

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:	Q2058	OrderDate:	5/15/2025 3:20:00 PM
Client:	Holland Manufacturing Co.	Project:	Pre Treatment Plant 2025
Contact:	Todd Holland	Location:	L41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2058-01	EFFLUENT	WATER			05/15/25 11:30			05/15/25
			Ammonia	SM4500-NH3		05/19/25	05/19/25 12:39	
			BOD5	SM5210 B			05/16/25 16:40	
			Oil and Grease	1664A			05/20/25 10:00	
			Phosphorus-Ortho	SM4500-P E			05/16/25 14:06	
			Phosphorus-Total	365.3		05/16/25	05/16/25 14:56	
			TSS	SM2540 D			05/16/25 11:25	
Q2058-01DL	EFFLUENTDL	WATER			05/15/25 11:30			05/15/25
			Ammonia	SM4500-NH3		05/19/25	05/19/25 13:38	
Q2058-04	AERATION-TK1	WATER			05/15/25 11:30			05/15/25
			TSS	SM2540 D			05/16/25 11:25	
Q2058-05	INFLUENT	WATER			05/15/25 11:30			05/15/25
			Ammonia	SM4500-NH3		05/19/25	05/19/25 12:39	
			BOD5	SM5210 B			05/16/25 16:40	

LAB CHRONICLE

Q2058-05DL

INFLUENTDL

WATER

**05/15/25
11:30**

05/15/25

Ammonia

SM4500-NH3

05/19/25

05/19/25
13:38



SAMPLE DATA

Report of Analysis

Client:	Holland Manufacturing Co.	Date Collected:	05/15/25 11:30
Project:	Pre Treatment Plant 2025	Date Received:	05/15/25
Client Sample ID:	EFFLUENT	SDG No.:	Q2058
Lab Sample ID:	Q2058-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	364	OR	1	1.50	5.00	mg/L	05/19/25 09:00	05/19/25 12:39	SM 4500-NH3 B plus G-11
BOD5	4930		1	0.20	2.00	mg/L		05/16/25 16:40	SM 5210 B-16
Oil and Grease	91.1		1	0.29	5.00	mg/L		05/20/25 10:00	1664A
Orthophosphate as P	0.21		1	0.0040	0.050	mg/L		05/16/25 14:06	SM 4500-P E-11
Phosphorus, Total	0.54		1	0.0050	0.050	mg/L	05/16/25 11:05	05/16/25 14:56	365.3
TSS	1980		1	1.00	4.00	mg/L		05/16/25 11:25	SM 2540 D-15

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N = Spiked sample recovery not within control limits

Report of Analysis

Client:	Holland Manufacturing Co.	Date Collected:	05/15/25 11:30
Project:	Pre Treatment Plant 2025	Date Received:	05/15/25
Client Sample ID:	EFFLUENTDL	SDG No.:	Q2058
Lab Sample ID:	Q2058-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	361	D	10	15.0	50.0	mg/L	05/19/25 09:00	05/19/25 13:38	SM 4500-NH3 B plus G-11

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:	05/15/25 11:30
Project:	Pre Treatment Plant 2025	Date Received:	05/15/25
Client Sample ID:	AERATION-TK1	SDG No.:	Q2058
Lab Sample ID:	Q2058-04	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TSS	1610		1	1.00	4.00	mg/L		05/16/25 11:25	SM 2540 D-15

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Holland Manufacturing Co.	Date Collected:	05/15/25 11:30
Project:	Pre Treatment Plant 2025	Date Received:	05/15/25
Client Sample ID:	INFLUENT	SDG No.:	Q2058
Lab Sample ID:	Q2058-05	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	209	OR	1	1.50	5.00	mg/L	05/19/25 09:00	05/19/25 12:39	SM 4500-NH3 B plus G-11
BOD5	8570		1	0.20	2.00	mg/L		05/16/25 16:40	SM 5210 B-16

Comments: _____

U = Not Detected
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:	05/15/25 11:30
Project:	Pre Treatment Plant 2025	Date Received:	05/15/25
Client Sample ID:	INFLUENTDL	SDG No.:	Q2058
Lab Sample ID:	Q2058-05DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	203	D	5	7.50	25.0	mg/L	05/19/25 09:00	05/19/25 13:38	SM 4500-NH3 B plus G-11

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits



QC RESULT SUMMARY

Initial and Continuing Calibration Verification

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

RunNo.: LB135805

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Orthophosphate as P	mg/L	0.491	0.50	98	90-110	05/16/2025
Sample ID: CCV1 Orthophosphate as P	mg/L	0.504	0.5	101	90-110	05/16/2025
Sample ID: CCV2 Orthophosphate as P	mg/L	0.504	0.5	101	90-110	05/16/2025

Initial and Continuing Calibration Verification

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

RunNo.: LB135808

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Phosphorus, Total	mg/L	0.506	0.50	101	90-110	05/16/2025
Sample ID: CCV1 Phosphorus, Total	mg/L	0.495	0.50	99	90-110	05/16/2025
Sample ID: CCV2 Phosphorus, Total	mg/L	0.500	0.50	100	90-110	05/16/2025

Initial and Continuing Calibration Verification

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

RunNo.: LB135824

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Ammonia as N	mg/L	1	1	100	90-110	05/19/2025
Sample ID: CCV1 Ammonia as N	mg/L	0.99	1	99	90-110	05/19/2025
Sample ID: CCV2 Ammonia as N	mg/L	1	1	100	90-110	05/19/2025
Sample ID: CCV3 Ammonia as N	mg/L	1	1	100	90-110	05/19/2025
Sample ID: CCV4 Ammonia as N	mg/L	1	1	100	90-110	05/19/2025

Initial and Continuing Calibration Verification

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

RunNo.: LB135824

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
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Initial and Continuing Calibration Blank Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

RunNo.: LB135805

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	05/16/2025
Sample ID: CCB1 Orthophosphate as P	mg/L	0.006	0.0250	J	0.0038	0.05	05/16/2025
Sample ID: CCB2 Orthophosphate as P	mg/L	0.008	0.0250	J	0.0038	0.05	05/16/2025

Initial and Continuing Calibration Blank Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

RunNo.: LB135808

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Phosphorus, Total	mg/L	0.007	0.0250	J	0.0045	0.05	05/16/2025
Sample ID: CCB1 Phosphorus, Total	mg/L	0.005	0.0250	J	0.0045	0.05	05/16/2025
Sample ID: CCB2 Phosphorus, Total	mg/L	0.008	0.0250	J	0.0045	0.05	05/16/2025

Initial and Continuing Calibration Blank Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

RunNo.: LB135824

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	05/19/2025
Sample ID: CCB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	05/19/2025
Sample ID: CCB2 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	05/19/2025
Sample ID: CCB3 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	05/19/2025
Sample ID: CCB4 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	05/19/2025

Initial and Continuing Calibration Blank Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

RunNo.: LB135824

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
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Preparation Blank Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB135797BL TSS	mg/L	1	2.0000	J	1	4	05/16/2025
Sample ID: LB135805BL Orthophosphate as P	mg/L	0.008	0.0250	J	0.004	0.05	05/16/2025
Sample ID: LB135810BL BOD5	mg/L	< 0.2000	0.2000	U	0.20	2.0	05/16/2025
Sample ID: LB135833BL Oil and Grease	mg/L	< 2.5000	2.5000	U	0.29	5.0	05/20/2025
Sample ID: PB168047BL Phosphorus, Total	mg/L	0.008	0.0250	J	0.005	0.05	05/16/2025
Sample ID: PB168056BL Ammonia as N	mg/L	< 0.0500	0.0500	U	0.03	0.1	05/19/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q2058
Project:	Pre Treatment Plant 2025	Sample ID:	Q2058-01
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
Phosphorus, Total	mg/L	90-110	0.99		0.54		0.5	1	91		05/16/2025
Orthophosphate as P	mg/L	90-110	0.69		0.21		0.5	1	97		05/16/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q2058
Project:	Pre Treatment Plant 2025	Sample ID:	Q2058-01
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
Phosphorus, Total	mg/L	90-110	1.00		0.54		0.5	1	92		05/16/2025
Orthophosphate as P	mg/L	90-110	0.69		0.21		0.5	1	96		05/16/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q2058
Project:	Pre Treatment Plant 2025	Sample ID:	Q2058-01
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
Oil and Grease	mg/L	78-114	111		91.1		20.0	1	102		05/20/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q2058
Project:	Pre Treatment Plant 2025	Sample ID:	Q2058-01
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
Oil and Grease	mg/L	78-114	111		91.1		20.0	1	102		05/20/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q2058
Project:	Pre Treatment Plant 2025	Sample ID:	Q2067-01
Client ID:	303-PPR-FRACMS	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	1.10		0.095	J	1	1	101		05/19/2025

