

Cover Page

Order ID : Q1907

Project ID : Walsh CO-032 Sampling

Client : Walsh Construction Company II, LLC

Lab Sample Number

Q1907-01
Q1907-02

Client Sample Number

CO-8R-WC
CO-8R-WC

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

Signature : _____

Date: 5/7/2025

DATA REPORTING QUALIFIERS- INORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1907

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: PRADIP PRAJAPATI

Date: 05/07/2025

LAB CHRONICLE

OrderID:	Q1907	OrderDate:	4/28/2025 4:13:00 PM
Client:	Walsh Construction Company II, LLC	Project:	Walsh CO-032 Sampling
Contact:	Jesse A. Sylvestri	Location:	L51,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1907-01	CO-8R-WC	SOIL			04/28/25 11:50			04/28/25
			Ammonia	SM4500-NH3		04/30/25	04/30/25 14:02	
			COD	SM5220 D			05/06/25 13:17	
			Cyanide	9012B		04/29/25	04/30/25 11:01	
			Hexavalent Chromium	7196A		04/29/25	04/29/25 14:10	
			Oil and Grease	9071B			05/06/25 10:25	
			Paint Filter	9095B			04/29/25 15:52	
			TS	SM2540 B			04/29/25 11:00	
			TVS	160.4			04/29/25 15:30	
Q1907-02	CO-8R-WC	SOIL			04/28/25 11:50			04/28/25
			Corrosivity	9045D			04/29/25 09:44	
			Ignitability	1030			04/30/25 14:22	
			Reactive Cyanide	9012B		04/30/25	04/30/25 11:46	
			Reactive Sulfide	9034		05/01/25	05/01/25 11:11	



SAMPLE DATA

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	04/28/25 11:50
Project:	Walsh CO-032 Sampling	Date Received:	04/28/25
Client Sample ID:	CO-8R-WC	SDG No.:	Q1907
Lab Sample ID:	Q1907-01	Matrix:	SOIL
		% Solid:	84.6

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Ammonia as N	2.50	U	1	2.50	5.80	mg/Kg	04/30/25 09:25	04/30/25 14:02	SM 4500-NH3 B plus G-11
COD	5850		1	95.6	568	mg/Kg		05/06/25 13:17	SM 5220 D-11
Cyanide	0.19	J	1	0.049	0.29	mg/Kg	04/29/25 14:00	04/30/25 11:01	9012B
Hexavalent Chromium	0.082	U	1	0.082	0.47	mg/Kg	04/29/25 09:00	04/29/25 14:10	7196A
Oil and Grease	2480		1	6.86	29.5	mg/Kg		05/06/25 10:25	SW9071B
Paint Filter	1.00	U	1	1.00	1.00	ml/100gm		04/29/25 15:52	9095B
TS	88.6		1	1.00	5.00	%		04/29/25 11:00	SM 2540 B-15
TVS	4.10	J	1	1.00	10.0	%		04/29/25 15:30	160.4

Comments: _____

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	04/28/25 11:50
Project:	Walsh CO-032 Sampling	Date Received:	04/28/25
Client Sample ID:	CO-8R-WC	SDG No.:	Q1907
Lab Sample ID:	Q1907-02	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	8.41	H	1	0	0	pH		04/29/25 09:44	9045D
Ignitability	NO		1	0	0	oC		04/30/25 14:22	1030
Reactive Cyanide	0.0083	U	1	0.0083	0.050	mg/Kg	04/30/25 08:50	04/30/25 11:46	9012B
Reactive Sulfide	1.59	J	1	0.20	10.0	mg/Kg	05/01/25 08:50	05/01/25 11:11	9034

Comments: pH result reported at temperature 20.9 °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: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135585

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: Corrosivity	ICV	pH	7.01	7	100	90-110	04/29/2025
Sample ID: Corrosivity	CCV1	pH	2.01	2.00	101	90-110	04/29/2025
Sample ID: Corrosivity	CCV2	pH	12.02	12.00	100	90-110	04/29/2025
Sample ID: Corrosivity	CCV3	pH	2.01	2.00	101	90-110	04/29/2025

Initial and Continuing Calibration Verification

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135596

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Hexavalent Chromium	mg/L	0.491	0.5	98	90-110	04/29/2025
Sample ID: CCV1 Hexavalent Chromium	mg/L	0.499	0.5	100	90-110	04/29/2025
Sample ID: CCV2 Hexavalent Chromium	mg/L	0.491	0.5	98	90-110	04/29/2025
Sample ID: CCV3 Hexavalent Chromium	mg/L	0.494	0.5	99	90-110	04/29/2025
Sample ID: CCV4 Hexavalent Chromium	mg/L	0.494	0.5	99	90-110	04/29/2025

Initial and Continuing Calibration Verification

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135605

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV1						
Cyanide		mg/L	0.099	0.099	100	90-110	04/30/2025
Sample ID:	CCV1						
Cyanide		mg/L	0.24	0.25	96	90-110	04/30/2025
Sample ID:	CCV2						
Cyanide		mg/L	0.23	0.25	92	90-110	04/30/2025
Sample ID:	CCV3						
Cyanide		mg/L	0.25	0.25	100	90-110	04/30/2025

