0.005 % max	0.004 %
Loss on drying	0.05 % max	0.03 %
Chloride	0.001 % max	< 0.001 %
Sulfate	0.005 % max	< 0.005 %
Iron	0.001 % max	< 0.001 %
Calcium	0.003 % max	0.0012 %
Sodium	0.02 % max	0.0047 %

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Ammonium Molybdate, 4-Hydrate, Crystal
BAKER ANALYZED® A.C.S. Reagent

(ammonium heptamolybdate, tetrahydrate)



Material No.: 0716-01
Batch No.: 0000234410
Manufactured Date: 2019/02/13
Retest Date: 2026/02/11
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (as MoO ₃)	81.0 – 83.0 %	81.4
ACS – Insoluble Matter	<= 0.005 %	< 0.001
Chloride (Cl)	<= 0.002 %	< 0.002
Nitrate (NO ₃)	Passes Test	PT
Arsenate, Phosphate and Silicate (as SiO ₂)	<= 0.001 %	< 0.001
ACS – Phosphate (PO ₄)	<= 5 ppm	< 5
Sulfate (SO ₄)	<= 0.02 %	< 0.02
Heavy Metals (as Pb)	<= 0.001 %	< 0.001
Magnesium (Mg)	<= 0.005 %	< 0.001
Potassium (K)	<= 0.01 %	< 0.01
Sodium (Na)	<= 0.01 %	<0.001

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

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

James Ethier
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

Phenolphthalein, Powder
BAKER ANALYZED® A.C.S. Reagent



Material No.: 2870-01
Batch No.: 0000235350
Manufactured Date: 2018/06/06
Retest Date: 2025/06/04
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
ACS – Clarity of Solution	Passes Test	PT
Visual Transition Interval – pH...8.0 (Colorless)	Passes Test	PT
Visual Transition Interval – pH...10.0 (Red)	Passes Test	PT

For Laboratory, Research or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality

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



Certificate Of Analysis

Item Number	P1060	Lot Number	2HD0179
Item	Phenol, Loose Crystal, Reagent, ACS		
CAS Number	108-95-2		
Molecular Formula	C ₆ H ₆ O	Molecular Weight	94.11

Test	Specification		Result
	min	max	
ASSAY (C ₆ H ₅ OH)	99.0 %		100.02 %
FREEZING POINT (DRY)	40.5 C		40.5°C
CLARITY OF SOLUTION	TO PASS TEST		PASSES TEST
RESIDUE AFTER EVAPORATION		0.05 %	<0.05 %
WATER		0.5 %	0.0087 %
DATE OF MANUFACTURE			06-MAR-2018

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ



Certificate Of Analysis Results Certified by

Ibad Tirmizi
Director of Quality
Spectrum Chemical Mfg. Corp.

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.

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

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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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: QIQXTHQIDYTFRH-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.



CERTIFICATE OF ANALYSIS

Product Name ISOPROPYL ALCOHOL, 99%
Grade Meets ACS/USP/NF Monographs
Catalog # 231000099, zp231000099
Lot # C20F23007
Date of Manufacture: 06/23/20 **W2788 Received on 12/30/2020 by AP**
Recommended Retest Date: Five Years from Date of Manufacture

TEST	MONO GRAPH	SPECIFICATION	RESULT
Assay (corrected for water)	USP	99.0% min	99.92%
Assay (corrected for water)	ACS	99.5% min	
Solubility in water	ACS ⁺	To Pass Test	Pass
Appearance	ACS ⁺	Clear, colorless liquid	Pass
Color, APHA	ACS	10 max	1
Limit of Nonvolatile Residue	USP ⁺	NMT 2.5 mg (0.005%)	0.1 mg
Residue after Evaporation	ACS ⁺	0.001% max	< 0.001%
Specific Gravity	USP	0.783 - 0.787 @25°C	0.783
Identification A - Infrared Absorption	USP	To Pass Test	Pass
Identification B	USP	To Pass Test	Pass
Refractive Index @ 20°C	USP	1.376-1.378	1.377
Acidity	USP ⁺	NMT 0.70 ml of 0.020N NaOH is required	0.30 mL
Titration Acid or Base	ACS ⁺	0.0001 meq/g max	0.0001 meq/g
Carbonyl Compounds	ACS	Propionaldehyde 0.002% max	< 0.002%
		Acetone 0.002% max	None Detected
Limit of Volatile Impurities	USP	Diethyl Ether NMT 0.1%	< 0.1%
		Acetone NMT 0.1%	None Detected
		Diisopropyl Ether NMT 0.1%	< 0.1%
		n-Propyl Alcohol NMT 0.1%	< 0.1%
		2-Butanol NMT 0.1%	< 0.1%
		Total NMT 1.0%	< 0.1%
Water, wt%	ACS	NMT 0.2%	0.05%
Water Determination	USP	NMT 0.5%	