Matrix Spike Summary

Client:	Holland Manufacturing Co.	SDG No.:	Q2058
Project:	Pre Treatment Plant 2025	Sample ID:	Q2067-01
Client ID:	303-PPR-FRACMSD	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	1.10		0.095	J	1	1	101		05/19/2025

Duplicate Sample Summary

Client: Holland Manufacturing Co.	SDG No.: Q2058
Project: Pre Treatment Plant 2025	Sample ID: Q2031-05
Client ID: DSN003DUP	Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
TSS	mg/L	+/-5	5.80		5.90		1	1.71		05/16/2025

Duplicate Sample Summary

Client: Holland Manufacturing Co.	SDG No.: Q2058
Project: Pre Treatment Plant 2025	Sample ID: Q2058-01
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	0.21		0.20		1	1.46		05/16/2025
Phosphorus, Total	mg/L	+/-20	0.54		0.54		1	1.11		05/16/2025

Duplicate Sample Summary

Client: Holland Manufacturing Co.	SDG No.: Q2058
Project: Pre Treatment Plant 2025	Sample ID: Q2058-01
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	0.69		0.69		1	0.58		05/16/2025
Phosphorus, Total	mg/L	+/-20	0.99		1.00		1	0.9		05/16/2025

Duplicate Sample Summary

Client: Holland Manufacturing Co.	SDG No.: Q2058
Project: Pre Treatment Plant 2025	Sample ID: Q2058-01
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
Oil and Grease	mg/L	+/-18	111		111		1	0		05/20/2025

Duplicate Sample Summary

Client: Holland Manufacturing Co.	SDG No.: Q2058
Project: Pre Treatment Plant 2025	Sample ID: Q2058-05
Client ID: INFLUENTDUP	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	8570		8810		1	2.79		05/16/2025

Duplicate Sample Summary

Client: Holland Manufacturing Co.	SDG No.: Q2058
Project: Pre Treatment Plant 2025	Sample ID: Q2067-01
Client ID: 303-PPR-FRACDUP	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	0.095	J	0.093	J	1	2		05/19/2025

Duplicate Sample Summary

Client: Holland Manufacturing Co.	SDG No.: Q2058
Project: Pre Treatment Plant 2025	Sample ID: Q2067-01
Client ID: 303-PPR-FRACMSD	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	1.10		1.10		1	0		05/19/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

Run No.: LB135797

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135797BS							
TSS	mg/L	550	532		97	1	90-110	05/16/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

Run No.: LB135805

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135805BS							
Orthophosphate as P	mg/L	0.5	0.49		99	1	90-110	05/16/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

Run No.: LB135810

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135810BS							
BOD5	mg/L	198	189		96	1	84.6-115.4	05/16/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

Run No.: LB135833

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135833BS							
Oil and Grease	mg/L	20.0	16.7		84	1	78-114	05/20/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

Run No.: LB135808

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB168047BS							
Phosphorus, Total	mg/L	0.50	0.50		100	1	90-110	05/16/2025

Laboratory Control Sample Summary

Client: Holland Manufacturing Co.

SDG No.: Q2058

Project: Pre Treatment Plant 2025

Run No.: LB135824

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB168056BS							
Ammonia as N	mg/L	1	1.00		100	1	90-110	05/19/2025



RAW DATA

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 05/15/2025

Run Number: LB135797

BalanceID: WC SC-6

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 05/15/2025 15:00 **TEMP1 OUT:** 104 °C 05/15/2025 16:00
TEMP2 IN: 103 °C 05/15/2025 16:30 **TEMP2 OUT:** 104 °C 05/15/2025 17:30
TEMP3 IN: 104 °C 05/16/2025 11:25 **TEMP3 OUT:** 103 °C 05/16/2025 12:30
TEMP4 IN: 104 °C 05/16/2025 13:00 **TEMP4 OUT:** 103 °C 05/16/2025 14:35

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	LB135797BL	LB135797BL	1.5693	1.5693	100	1.5694	1.5694	1.5694	0.0001	1
2	LB135797BS	LB135797BS	1.6033	1.6033	100	1.6565	1.6565	1.6565	0.0532	532
3	Q2026-01	001-WILLETTS-PT-BLVD (MAY)	1.4869	1.4869	100	1.5037	1.5037	1.5037	0.0168	168
4	Q2026-02	002-35TH-AVE (MAY)	1.4877	1.4877	100	1.5075	1.5075	1.5075	0.0198	198
5	Q2029-01	TOWER-1	1.4731	1.4731	1000	1.4834	1.4834	1.4834	0.0103	10.3
6	Q2029-02	TOWER-2	1.4875	1.4875	200	1.4926	1.4926	1.4926	0.0051	25.5
7	Q2030-01	402-PSD	1.4505	1.4505	1000	1.4525	1.4525	1.4525	0.0020	2
8	Q2030-02	AHW-PSD	1.4819	1.4819	1000	1.4846	1.4846	1.4846	0.0027	2.7
9	Q2031-01	DSN002	1.4864	1.4864	1000	1.5009	1.5009	1.5009	0.0145	14.5
10	Q2031-03	DSN001	1.3654	1.3654	2000	1.3932	1.3932	1.3932	0.0278	13.9
11	Q2031-05	DSN003	1.4860	1.4860	1500	1.4947	1.4947	1.4947	0.0087	5.8
12	Q2031-05DUP	DSN003DUP	1.4656	1.4656	1500	1.4744	1.4744	1.4744	0.0088	5.9
13	Q2033-01	TW-WTS-08	1.4965	1.4965	500	1.4974	1.4974	1.4974	0.0009	1.8
14	Q2036-02	COMP	1.4992	1.4992	100	1.5178	1.5178	1.5178	0.0186	186
15	Q2058-01	EFFLUENT	1.4747	1.4747	30	1.5341	1.5341	1.5341	0.0594	1980

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 05/15/2025

Run Number: LB135797

BalanceID: WC SC-6

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 05/15/2025 15:00 **TEMP1 OUT:** 104 °C 05/15/2025 16:00
TEMP2 IN: 103 °C 05/15/2025 16:30 **TEMP2 OUT:** 104 °C 05/15/2025 17:30
TEMP3 IN: 104 °C 05/16/2025 11:25 **TEMP3 OUT:** 103 °C 05/16/2025 12:30
TEMP4 IN: 104 °C 05/16/2025 13:00 **TEMP4 OUT:** 103 °C 05/16/2025 14:35

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
16	Q2058-04	AERATION-TK1	1.4829	1.4829	30	1.5311	1.5311	1.5311	0.0482	1606.7

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)

835897

WorkList Name : TSS Q2058

WorkList ID : 189556

Department : Wet-Chemistry

Date : 05-16-2025 09:18:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2026-01	B 001-WILLETS-PT-BLVD(MAY)	Water	TSS	Cool 4 deg C	TULL01	L41	05/12/2025	SM2540 D
Q2026-02	B 002-35TH-AVE(MAY)	Water	TSS	Cool 4 deg C	TULL01	L41	05/12/2025	SM2540 D
Q2029-01	B TOWER-1	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2029-02	B TOWER-2	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2030-01	A 402-PSD	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2030-02	A AHW-PSD	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2031-01	A DSN002	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2031-03	DE DSN001	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2031-05	DSN003 A,D,E,	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2033-01	E TW-WTS-08	Water	TSS	Cool 4 deg C	PSEG04	L41	05/13/2025	SM2540 D
Q2036-02	A COMP	Water	TSS	Cool 4 deg C	ENTA05	L41	05/12/2025	SM2540 D
Q2058-01	D EFFLUENT	Water	TSS	Cool 4 deg C	ARAM01	L41	05/14/2025	SM2540 D
Q2058-04	AERATION-TK1	Water	TSS	Cool 4 deg C	HOLL01	L41	05/15/2025	SM2540 D
					HOLL01	L41	05/15/2025	SM2540 D

Date/Time 05-16-25 09:25
 Raw Sample Received by: 88 WOC
 Raw Sample Relinquished by: JTCsm