Initial and Continuing Calibration Verification

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135608

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Reactive Cyanide	mg/L	0.092	0.099	93	85-115	04/30/2025
Sample ID: CCV1 Reactive Cyanide	mg/L	0.25	0.25	100	90-110	04/30/2025
Sample ID: CCV2 Reactive Cyanide	mg/L	0.23	0.25	92	90-110	04/30/2025
Sample ID: CCV3 Reactive Cyanide	mg/L	0.25	0.25	100	90-110	04/30/2025

Initial and Continuing Calibration Verification

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135612

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Ammonia as N	mg/L	0.92	1	92	90-110	04/30/2025
Sample ID: CCV1 Ammonia as N	mg/L	0.94	1	94	90-110	04/30/2025
Sample ID: CCV2 Ammonia as N	mg/L	1	1	100	90-110	04/30/2025
Sample ID: CCV3 Ammonia as N	mg/L	0.97	1	97	90-110	04/30/2025

Initial and Continuing Calibration Verification

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135683

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV COD	mg/L	48.972	50	98	95-105	05/06/2025
Sample ID: CCV1 COD	mg/L	51.007	50	102	95-105	05/06/2025
Sample ID: CCV2 COD	mg/L	47.954	50	96	95-105	05/06/2025

Initial and Continuing Calibration Verification

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135683

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
---------	-------	--------	------------	---------------	---------------------------	------------------

Initial and Continuing Calibration Blank Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135596

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	04/29/2025
Sample ID: CCB1 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	04/29/2025
Sample ID: CCB2 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	04/29/2025
Sample ID: CCB3 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	04/29/2025
Sample ID: CCB4 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	04/29/2025

Initial and Continuing Calibration Blank Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135605

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	04/30/2025
Sample ID: CCB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	04/30/2025
Sample ID: CCB2 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	04/30/2025
Sample ID: CCB3 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	04/30/2025

Initial and Continuing Calibration Blank Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135608

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	04/30/2025
Sample ID: CCB1 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	04/30/2025
Sample ID: CCB2 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	04/30/2025
Sample ID: CCB3 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	04/30/2025

Initial and Continuing Calibration Blank Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135612

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	04/30/2025
Sample ID: CCB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	04/30/2025
Sample ID: CCB2 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	04/30/2025
Sample ID: CCB3 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.030	0.1	04/30/2025

Initial and Continuing Calibration Blank Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135683

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	05/06/2025
Sample ID: CCB1 COD	mg/L	< 5.0000	5.0000	U	1.50	10	05/06/2025
Sample ID: CCB2 COD	mg/L	< 5.0000	5.0000	U	1.50	10	05/06/2025

Initial and Continuing Calibration Blank Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

RunNo.: LB135683

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
---------	-------	--------	----------------------	--------------	-----	-----	------------------

Preparation Blank Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB135587BL TS	%	< 2.5000	2.5000	U	1	5	04/29/2025
Sample ID: LB135588BL TVS	%	< 5.0000	5.0000	U	1	10	04/29/2025
Sample ID: LB135676BL Oil and Grease	mg/Kg	< 12.5000	12.5000	U	5.8	25	05/06/2025
Sample ID: LB135683BL COD	mg/Kg	< 250.0000	250.0000	U	84.1	500	05/06/2025
Sample ID: PB167753BL Cyanide	mg/Kg	< 0.1250	0.1250	U	0.042	0.25	04/30/2025
Sample ID: PB167785BL Hexavalent Chromium	mg/Kg	< 0.2000	0.2000	U	0.07	0.4	04/29/2025
Sample ID: PB167792BL Reactive Cyanide	mg/Kg	< 0.0250	0.0250	U	0.0084	0.05	04/30/2025
Sample ID: PB167793BL Ammonia as N	mg/Kg	< 2.5000	2.5000	U	2.2	5	04/30/2025
Sample ID: PB167811BL Reactive Sulfide	mg/Kg	< 5.0000	5.0000	U	0.201	10	05/01/2025

Matrix Spike Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1883-15
Client ID:	OU4-VSL-19-042325MS	Percent Solids for Spike Sample:	95.8

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Cyanide	mg/Kg	75-125	1.70		0.043	U	2	1	85		04/30/2025

Matrix Spike Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1883-15
Client ID:	OU4-VSL-19-042325MSD	Percent Solids for Spike Sample:	95.8

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Cyanide	mg/Kg	75-125	1.70		0.043	U	2	1	85		04/30/2025

Matrix Spike Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1889-01
Client ID:	COMP-1MS	Percent Solids for Spike Sample:	82.5

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/Kg	75-125	63.1		5.50	J	58.8	1	98		04/30/2025

Matrix Spike Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1889-01
Client ID:	COMP-1MSD	Percent Solids for Spike Sample:	82.5

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/Kg	75-125	65.5		5.50	J	59.4	1	101		04/30/2025

Matrix Spike Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1901-02
Client ID:	B-167-SB01MS	Percent Solids for Spike Sample:	82.6

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	1500		0.083	U	1550	40	97		04/29/2025

Matrix Spike Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1901-02
Client ID:	B-167-SB01MS	Percent Solids for Spike Sample:	82.6

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	85-115	46.5		0.083	U	48.4	2	96		04/29/2025

Matrix Spike Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1901-02
Client ID:	B-167-SB01MS	Percent Solids for Spike Sample:	82.6

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	40.8		0.083	U	48.4	2	84		04/29/2025