⁺This test is performed quarterly

Certification and Compliance Statements

This lot of Isopropyl Alcohol complies with all of the current requirements listed in the United States Pharmacopeia, American Chemical Society monographs and the National Formulary.

No chemicals whatsoever are used as solvents at any point in the manufacture, processing or packaging of Isopropyl Alcohol. Only Class 2 and Class 3 residual solvents may appear as impurities / related substances / low level contaminants in IPA. Concentration of Class 2 Option 1 and Class 3 residual solvents is below limits in the current USP/NF General Chapter <467>.

This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.

This product is for further commercial manufacturing, laboratory or research use, and may be used as an excipient or a process solvent for pharmaceutical purposes. It is not intended for use as an active ingredient in drug manufacturing nor as a medical device or disinfectant. Appropriate/legal use of this product is the responsibility of the user.

Approved by: D. Simoncelli, Quality Control Chemist

Date of Approval: 06/23/2020



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.



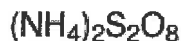
W 3035
rec. 6/6/23 12

Product Name:

Certificate of Analysis

Ammonium persulfate - ACS reagent, $\geq 98.0\%$

Product Number: 248614
Batch Number: MKCR9319
Brand: SIGALD
CAS Number: 7727-54-0
MDL Number: MFCD00003390
Formula Weight: 228.20 g/mol
Quality Release Date: 13 OCT 2022



Test	Specification	Result
Appearance (Color)	White to Off White	White
Appearance (Form)	Powder or Crystals or Granules or Chunks	Crystals
ICP Major Analysis	Confirmed	Confirmed
Confirms Sulfur Component		
Titration by KMNO ₄	$\geq 98.0 \%$	100.0 %
Residue on ignition (Ash)	$\leq 0.05 \%$	< 0.05 %
Insoluble Matter	$\leq 0.005 \%$	0.002 %
c = 10 %; In Water		
Chloride and Chlorate (as Cl)	$\leq 0.001 \%$	< 0.001 %
Iron (Fe)	$\leq 0.001 \%$	< 0.001 %
Heavy Metal	$\leq 0.005 \%$	< 0.001 %
as Lead		
Manganese (Mn)	$\leq 0.5 \text{ ppm}$	< 0.1 ppm
Titrateable Acid (meq/g)	≤ 0.04	< 0.04
Meets ACS Requirements	Current ACS Specification	Conforms


Larry Coers, Director
Quality Control
Milwaukee, WI US

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





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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:	MAY/23/2024
LOT NUMBER :	417203		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.8 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.2
Insoluble matter	Max. 0.01%	0.001 %
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%	0.001 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.001 %
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%	0.2 %
Retained on US Standard No. 60 sieve	Min. 94%	96.2 %
Through US Standard No. 60 sieve	Max. 5%	3.5 %
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.

