

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: Q2276	OrderDate: 6/10/2025 11:49:37 AM
Client: Europastry	Project: MCUA Permit No 14241 - 571 Jersey Ave NB NJ
Contact: Kevin Carlucci	Location: D31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2276-01	MH-6-10-2025	WATER			06/10/25 11:10			06/10/25
			BOD5	SM5210 B			06/11/25 16:40	
			COD	SM5220 D			06/12/25 14:17	
			Oil and Grease	1664A			06/13/25 09:30	
			pH	9040C			06/11/25 11:45	
			TPH	1664A			06/13/25 09:30	
			TSS	SM2540 D			06/13/25 10:00	



SAMPLE DATA

Report of Analysis

Client:	Europastry	Date Collected:	06/10/25 11:10
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Date Received:	06/10/25
Client Sample ID:	MH-6-10-2025	SDG No.:	Q2276
Lab Sample ID:	Q2276-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
BOD5	498		1	0.20	2.00	mg/L		06/11/25 16:40	SM 5210 B-16
COD	9670	D	100	150	1000	mg/L		06/12/25 14:17	SM 5220 D-11
Oil and Grease	803		1	0.29	5.00	mg/L		06/13/25 09:30	1664A
pH	3.76	H	1	0	0	pH		06/11/25 11:45	9040C
TPH	403		1	0.29	5.00	mg/L		06/13/25 09:30	1664A
TSS	2320		1	1.00	4.00	mg/L		06/13/25 10:00	SM 2540 D-15

Comments: pH result reported at temperature 20.1 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits



QC RESULT SUMMARY



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

Initial and Continuing Calibration Verification

Client: Europastry

SDG No.: Q2276

Project: MCUA Permit No 14241 - 571 Jersey Ave NB NJ

RunNo.: LB136102

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV						
pH		pH	7.00	7	100	90-110	06/11/2025
Sample ID:	CCV1						
pH		pH	2.01	2.00	101	90-110	06/11/2025
Sample ID:	CCV2						
pH		pH	12.02	12.00	100	90-110	06/11/2025

Initial and Continuing Calibration Verification

Client: Europastry

SDG No.: Q2276

Project: MCUA Permit No 14241 - 571 Jersey Ave NB NJ

RunNo.: LB136134

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: COD	ICV	mg/L	50.962	50	102	95-105	05/28/2025
Sample ID: COD	CCV1	mg/L	49.946	50	100	95-105	06/12/2025
Sample ID: COD	CCV2	mg/L	48.931	50	98	95-105	06/12/2025
Sample ID: COD	CCV3	mg/L	50.962	50	102	95-105	06/12/2025

Initial and Continuing Calibration Blank Summary

Client: Europastry

SDG No.: Q2276

Project: MCUA Permit No 14241 - 571 Jersey Ave NB NJ

RunNo.: LB136134

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB COD	mg/L	< 5.0000	5.0000	U	1.50	10	05/28/2025
Sample ID: CCB1 COD	mg/L	< 5.0000	5.0000	U	1.50	10	06/12/2025
Sample ID: CCB2 COD	mg/L	< 5.0000	5.0000	U	1.50	10	06/12/2025
Sample ID: CCB3 COD	mg/L	< 5.0000	5.0000	U	1.50	10	06/12/2025

Preparation Blank Summary

Client: Europastry

SDG No.: Q2276

Project: MCUA Permit No 14241 - 571 Jersey Ave NB NJ

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB136118BL BOD5	mg/L	< 0.2000	0.2000	U	0.20	2.0	06/11/2025
Sample ID: LB136134BL COD	mg/L	< 5.0000	5.0000	U	1.5	10.0	06/12/2025
Sample ID: LB136143BL Oil and Grease	mg/L	< 2.5000	2.5000	U	0.29	5.0	06/13/2025
Sample ID: LB136144BL TPH	mg/L	< 2.5000	2.5000	U	0.29	5.0	06/13/2025
Sample ID: LB136145BL TSS	mg/L	1	2.0000	J	1	4	06/13/2025

Matrix Spike Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID:	Q2276-01
Client ID:	MH-6-10-2025MS	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	31.8		803		20.0	1	-3850	*	06/13/2025

Matrix Spike Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID:	Q2276-01
Client ID:	MH-6-10-2025MSD	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	32.6		803		20.0	1	-3850	*	06/13/2025

Matrix Spike Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID:	Q2294-01
Client ID:	Outfall 1MS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
COD	mg/L	75-125	64.2		18.5		50.0	1	91		06/12/2025

Matrix Spike Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID:	Q2294-01
Client ID:	Outfall 1MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
COD	mg/L	75-125	64.2		18.5		50.0	1	91		06/12/2025

Matrix Spike Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID:	Q2309-01
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	41.9		22.1		20.0	1	99		06/13/2025

Matrix Spike Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID:	Q2309-01
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	42.3		22.1		20.0	1	101		06/13/2025

Duplicate Sample Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID:	LB136144BS
Client ID:	LB136144BSD	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
TPH	mg/L	+/-18	17.0		17.0		1	0		06/13/2025

Duplicate Sample Summary

Client: Europastry Project: MCUA Permit No 14241 - 571 Jersey Ave NB NJ Client ID: LAW-25-0084DUP	SDG No.: Q2276 Sample ID: Q2286-03 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
pH	pH	+/-20	6.05		6.06		1	0.17		06/11/2025
BOD5	mg/L	+/-20	495		494		1	0.12		06/11/2025

Duplicate Sample Summary

Client: Europastry	SDG No.: Q2276
Project: MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID: Q2293-01
Client ID: SW-3DUP	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	235		235		1	0.34		06/13/2025

Duplicate Sample Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID:	Q2294-01
Client ID:	Outfall 1DUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
COD	mg/L	+/-20	18.5		19.5		1	5.26		06/12/2025

Duplicate Sample Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID:	Q2294-01
Client ID:	Outfall 1MSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
COD	mg/L	+/-20	64.2		64.2		1	0		06/12/2025

Duplicate Sample Summary

Client: Europastry	SDG No.: Q2276
Project: MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID: Q2276-01
Client ID: MH-6-10-2025MSD	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	31.8		32.6		1	2.5		06/13/2025

Duplicate Sample Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Sample ID:	Q2309-01
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	41.9		42.3		1	0.95		06/13/2025

Laboratory Control Sample Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Run No.:	LB136118

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136118BS							
BOD5	mg/L	198	188		95	1	84.6-115.4	06/11/2025

Laboratory Control Sample Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Run No.:	LB136134

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136134BS							
COD	mg/L	50	47.9		96	1	90-110	06/12/2025

Laboratory Control Sample Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Run No.:	LB136143