Matrix Spike Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1907-01
Client ID:	CO-8R-WCMS	Percent Solids for Spike Sample:	84.6

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/Kg	75-125	2580		2480		118	1	83		05/06/2025
COD	mg/Kg	75-125	7930		5850		2760	1	75		05/06/2025

Matrix Spike Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1907-01
Client ID:	CO-8R-WCMSD	Percent Solids for Spike Sample:	84.6

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/Kg	75-125	2620				118	1	114		05/06/2025
COD	mg/Kg	75-125	8100		5850		2840	1	79		05/06/2025

Duplicate Sample Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1883-15
Client ID:	OU4-VSL-19-042325DUP	Percent Solids for Spike Sample:	95.8

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Cyanide	mg/Kg	+/-20	0.043	U	0.043	U	1	0		04/30/2025

Duplicate Sample Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1883-15
Client ID:	OU4-VSL-19-042325MSD	Percent Solids for Spike Sample:	95.8

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Cyanide	mg/Kg	+/-20	1.70		1.70		1	0		04/30/2025

Duplicate Sample Summary

Client: Walsh Construction Company II, LLC	SDG No.: Q1907
Project: Walsh CO-032 Sampling	Sample ID: Q1889-01
Client ID: COMP-1DUP	Percent Solids for Spike Sample: 82.5

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ammonia as N	mg/Kg	+/-20	5.50	J	5.60	J	1	2		04/30/2025

Duplicate Sample Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1889-01
Client ID:	COMP-1MSD	Percent Solids for Spike Sample:	82.5

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ammonia as N	mg/Kg	+/-20	63.1		65.5		1	4		04/30/2025

Duplicate Sample Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1892-01
Client ID:	MH-GDUP	Percent Solids for Spike Sample:	85.5

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Paint Filter	ml/100gm	+/-20	1.00	U	1.00	U	1	0		04/29/2025

Duplicate Sample Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1901-02
Client ID:	B-167-SB01DUP	Percent Solids for Spike Sample:	82.6

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	+/-20	0.083	U	0.083	U	1	0		04/29/2025

Duplicate Sample Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1901-08
Client ID:	B-167-SB01DUP	Percent Solids for Spike Sample:	100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ignitability	oC	+/-20	NO		NO		1	0		04/30/2025

Duplicate Sample Summary

Client: Walsh Construction Company II, LLC	SDG No.: Q1907
Project: Walsh CO-032 Sampling	Sample ID: Q1905-04
Client ID: MH-GDUP	Percent Solids for Spike Sample: 100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Reactive Cyanide	mg/Kg	+/-20	0.0083	U	0.0083	U	1	0		04/30/2025
Reactive Sulfide	mg/Kg	+/-20	3.16	J	3.16	J	1	0		05/01/2025

Duplicate Sample Summary

Client: Walsh Construction Company II, LLC	SDG No.: Q1907
Project: Walsh CO-032 Sampling	Sample ID: Q1907-01
Client ID: CO-8R-WCDUP	Percent Solids for Spike Sample: 84.6

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
TS	%	+/-5	88.6		89.1		1	0.56		04/29/2025
TVS	%	+/-5	4.10	J	4.00	J	1	2.47		04/29/2025
Oil and Grease	mg/Kg	+/-20	2480		2500		1	0.52		05/06/2025
COD	mg/Kg	+/-20	5850		5850		1	0		05/06/2025

Duplicate Sample Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1907-01
Client ID:	CO-8R-WCMSD	Percent Solids for Spike Sample:	84.6

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Oil and Grease	mg/Kg	+/-20	2480		2620		1			05/06/2025
COD	mg/Kg	+/-20	7930		8100		1	2.12		05/06/2025

Duplicate Sample Summary

Client:	Walsh Construction Company II, LLC	SDG No.:	Q1907
Project:	Walsh CO-032 Sampling	Sample ID:	Q1907-02
Client ID:	CO-8R-WCDUP	Percent Solids for Spike Sample:	100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Corrosivity	pH	+/-20	8.41		8.42		1	0.12		04/29/2025

Laboratory Control Sample Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

Run No.: LB135676

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135676BS							
Oil and Grease	mg/Kg	100	95.0		95	1	80-120	05/06/2025

Laboratory Control Sample Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

Run No.: LB135683

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB135683BS							
COD	mg/Kg	2500	2550		102	1	90-110	05/06/2025

Laboratory Control Sample Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

Run No.: LB135605

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB167753BS							
Cyanide	mg/Kg	5	4.60		92	1	85-115	04/30/2025

Laboratory Control Sample Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

Run No.: LB135596

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB167785BS							
Hexavalent Chromium	mg/Kg	20	19.9		100	1	84-110	04/29/2025

Laboratory Control Sample Summary

Client: Walsh Construction Company II, LLC

SDG No.: Q1907

Project: Walsh CO-032 Sampling

Run No.: LB135612

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB167793BS							
Ammonia as N	mg/Kg	50	47.5		95	1	90-110	04/30/2025



RAW DATA

Analytical Summary Report

Analysis Method: 9045D

Analyst By : jignesh

Parameter: Corrosivity

Supervisor Review By : Iwona

Run Number: LB135585

Slope : 98.6

BalanceID: WC SC-7

pH Meter ID : WC PH METER-1

Calibration Standards	Chemtech Log#
PH 4 BUFFER SOLUTION	W3178
BUFFER PH 7.00 GREEN 1PINT PK6	W3093
PH 10.01 BUFFER, COLOR CD 475ML	W3191
buffer solution pH 7 yellow	W3071
Buffer Solution, PH2 (500ml)	W3161
Buffer Solution, PH12 (500ml)	W3072

True Value of ICV = 7.00 Control Limits[+/- 0.1].