RE-02-01, Ed. 3

E 3875

Acetone

BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

Avantor™



Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	<0.1 %
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: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 03/31/25

E3917

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials LLC

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

avantor™



M 6041-4b
MS

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

 **avantorsm**

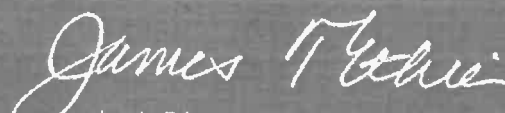


Material No.: 9673-33
Batch No.: 23D2462010

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™**



M6151

R → 11/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

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

>>> Continued on page 2 >>>

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

 **avantorsm**



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

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

>>> Continued on page 3 >>>

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



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

Test	Specification	Result
------	---------------	--------

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

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

A handwritten signature in cursive script that reads 'Jamie Ethier'.
Jamie Ethier
Vice President Global Quality

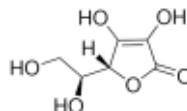
W3074 Rec. on 01/16/24 by IZ

Certificate of Analysis

Product Name:

L-Ascorbic acid - ACS reagent, ≥99%

Product Number: 255564
Batch Number: MKCS4627
Brand: SIAL
CAS Number: 50-81-7
MDL Number: MFCD00064328
Formula: C₆H₈O₆
Formula Weight: 176.12 g/mol
Quality Release Date: 21 NOV 2022
Recommended Retest Date: SEP 2025



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Conforms to Requirements	Powder
Powder, Crystals, Crystalline Powder, Granules and/or Chunks		
Infrared Spectrum	Conforms to Structure	Conforms
Optical Rotation (+); c = 10%; Water	20.5 - 21.5 deg	20.7 deg
Titration by Iodine	≥ 99.0 %	99.4 %
Residue on Ignition	≤ 0.10 %	0.03 %
Iron (Fe)	≤ 0.001 %	< 0.001 %
Heavy Metals by ICP-OES	≤ 0.002 %	0.001 %
Recommended Retest Period 3 Years	-----	-----
Meets ACS Requirements	Current ACS Specification	Conforms

Larry Coers, Director
Quality Control
Milwaukee, WI US

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



Certificate of analysis

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."

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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.

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.



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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Certificate of Analysis



Material	BDH9208-500G
Material Description	BDH AMMONIUM CHLORIDE ACS 500G
Grade	U S P REAGENT (ACS GRADE)
Batch	24L0356561
Reassay Date	08/31/2027
CAS Number	12125-02-9
Molecular Formula	NH ₄ Cl
Molecular Mass	53.49
Date of Manufacture	08/01/2024
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	White granular powder	White granular powder
Calcium	<= 0.001 %	0.001 %
Heavy Metals (as Pb)	<= 0.0005 %	<0.0002 %
Insolubles	<= 0.005 %	0.001 %
Iron	<= 0.0002 %	<0.0002 %
Magnesium	<= 0.0005 %	0.0001 %
pH (5%, Water) @25C	4.5 - 5.5	4.8
Phosphate	<= 0.0002 %	<0.0002 %
Purity	>= 99.5 %	99.8 %
Residue on Ignition	<= 0.01 %	0.003 %
Sulfate	<= 0.002 %	<0.002 %
Extra Description:	Meets Reagent Specifications for testing USP/NF monographs	

Internal ID #: 710

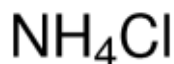
Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA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

W3196 Received on 03/19/2025 by IZ

Certificate of Analysis

Product Name:

Ammonium chloride - ACS reagent, ≥99.5%



Product Number: 213330
Batch Number: MKCV1009
Brand: SIGALD
CAS Number: 12125-02-9
MDL Number: MFCD00011420
Formula: H4ClN
Formula Weight: 53.49 g/mol
Quality Release Date: 23 OCT 2023
Recommended Retest Date: SEP 2026

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals or Chunk(s)	Crystals
Titration by AgNO ₃	≥ 99.5 %	100.2 %
pH	4.5 - 5.5	4.9
@ 25 Deg c (5% Solution)		
Insoluble Matter	≤ 0.005 %	0.001 %
10%, H ₂ O		
Residue on ignition (Ash)	≤ 0.01 %	< 0.01 %
Calcium (Ca)	≤ 0.001 %	< 0.001 %
Magnesium (Mg)	≤ 5 ppm	1 ppm
Heavy Metals	≤ 5 ppm	< 1 ppm
by ICP		
Iron (Fe)	≤ 2 ppm	< 1 ppm
Phosphate (PO ₄)	≤ 2 ppm	< 2 ppm
Sulfate (SO ₄)	≤ 0.002 %	< 0.002 %
Meets ACS Requirements	Current ACS Specification	Conforms
Recommended Retest Period	-----	-----
3 Years		