Date/Time 05-16-25 15:30
 Raw Sample Received by: JTCsm
 Raw Sample Relinquished by: 88 WOC

Analytical Summary Report

Analysis Method: SM4500-P E

ANALYST: Iwona

Parameter: Phosphorus-Ortho

SUPERVISOR REVIEW BY: jignesh

Run Number: LB135805

Reagent/Standard	Lot/Log #
calibration std. phosphate 1 ppm	WP113108
calibration std. phosphate 0.5 ppm	WP113107
calibration std. phosphate 0.3 ppm	WP113106
calibration std. phosphate 0.1 ppm	WP113105
calibration std. phosphate 0.05 ppm	WP113104
calibration std. 0 ppm	WP113103
phosphate CCV std.	WP113109
5N sulfuric acid	WP112831
Combined reagent	WP113114
Phenolphthalein indicator	WP111415
Sodium hydroxide, 1N	WP111323
Phosphate ICV-LCS Std	WP113110

Intercept: -0.0041

Slope: 0.6566

Regression: 0.999789

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	0.006		05/16/2025	14:00
2	CAL2	0.05	1	50	50	0.031	0.053	6	05/16/2025	14:00
3	CAL3	0.10	1	50	50	0.059	0.096	-4	05/16/2025	14:01
4	CAL4	0.30	1	50	50	0.184	0.286	-4.7	05/16/2025	14:01
5	CAL5	0.50	1	50	50	0.329	0.507	1.4	05/16/2025	14:02
6	CAL6	1.00	1	50	50	0.653	1.001	0.1	05/16/2025	14:02

Analysis Method: SM4500-P E

ANALYST: Iwona

Parameter: Phosphorus-Ortho

SUPERVISOR REVIEW BY: jignesh

Run Number: LB135805

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	0.318	0.491	05/16/2025	14:03
2	ICB		1	50	50	0.001	0.008	05/16/2025	14:03
3	CCV1	0.5	1	50	50	0.327	0.504	05/16/2025	14:04
4	CCB1		1	50	50	0.000	0.006	05/16/2025	14:04
5	RL Check	0.05	1	50	50	0.031	0.053	05/16/2025	14:05
6	LB135805BL		1	50	50	0.001	0.008	05/16/2025	14:05
7	LB135805BS	0.5	1	50	50	0.320	0.494	05/16/2025	14:06
8	Q2058-01		1	50	50	0.132	0.207	05/16/2025	14:06
9	Q2058-01DUP		1	50	50	0.130	0.204	05/16/2025	14:07
10	Q2058-01MS	0.5	1	50	50	0.451	0.693	05/16/2025	14:07
11	Q2058-01MSD	0.5	1	50	50	0.448	0.689	05/16/2025	14:08
12	CCV2	0.5	1	50	50	0.327	0.504	05/16/2025	14:08
13	CCB2		1	50	50	0.001	0.008	05/16/2025	14:09

Analytical Summary Report

Analysis Method: 365.3
Parameter: Phosphorus-Total
Run Number: LB135808

ANALYST: Iwona
SUPERVISOR REVIEW BY: jignesh

Reagent/Standard	Lot/Log #
calibration std. phosphate 1 ppm	WP113108
calibration std. phosphate 0.5 ppm	WP113107
calibration std. phosphate 0.3 ppm	WP113106
calibration std. phosphate 0.1 ppm	WP113105
calibration std. phosphate 0.05 ppm	WP113104
calibration std. 0 ppm	WP113103
phosphate CCV std.	WP113109
5N sulfuric acid	WP112831
Combined reagent	WP113114
Phenolphthalein indicator	WP111415
Sodium hydroxide, 1N	WP111323
Phosphate ICV-LCS Std	WP113110

Intercept: -0.0023 Slope: 0.6491 Regression: 0.99974

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		05/16/2025	14:50
2	CAL2	0.05	1	50	50	0.033	0.054	8	05/16/2025	14:50
3	CAL3	0.10	1	50	50	0.065	0.104	4	05/16/2025	14:51
4	CAL4	0.30	1	50	50	0.181	0.282	-6	05/16/2025	14:51
5	CAL5	0.50	1	50	50	0.324	0.503	0.6	05/16/2025	14:52
6	CAL6	1.00	1	50	50	0.649	1.003	0.3	05/16/2025	14:52

Analysis Method: 365.3

ANALYST: Iwona

Parameter: Phosphorus-Total

SUPERVISOR REVIEW BY: jignesh

Run Number: LB135808

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	0.326	0.506	05/16/2025	14:53
2	ICB		1	50	50	0.002	0.007	05/16/2025	14:53
3	CCV1	0.50	1	50	50	0.319	0.495	05/16/2025	14:54
4	CCB1		1	50	50	0.001	0.005	05/16/2025	14:54
5	RL Check	0.05	1	50	50	0.031	0.051	05/16/2025	14:55
6	PB168047BL		1	50	50	0.003	0.008	05/16/2025	14:55
7	PB168047BS	0.50	1	50	50	0.321	0.498	05/16/2025	14:56
8	Q2058-01		1	50	50	0.347	0.538	05/16/2025	14:56
9	Q2058-01DUP		1	50	50	0.351	0.544	05/16/2025	14:57
10	Q2058-01MS	0.50	1	50	50	0.641	0.991	05/16/2025	14:57
11	Q2058-01MSD	0.50	1	50	50	0.649	1.003	05/16/2025	14:58
12	CCV2	0.50	1	50	50	0.322	0.500	05/16/2025	14:58
13	CCB2		1	50	50	0.003	0.008	05/16/2025	14:59

BOD5 LOG

ANALYST: rubin
Inst Id :DO METER
LB :LB135810

Reviewed By:Iwona
On:5/21/2025 2:00:18
PM

SUPERVISOR: Iwona

QC BATCH ID: LB135810

Analysis Date: 05/16/2025

BOD Water: WP113088

MANGANOUS SULFATE SOLUTION: W3103

Starch: W3149

Alkaline Iodide Azide: W3109

Sulfuric acid, 1N: WP112832

Sodium Thiosulfate, 0.025N: W3105

POLYSEED: WP113090

NaOH, 1N: WP111323

GGA: WP113089

IncubatorID: INCUBATOR #3

Chlorine Strips: W3155

GuageID: 0511064

pH Strips: W3140

Zero DO: WP112724

Lab SampleID	Client ID	Bottle No.	VOL. ML	Initial Reading (ML)	Final Reading (ML)	Difference	Average
WINKLER 1	WINKLER 1	1	300	0.0	9.7	9.7	9.7
WINKLER 2	WINKLER 2	2	300	9.9	19.6	9.7	9.7

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: 9.79

After Incubation

Meter Calibration2: 8.97

Zero DO Reading2: 0.12 mg/L (<=0.2 Criteria)