True Value of CCV1 = 2.00 Control Limits[+/- 0.1].

True Value of CCV2 = 12.00 Control Limits[+/- 0.1].

True Value of CCV3 = 2.00 Control Limits[+/- 0.1].

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.3	4.01	04/29/2025	08:20
2	CAL2	1	Water	NA	NA	20.2	7.00	04/29/2025	08:21
3	CAL3	1	Water	NA	NA	20.2	10.02	04/29/2025	08:22
4	ICV	1	Water	NA	NA	20.3	7.01	04/29/2025	08:25
5	CCV1	1	Water	NA	NA	20.2	2.01	04/29/2025	08:30
6	Q1901-08	1	Solid	20.02	20	21.3	8.45	04/29/2025	08:35
7	Q1901-09	1	Solid	20.03	20	20.9	8.99	04/29/2025	08:40
8	Q1901-10	1	Solid	20.02	20	21.0	7.07	04/29/2025	08:44
9	Q1901-11	1	Solid	20.03	20	20.7	8.16	04/29/2025	08:47
10	Q1904-02	1	Solid	20.02	20	20.7	8.41	04/29/2025	08:55
11	Q1905-04	1	Solid	20.03	20	24.1	5.54	04/29/2025	09:00
12	Q1905-08	1	Solid	20.02	20	24.1	5.95	04/29/2025	09:10
13	Q1906-04	1	Solid	20.03	20	23.2	7.54	04/29/2025	09:15
14	Q1906-08	1	Solid	20.04	20	23.2	6.92	04/29/2025	09:20
15	Q1906-12	1	Solid	20.03	20	22.1	6.72	04/29/2025	09:30
16	CCV2	1	Water	NA	NA	20.2	12.02	04/29/2025	09:35
17	Q1906-16	1	Solid	20.04	20	23.2	6.54	04/29/2025	09:35
18	Q1907-02	1	Solid	20.02	20	20.9	8.41	04/29/2025	09:44
19	Q1907-02DUP	1	Solid	20.03	20	20.8	8.42	04/29/2025	09:45
20	CCV3	1	Water	NA	NA	20.2	2.01	04/29/2025	09:50

WORKLIST(Hardcopy Internal Chain)

135585

WorkList Name : corrosion q1907 WorkList ID : 189190 Department : Wet-Chemistry Date : 04-29-2025 08:00:05

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1901-08	B-167-SB01	Solid	Corrosivity	Cool 4 deg C	PORT06	L51	04/26/2025	9045D
Q1901-09	B-170-SB01	Solid	Corrosivity	Cool 4 deg C	PORT06	L51	04/26/2025	9045D
Q1901-10	B-167-SB02	Solid	Corrosivity	Cool 4 deg C	PORT06	L51	04/26/2025	9045D
Q1901-11	B-170-SB02	Solid	Corrosivity	Cool 4 deg C	PORT06	L51	04/26/2025	9045D
Q1904-02	VNU-210	Solid	Corrosivity	Cool 4 deg C	PSEG03	L41	04/28/2025	9045D
Q1905-04	MH-G	Solid	Corrosivity	Cool 4 deg C	PSEG03	L51	04/28/2025	9045D
Q1905-08	MH-H	Solid	Corrosivity	Cool 4 deg C	PSEG03	L51	04/28/2025	9045D
Q1906-04	WC-4	Solid	Corrosivity	Cool 4 deg C	PSEG03	L41	04/28/2025	9045D
Q1906-08	WC-5	Solid	Corrosivity	Cool 4 deg C	PSEG03	L41	04/28/2025	9045D
Q1906-12	WC-6	Solid	Corrosivity	Cool 4 deg C	PSEG03	L41	04/28/2025	9045D
Q1906-16	WC-7	Solid	Corrosivity	Cool 4 deg C	PSEG03	L41	04/28/2025	9045D
Q1907-02	CO-8R-WC	Solid	Corrosivity	Cool 4 deg C	WALS01	L51	04/28/2025	9045D

Date/Time 04/29/25 08:15
 Raw Sample Received by: 30 Cole
 Raw Sample Relinquished by: CP

Date/Time 04/29/25 13:30
 Raw Sample Received by: CP
 Raw Sample Relinquished by: 30 Cole

TOTAL SOLIDS - SM2540B

SUPERVISOR: Iwona

ANALYST: jignesh

Date: 04/29/2025

Run Number: LB135587

BalanceID: WC SC-6

OvenID: WC OVEN#1

ThermometerID: WET OVEN#1

TEMP1 IN: 103 °C 04/29/2025 11:00 **TEMP1 OUT:** 103 °C 04/29/2025 12:00
TEMP2 IN: 104 °C 04/29/2025 12:30 **TEMP2 OUT:** 103 °C 04/29/2025 13:30
TEMP3 IN: 104 °C 04/29/2025 15:30 **TEMP3 OUT:** 103 °C 04/30/2025 07:30
TEMP4 IN: 104 °C 04/30/2025 08:00 **TEMP4 OUT:** 104 °C 04/30/2025 09:30