Larry Coers, Director

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

Product Number: 213330
Batch Number: MKCV1009

Quality Control
Milwaukee, WI US

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



W3198 Received on 4/11/2025 by IZ

3050 Spruce Street, Saint Louis, MO 63103, USA

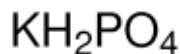
Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:

Potassium phosphate monobasic - ACS reagent, ≥99.0%

Product Number: P0662
Batch Number: MKCW6723
Brand: SIGALD
CAS Number: 7778-77-0
MDL Number: MFCD00011401
Formula: H₂KO₄P
Formula Weight: 136.09 g/mol
Quality Release Date: 16 OCT 2024
Recommended Retest Date: OCT 2028



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Crystals
Assay	≥ 99.0 %	99.8 %
Insoluble Matter	≤ 0.01 %	< 0.01 %
Loss on Drying	≤ 0.2 %	< 0.1 %
At 105°C		
pH	4.1 - 4.5	4.5
(c = 5%, 25 deg C)		
Chloride Content	≤ 0.001 %	< 0.001 %
Sulfate (SO ₄)	≤ 0.003 %	< 0.003 %
Heavy Metals	≤ 0.001 %	< 0.001 %
by ICP		
Iron (Fe)	≤ 0.002 %	< 0.001 %
Sodium (Na)	≤ 0.005 %	< 0.001 %
Recommended Retest Period	-----	-----
4 Years		



Larry Coers, Director
Quality Control
Milwaukee, WI US

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



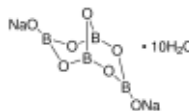
W3201 Received on 4/16/25 by IZ

Certificate of Analysis

Product Name:

Sodium tetraborate decahydrate - ACS reagent, ≥99.5%

Product Number: S9640
Batch Number: BCCL9613
Brand: SIGALD
CAS Number: 1303-96-4
Formula: B₄Na₂O₇ · 10H₂O
Formula Weight: 381,37 g/mol
Quality Release Date: 05 JUL 2024
Recommended Retest Date: MAY 2029



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Powder
Titration with NaOH	99.5 - 105.0 %	100.7 %
pH	9.15 - 9.20	9.20
0.01 m Solution at 25 Deg C		
Meets ACS Requirements	Corresponds to Requirements	Corresponds
ACS Specifications	Corresponds to Requirements	Corresponds
Insoluble Matter ≤ 0.005% / Heavy		
Metals (As Pb) ≤ 0.001%		
Calcium (Ca)	≤ 50 mg/kg	< 50 mg/kg
Iron (Fe)	≤ 5 mg/kg	< 5 mg/kg
Total Sulfur	≤ 50 mg/kg	< 50 mg/kg
as SO ₄ (ICP)		
Chloride (Cl)	≤ 10 mg/kg	< 10 mg/kg
Phosphate (PO ₄)	≤ 10 mg/kg	< 10 mg/kg

Dr. Reinhold Schwenninger
Quality Assurance
Buchs, Switzerland CH

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.



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

avantor™



W3204
084K: 09/22/2025
38

Material No.: 9262-03
Batch No.: 25C0362005
Manufactured Date: 2025-01-29
Expiration Date: 2026-04-30
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	≤ 5	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	100 %
Color (APHA)	≤ 10	10
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	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: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

J. Croak

Jamie Croak
Director Quality Operations, Bioscience Production

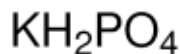
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Certificate of Analysis

Product Name:

Potassium phosphate monobasic - ACS reagent, ≥99.0%

Product Number: P0662
Batch Number: MKCX1379
Brand: SIGALD
CAS Number: 7778-77-0
MDL Number: MFCD00011401
Formula: H₂KO₄P
Formula Weight: 136.09 g/mol
Quality Release Date: 27 JAN 2025
Recommended Retest Date: JAN 2029