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136143BS							
Oil and Grease	mg/L	20.0	16.8		84	1	78-114	06/13/2025

Laboratory Control Sample Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Run No.:	LB136144

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136144BS							
TPH	mg/L	20.0	17.0		85	1	78-114	06/13/2025

Laboratory Control Sample Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Run No.:	LB136144

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136144BSD							
TPH	mg/L	20.0	17.0		85	1	78-114	06/13/2025

Laboratory Control Sample Summary

Client:	Europastry	SDG No.:	Q2276
Project:	MCUA Permit No 14241 - 571 Jersey Ave NB NJ	Run No.:	LB136145

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB136145BS							
TSS	mg/L	550	532		97	1	90-110	06/13/2025



RAW DATA

Analytical Summary Report

Analysis Method: 9040C

Analyst By : jignesh

Parameter: pH

Supervisor Review By : Iwona

Run Number: LB136102

Slope : 98.4

pH Meter ID : WC PH METER-1

Calibration Standards	Chemtech Log#
PH 4 BUFFER SOLUTION	W3178
BUFFER PH 7.00 GREEN 1PINT PK6	W3093
PH 10.01 BUFFER, COLOR CD 475ML	W3191
buffer solution pH 7 yellow	W3071
Buffer Solution, PH2 (500ml)	W3161
pH 12.00 Buffer	W3200

True Value of ICV = 7.00 Control Limits[+/- 0.05].

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

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

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.2	4.01	06/11/2025	11:30
2	CAL2	1	Water	NA	NA	20.2	7.01	06/11/2025	11:31
3	CAL3	1	Water	NA	NA	20.2	10.02	06/11/2025	11:33
4	ICV	1	Water	NA	NA	20.2	7.00	06/11/2025	11:35
5	CCV1	1	Water	NA	NA	20.2	2.01	06/11/2025	11:36
6	Q2276-01	1	Water	NA	NA	20.1	3.76	06/11/2025	11:45
7	Q2279-01	1	Water	NA	NA	20.1	7.77	06/11/2025	12:00
8	Q2282-03	1	Water	NA	NA	20.5	5.30	06/11/2025	12:12
9	Q2282-04	1	Water	NA	NA	20.4	7.35	06/11/2025	12:20
10	Q2284-02	1	Water	NA	NA	20.1	9.28	06/11/2025	12:30
11	Q2286-03	1	Water	NA	NA	20.1	6.05	06/11/2025	12:37
12	Q2286-03DUP	1	Water	NA	NA	20.2	6.06	06/11/2025	12:40
13	CCV2	1	Water	NA	NA	20.2	12.02	06/11/2025	12:41

BOD5 LOG

ANALYST: Eman

SUPERVISOR: Iwona

Analysis Date: 06/11/2025

MANGANOUS SULFATE SOLUTION: W3103

Alkaline Iodide Azide: W3109

Sodium Thiosulfate, 0.025N: W3105

NaOH, 1N: WP111323

IncubatorID:

GuageID:

Zero DO: WP113147

QC BATCH ID: LB136118

BOD Water: WP113477

Starch: W3149

Sulfuric acid, 1N: WP112832

POLYSEED: WP113479

GGA: WP113478

Chlorine Strips: W3155

pH Strips: W3215

Lab SampleID	Client ID	Bottle No.	VOL. ML	Initial Reading (ML)	Final Reading (ML)	Difference	Average
WINKLER 1	WINKLER 1	1	300	0.0	9.8	9.8	9.8
WINKLER 2	WINKLER 2	2	300	9.9	19.7	9.8	9.8

Meter Calibration1: 9.92

Zero DO Reading1: 0.10 mg/L (<=0.2 Criteria)

Barometric Pressure1: 760 mmHg

DO Meter BOD fluid reading for winkler comparison: 9.99

After Incubation

Meter Calibration2: 9.69

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

Barometric Pressure2: 763 mmHg

QC BATCH ID: LB136118

INCUBATOR TEMP IN(C): 19.9

INCUBATOR TEMP OUT(C): 19.8

TIME IN: 16:40

TIME OUT: 12:00

DATE IN: 06/11/2025

DATE OUT: 06/16/2025

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
LB136118BL	1	No	6.63	N/A	20.80	300	9.99	9.97	0.02	0.02	0.02	
POLYSEED	1					10	9.92	7.35	2.57	0.51	0.65	
POLYSEED	2					15	9.90	4.14	5.76	0.77		
POLYSEED	3					20	9.87	3.32	6.55	0.66		
GGA	1					6	9.92	5.54	4.38	186.5	188.17	
GGA	2					6	9.87	5.46	4.41	188		
GGA	3					6	9.87	5.42	4.45	190		
Q2276-01	1	No	3.76	6.64	20.10	5	9.96	1.01	8.95	498	498	pH Adjusted
Q2276-01	2					20	9.64	0.11	-	0		
Q2276-01	3					50	8.84	0.09	-	0		
Q2276-01	4					150	6.26	0.07	-	0		
Q2286-03	1	No	6.05	6.89	20.00	5	9.91	1.01	8.9	495	495	pH Adjusted
Q2286-03	2					20	9.81	0.14	-	0		
Q2286-03	3					50	8.73	0.12	-	0		
Q2286-03	4					150	6.09	0.10	-	0		
Q2286-03DUP	1	No	6.05	6.89	20.00	5	9.90	1.01	8.89	494.4	494.4	pH Adjusted
Q2286-03DUP	2					20	9.83	0.13	-	0		
Q2286-03DUP	3					50	8.71	0.12	-	0		
Q2286-03DUP	4					150	6.07	0.10	-	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)

LB136118

WorkList Name : bod5-6-11

WorkList ID : 190118

Department : Wet-Chemistry

Date : 06-11-2025 13:50:20

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2276-01 C	MH-6-10-2025	Water	BOD5	Cool 4 deg C	EURO03	D31	06/10/2025	SM5210 B
Q2286-03 K	LAW-25-0084	Water	BOD5	Cool 4 deg C	PSEG03	D41	06/10/2025	SM5210 B

Date/Time 06/14/2025 15:00
Raw Sample Received by: RM CWC
Raw Sample Relinquished by: SPCOC

Date/Time 06/11/2025 16:50
Raw Sample Received by: SPCOC
Raw Sample Relinquished by: RM CWC

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Iwona

Parameter: COD

SUPERVISOR REVIEW BY: jignesh

Run Number: LB136134

Reagent/Standard	Lot/Log #
COD calibration std. 150 ppm	WP113238
COD calibration std. 100 ppm	WP113237
COD calibration std. 50 ppm	WP113235
COD calibration std. 10 ppm	WP113234
COD calibration std. 0 ppm	WP113233
COD ICV-LCS std, 50ppm	WP113240
COD calibration std. 75 ppm	WP113236
COD Digestion Vials Low Level 0-150Mg/L	W3128
COD CCV std, 50ppm	WP113445
COD ICV-LCS std, 50ppm	WP113446
RL CHECK	WP113448