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Dish + Sample Weight (g)	Original weight 1st Dish+Sample weight after Drying @103-@105°C (g)	Constant weight 2nd Dish+Sample weight after Drying @103-@105°C (g)	Final Constant weight Final Dish+Sample weight after Drying @103-@105°C (g)	Weight (g)	Result %
1	LB135587BL	LB135587BL	65.6387	65.6387	65.6387	65.6387	65.6387	65.6387	0.0000	0
2	Q1907-01	CO-8R-WC	59.4042	59.4042	80.7701	78.3244	78.3244	78.3244	18.9202	88.6
3	Q1907-01DUP	CO-8R-WCDUP	55.8975	55.8975	77.2633	74.9370	74.9370	74.9370	19.0395	89.1

A = Final Empty Dish Weight (g)

B = Dish + Sample Weight (g)

C = Final Dish+Sample weight after Drying @103-@105°C (g)

$$\text{Result \%} = (C - A) * 100 / (B - A)$$

WORKLIST(Hardcopy Internal Chain)

VB135587
B135587 JB

WorkList Name : ts s q17907 WorkList ID : 189205 Department : Wet-Chemistry Date : 04-29-2025 10:54:11

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1907-01	CO-8R-WC	Solid	TS	Cool 4 deg C	WALS01	L51	04/28/2025	SM2540 B

Date/Time 04/29/25 12:30
Raw Sample Received by: JB Cdcy
Raw Sample Relinquished by: [Signature]

Date/Time 04/29/25 16:00
Raw Sample Received by: CJD SN
Raw Sample Relinquished by: JB Cdcy

TOTAL VOLATILE SOLIDS 160.4

TEMP1 IN: 104 °C 04/29/2025 15:30 **TEMP1 OUT:** 103 °C 04/30/2025 07:30
TEMP2 IN: 104 °C 04/30/2025 08:00 **TEMP2 OUT:** 104 °C 04/30/2025 09:30
TEMP3 IN: 540 °C 04/30/2025 10:00 **TEMP3 OUT:** 540 °C 04/30/2025 11:30
TEMP4 IN: 550 °C 04/30/2025 12:00 **TEMP4 OUT:** 550 °C 04/30/2025 13:30

Run Number: LB135588

SUPERVISOR: Iwona

ANALYST: jignesh

BalanceID: WC SC-6

OvenID: WC OVEN#1

Dish #	Lab ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Empty Dish + Sample Weight (g)	1st Dish + SampleWt Drying @103-@105°C (g)	Final Dish + SampleWt Drying @103-@105°C (g)	Dish + Samplewt Drying @550 (±50) °C (g)	Final Dish + Samplewt Drying @550 (±50) °C (g)	Weight Diff (g)	Result (%)
1	LB135588BL	65.6387	65.6387	65.6387	65.6387	65.6387	65.6387	65.6387	0.0000	0
2	Q1907-01	59.4042	59.4042	80.7701	78.3244	78.3244	77.5569	77.5569	0.7675	4.1
3	Q1907-01DUP	55.8975	55.8975	77.2633	74.9370	74.937	74.1826	74.1826	0.7544	4

A = Sample Weight (g)
B = Final Dish + Samplewt Drying @550 (±50) °C (g)
C = Final Dish + SampleWt Drying @103-@105 °C (g)
D = Weight (g)
E = Final Empty Dish Weight (g)
F = Final Dish + SampleWt Drying @103-@105 °C (g)

Weight D = C - B

Result % = $\frac{D}{F - E} \star 100$

WORKLIST(Hardcopy Internal Chain)

UB135588 JB135588 J8

WorkList Name : tvs q1907 s WorkList ID : 189206 Department : Wet-Chemistry Date : 04-29-2025 10:54:56

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1907-01	CO-8R-WC	Solid	TVS	Cool 4 deg C	WALS01	L51	04/28/2025	160.4

Date/Time 04/29/25 12:30
Raw Sample Received by: JB GOCJ
Raw Sample Relinquished by: CP Jm

Date/Time 04/29/25 16:00
Raw Sample Received by: CP Jm
Raw Sample Relinquished by: JB GOCJ

Analytical Summary Report

Analysis Method: 7196A

ANALYST: rubina

Parameter: ~~Hexavalent Chromium~~

SUPERVISOR REVIEW BY: Iwona

Run Number: LB135596

pH Meter ID: WC pH Meter-1

Reagent/Standard	Lot/Log #
hexavalent chromium color reagent	WP112869
5N sulfuric acid	WP112831
HNO3 Hex-Chrome, 5M	WP112830
Hexchrome Cleaning Solution	WP111249