Barometric Pressure2: 760 mmHg

QC BATCH ID: LB135810

INCUBATOR TEMP IN(C): 20.1

INCUBATOR TEMP OUT(C): 19.9

TIME IN: 16:40

TIME OUT: 12:00

DATE IN: 05/16/2025

DATE OUT: 05/21/2025

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
LB135810BL	1	No	6.62	N/A	20.90	300	9.79	9.78	0.01	0.01	0.01	
POLYSEED	1					10	9.72	6.02	3.7	0.74	0.71	
POLYSEED	2					15	9.70	4.20	5.5	0.73		
POLYSEED	3					20	9.67	3.09	6.58	0.66		
GGA	1					6	9.74	5.39	4.35	182	189.17	
GGA	2					6	9.71	5.28	4.43	186		
GGA	3					6	9.74	5.04	4.7	199.5		
Q2058-01	1	No	7.49	N/A	20.40	1	9.72	8.70	-	0	4926	
Q2058-01	2					5	9.69	8.23	-	0		
Q2058-01	3					10	9.67	6.72	2.95	6720		
Q2058-01	4					50	9.65	3.72	5.93	3132		
Q2058-01	5					100	9.26	0.17	-	0		
Q2058-05	1	No	4.40	6.89	20.50	1	9.76	8.55	-	0	8566	pH Adjuster
Q2058-05	2					5	9.74	6.89	2.85	12840		
Q2058-05	3					10	9.72	6.05	3.67	8880		
Q2058-05	4					50	9.65	2.31	7.34	3978		
Q2058-05	5					100	9.32	0.19	-	0		
Q2058-05DUP	1	No	4.40	6.86	20.50	1	9.76	8.49	-	0	8808	pH Adjuster
Q2058-05DUP	2					5	9.73	6.84	2.89	13080		
Q2058-05DUP	3					10	9.70	5.90	3.8	9270		
Q2058-05DUP	4					50	9.63	2.13	7.5	4074		
Q2058-05DUP	5					100	9.32	0.18	-	0		
Q2065-01	1	No	7.00	N/A	20.70	5	9.74	1.93	7.81	426	426	
Q2065-01	2					20	9.50	0.20	-	0		
Q2065-01	3					50	9.24	0.17	-	0		
Q2065-01	4					150	5.89	0.10	-	0		
Q2067-01	1	No	7.02	N/A	20.70	5	9.67	7.86	-	0	30.78	
Q2067-01	2					20	9.33	6.28	3.05	35.1		
Q2067-01	3					50	8.68	3.56	5.12	26.46		
Q2067-01	4					150	7.95	0.14	-	0		
Q2068-03	1	No	4.91	7.09	20.90	5	9.53	1.1	8.43	463.2	463.2	pH Adjuster
Q2068-03	2					20	9.23	0.16	-	0		
Q2068-03	3					50	8.61	0.15	-	0		
Q2068-03	4					150	7.18	0.13	-	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)

LB135810

WorkList Name : BOD5-5-16

WorkList ID : 189584

Department : Wet-Chemistry

Date : 05-16-2025 15:55:56

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2068-03	LAW-25-0074	Water	BOD5	Cool 4 deg C	PSEG03	L31	05/16/2025	SM5210 B

Date/Time 05/16/2025 16.05
 Raw Sample Received by: RM cwy
 Raw Sample Relinquished by: JPLC2025

Date/Time 05/16/2025 16.58
 Raw Sample Received by: JPLC2025
 Raw Sample Relinquished by: RM cwy

WORKLIST(Hardcopy Internal Chain)

66135810

WorkList Name : bod5-05-16 WorkList ID : 189577 Department : Wet-Chemistry Date : 05-16-2025 13:40:28

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2058-01	EFFLUENT	Water	BOD5	Cool 4 deg C	HOLL01	L41	05/15/2025	SM5210 B
Q2058-05	INFLUENT	Water	BOD5	Cool 4 deg C	HOLL01	L41	05/15/2025	SM5210 B
Q2065-01	VAC TRUCK-728068	Water	BOD5	Cool 4 deg C	PSEG03	L41	05/16/2025	SM5210 B
Q2067-01	303-PPR-FRAC	Water	BOD5	Cool 4 deg C	PSEG03	L41	05/16/2025	SM5210 B

Date/Time 05/16/2025 14:30
 Raw Sample Received by: RM WB
 Raw Sample Relinquished by: JPL0209

Date/Time 05/16/2025 16:56
 Raw Sample Received by: JPL0209
 Raw Sample Relinquished by: RM WB

LB13582

Test results

Aquakem 7.2AQ1

Page:

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092Reviewed by : RM

Instrument ID : Konelab

5/19/2025 13:39

Test: Ammonia-N

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	1.030	0.0	0.220	
ICB1	0.014	0.0	0.022	
CCV1	0.992	0.0	0.213	
CCB1	0.013	0.0	0.022	
RL CHECK	0.098	0.0	0.038	
PB168056BL	0.022	0.0	0.023	
PB168056BS	1.019	0.0	0.218	
Q2058-01	7.274	0.0	1.441	Test limit high
Q2058-05	4.177	0.0	0.835	Test limit high
Q2065-01	0.031	0.0	0.025	
Q2067-01	0.095	0.0	0.038	
Q2067-01DUP	0.093	0.0	0.037	
Q2067-01MS	1.108	0.0	0.235	
Q2067-01MSD	1.114	0.0	0.237	
CCV2	1.017	0.0	0.218	
CCB2	0.020	0.0	0.023	
Q2068-03	2.567	0.0	0.521	Test limit high
CCV3	1.041	0.0	0.222	
CCB3	0.020	0.0	0.023	
Q2058-01DLX10	0.721	0.0	0.160	
Q2058-05DLX5	0.813	0.0	0.178	
Q2068-03DLX2	1.646	0.0	0.341	
CCV4	1.041	0.0	0.222	
CCB4	0.012	0.0	0.021	

98% (50-150) 05/19/2025
RMN 24
Mean 1.082
SD 1.6352
CV% 151.07

Aquakem v. 7.2AQ1

Results from time period:

Mon May 19 11:23:19 2025

Mon May 19 13:38:28 2025

Sample Id	Sam/Ctr/c	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	Ammonia-1 P		0.0107	mg/l	5/19/2025 11:23:19	
0.1PPM	A	Ammonia-1 P		0.114	mg/l	5/19/2025 11:23:20	
0.2PPM	A	Ammonia-1 P		0.1953	mg/l	5/19/2025 11:23:21	
0.4PPM	A	Ammonia-1 P		0.3831	mg/l	5/19/2025 11:23:22	
1.0PPM	A	Ammonia-1 P		0.9943	mg/l	5/19/2025 11:23:23	
1.3PPM	A	Ammonia-1 P		1.3232	mg/l	5/19/2025 11:23:24	
2.0PPM	A	Ammonia-1 P		2.0128	mg/l	5/19/2025 11:23:25	
ICV1	S	Ammonia-1 P		1.0303	mg/l	5/19/2025 12:28:22	
ICB1	S	Ammonia-1 P		0.0143	mg/l	5/19/2025 12:28:24	
CCV1	S	Ammonia-1 P		0.992	mg/l	5/19/2025 12:28:26	
CCB1	S	Ammonia-1 P		0.0134	mg/l	5/19/2025 12:28:28	
RL CHECK	S	Ammonia-1 P		0.0982	mg/l	5/19/2025 12:28:29	
PB168056BL	S	Ammonia-1 P		0.0218	mg/l	5/19/2025 12:39:05	
PB168056BS	S	Ammonia-1 P		1.0194	mg/l	5/19/2025 12:39:07	
Q2058-01	S	Ammonia-1 P		7.2739	mg/l	5/19/2025 12:39:09	
Q2058-05	S	Ammonia-1 P		4.1768	mg/l	5/19/2025 12:39:10	
Q2065-01	S	Ammonia-1 P		0.0306	mg/l	5/19/2025 12:39:11	
Q2067-01	S	Ammonia-1 P		0.0951	mg/l	5/19/2025 12:39:14	
Q2067-01DUP	S	Ammonia-1 P		0.0926	mg/l	5/19/2025 12:39:15	
Q2067-01MS	S	Ammonia-1 P		1.1078	mg/l	5/19/2025 12:49:47	
Q2067-01MSD	S	Ammonia-1 P		1.1137	mg/l	5/19/2025 12:49:48	
CCV2	S	Ammonia-1 P		1.0167	mg/l	5/19/2025 12:49:52	
CCB2	S	Ammonia-1 P		0.0195	mg/l	5/19/2025 12:49:54	
Q2068-03	S	Ammonia-1 P		2.5666	mg/l	5/19/2025 12:49:55	
CCV3	S	Ammonia-1 P		1.0413	mg/l	5/19/2025 12:49:58	
CCB3	S	Ammonia-1 P		0.0204	mg/l	5/19/2025 12:54:41	
Q2058-01DLX10	S	Ammonia-1 P		0.7214	mg/l	5/19/2025 13:38:19	
Q2058-05DLX5	S	Ammonia-1 P		0.8129	mg/l	5/19/2025 13:38:21	
Q2068-03DLX2	S	Ammonia-1 P		1.6463	mg/l	5/19/2025 13:38:24	
CCV4	S	Ammonia-1 P		1.0413	mg/l	5/19/2025 13:38:26	
CCB4	S	Ammonia-1 P		0.0118	mg/l	5/19/2025 13:38:28	

Calibration results

Aquakem 7.2AQ1

Page:

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

Reviewed by : RM Instrument ID : Konelab

5/19/2025 11:28

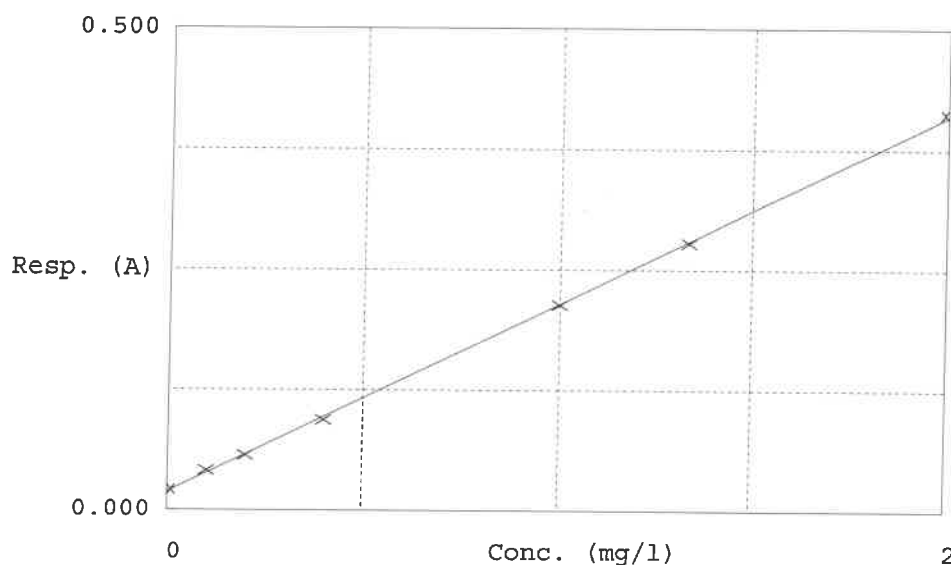
Test Ammonia-N

Accepted 5/19/2025 11:28

Factor 5.116
Bias 0.019

Coeff. of det. 0.999727

Errors



	Calibrator	Response	Calc. con.	Conc.	Re Errors
1	0.00PPM	0.021	0.0107	0.0000	14.0
2	NH3-2PPM	0.041	0.1140	0.1000	-2.4
3	NH3-2PPM	0.057	0.1953	0.2000	-4.2
4	NH3-2PPM	0.094	0.3831	0.4000	-0.6
5	NH3-2PPM	0.213	0.9943	1.0000	1.8
6	NH3-2PPM	0.278	1.3232	1.3333	0.6
7	NH3-2PPM	0.412	2.0128	2.0000	

05/19/2025
RM

Extraction and Analytical Summary Report

Analysis Method: 1664A
Test: Oil and Grease
Run Number: LB135833
Analysis Date: 05/20/2025
BalanceID: WC SC-6
OvenID: EXT OVEN-3

ANALYST: jignesh
REVIEWED BY: Iwona
Extraction Date: 05/20/2025
Extraction IN Time: 08:35
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	LB135833BL	LB135833BL	WATER	1.3	1000	100	3.5623	3.5623	0	3.5624	3.5624	0.0001	0.1
2	LB135833BS	LB135833BS	WATER	1.3	1000	100	3.0147	3.0147	0	3.0314	3.0314	0.0167	16.7
3	Q2058-01	EFFLUENT	WATER	1.6	1000	100	2.8563	2.8563	0	2.9474	2.9474	0.0911	91.1
4	Q2058-02	Q2058-01MS	WATER	1.6	1000	100	3.0744	3.0744	0	3.1858	3.1858	0.1114	111.4
5	Q2058-03	Q2058-01MSD	WATER	1.6	1000	100	3.1906	3.1906	0	3.3020	3.3020	0.1114	111.4

Out Time2: 12:30

WORKLIST(Hardcopy Internal Chain)

VB 135833

WorkList Name : OIL & GREASE Q2036

WorkList ID : 189617

Department : Wet-Chemistry

Date : 05-20-2025 08:19:54

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2058-01	EFFLUENT	Water	Oil and Grease	Conc H2SO4 to pH < 2	HOLL01	L41	05/15/2025	1664A
Q2058-02	Q2058-01MS	Water	Oil and Grease	Conc H2SO4 to pH < 2	HOLL01	L41	05/15/2025	1664A
Q2058-03	Q2058-01MSD	Water	Oil and Grease	Conc H2SO4 to pH < 2	HOLL01	L41	05/15/2025	1664A

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

05/20/25 08:25

Signature

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

05/20/25

Signature

13:30

Signature

Signature

SOP ID : M365.3 & SM4500-P E-18

SDG No : N/A

Start Digest Date: 05/16/2025 Time : 11:05 Temp : 95 °C

Matrix : WATER

End Digest Date: 05/16/2025 Time : 12:10 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 : IZ

pH Meter ID : N/A

Supervisor Signature: 2P

Standard Name	MLS USED	STD REF. # FROM LOG
LCSW	0.5ML	WP112914
MS/MSD SPIKE SOL.	0.5ML	WP112913
PBW	50.ML	W3112
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
11N H2SO4	1ML	WP112615
AMMONIUM PERSULFATE	0.4g	W3035
pH Paper 0-14	N/A	W3140
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
CAL1	CAL1	50.0ML	WP113103
CAL2	CAL2	50.0ML	WP113104
CAL3	CAL3	50.0ML	WP113105
CAL4	CAL4	50.0ML	WP113106
CAL5	CAL5	50.0ML	WP113107
CAL6	CAL6	50.0ML	WP113108
ICV	ICV	50.0ML	WP113110
ICB	ICB	50.0ML	W3112
CCV	CCV	50.0ML	WP113109
CCB	CCB	50.0ML	W3112

Extraction Conformance/Non-Conformance Comments:

N/A

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

12

5/16/25

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB168047BL	PBW047	50	50	<2	N/A	N/A	N/A	N/A	N/A
PB168047BS	LCS047	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2058-01	EFFLUENT	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2058-01DUP	EFFLUENTDUP	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2058-01MS	EFFLUENTMS	50	50	<2	N/A	N/A	N/A	N/A	N/A
Q2058-01MSD	EFFLUENTMSD	50	50	<2	N/A	N/A	N/A	N/A	N/A

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

SDG No : N/A

Start Digest Date: 05/19/2025 Time : 09:00 Temp : 150 °C

Matrix : WATER

End Digest Date: 05/19/2025 Time : 10:00 Temp : 160 °C

Pipette ID : WC

11 batch 05/19/2025 10:20 150 °C
05/19/2025 11:20 158 °C

Balance ID : N/A

Hood ID : HOOD#2

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Block ID : WC-DIST-BLOCK-1

Filter paper ID : N/A

Prep Technician Signature: RM

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature: 12

Standard Name	MLS USED	STD REF. # FROM LOG
LCSW	1.0ML	WP112987
MS/MSD SPIKE SOL.	1.0ML	WP112986
PBW	50.0ML	W3112
RL CHECK	0.1ML	WP112986
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
BORATE BUFFER	2.5ML	WP111325
NAOH 6N	1.0ML-5.0ML	WP111318
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 WP111604. Due to bad matrix and client history 1ML was taken as an initial volume for Q2058-01 and-05.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
05/19/2025 11:30	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
PB168056BL	PBW056	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
PB168056BS	LCS056	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2058-01	EFFLUENT	1	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2058-05	INFLUENT	1	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2065-01	VACTRUCK-728068	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2067-01	303-PPR-FRAC	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2067-01DUP	303-PPR-FRACDUP	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2067-01MS	303-PPR-FRACMS	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2067-01MSD	303-PPR-FRACMSD	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q2068-03	LAW-25-0074	50	50	<2	N/A	Negative	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB135797

Review By	jignesh	Review On	5/19/2025 11:31:49 AM
Supervise By	Iwona	Supervise On	5/19/2025 1:21:25 PM
SubDirectory	LB135797	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	LB135797BL	LB135797BL	MB	05/16/25 11:25		jignesh	OK
2	LB135797BS	LB135797BS	LCS	05/16/25 11:25		jignesh	OK
3	Q2026-01	001-WILLETS-PT-BL	SAM	05/16/25 11:25		jignesh	OK
4	Q2026-02	002-35TH-AVE(MAY)	SAM	05/16/25 11:25		jignesh	OK
5	Q2029-01	TOWER-1	SAM	05/16/25 11:25		jignesh	OK
6	Q2029-02	TOWER-2	SAM	05/16/25 11:25		jignesh	OK
7	Q2030-01	402-PSD	SAM	05/16/25 11:25		jignesh	OK
8	Q2030-02	AHW-PSD	SAM	05/16/25 11:25		jignesh	OK
9	Q2031-01	DSN002	SAM	05/16/25 11:25		jignesh	OK
10	Q2031-03	DSN001	SAM	05/16/25 11:25		jignesh	OK
11	Q2031-05	DSN003	SAM	05/16/25 11:25		jignesh	OK
12	Q2031-05DUP	DSN003DUP	DUP	05/16/25 11:25		jignesh	OK
13	Q2033-01	TW-WTS-08	SAM	05/16/25 11:25		jignesh	OK
14	Q2036-02	COMP	SAM	05/16/25 11:25		jignesh	OK
15	Q2058-01	EFFLUENT	SAM	05/16/25 11:25		jignesh	OK
16	Q2058-04	AERATION-TK1	SAM	05/16/25 11:25		jignesh	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135805