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Crystals
Assay	≥ 99.0 %	99.9 %
Insoluble Matter	≤ 0.01 %	< 0.01 %
Loss on Drying	≤ 0.2 %	< 0.1 %
At 105°C		
pH	4.1 - 4.5	4.5
(c = 5%, 25 deg C)		
Chloride Content	≤ 0.001 %	< 0.001 %
Sulfate (SO ₄)	≤ 0.003 %	< 0.003 %
Heavy Metals	≤ 0.001 %	< 0.001 %
by ICP		
Iron (Fe)	≤ 0.002 %	< 0.001 %
Sodium (Na)	≤ 0.005 %	< 0.001 %
Recommended Retest Period	-----	-----
4 Years		



Larry Coers, Director
Quality Control
Milwaukee, WI US

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



Certificate of Analysis

Sodium Hypochlorite Solution, 5% available Chlorine

Lot Number: 2506M51**Product Number:** 7495.5**Manufacture Date:** JUN 18, 2025**Expiration Date:** DEC 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

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

Jose Pena (06/18/2025)
Operations Manager

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



An ISO 9001 Certified Company

P.O. Box 389
Loveland, CO 80539
(970) 669-3050

Certificate of Analysis

This is a Component of 1486266 / LOT A5105

PRODUCT: BOD Nutrient Buffer Pillows

PRODUCT NUMBER: 1486227

LOT NUMBER: A5105

MANUFACTURE DATE: 05/13/2025

DATE OF ANALYSIS: 05/27/2025

TEST	SPECIFICATIONS	RESULTS
Ammonia Concentration of a diluted pillow	0.57 to 0.79 ppm	0.570
Calcium Concentration of a diluted pillow	0.93 to 1.29 ppm	0.980
Iron Concentration of a diluted pillow	0.27 to 0.36 ppm	0.283
Magnesium Concentration of a diluted pillow	0.35 to 0.48 ppm	0.360
Phosphorus Concentration of a diluted pillow	7.6 to 10.3 ppm	8.11
pH in a 6 L of DI water	7.1 to 7.6 ph	7.31
Five Day Change in Dissolved Oxygen Concentration	-0.2 to 0.2 ppm	0.03
Sterility	To Pass	Passed

The expiration date is May 2030

Certified by: *Scott Als*

Analytical Services Chemist



SHIPPING DOCUMENTS

CLIENT INFORMATION

COMPANY: **Holland Mfg Co**
ADDRESS: **15 Main St**
CITY: **Succasunna** STATE: **NJ** ZIP: **07846**
ATTENTION:
PHONE:
FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: **HMC PRETREATMENT**
PROJECT NO.:
LOCATION:
PROJECT MANAGER: **Tom Holland**
e-mail:
PHONE:
FAX:

CLIENT BILLING INFORMATION

BILL TO: PO#:
ADDRESS:
CITY STATE ZIP:
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: 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)
☐ EDD FORMAT
Other

PRESERVATIVES

1: **BBS**
2: **TSS**
3: **PO4**
4: **TOMAP**
5: **AMT**
6: **NH2**
7:
8:
9:

COMMENTS

Specify Preservatives
A-HCl
D-NaOH
E-ICE
F-OTHER
C-H2SO4

ALLIANCE
SAMPLE
ID

PROJECT
SAMPLE IDENTIFICATION

SAMPLE MATRIX
SAMPLE TYPE
COMP
GRAB
DATE
TIME
OF BOTTLES

1. **effluent**
2. **precipitation**
3. **TUFLUVA**
4.
5.
6.
7.
8.
9.

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

RELINQUISHED BY SAMPLER: **[Signature]**
DATE/TIME: **9/4 12:00**
RECEIVED BY: **[Signature]**
DATE/TIME: **9/4 12:00**
RELINQUISHED BY SAMPLER:
DATE/TIME:
RECEIVED BY:

RELINQUISHED BY SAMPLER:
DATE/TIME:
RECEIVED BY:
DATE/TIME:

RELINQUISHED BY SAMPLER:
DATE/TIME:
RECEIVED BY:
DATE/TIME:

Page _____ of _____

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete
☐ YES ☐ NO

Laboratory Certification

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