Intercept: 0.0005

Slope: 0.7683

Regression: 0.999996

Seq	Lab ID	True Value (mg/l)	DF	Initial Vol (ml)	Final Vol (ml)	pH HNO3	pH H2SO4	Absorb.at 540nm		Absorbance Difference	Result (mg/L)	%D	Anal Date	Anal Time
								Backgrnd	Color					
1	CAL1	0	1	100	100	7.30	1.96	0.000	0.000	0.000	-0.00		04/29/2025	13:30
2	CAL2	0.01	1	100	100	7.36	1.84	0.000	0.007	0.007	0.008	-20	04/29/2025	13:31
3	CAL3	0.025	1	100	100	7.50	2.06	0.000	0.020	0.020	0.025	0	04/29/2025	13:32
4	CAL4	0.05	1	100	100	7.39	1.98	0.000	0.040	0.040	0.051	2	04/29/2025	13:33
5	CAL5	0.1	1	100	100	7.48	1.93	0.000	0.078	0.078	0.100	0	04/29/2025	13:34
6	CAL6	0.5	1	100	100	7.36	2.01	0.000	0.384	0.384	0.499	-0.2	04/29/2025	13:35
7	CAL7	1	1	100	100	7.44	1.97	0.000	0.769	0.769	1.000	0	04/29/2025	13:36

Analytical Summary Report

Analysis Method: 7196A

ANALYST:rubina

Parameter: Hexavalent Chromium

SUPERVISOR REVIEW BY:Iwona

Run Number: LB135596

pH Meter ID:WC pH Meter-1

Seq	Lab ID	True Value	DF	Initial Vol (ml/gm)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at540nm		Absorbance Difference	Intermediate Result (mg/L)	Anal Date	Anal Time
								Backgrnd	Color				
1	ICV	0.5	1	100	100	7.43	1.89	0.000	0.378	0.378	0.491	04/29/2025	13:37
2	ICB		1	100	100	7.27	1.75	0.000	0.000	0.000	-0.001	04/29/2025	13:38
3	CCV1	0.5	1	100	100	7.49	1.95	0.000	0.384	0.384	0.499	04/29/2025	13:39
4	CCB1		1	100	100	7.34	1.80	0.000	0.000	0.000	-0.001	04/29/2025	13:40
5	RL Check	0.01	1	100	100	7.41	1.89	0.000	0.008	0.008	0.010	04/29/2025	13:41
6	PB167785BL		1	2.50	100	7.24	1.71	0.000	0.000	0.000	-0.001	04/29/2025	13:42
7	PB167785BS	20	1	2.50	100	7.52	2.00	0.000	0.383	0.383	0.498	04/29/2025	13:43
8	Q1892-01		1	2.57	100	7.55	2.20	0.007	0.007	0.000	-0.001	04/29/2025	13:44
9	Q1892-05		1	2.53	100	7.36	2.19	0.006	0.007	0.001	0.001	04/29/2025	13:45
10	Q1892-09		1	2.52	100	7.52	2.27	0.012	0.012	0.000	-0.001	04/29/2025	13:46
11	Q1900-01		1	2.54	100	7.56	2.34	0.032	0.033	0.001	0.001	04/29/2025	13:47
12	Q1900-05		1	2.55	100	7.54	2.24	0.020	0.021	0.001	0.001	04/29/2025	13:48
13	Q1900-09		1	2.52	100	7.71	2.10	0.011	0.012	0.001	0.001	04/29/2025	13:49
14	Q1901-02		1	2.55	100	7.59	2.16	0.004	0.004	0.000	-0.001	04/29/2025	13:50
15	Q1901-02DU		1	2.55	100	7.55	2.10	0.004	0.004	0.000	-0.001	04/29/2025	13:51
16	CCV2	0.5	1	100	100	7.44	1.92	0.000	0.378	0.378	0.491	04/29/2025	13:52
17	CCB2		1	100	100	7.36	1.84	0.000	0.001	0.001	0.001	04/29/2025	13:53
18	Q1901-02MS	40	2	2.54	100	7.64	2.10	0.000	0.329	0.329	0.428	04/29/2025	13:54
19	Q1901-02MS	1284	40	2.54	100	7.53	2.09	0.000	0.606	0.606	0.788	04/29/2025	13:55
20	Q1901-02MS	40	2	2.55	100	7.67	2.20	0.000	0.377	0.377	0.490	04/29/2025	13:56
21	Q1901-03		1	2.52	100	7.75	2.10	0.002	0.003	0.001	0.001	04/29/2025	13:57
22	Q1901-04		1	2.54	100	7.60	2.23	0.036	0.036	0.000	-0.001	04/29/2025	13:58
23	Q1901-05		1	2.56	100	7.59	2.32	0.036	0.036	0.000	-0.001	04/29/2025	13:59
24	Q1903-01		1	2.52	100	7.34	2.06	0.000	0.000	0.000	-0.001	04/29/2025	14:00
25	Q1903-02		1	2.53	100	7.48	2.10	0.001	0.001	0.000	-0.001	04/29/2025	14:01
26	Q1903-03		1	2.25	100	7.39	2.16	0.006	0.007	0.001	0.001	04/29/2025	14:02
27	Q1904-01		1	2.23	100	7.51	2.19	0.010	0.010	0.000	-0.001	04/29/2025	14:03
28	CCV3	0.5	1	100	100	7.40	1.90	0.000	0.380	0.380	0.494	04/29/2025	14:04
29	CCB3		1	100	100	7.29	1.79	0.000	0.001	0.001	0.001	04/29/2025	14:05
30	Q1906-01		1	2.56	100	7.60	2.10	0.004	0.004	0.000	-0.001	04/29/2025	14:06
31	Q1906-05		1	2.58	100	7.67	2.17	0.011	0.014	0.003	0.003	04/29/2025	14:07
32	Q1906-09		1	2.52	100	7.69	2.14	0.010	0.013	0.003	0.003	04/29/2025	14:08
33	Q1906-13		1	2.57	100	7.54	2.20	0.009	0.010	0.001	0.001	04/29/2025	14:09
34	Q1907-01		1	2.52	100	7.42	2.29	0.010	0.010	0.000	-0.001	04/29/2025	14:10
35	CCV4	0.5	1	100	100	7.52	1.98	0.000	0.380	0.380	0.494	04/29/2025	14:11
36	CCB4		1	100	100	7.39	1.80	0.000	0.001	0.001	0.001	04/29/2025	14:12