Temp In (C): 148	Date In: 06/12/2025	Time In: 10:30
Temp Out (C): 151	Date Out: 06/12/2025	Time Out: 12:30

Intercept: 0.8179

Slope: 0.9847

Regression: 0.9995

Seq	Lab ID	TrueValue (mg/l)	DF	MATRIX	Reading	Result (mg/l)	%D	Anal Date	Anal Time
1	CAL1	0	1	Water	0.000	-0.831		05/28/2025	13:10
2	CAL2	10	1	Water	9.000	8.309	-16.9	05/28/2025	13:10
3	CAL3	50	1	Water	52.000	51.977	4	05/28/2025	13:11
4	CAL4	75	1	Water	77.000	77.366	3.2	05/28/2025	13:11
5	CAL5	100	1	Water	99.000	99.708	-0.3	05/28/2025	13:12
6	CAL6	150	1	Water	147.000	148.453	-1	05/28/2025	13:12

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Iwona

Parameter: COD

SUPERVISOR REVIEW BY: jignesh

Run Number: LB136134

Seq	Lab ID	True Value (mg/l)	Initial Weight (g)	Final Vol (ml)	DF	MATRIX	Reading	Result	AnalDate	AnalTime
1	ICV	50	NA	NA	1	Water	51.000	50.962	05/28/2025	13:13
2	ICB		NA	NA	1	Water	0.000	-0.831	05/28/2025	13:13
3	CCV1	50	NA	NA	1	Water	50.000	49.946	06/12/2025	14:15
4	CCB1		NA	NA	1	Water	1.000	0.185	06/12/2025	14:15
5	RL Check	10	NA	NA	1	Water	9.000	8.309	06/12/2025	14:16
6	LB136134BL		NA	NA	1	Water	0.000	-0.831	06/12/2025	14:16
7	LB136134BS	50	NA	NA	1	Water	48.000	47.915	06/12/2025	14:17
8	Q2276-01		NA	NA	100	Water	96.000	96.661	06/12/2025	14:17
9	Q2286-03		NA	NA	100	Water	37.000	36.744	06/12/2025	14:18
10	Q2289-01		NA	NA	5	Water	46.000	45.884	06/12/2025	14:18
11	Q2289-02		NA	NA	1	Water	130.000	131.189	06/12/2025	14:19
12	Q2289-03		NA	NA	10	Water	77.000	77.366	06/12/2025	14:19
13	Q2290-01		NA	NA	1	Water	78.000	78.381	06/12/2025	14:20
14	Q2290-02		NA	NA	1	Water	70.000	70.257	06/12/2025	14:20
15	Q2291-01		NA	NA	1	Water	123.000	124.081	06/12/2025	14:21
16	CCV2	50	NA	NA	1	Water	49.000	48.931	06/12/2025	14:21
17	CCB2		NA	NA	1	Water	1.000	0.185	06/12/2025	14:22
18	Q2292-01		NA	NA	1	Water	22.000	21.511	06/12/2025	14:22
19	Q2292-02		NA	NA	1	Water	39.000	38.775	06/12/2025	14:23
20	Q2293-01		NA	NA	1	Water	41.000	40.806	06/12/2025	14:23
21	Q2294-01		NA	NA	1	Water	19.000	18.465	06/12/2025	14:24
22	Q2294-01DUP		NA	NA	1	Water	20.000	19.480	06/12/2025	14:24
23	Q2294-01MS	50	NA	NA	1	Water	64.000	64.164	06/12/2025	14:25
24	Q2294-01MSD	50	NA	NA	1	Water	64.000	64.164	06/12/2025	14:25
25	CCV3	50	NA	NA	1	Water	51.000	50.962	06/12/2025	14:26
26	CCB3		NA	NA	1	Water	1.000	0.185	06/12/2025	14:26

WORKLIST(Hardcopy Internal Chain)

LB13 6134

WorkList Name : COD-061225

WorkList ID : 190138

Department : Wet-Chemistry

Date : 06-12-2025 09:56:34

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2276-01	MH-6-10-2025	Water	COD	Conc H2SO4 to pH < 2	EURO03	D31	06/10/2025	SM5220 D
Q2286-03	LAW-25-0084	Water	COD	Conc H2SO4 to pH < 2	PSEG03	D41	06/10/2025	SM5220 D
Q2289-01	SP-1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2289-02	SP-2	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2289-03	SP-3	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2290-01	Outfall 1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2290-02	Outfall 2	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2291-01	Outfall 001	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2292-01	SW-1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A11	06/10/2025	SM5220 D
Q2292-02	SW-2	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	SM5220 D
Q2293-01	SW-3	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	SM5220 D
Q2294-01	Outfall 1	Water	COD	Conc H2SO4 to pH < 2	ATGG01	A12	06/10/2025	SM5220 D

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

06/12/25 10:00
12(50)
28(60)

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

06/12/25 10:45
28(60)
12(50)

Extraction and Analytical Summary Report

Analysis Method: 1664A
Test: Oil and Grease
Run Number: LB136143
Analysis Date: 06/13/2025
BalanceID: WC SC-6
OvenID: WC OVEN-1

ANALYST: jignesh
REVIEWED BY: Iwona
Extraction Date: 06/13/2025
Extraction IN Time: 08:10
Extraction OUT Time: 08:20
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	LB136143BL	LB136143BL	WATER	1.3	1000	100	3.0263	3.0263	0	3.0264	3.0264	0.0001	0.1
2	LB136143BS	LB136143BS	WATER	1.3	1000	100	3.1475	3.1475	0	3.1643	3.1643	0.0168	16.8
3	Q2276-01	MH-6-10-2025	WATER	1.6	1000	100	3.0005	3.0005	0	3.8030	3.8030	0.8025	802.5
4	Q2276-02	Q2276-01MS	WATER	1.6	1000	100	3.1856	3.1856	0	3.2174	3.2174	0.0318	31.8
5	Q2276-03	Q2276-01MSD	WATER	1.6	1000	100	2.7032	2.7032	0	2.7358	2.7358	0.0326	32.6
6	Q2309-01	EFFLUENT	WATER	1.6	1000	100	3.0565	3.0565	0	3.0786	3.0786	0.0221	22.1
7	Q2309-02	Q2309-01MS	WATER	1.6	1000	100	2.7132	2.7132	0	2.7551	2.7551	0.0419	41.9
8	Q2309-03	Q2309-01MSD	WATER	1.6	1000	100	2.6803	2.6803	0	2.7226	2.7226	0.0423	42.3