Review By	Iwona	Review On	5/16/2025 3:50:30 PM
Supervise By	jignesh	Supervise On	5/16/2025 4:13:51 PM
SubDirectory	LB135805	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	WP113108,WP113107,WP113106,WP113105,WP113104,WP113103,WP113109,WP112831,WP113114,WP111415,V		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	05/16/25 14:00		Iwona	OK
2	CAL2	CAL2	CAL	05/16/25 14:00		Iwona	OK
3	CAL3	CAL3	CAL	05/16/25 14:01		Iwona	OK
4	CAL4	CAL4	CAL	05/16/25 14:01		Iwona	OK
5	CAL5	CAL5	CAL	05/16/25 14:02		Iwona	OK
6	CAL6	CAL6	CAL	05/16/25 14:02		Iwona	OK
7	ICV	ICV	ICV	05/16/25 14:03		Iwona	OK
8	ICB	ICB	ICB	05/16/25 14:03		Iwona	OK
9	CCV1	CCV1	CCV	05/16/25 14:04		Iwona	OK
10	CCB1	CCB1	CCB	05/16/25 14:04		Iwona	OK
11	RL Check	RL Check	SAM	05/16/25 14:05		Iwona	OK
12	LB135805BL	LB135805BL	MB	05/16/25 14:05		Iwona	OK
13	LB135805BS	LB135805BS	LCS	05/16/25 14:06		Iwona	OK
14	Q2058-01	EFFLUENT	SAM	05/16/25 14:06		Iwona	OK
15	Q2058-01DUP	EFFLUENTDUP	DUP	05/16/25 14:07		Iwona	OK
16	Q2058-01MS	EFFLUENTMS	MS	05/16/25 14:07		Iwona	OK
17	Q2058-01MSD	EFFLUENTMSD	MSD	05/16/25 14:08		Iwona	OK
18	CCV2	CCV2	CCV	05/16/25 14:08		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135805

Review By	Iwona	Review On	5/16/2025 3:50:30 PM
Supervise By	jignesh	Supervise On	5/16/2025 4:13:51 PM
SubDirectory	LB135805	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	WP113108,WP113107,WP113106,WP113105,WP113104,WP113103,WP113109,WP112831,WP113114,WP111415,V		

19	CCB2	CCB2	CCB	05/16/25 14:09		Iwona	OK
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Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135808

Review By	Iwona	Review On	5/16/2025 3:57:24 PM
Supervise By	jignesh	Supervise On	5/16/2025 4:14:21 PM
SubDirectory	LB135808	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	WP113108,WP113107,WP113106,WP113105,WP113104,WP113103,WP113109,WP112831,WP113114,WP111415,V		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	05/16/25 14:50		Iwona	OK
2	CAL2	CAL2	CAL	05/16/25 14:50		Iwona	OK
3	CAL3	CAL3	CAL	05/16/25 14:51		Iwona	OK
4	CAL4	CAL4	CAL	05/16/25 14:51		Iwona	OK
5	CAL5	CAL5	CAL	05/16/25 14:52		Iwona	OK
6	CAL6	CAL6	CAL	05/16/25 14:52		Iwona	OK
7	ICV	ICV	ICV	05/16/25 14:53		Iwona	OK
8	ICB	ICB	ICB	05/16/25 14:53		Iwona	OK
9	CCV1	CCV1	CCV	05/16/25 14:54		Iwona	OK
10	CCB1	CCB1	CCB	05/16/25 14:54		Iwona	OK
11	RL Check	RL Check	SAM	05/16/25 14:55		Iwona	OK
12	PB168047BL	PB168047BL	MB	05/16/25 14:55		Iwona	OK
13	PB168047BS	PB168047BS	LCS	05/16/25 14:56		Iwona	OK
14	Q2058-01	EFFLUENT	SAM	05/16/25 14:56		Iwona	OK
15	Q2058-01DUP	EFFLUENTDUP	DUP	05/16/25 14:57		Iwona	OK
16	Q2058-01MS	EFFLUENTMS	MS	05/16/25 14:57		Iwona	OK
17	Q2058-01MSD	EFFLUENTMSD	MSD	05/16/25 14:58		Iwona	OK
18	CCV2	CCV2	CCV	05/16/25 14:58		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135808

Review By	Iwona	Review On	5/16/2025 3:57:24 PM
Supervise By	jignesh	Supervise On	5/16/2025 4:14:21 PM
SubDirectory	LB135808	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	WP113108,WP113107,WP113106,WP113105,WP113104,WP113103,WP113109,WP112831,WP113114,WP111415,V		

19	CCB2	CCB2	CCB	05/16/25 14:59		Iwona	OK
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Instrument ID: DO METER

Daily Analysis Runlog For Sequence/QC Batch ID # LB135810

Review By	rubina	Review On	5/21/2025 1:52:09 PM
Supervise By	Iwona	Supervise On	5/21/2025 2:00:18 PM
SubDirectory	LB135810	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	WP113088,W3149,WP112832,W3103,W3109,W3105,WP113090,WP113089,WP111323		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB135810BL	LB135810BL	MB	05/16/25 16:40		rubina	OK
2	LB135810BS	LB135810BS	LCS	05/16/25 16:40		rubina	OK
3	Q2058-01	EFFLUENT	SAM	05/16/25 16:40	Due to bad matrix difference between highest and lowest results is >30%.	rubina	OK
4	Q2058-05	INFLUENT	SAM	05/16/25 16:40	Due to bad matrix difference between highest and lowest results is >30%.	rubina	OK
5	Q2058-05DUP	INFLUENTDUP	DUP	05/16/25 16:40	Due to bad matrix difference between highest and lowest results is >30%	rubina	OK
6	Q2065-01	VACTRUCK-728068	SAM	05/16/25 16:40		rubina	OK
7	Q2067-01	303-PPR-FRAC	SAM	05/16/25 16:40		rubina	OK
8	Q2068-03	LAW-25-0074	SAM	05/16/25 16:40		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135824

Review By	rubina	Review On	5/20/2025 10:51:20 AM
Supervise By	Iwona	Supervise On	5/20/2025 11:22:57 AM
SubDirectory	LB135824	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP113130		
ICV Standard	WP113132		
CCV Standard	WP113131		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP112987		
Chk Standard	WP112897,WP111745,WP111385,WP111660		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	05/19/25 11:23		rubina	OK
2	0.1PPM	0.1PPM	CAL2	05/19/25 11:23		rubina	OK
3	0.2PPM	0.2PPM	CAL3	05/19/25 11:23		rubina	OK
4	0.4PPM	0.4PPM	CAL4	05/19/25 11:23		rubina	OK
5	1.0PPM	1.0PPM	CAL5	05/19/25 11:23		rubina	OK
6	1.3PPM	1.3PPM	CAL6	05/19/25 11:23		rubina	OK
7	2.0PPM	2.0PPM	CAL7	05/19/25 11:23		rubina	OK
8	ICV1	ICV1	ICV	05/19/25 12:28		rubina	OK
9	ICB1	ICB1	ICB	05/19/25 12:28		rubina	OK
10	CCV1	CCV1	CCV	05/19/25 12:28		rubina	OK
11	CCB1	CCB1	CCB	05/19/25 12:28		rubina	OK
12	RL	RL	LOQ	05/19/25 12:28		rubina	OK
13	PB168056BL	PB168056BL	MB	05/19/25 12:39		rubina	OK
14	PB168056BS	PB168056BS	LCS	05/19/25 12:39		rubina	OK
15	Q2058-01	EFFLUENT	SAM	05/19/25 12:39	High	rubina	Dilution
16	Q2058-05	INFLUENT	SAM	05/19/25 12:39	High	rubina	Dilution
17	Q2065-01	VACTRUCK-728068	SAM	05/19/25 12:39		rubina	OK
18	Q2067-01	303-PPR-FRAC	SAM	05/19/25 12:39		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135824