Analytical Summary Report

Analysis Method: 9095B
Parameter: Paint Filter
Run Number: LB135599

Reviewed By: rubina
Supervisor Review By: Iwona
BalanceID: WC SC-7

Seq	LabID	ClientID	Dilution	Weight (g)	Inst. Conc (ml/100g)	Anal Date	Anal Time
1	Q1892-01	MH-G	1	100.02	0.00	04/29/2025	14:30
2	Q1892-01DUP	MH-GDUP	1	100.02	0.00	04/29/2025	14:38
3	Q1892-05	MH-H	1	100.08	0.00	04/29/2025	14:45
4	Q1892-09	MH-U2	1	100.04	0.00	04/29/2025	14:52
5	Q1896-01	295-BERGEN-RO	1	100.01	0.00	04/29/2025	15:00
6	Q1905-01	MH-G	1	100.08	0.00	04/29/2025	15:07
7	Q1905-05	MH-H	1	100.03	0.00	04/29/2025	15:15
8	Q1906-01	WC-4	1	100.04	0.00	04/29/2025	15:23
9	Q1906-05	WC-5	1	100.04	0.00	04/29/2025	15:30
10	Q1906-09	WC-6	1	100.07	0.00	04/29/2025	15:37
11	Q1906-13	WC-7	1	100.05	0.00	04/29/2025	15:45
12	Q1907-01	CO-8R-WC	1	100.02	0.00	04/29/2025	15:52

WORKLIST(Hardcopy Internal Chain)

LB135599

WorkList Name : pf-04-29

WorkList ID : 189208

Department : Wet-Chemistry

Date : 04-29-2025 11:23:57

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1892-01	MH-G	Solid	Paint Filter	Cool 4 deg C	PSEG03	L51	04/24/2025	9095B
Q1892-05	MH-H	Solid	Paint Filter	Cool 4 deg C	PSEG03	L51	04/24/2025	9095B
Q1892-09	MH-U2	Solid	Paint Filter	Cool 4 deg C	PSEG03	L51	04/25/2025	9095B
Q1896-01	295-BERGEN-RO	Solid	Paint Filter	Cool 4 deg C	PSEG03	L31	04/25/2025	9095B
Q1905-01	MH-G	Solid	Paint Filter	Cool 4 deg C	PSEG03	L51	04/28/2025	9095B
Q1905-05	MH-H	Solid	Paint Filter	Cool 4 deg C	PSEG03	L51	04/28/2025	9095B
Q1906-01	WC-4	Solid	Paint Filter	Cool 4 deg C	PSEG03	L41	04/28/2025	9095B
Q1906-05	WC-5	Solid	Paint Filter	Cool 4 deg C	PSEG03	L41	04/28/2025	9095B
Q1906-09	WC-6	Solid	Paint Filter	Cool 4 deg C	PSEG03	L41	04/28/2025	9095B
Q1906-13	WC-7	Solid	Paint Filter	Cool 4 deg C	PSEG03	L41	04/28/2025	9095B
Q1907-01	CO-8R-WC	Solid	Paint Filter	Cool 4 deg C	WALS01	L51	04/28/2025	9095B

Date/Time

04/29/25 14:20

Raw Sample Received by:

RM CWL

Raw Sample Relinquished by:

RM CWL

Date/Time

04/29/25 16:10

Raw Sample Received by:

RM CWL

Raw Sample Relinquished by:

RM CWL

Analytical Summary Report

Analysis Method: 1030
Parameter: Ignitability
Run Number: LB135603

Reviewed By: Iwona

Supervisor Review By: jignesh

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Anal Time
1	Q1901-08	B-167-SB01	1	Solid	NO	0.00	04/30/2025	12:00
2	Q1901-08DUP	B-167-SB01DUP	1	Solid	NO	0.00	04/30/2025	12:08
3	Q1901-09	B-170-SB01	1	Solid	NO	0.00	04/30/2025	12:15
4	Q1901-10	B-167-SB02	1	Solid	NO	0.00	04/30/2025	12:23
5	Q1901-11	B-170-SB02	1	Solid	NO	0.00	04/30/2025	12:30
6	Q1904-01	VNJ-210	1	Solid	NO	0.00	04/30/2025	12:37
7	Q1904-02	VNJ-210	1	Solid	NO	0.00	04/30/2025	12:45
8	Q1905-01	MH-G	1	Solid	NO	0.00	04/30/2025	12:53
9	Q1905-04	MH-G	1	Solid	NO	0.00	04/30/2025	13:00
10	Q1905-05	MH-H	1	Solid	NO	0.00	04/30/2025	13:07
11	Q1905-08	MH-H	1	Solid	NO	0.00	04/30/2025	13:14
12	Q1906-01	WC-4	1	Solid	NO	0.00	04/30/2025	14:22
13	Q1906-04	WC-4	1	Solid	NO	0.00	04/30/2025	13:30
14	Q1906-05	WC-5	1	Solid	NO	0.00	04/30/2025	13:38
15	Q1906-08	WC-5	1	Solid	NO	0.00	04/30/2025	13:45
16	Q1906-09	WC-6	1	Solid	NO	0.00	04/30/2025	13:52
17	Q1906-12	WC-6	1	Solid	NO	0.00	04/30/2025	14:00
18	Q1906-13	WC-7	1	Solid	NO	0.00	04/30/2025	14:08
19	Q1906-16	WC-7	1	Solid	NO	0.00	04/30/2025	14:15
20	Q1907-02	CO-8R-WC	1	Solid	NO	0.00	04/30/2025	14:22