QC Batch# LB136143

Test: Oil and Grease

Analysis Date: 06/13/2025

Chemicals Used:

Chemical Name	Chemical Lot #
HEXANE	W3204
pH Paper 0-14	M6069
Sodium Sulfate	EP2620
1:1 HCL	WP112782
Silica Gel	NA
Sand	NA

Standards Used:

Standard Name	Amount Used	Standard Lot #
LCSW	2.5 ML	WP112783
LCSWD	NA	NA
MS/MSD	2.5 ML	W0112784

BALANCE CALIBRATION / OVEN Dessicator Data

Analytical Balance ID # : WC SC-6

Before Analysis

0.0020 gram Balance: 0.0018 (0.0018-0.0022) In OVEN TEMP1 : 71 °C Dessicator Time In1 : 10:26

1.0000 gram Balance: 1.0004 (0.9950-1.0050) In Time1: 09:30

Bal Check Time: 08:15 Out OVEN TEMP1: 71 °C Dessicator Time Out1: 11:00

Out Time1: 10:25

After Analysis

0.0020 gram Balance: 0.0019 (0.0018-0.0022) In OVEN TEMP2 : 70 °C Dessicator Time In2 : 12:01

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

Bal Check Time: 12:37 Out OVEN TEMP2: 70 °C Dessicator Time Out2: 12:35

Out Time2: 12:00

WORKLIST(Hardcopy Internal Chain)

136143

WorkList Name : OIL & GREASE Q2289

WorkList ID : 190168

Department : Wet-Chemistry

Date : 06-13-2025 07:47:32

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2276-01	CG MH-6-10-2025	Water	Oil and Grease	Conc H2SO4 to pH < 2	EURO03	D31	06/10/2025	1664A
Q2276-02	Q2276-01MS	Water	Oil and Grease	Conc H2SO4 to pH < 2	EURO03	D31	06/10/2025	1664A
Q2276-03	Q2276-01MSD	Water	Oil and Grease	Conc H2SO4 to pH < 2	EURO03	D31	06/10/2025	1664A
Q2309-01	EFFLUENT	Water	Oil and Grease	Conc H2SO4 to pH < 2	HOLL01	D51	06/12/2025	1664A
Q2309-02	Q2309-01MS	Water	Oil and Grease	Conc H2SO4 to pH < 2	HOLL01	D51	06/12/2025	1664A
Q2309-03	Q2309-01MSD	Water	Oil and Grease	Conc H2SO4 to pH < 2	HOLL01	D51	06/12/2025	1664A

Date/Time 06/13/25 08:00

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 06/13/25 15:00

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Extraction and Analytical Summary Report

Analysis Method: 1664A
Test: TPH
Run Number: LB136144
Analysis Date: 06/13/2025
BalanceID: WC SC-6
OvenID: EXT OVEN-3

ANALYST: jignesh
REVIEWED BY: Iwona
Extraction Date: 06/13/2025
Extraction IN Time: 08:25
Extraction OUT Time: 08:50
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	LB136144BL	LB136144BL	WATER	1.3	1000	100	3.1685	3.1685	3.01	3.1686	3.1686	0.0001	0.1
2	LB136144BS	LB136144BS	WATER	1.3	1000	100	2.8744	2.8744	3.02	2.8914	2.8914	0.0170	17
3	LB136144BSD	LB136144BSD	WATER	1.3	1000	100	2.9103	2.9103	3.03	2.9273	2.9273	0.0170	17
4	Q2276-01	MH-6-10-2025	WATER	1.6	1000	100	3.0280	3.0280	18.03	3.4312	3.4312	0.4032	403.2
5	Q2286-03	LAW-25-0084	WATER	1.6	1000	100	3.0386	3.0386	18.01	3.5090	3.5090	0.4704	470.4
6	Q2300-01	GRAB	WATER	1.6	1000	100	3.0455	3.0455	3.03	3.1776	3.1776	0.1321	132.1



Alliance
TECHNICAL GROUP

Test: TPH

Analysis Date: 06/13/2025

Chemicals Used:

Chemical Name	Chemical Lot #
HEXANE	W3204
pH Paper 0-14	M6069
Sodium Sulfate	EP2620
1:1 HCL	WP112782
Silica Gel	W3079
Sand	NA

Standards Used:

Standard Name	Amount Used	Standard Lot #
LCSW	5.00 ML	WP112783
LCSWD	5.00 ML	WP112784
MS/MSD	NA	NA

BALANCE CALIBRATION / OVEN Dessicator Data

Analytical Balance ID # : WC SC-6

Before Analysis

0.0020 gram Balance: 0.0018 (0.0018-0.0022) In OVEN TEMP1 : 70 °C Dessicator Time In1 : 10:31

1.0000 gram Balance: 1.0004 (0.9950-1.0050) In Time1: 09:30

Bal Check Time: 08:33 Out OVEN TEMP1: 70 °C Dessicator Time Out1: 11:00

Out Time1: 10:30

After Analysis

0.0020 gram Balance: 0.0021 (0.0018-0.0022) In OVEN TEMP2 : 71 °C Dessicator Time In2 : 12:01

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

Bal Check Time: 12:40 Out OVEN TEMP2: 71 °C Dessicator Time Out2: 12:38

Out Time2: 12:00

WORKLIST(Hardcopy Internal Chain)

UB136144

WorkList Name : TPH Q2276

WorkList ID : 190169

Department : Wet-Chemistry

Date : 06-13-2025 07:48:45

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2276-01	MH-6-10-2025	Water	TPH	Conc H2SO4 to pH < 2	EURO03	D31	06/10/2025	1664A
Q2286-03	LAW-25-0084	Water	TPH	Conc H2SO4 to pH < 2	PSEG03	D41	06/10/2025	1664A
Q2300-01	GRAB	Water	TPH	Conc H2SO4 to pH < 2	ARAM01	D41	06/11/2025	1664A

Date/Time 06/13/25 08:00

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 06/13/25 15:00

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 06/12/2025

Run Number: LB136145

BalanceID: WC SC-6

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 06/12/2025 14:00 **TEMP1 OUT:** 104 °C 06/12/2025 15:00
TEMP2 IN: 103 °C 06/12/2025 15:30 **TEMP2 OUT:** 104 °C 06/12/2025 16:30
TEMP3 IN: 104 °C 06/13/2025 10:00 **TEMP3 OUT:** 103 °C 06/13/2025 11:30
TEMP4 IN: 103 °C 06/13/2025 12:00 **TEMP4 OUT:** 104 °C 06/13/2025 13:35