Review By	rubina	Review On	5/20/2025 10:51:20 AM
Supervise By	Iwona	Supervise On	5/20/2025 11:22:57 AM
SubDirectory	LB135824	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP113130		
ICV Standard	WP113132		
CCV Standard	WP113131		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP112987		
Chk Standard	WP112897,WP111745,WP111385,WP111660		

19	Q2067-01DUP	303-PPR-FRACDUP	DUP	05/19/25 12:39		rubina	OK
20	Q2067-01MS	303-PPR-FRACMS	MS	05/19/25 12:49		rubina	OK
21	Q2067-01MSD	303-PPR-FRACMSD	MSD	05/19/25 12:49		rubina	OK
22	CCV2	CCV2	CCV	05/19/25 12:49		rubina	OK
23	CCB2	CCB2	CCB	05/19/25 12:49		rubina	OK
24	Q2068-03	LAW-25-0074	SAM	05/19/25 12:49	High	rubina	Dilution
25	CCV3	CCV3	CCV	05/19/25 12:49		rubina	OK
26	CCB3	CCB3	CCB	05/19/25 12:54		rubina	OK
27	Q2058-01DL	EFFLUENTDL	SAM	05/19/25 13:38	Report 10X	rubina	Confirms
28	Q2058-05DL	INFLUENTDL	SAM	05/19/25 13:38	Report 5X	rubina	Confirms
29	Q2068-03DL	LAW-25-0074DL	SAM	05/19/25 13:38	Report 2X	rubina	Confirms
30	CCV4	CCV4	CCV	05/19/25 13:38		rubina	OK
31	CCB4	CCB4	CCB	05/19/25 13:38		rubina	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB135833

Review By	jignesh	Review On	5/20/2025 10:29:03 AM
Supervise By	Iwona	Supervise On	5/20/2025 11:28:49 AM
SubDirectory	LB135833	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,EP2614,WP112782,NA,NA,WP112783,NA,WO112784		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB135833BL	LB135833BL	MB	05/20/25 10:00		jignesh	OK
2	LB135833BS	LB135833BS	LCS	05/20/25 10:00		jignesh	OK
3	Q2058-01	EFFLUENT	SAM	05/20/25 10:00		jignesh	OK
4	Q2058-02	Q2058-01MS	MS	05/20/25 10:00		jignesh	OK
5	Q2058-03	Q2058-01MSD	MSD	05/20/25 10:00		jignesh	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2058

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

Prepbatch ID : PB168047,PB168056,

Sequence ID/Qc Batch ID: LB135797,LB135805,LB135808,LB135810,LB135824,LB135833,

Standard ID :

EP2614,WP111317,WP111318,WP111323,WP111325,WP111385,WP111415,WP111660,WP111745,WP112611,WP112612,WP112615,WP112782,WP112783,WP112828,WP112831,WP112832,WP112897,WP112913,WP112914,WP112986,WP112987,WP113088,WP113089,WP113090,WP113103,WP113104,WP113105,WP113106,WP113107,WP113108,WP113109,WP113110,WP113111,WP113112,WP113113,WP113114,WP113130,WP113131,WP113132,

Chemical ID :

E3551,E3917,M6041,M6069,M6151,W2306,W2650,W2653,W2654,W2664,W2666,W2700,W2788,W2817,W2858,W2871,W3035,W3059,W3074,W3103,W3105,W3109,W3112,W3113,W3132,W3133,W3140,W3144,W3149,W3155,W3174,W3195,W3196,W3198,W3204,W3206,WO112784,



<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	EP2614	05/19/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/19/2025
<u>FROM</u> 4000.00000gram of E3551 = Final Quantity: 4000.000 gram								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1796	NaOH, 0.1N	WP111317	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_7 (WCS-6)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 4.00000gram of W3113 + 996.00000ml of W3112 = Final Quantity: 1000.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1471	NaOH Solution, 6N	WP111318	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_7 (WC SC-6)	None	Iwona Zarych 01/09/2025
<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>
1571	Sodium hydroxide, 1N	WP111323	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 01/09/2025
<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>
1494	BORATE BUFFER	WP111325	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 01/09/2025
<u>FROM</u>	100.00000L of W3112 + 9.50000gram of W2700 + 88.00000ml of WP111317 = Final Quantity: 100.000 L							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
290	Phenol reagent for Ammonia	WP111385	01/13/2025	07/13/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC-7)	None	Iwona Zarych 01/13/2025
<u>FROM</u> 3.20000gram of W3113 + 8.30000gram of W2858 + 88.80000ml of W3112 = Final Quantity: 100.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1213	Phenolphthalein indicator	WP111415	01/15/2025	06/04/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCS)	None	Iwona Zarych 01/16/2025
<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>
635	EDTA BUFFER FOR AMMONIA	WP111660	01/28/2025	07/28/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 01/28/2025
<u>FROM</u> 5.50000gram of W3113 + 50.00000gram of W3132 + 950.00000ml of W3112 = Final Quantity: 1000.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
289	Sodium Hypochlorite for Ammonia	WP111745	02/03/2025	07/31/2025	Rubina Mughal	None	None	Iwona Zarych
								02/03/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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

FROM 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							

<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
<u>FROM</u> 306.00000ml of M6041 + 694.00000ml 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>
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_S CALE_8 (WC SC-7)	None	Iwona Zarych
								04/22/2025

FROM 1000.00000ml of E3917 + 4.00000gram of W2817 + 4.00000gram of W2871 = 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>
740	sodium nitroferricyanide for ammonia	WP112897	04/30/2025	05/30/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 05/01/2025
<u>FROM</u> 0.05000gram of W2666 + 99.95000ml of W3112 = Final Quantity: 100.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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_SCALE_5 (WCS-5)	None	Jignesh Parikh
<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>
1322	Ammonia Intermediate Std, 50PPM	WP112986	05/07/2025	06/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025
<u>FROM</u> 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	WP112987	05/07/2025	06/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025
<u>FROM</u> 95.00000ml of W3112 + 5.00000ml of WP112612 = 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	WP113088	05/16/2025	05/17/2025	Rubina Mughal	None	None	Jignesh Parikh
								05/16/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
129	Glutamic acid-glucose mix for BOD	WP113089	05/16/2025	05/17/2025	Rubina Mughal	WETCHEM_SCALE_7 (WC SC-6)	None	Jignesh Parikh
								05/16/2025

FROM 0.15000gram of W2653 + 0.15000gram of W2654 + 1000.00000ml 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>
128	polyseed seed control	WP113090	05/16/2025	05/17/2025	Rubina Mughal	None	None	Jignesh Parikh
								05/16/2025

FROM 1.00000PILLOW of W3059 + 300.00000ml of WP113088 = Final Quantity: 300.000 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>
122	calibration std. 0 ppm	WP113103	05/16/2025	05/23/2025	Iwona Zarych	None	None	Jignesh Parikh
								05/16/2025

FROM 100.00000ml of W3112 = Final Quantity: 100.000 ml

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
121	calibration std. phosphate 0.05 ppm	WP113104	05/16/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/16/2025
FROM 99.90000ml of W3112 + 0.10000ml 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>
120	calibration std. phosphate 0.1 ppm	WP113105	05/16/2025	05/17/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/16/2025
FROM 99.80000ml of W3112 + 0.20000ml 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>
119	calibration std. phosphate 0.3 ppm	WP113106	05/16/2025	05/17/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/16/2025
FROM 99.40000ml of W3112 + 0.60000ml 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>
118	calibration std. phosphate 0.5 ppm	WP113107	05/16/2025	05/17/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/16/2025
FROM 99.00000ml of W3112 + 1.00000ml 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>
117	calibration std. phosphate 1 ppm	WP113108	05/16/2025	05/17/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/16/2025
FROM 98.00000ml of W3112 + 2.00000ml 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>
124	phosphate CCV std.	WP113109	05/16/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/16/2025
FROM 99.00000ml of W3112 + 1.00000ml 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>
3805	Phosphate ICV-LCS Std	WP113110	05/16/2025	05/23/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/16/2025