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	LB136145BL	LB136145BL	1.3523	1.3523	100	1.3524	1.3524	1.3524	0.0001	1
2	LB136145BS	LB136145BS	1.4931	1.4931	100	1.5463	1.5463	1.5463	0.0532	532
3	Q2276-01	MH-6-10-2025	1.4832	1.4832	100	1.7147	1.7147	1.7147	0.2315	2315
4	Q2286-03	LAW-25-0084	1.4881	1.4881	100	1.8323	1.8323	1.8323	0.3442	3442
5	Q2289-01	SP-1	1.4981	1.4981	50	1.5281	1.5281	1.5281	0.0300	600
6	Q2289-02	SP-2	1.4829	1.4829	100	1.5134	1.5134	1.5134	0.0305	305
7	Q2289-03	SP-3	1.4805	1.4805	50	1.5327	1.5327	1.5327	0.0522	1044
8	Q2290-01	Outfall 1	1.4777	1.4777	500	1.4955	1.4955	1.4955	0.0178	35.6
9	Q2290-02	Outfall 2	1.4759	1.4759	700	1.4917	1.4917	1.4917	0.0158	22.6
10	Q2291-01	Outfall 001	1.4022	1.4022	100	1.4624	1.4624	1.4624	0.0602	602
11	Q2292-01	SW-1	1.3915	1.3915	500	1.4302	1.4302	1.4302	0.0387	77.4
12	Q2292-02	SW-2	1.4054	1.4054	1000	1.4487	1.4487	1.4487	0.0433	43.3
13	Q2293-01	SW-3	1.3996	1.3996	400	1.4934	1.4934	1.4934	0.0938	234.5
14	Q2293-01DUP	SW-3DUP	1.4901	1.4901	400	1.5842	1.5842	1.5842	0.0941	235.3
15	Q2300-02	COMP	1.4980	1.4980	100	1.5789	1.5789	1.5789	0.0809	809

TOTAL SUSPENDED SOLIDS - SM2540D

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 06/12/2025

Run Number: LB136145

BalanceID: WC SC-6

OvenID: WC OVEN-1

FilterID: 17416528

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 06/12/2025 14:00 **TEMP1 OUT:** 104 °C 06/12/2025 15:00
TEMP2 IN: 103 °C 06/12/2025 15:30 **TEMP2 OUT:** 104 °C 06/12/2025 16:30
TEMP3 IN: 104 °C 06/13/2025 10:00 **TEMP3 OUT:** 103 °C 06/13/2025 11:30
TEMP4 IN: 103 °C 06/13/2025 12:00 **TEMP4 OUT:** 104 °C 06/13/2025 13:35

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	Q2309-01	EFFLUENT	1.4834	1.4834	20	1.5331	1.5331	1.5331	0.0497	2485
17	Q2309-04	AERATION	1.4981	1.4981	20	1.6252	1.6252	1.6252	0.1271	6355

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)

UB 136145

WorkList Name : TSS Q2276 WorkList ID : 190170 Department : Wet-Chemistry Date : 06-13-2025 07:49:33

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2276-01	MH-6-10-2025	Water	TSS	Cool 4 deg C	EURO03	D31	06/10/2025	SM2540 D
Q2286-03	LAW-25-0084	Water	TSS	Cool 4 deg C	PSEG03	D41	06/10/2025	SM2540 D
Q2289-01	SP-1	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2289-02	SP-2	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2289-03	SP-3	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2290-01	Outfall 1	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2290-02	Outfall 2	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2291-01	Outfall 001	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2292-01	SW-1	Water	TSS	Cool 4 deg C	ATGG01	A11	06/10/2025	SM2540 D
Q2292-02	SW-2	Water	TSS	Cool 4 deg C	ATGG01	A12	06/10/2025	SM2540 D
Q2293-01	SW-3	Water	TSS	Cool 4 deg C	ATGG01	A12	06/10/2025	SM2540 D
Q2300-02	COMP	Water	TSS	Cool 4 deg C	ATGG01	A12	06/10/2025	SM2540 D
Q2309-04	EFFLUENT	Water	TSS	Cool 4 deg C	ARAM01	D41	06/11/2025	SM2540 D
Q2309-04	AERATION	Water	TSS	Cool 4 deg C	HOLL01	D51	06/12/2025	SM2540 D
Q2309-04		Water	TSS	Cool 4 deg C	HOLL01	D51	06/12/2025	SM2540 D

Date/Time 06/13/25 08:00
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 06/13/25 14:30
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136102

Review By	jignesh	Review On	6/11/2025 12:13:30 PM
Supervise By	Iwona	Supervise On	6/11/2025 12:33:36 PM
SubDirectory	LB136102	Test	pH
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	W3178,W3093,W3191,W3071,W3161,W3200		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	06/11/25 11:30		jignesh	OK
2	CAL2	CAL2	CAL	06/11/25 11:31		jignesh	OK
3	CAL3	CAL3	CAL	06/11/25 11:33		jignesh	OK
4	ICV	ICV	ICV	06/11/25 11:35		jignesh	OK
5	CCV1	CCV1	CCV	06/11/25 11:36		jignesh	OK
6	Q2276-01	MH-6-10-2025	SAM	06/11/25 11:45		jignesh	OK
7	Q2279-01	301-469-5TH-AVE	SAM	06/11/25 12:00		jignesh	OK
8	Q2282-03	GAS-AUD-25-0027-00	SAM	06/11/25 12:12		jignesh	OK
9	Q2282-04	251233	SAM	06/11/25 12:20		jignesh	OK
10	Q2284-02	TRE-GAS-25-0068	SAM	06/11/25 12:30		jignesh	OK
11	Q2286-03	LAW-25-0084	SAM	06/11/25 12:37		jignesh	OK
12	Q2286-03DUP	LAW-25-0084DUP	DUP	06/11/25 12:40		jignesh	OK
13	CCV2	CCV2	CCV	06/11/25 12:41		jignesh	OK

Instrument ID: DO METER

Daily Analysis Runlog For Sequence/QC Batch ID # LB136118

Review By	Eman	Review On	6/16/2025 2:29:47 PM
Supervise By	Iwona	Supervise On	6/16/2025 4:14:08 PM
SubDirectory	LB136118	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	WP113477,W3149,WP112832,W3103,W3109,W3105,WP113479,WP113478,WP111323		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB136118BL	LB136118BL	MB	06/11/25 16:40		rubina	OK
2	LB136118BS	LB136118BS	LCS	06/11/25 16:40		rubina	OK
3	Q2276-01	MH-6-10-2025	SAM	06/11/25 16:40		rubina	OK
4	Q2286-03	LAW-25-0084	SAM	06/11/25 16:40		rubina	OK
5	Q2286-03DUP	LAW-25-0084DUP	DUP	06/11/25 16:40		rubina	OK

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB136134

Review By	Iwona	Review On	6/12/2025 4:52:37 PM
Supervise By	jignesh	Supervise On	6/12/2025 4:54:41 PM
SubDirectory	LB136134	Test	COD
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP113238,WP113237,WP113235,WP113234,WP113233,WP113240,WP113236,W3128,WP113445,WP113446,WP1		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	05/28/25 13:10		Iwona	OK
2	CAL2	CAL2	CAL	05/28/25 13:10		Iwona	OK
3	CAL3	CAL3	CAL	05/28/25 13:11		Iwona	OK
4	CAL4	CAL4	CAL	05/28/25 13:11		Iwona	OK
5	CAL5	CAL5	CAL	05/28/25 13:12		Iwona	OK
6	CAL6	CAL6	CAL	05/28/25 13:12		Iwona	OK
7	ICV	ICV	ICV	05/28/25 13:13		Iwona	OK
8	ICB	ICB	ICB	05/28/25 13:13		Iwona	OK
9	CCV1	CCV1	CCV	06/12/25 14:15		Iwona	OK
10	CCB1	CCB1	CCB	06/12/25 14:15		Iwona	OK
11	RL Check	RL Check	SAM	06/12/25 14:16		Iwona	OK
12	LB136134BL	LB136134BL	MB	06/12/25 14:16		Iwona	OK
13	LB136134BS	LB136134BS	LCS	06/12/25 14:17		Iwona	OK
14	Q2276-01	MH-6-10-2025	SAM	06/12/25 14:17		Iwona	OK
15	Q2286-03	LAW-25-0084	SAM	06/12/25 14:18		Iwona	OK
16	Q2289-01	SP-1	SAM	06/12/25 14:18		Iwona	OK
17	Q2289-02	SP-2	SAM	06/12/25 14:19		Iwona	OK
18	Q2289-03	SP-3	SAM	06/12/25 14:19		Iwona	OK

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB136134

Review By	Iwona	Review On	6/12/2025 4:52:37 PM
Supervise By	jignesh	Supervise On	6/12/2025 4:54:41 PM
SubDirectory	LB136134	Test	COD
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP113238,WP113237,WP113235,WP113234,WP113233,WP113240,WP113236,W3128,WP113445,WP113446,WP1		

19	Q2290-01	Outfall 1	SAM	06/12/25 14:20		Iwona	OK
20	Q2290-02	Outfall 2	SAM	06/12/25 14:20		Iwona	OK
21	Q2291-01	Outfall 001	SAM	06/12/25 14:21		Iwona	OK
22	CCV2	CCV2	CCV	06/12/25 14:21		Iwona	OK
23	CCB2	CCB2	CCB	06/12/25 14:22		Iwona	OK
24	Q2292-01	SW-1	SAM	06/12/25 14:22		Iwona	OK
25	Q2292-02	SW-2	SAM	06/12/25 14:23		Iwona	OK
26	Q2293-01	SW-3	SAM	06/12/25 14:23		Iwona	OK
27	Q2294-01	Outfall 1	SAM	06/12/25 14:24		Iwona	OK
28	Q2294-01DUP	Outfall 1DUP	DUP	06/12/25 14:24		Iwona	OK
29	Q2294-01MS	Outfall 1MS	MS	06/12/25 14:25		Iwona	OK
30	Q2294-01MSD	Outfall 1MSD	MSD	06/12/25 14:25		Iwona	OK
31	CCV3	CCV3	CCV	06/12/25 14:26		Iwona	OK
32	CCB3	CCB3	CCB	06/12/25 14:26		Iwona	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB136143

Review By	jignesh	Review On	6/13/2025 11:04:42 AM
Supervise By	Iwona	Supervise On	6/13/2025 12:25:21 PM
SubDirectory	LB136143	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,EP2620,WP112782,NA,NA,WP112783,NA,WO112784		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB136143BL	LB136143BL	MB	06/13/25 09:30		jignesh	OK
2	LB136143BS	LB136143BS	LCS	06/13/25 09:30		jignesh	OK
3	Q2276-01	MH-6-10-2025	SAM	06/13/25 09:30		jignesh	OK
4	Q2276-02	Q2276-01MS	MS	06/13/25 09:30		jignesh	OK
5	Q2276-03	Q2276-01MSD	MSD	06/13/25 09:30		jignesh	OK
6	Q2309-01	EFFLUENT	SAM	06/13/25 09:30		jignesh	OK
7	Q2309-02	Q2309-01MS	MS	06/13/25 09:30		jignesh	OK
8	Q2309-03	Q2309-01MSD	MSD	06/13/25 09:30		jignesh	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB136144

Review By	jignesh	Review On	6/13/2025 11:16:48 AM
Supervise By	Iwona	Supervise On	6/13/2025 12:24:53 PM
SubDirectory	LB136144	Test	TPH
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,EP2620,WP112782,W3079,NA,WP112783,WP112784,NA		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB136144BL	LB136144BL	MB	06/13/25 09:30		jignesh	OK
2	LB136144BS	LB136144BS	LCS	06/13/25 09:30		jignesh	OK
3	LB136144BSD	LB136144BSD	LCSD	06/13/25 09:30		jignesh	OK
4	Q2276-01	MH-6-10-2025	SAM	06/13/25 09:30		jignesh	OK
5	Q2286-03	LAW-25-0084	SAM	06/13/25 09:30		jignesh	OK
6	Q2300-01	GRAB	SAM	06/13/25 09:30		jignesh	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB136145

Review By	jignesh	Review On	6/13/2025 12:19:03 PM
Supervise By	Iwona	Supervise On	6/13/2025 12:24:22 PM
SubDirectory	LB136145	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	LB136145BL	LB136145BL	MB	06/13/25 10:00		jignesh	OK
2	LB136145BS	LB136145BS	LCS	06/13/25 10:00		jignesh	OK
3	Q2276-01	MH-6-10-2025	SAM	06/13/25 10:00		jignesh	OK
4	Q2286-03	LAW-25-0084	SAM	06/13/25 10:00		jignesh	OK
5	Q2289-01	SP-1	SAM	06/13/25 10:00		jignesh	OK
6	Q2289-02	SP-2	SAM	06/13/25 10:00		jignesh	OK
7	Q2289-03	SP-3	SAM	06/13/25 10:00		jignesh	OK
8	Q2290-01	Outfall 1	SAM	06/13/25 10:00		jignesh	OK
9	Q2290-02	Outfall 2	SAM	06/13/25 10:00		jignesh	OK
10	Q2291-01	Outfall 001	SAM	06/13/25 10:00		jignesh	OK
11	Q2292-01	SW-1	SAM	06/13/25 10:00		jignesh	OK
12	Q2292-02	SW-2	SAM	06/13/25 10:00		jignesh	OK
13	Q2293-01	SW-3	SAM	06/13/25 10:00		jignesh	OK
14	Q2293-01DUP	SW-3DUP	DUP	06/13/25 10:00		jignesh	OK
15	Q2300-02	COMP	SAM	06/13/25 10:00		jignesh	OK
16	Q2309-01	EFFLUENT	SAM	06/13/25 10:00		jignesh	OK
17	Q2309-04	AERATION	SAM	06/13/25 10:00		jignesh	OK