FROM 99.00000ml of W3112 + 1.00000ml of WP112914 = 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>
590	Ascorbic Acid	WP113111	05/16/2025	05/17/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 05/16/2025

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>
648	Ammonium molybdate solution	WP113112	05/16/2025	11/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 05/16/2025
<u>FROM</u> 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 (WC SC-5)	None	Jignesh Parikh 05/16/2025
<u>FROM</u>	1.37150gram of W2306 + 500.00000ml of W3112 = Final Quantity: 500.000 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>
658	Combined reagent	WP113114	05/16/2025	05/17/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 05/16/2025

FROM 15.00000ml of WP113112 + 30.00000ml of WP113111 + 5.00000ml of WP113113 + 50.00000ml of WP112831 = 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>
275	Ammonia Calibration Std. (2 ppm)	WP113130	05/19/2025	05/20/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 05/20/2025

FROM 48.00000ml of W3112 + 2.00000ml of WP112986 = Final Quantity: 50.000 ml

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
285	Ammonia CCV Std. (1 ppm)	WP113131	05/19/2025	05/20/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 05/20/2025
FROM 49.00000ml of W3112 + 1.00000ml of WP112986 = 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)	WP113132	05/19/2025	05/20/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 05/20/2025
FROM 49.00000ml of W3112 + 1.00000ml of WP112987 = Final Quantity: 50.000 ml								

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	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	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

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

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

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

CHEMICAL RECEIPT LOG BOOK

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	06/23/2025	12/30/2020 / apatel	12/30/2020 / apatel	W2788

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

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

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

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

CHEMICAL RECEIPT LOG BOOK

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.	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

CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140444 / TEST PAPERS,PH 0-14,.5 SENSI,100PK	10D0142	09/17/2029	09/17/2024 / lwona	09/17/2024 / lwona	W3140

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

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



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:

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


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

Hexadecane, 99.0%



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

Certificate of Analysis

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

For Laboratory, Research or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality

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

W2858 Received by AP on 07/07/2021

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

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

Retest date: January 7, 2026

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W2666 Recived on 02/10/2020 by AP

Product No.: 87683

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


Lot No.: W12F013

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

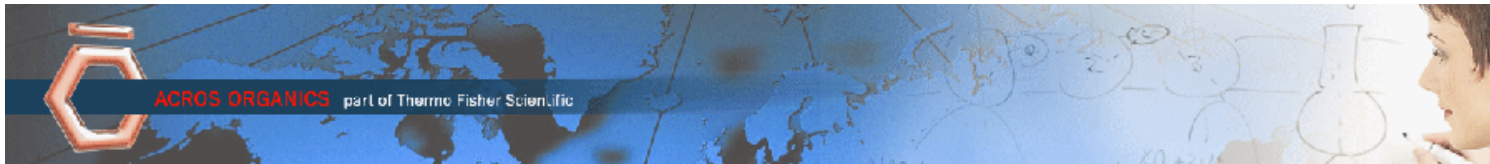
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ACROS ORGANICS part of Thermo Fisher Scientific



Version 0

Molecular weight 147.13

Molecular formula C5 H9 N O4

CAS No 56-86-0

Linear formula HO2CCH2CH2CH(NH2)CO2H

Flash point (°C)

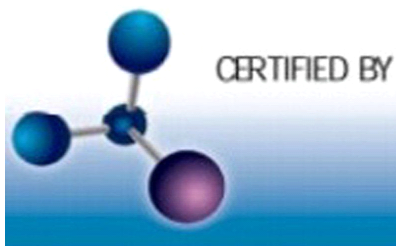
Certificate of Analysis

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

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

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



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

L. Van den Broek, QA Manager

Issued: 24 January 2020

Acros Organics

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

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

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

W2817

REC. 04/02/2021

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

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

Product Specification

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

Date Of Print: 11/30/2023

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



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



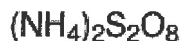
W 3035
rec. 6/6/23 12

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.





CERTIFICATE OF ANALYSIS

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

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

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

FORMULATION:

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

VIABLE COUNT, FINAL TEST RESULT:

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

GLUCOSE/GLUTAMIC-ACID RESULTS:

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

See www.polyseed.com for details.

SEED CONTROL FACTOR:

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

SALMONELLA TEST RESULT:

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

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

Signature: _____

Quality Control Department

Date: 05/15/2023

POLYSEED.Ref.1.19

Revised Jan 23

InterLab®
International Laboratory Supply



Certificate Of Analysis



Date of Release: 11/14/2019

W2700 Recived by AP on 3/11/2020

Name: **Sodium Borate, Decahydrate**

ACS

Item No: **SX0355 All Sizes**

Lot / Batch No: **2019111354**

Country of Origin: **India**

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

Joe Schoellkopf

Quality Control Manager

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

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

EMD Millipore Corporation

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

Form number: 00005624CA, Rev. 2.0



Certificate of Analysis

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

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

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

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

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

Jerisa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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

*Based on suggested storage condition.



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

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

CERTIFICATE OF ANALYSIS

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

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

COMMENTS

QC: PhC Irma Belmares

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

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

RC-02-01, Ed. 3

Acetone

BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

Avantor™



Material No.: 9254-03

Batch No.: 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™



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

 **avantor™**



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

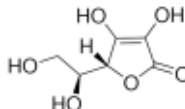
W3074 Rec. on 01/16/24 by IZ

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

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

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

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

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

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

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

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



Jose Pena (03/15/2024)

Operations Manager

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

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

Certificate of Analysis

Sodium Thiosulfate, 0.0250 Normal (N/40)

Lot Number: 4403S13

Product Number: 7900

Manufacture Date: MAR 29, 2024

Expiration Date: SEP 2025

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

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

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

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

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

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

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



Paul Brandon (03/29/2024)

Production Manager

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

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

Certificate of Analysis

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.



An ISO 9001 Certified Company

Loveland, CO 80539

(970) 669-3050

Certificate of Analysis

This is a Component of 1486266 / LOT A4169

PRODUCT: BOD Nutrient Buffer Pillows

PRODUCT NUMBER: 1486227

LOT NUMBER: A4169

MANUFACTURE DATE: 06/24/2024

DATE OF ANALYSIS: 07/03/2024

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

The expiration date is Jun 2029

Certified by: *Scott Als*

Analytical Services Chemist



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

Sodium Hypochlorite Solution, 5% available Chlorine

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

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

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

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

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

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

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

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

Jose Pena (01/17/2025)
Operations Manager

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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

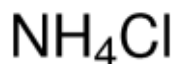
Signature	Additional Information
<p>We certify that this batch conforms to the specifications listed above.</p> <p>This document has been electronically produced and is valid without a signature.</p> <p>Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon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

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: H4CIN
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

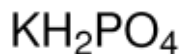
Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

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

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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

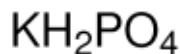
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

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

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SHIPPING DOCUMENTS

CHEMTECH

CHAIN OF CUSTODY RECORD

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

CHEMTECH PROJECT NO.

QUOTE NO.

COC Number

Q2058
2042215

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: HOLLAND MFG Co
ADDRESS: 15 MAIN ST
CITY: SUCCASUNNA STATE: NJ ZIP: 07876
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: PRETREATMENT PLANT
PROJECT NO.: LOCATION:
PROJECT MANAGER: TOBO 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 DAYS

DATA DELIVERABLE INFORMATION

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

1 2 3 4 5 6 7 8 9
BOD5 TSS O+G PO4 Total P NH2

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	EFFLUENT	W		✓	5/15	1130		✓	✓	✓	✓	✓	✓				pH 1.9	
2.	AERATION TK 1	W		✓	5/15	1130			✓								pH	
3.	INFLUENT	W		✓	5/15	1130		✓					✓				pH 1.9	
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

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

RELINQUISHED BY SAMPLER: <u>[Signature]</u>	DATE/TIME: <u>5/15/25 12:20</u>	RECEIVED BY: <u>[Signature]</u>	Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP <u>3.8°C</u>
RELINQUISHED BY SAMPLER: <u>[Signature]</u>	DATE/TIME:	RECEIVED BY:	Comments: <u>LAB TO FILTER</u>
RELINQUISHED BY SAMPLER: <u>[Signature]</u>	DATE/TIME:	RECEIVED BY:	Page ____ of ____
			CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other CHEMTECH: <input type="checkbox"/> Picked Up <input type="checkbox"/> Field Sampling
			Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO

Laboratory Certification

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