Prep Standard - Chemical Standard Summary

Order ID : Q2276

Test : BOD5,COD,Oil and Grease,pH,TPH,TSS

Prepbatch ID :

Sequence ID/Qc Batch ID: LB136102, LB136118, LB136134, LB136143, LB136144, LB136145,

Standard ID :

EP2620, WP111323, WP112782, WP112783, WP112784, WP112832, WP113231, WP113232, WP113233, WP113234, WP113235, WP113236, WP113237, WP113238, WP113240, WP113443, WP113444, WP113445, WP113446, WP113448, WP113477, WP113478, WP113479,

Chemical ID :

E3551, E3917, M6041, M6069, M6151, W2653, W2654, W2784, W2817, W2871, W3009, W3071, W3079, W3082, W3093, W3103, W3105, W3109, W3112, W3113, W3128, W3144, W3149, W3161, W3169, W3178, W3191, W3200, W3204, W3212, WO 112784,



<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	EP2620	05/30/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/30/2025
<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>
1571	Sodium hydroxide, 1N	WP111323	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 4.00000gram of W3113 + 96.00000ml 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>
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



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3374	1664A QCS spiking solution-SS	WP112784	04/22/2025	10/03/2025	Jignesh Parikh	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 04/22/2025
<u>FROM</u>	1000.00000ml of E3917 + 4.00000gram of W3009 + 4.00000gram of W3082 = Final Quantity: 1000.000 ml							

<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>
2456	COD Stock std, 1000ppm	WP113231	05/28/2025	06/04/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 05/28/2025
<u>FROM</u> 0.08500gram of W2784 + 100.00000ml of W3112 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2457	COD Stock std-SS, 1000ppm	WP113232	05/28/2025	06/04/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 05/28/2025
<u>FROM</u>	0.08500gram of W3169 + 100.00000ml of W3112 = Final Quantity: 100.000 ml							

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
139	COD calibration std. 0 ppm	WP113233	05/28/2025	06/04/2025	Iwona Zarych	None	None	Jignesh Parikh
								05/28/2025

FROM 10.00000ml of W3112 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
138	COD calibration std. 10 ppm	WP113234	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh
								05/28/2025

FROM 9.90000ml of W3112 + 0.10000ml of WP113231 = Final Quantity: 10.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
137	COD calibration std. 50 ppm	WP113235	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u>	9.50000ml of W3112 + 0.50000ml of WP113231 = Final Quantity: 10.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4161	COD calibration std. 75 ppm	WP113236	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u>	9.25000ml of W3112 + 0.75000ml of WP113231 = Final Quantity: 10.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
136	COD calibration std. 100 ppm	WP113237	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u>	9.00000ml of W3112 + 1.00000ml of WP113231 = Final Quantity: 10.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
135	COD calibration std. 150 ppm	WP113238	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/28/2025
<u>FROM</u>	8.50000ml of W3112 + 1.50000ml of WP113231 = Final Quantity: 10.000 ml							

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2459	COD ICV-LCS std, 50ppm	WP113240	05/28/2025	06/04/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/28/2025

FROM 9.50000ml of W3112 + 0.50000ml of WP113232 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2456	COD Stock std, 1000ppm	WP113443	06/09/2025	06/16/2025	Iwona Zarych	WETCHEM_S CALE_5 (WC SC-5)	None	Jignesh Parikh 06/11/2025

FROM 0.08500gram of W2784 + 100.00000ml of W3112 = Final Quantity: 100.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2457	COD Stock std-SS, 1000ppm	WP113444	06/09/2025	06/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 06/11/2025
<u>FROM</u>	0.08500gram of W3169 + 100.00000ml of W3112 = Final Quantity: 100.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2458	COD CCV std, 50ppm	WP113445	06/09/2025	06/16/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/11/2025
<u>FROM</u> 9.50000ml of W3112 + 0.50000ml of WP113443 = Final Quantity: 10.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2459	COD ICV-LCS std, 50ppm	WP113446	06/09/2025	06/16/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 06/11/2025
<u>FROM</u> 9.50000ml of W3112 + 0.50000ml of WP113444 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4162	RL CHECK	WP113448	06/09/2025	06/16/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Jignesh Parikh 06/11/2025
<u>FROM</u> 9.90000ml of W3112 + 0.10000ml of WP113443 = Final Quantity: 10.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
127	BOD Dilution fluid	WP113477	06/11/2025	06/12/2025	Rubina Mughal	None	None	Iwona Zarych
								06/11/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
129	Glutamic acid-glucose mix for BOD	WP113478	06/11/2025	06/12/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych
								06/11/2025

FROM 0.15000gram of W2653 + 0.15000gram of W2654 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
128	polyseed seed control	WP113479	06/11/2025	06/12/2025	Rubina Mughal	None	None	Iwona Zarych 06/11/2025
<u>FROM</u> 1.00000PILLOW of W3212 + 300.00000ml of WP113477 = Final Quantity: 300.000 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	12/04/2025	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.	AC156212500 / GLUTAMIC ACID BIOCHEM REG, 250G	A0405990	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2653

CHEMICAL RECEIPT LOG BOOK

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.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	201089	06/30/2025	12/23/2020 / apatel	12/16/2020 / apatel	W2784

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14455-3 / buffer solution pH 7 yellow	4308H30	07/31/2025	01/02/2024 / JIGNESH	12/06/2023 / lwona	W3071

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	04667-2.5 / Silica Gel (60-200 mesh), 2.5 KG	072154301	01/30/2029	05/07/2024 / jignesh	01/30/2024 / jignesh	W3079

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	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

CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Environmental Express LTD	B1010 / COD Digestion Vials Low Level 0-150Mg/L	13821	10/31/2027	05/20/2025 / lwona	07/25/2024 / lwona	W3128

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.	AL13850-1 / Buffer Solution, PH2 (500ml)	2411E26	10/31/2026	12/09/2024 / lwona	12/09/2024 / lwona	W3161

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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.	136742-80 / POLYSEED	132409	09/30/2026	05/21/2025 / lwona	05/21/2025 / lwona	W3212

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



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

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. Acros Organics 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 human or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing 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	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

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.

W3071
Rec 12/6/23

Certificate of Analysis 12

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

Lot Number: 4308H30

Product Number: 1551

Manufacture Date: AUG 09, 2023

Expiration Date: JUL 2025

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

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

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

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

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.002	0.02	186-I-g, 186-II-g, 191d

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

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

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

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



Paul Brandon (08/09/2023)

Production Manager

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

This product was tested in an ISO 17025 Accredited Laboratory

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

W3009
rec. 2/27/2023 12

Product Name:

Hexadecane - ReagentPlus®, 99%

Certificate of Analysis

Product Number:

H6703

Batch Number:

SHBP8192

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

Brand:

SIAL

CAS Number:

544-76-3

MDL Number:

MFCD00008998

Formula:

C16H34

Formula Weight:

226.44 g/mol

Quality Release Date:

04 AUG 2022

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


Larry Coers, Director

Quality Control

Sheboygan Falls, WI US

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





Certificate of Analysis

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.

Certificate of Analysis

ThermoFisher
SCIENTIFIC

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

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



Julian Burton - Quality Control Manager – Fair Lawn

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

*Based on suggested storage condition.



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

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

CERTIFICATE OF ANALYSIS

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

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

COMMENTS

QC: PhC Irma Belmares

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

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

RC-02-01, Ed. 3

Acetone

BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 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

Certificate of Analysis

Product information

Product: Silica 60, 0.063 - 0.200 mm
REF: 815330.25
LOT: 072154301

W 3049
SP

Technical data

Material: Synthetic amorphous silica (irregular shaped)
Description: White powder

Parameter	Specifications	Result
Specific surface (m ² /g, N ₂ adsorption) :	450 - 550	537
Particle size distribution (screen analysis) :	< 63 µm max. 5 %	0.3
	> 200 µm max. 5 %	0.1
pH value :	6.0 - 7.5	7
Water content (%) :	< 7	3.6
Pore volume (mL/g, N ₂ adsorption) :	0.65 - 0.85	0.82
Mean pore size (Å, N ₂ adsorption) :	50 - 70	62

Expiry

This product has no stated expiration date or shelf life.

We recommend to use the product within a time period of 5 years after date of QC release.

This time period is valid only if the product is stored under dry and frost-free conditions.

After 5 years we recommend retesting the adsorbent to make sure that the expected performance is still given.

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.

Date of measurement: 16.02.2023 22:00

Certificate of analysis

W3082 Received on 2/26/2026 by IZ

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

Appearance White flakes
Assay 98.7 %

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

Order our products online www.alfa.com

ThermoFisher
S C I E N T I F I C

**RICCA CHEMICAL COMPANY®**

1490 Lammers Pike

Batesville, IN 47006

<http://www.riccachemical.com>

1-888-GO-RICCA

customerservice@riccachemical.com

Certificate of Analysis

W3093
004121
04/03/2024
16

Buffer, Reference Standard, pH 7.00 ± 0.01 at 25°C (Color Coded Yellow)**Lot Number:** 4401F99**Product Number:** 1551**Manufacture Date:** JAN 08, 2024**Expiration Date:** DEC 2025

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

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

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

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

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

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

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

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

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

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



Paul Brandon (01/08/2024)

Production Manager

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

This product was tested in an ISO 17025 Accredited Laboratory

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



Certificate of Analysis

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

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



Sodium Hydroxide (Pellets)

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

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

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

Storage: Room Temperature

Pellets

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

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.



Sodium Hydroxide (Pellets)

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

Chemical Formula: NaOH
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.

W3127 rec. 7/25/24 12
W3128 exp. 10/31/27
W3129

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

October 27, 2022

CERTIFICATE OF ANALYSIS

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

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

<u>Cat. No.</u>	<u>Lot No.</u>	<u>Product Description</u>
B1010	13821	COD Reagent Vials, 0 - 150 ppm



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

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



Certificate of Analysis

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

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

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

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

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

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

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

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

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



Jose Pena (11/11/2024)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

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



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

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

Internal ID #: 322

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

**RICCA CHEMICAL COMPANY®**

1841 Broad Street
Pocomoke City, MD 21851
<http://www.riccachemical.com>
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

W21758 58

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

Lot Number: 2411A93

Product Number: 1501

Manufacture Date: NOV 04, 2024

Expiration Date: OCT 2026

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

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

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

Test	Specification	Result
Appearance	Red liquid	Passed

*Not a certified value.

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

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

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

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

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



RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
<http://www.riccachemical.com>
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

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

Lot Number: 2410F80

Product Number: 1601

Manufacture Date: OCT 09, 2024

Expiration Date: MAR 2026

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

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

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

Test	Specification	Result
Appearance	Blue liquid	Passed

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

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

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

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

Version: 1.3

Lot Number: 2410F80

Product Number: 1601

Page 1 of 2



Certificate of Analysis

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

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

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

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

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

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

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

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



Jose Pena (04/08/2025)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

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

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

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

N3212 Received on 5/21/25 by 12



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 132409 • Mfg. Date: 09/2024 • Exp. Date: 09/2026

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# 43100020 – Average Test Result: 202.1

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 ensure that the Finished Product conforms to the above specification.

Signature: _____

Quality Control Department

Date: 09/13/2024

POLYSEED.Ref.1.19

Revised Jan 24



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Europastay USA
ADDRESS: 571 JERSEY AVE
CITY NEW BRUNSWICK STATE: NJ ZIP: 08901
ATTENTION: KEVIN CARLUCCI
PHONE: 631 563 6262 FAX: X2602

CLIENT PROJECT INFORMATION

PROJECT NAME: MCUA Permit No 14241-571 Jersey Ave
PROJECT NO.: LOCATION:
PROJECT MANAGER:
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

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

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

TPH ORG PH, BOD5
TSS
MET. Group 3
COD
PFAS

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	<u>MH-6-10-2025</u>	<u>W.</u>		<u>X</u>	<u>6/9/0</u>	<u>1110</u>	<u>11</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>			
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. <u>[Signature]</u>	DATE/TIME: <u>1115</u> <u>6/10/25</u>	RECEIVED BY: 1. <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>3.2</u> °C Comments:
RELINQUISHED BY SAMPLER: 2. <u>[Signature]</u>	DATE/TIME:	RECEIVED BY: 2. <u>[Signature]</u>	
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: <u>1230</u> <u>6/10/25</u>	RECEIVED BY: 3. <u>[Signature]</u>	

Page 1 of 1 CLIENT: ☐ Hand Delivered ☐ Other Shipment Complete
☐ YES ☐ NO

Laboratory Certification

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