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

WORKLIST(Hardcopy Internal Chain)

6135603

WorkList Name : ign-04--29

WorkList ID : 189215

Department : Wet-Chemistry

Date : 04-29-2025 12:33:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1901-08	B-167-SB01	Solid	Ignitability	Cool 4 deg C	PORT06	L51	04/26/2025	1030
Q1901-09	B-170-SB01	Solid	Ignitability	Cool 4 deg C	PORT06	L51	04/26/2025	1030
Q1901-10	B-167-SB02	Solid	Ignitability	Cool 4 deg C	PORT06	L51	04/26/2025	1030
Q1901-11	B-170-SB02	Solid	Ignitability	Cool 4 deg C	PORT06	L51	04/26/2025	1030
Q1904-01	VNJ-210	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/28/2025	1030
Q1904-02	VNJ-210	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/28/2025	1030
Q1905-01	MH-G	Solid	Ignitability	Cool 4 deg C	PSEG03	L51	04/28/2025	1030
Q1905-04	MH-G	Solid	Ignitability	Cool 4 deg C	PSEG03	L51	04/28/2025	1030
Q1905-05	MH-H	Solid	Ignitability	Cool 4 deg C	PSEG03	L51	04/28/2025	1030
Q1905-08	MH-H	Solid	Ignitability	Cool 4 deg C	PSEG03	L51	04/28/2025	1030
Q1906-01	WC-4	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/28/2025	1030
Q1906-04	WC-4	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/28/2025	1030
Q1906-05	WC-5	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/28/2025	1030
Q1906-08	WC-5	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/28/2025	1030
Q1906-09	WC-6	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/28/2025	1030
Q1906-12	WC-6	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/28/2025	1030
Q1906-13	WC-7	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/28/2025	1030
Q1906-16	WC-7	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/28/2025	1030
Q1907-02	CO-8R-WC	Solid	Ignitability	Cool 4 deg C	WALS01	L51	04/28/2025	1030

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

04/30/25 11:50

12(-C)

12(-C)

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

04/30/25 14:45

12(-C)

12(-C)

LB135605

Test results

Aquakem 7.2AQ1

Page: 1

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

4/30/2025 11:04

Reviewed by : RM Instrument ID : Konelab

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	98.828	0.0	0.067	
ICB1	0.508	0.0	0.001	
CCV1	237.386	0.0	0.160	
CCB1	0.372	0.0	0.001	
PB167753BL	-0.063	0.0	0.001	
PB167753BS	91.350	0.0	0.062	
LOWPB167753	10.145	0.0	0.008	100% (90-110)
HIGHPB167753	465.539	0.0	0.313	93% (90-110) 04/30/2025 RM
Q1883-01	0.766	0.0	0.002	
Q1883-03	0.734	0.0	0.002	
Q1883-05	0.351	0.0	0.001	
Q1883-07	3.004	0.0	0.003	
Q1883-09	1.994	0.0	0.002	
Q1883-11	0.599	0.0	0.001	
CCV2	233.732	0.0	0.158	
CCB2	0.332	0.0	0.001	
Q1883-13	0.161	0.0	0.001	
Q1883-15	0.350	0.0	0.001	
Q1883-15DUP	0.398	0.0	0.001	
Q1883-15MS	33.468	0.0	0.023	
Q1883-15MSD	33.524	0.0	0.023	
Q1902-02	0.136	0.0	0.001	
Q1907-01	3.291	0.0	0.003	
CCV3	254.857	0.0	0.172	
CCB3	0.327	0.0	0.001	

N 25
Mean 58.884
SD 116.6306
CV% 198.07

Aquakem v. 7.2AQ1

Results from time period:

Wed Apr 30 09:44:52 2025

Wed Apr 30 11:03:39 2025

Sample Id	Sam/Ctr/c	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	-0.1667	µg/l	4/30/2025 9:44:52	
5.0PPBCN	A	Total CN	P	4.9771	µg/l	4/30/2025 9:44:53	
10PPBCN	A	Total CN	P	9.7002	µg/l	4/30/2025 9:44:54	
50PPBCN	A	Total CN	P	49.9686	µg/l	4/30/2025 9:44:55	
100PPBCN	A	Total CN	P	100.5264	µg/l	4/30/2025 9:44:56	
250PPBCN	A	Total CN	P	250.1804	µg/l	4/30/2025 9:44:57	
500PPBCN	A	Total CN	P	499.8139	µg/l	4/30/2025 9:44:58	
ICV1	S	Total CN	P	98.8279	µg/l	4/30/2025 10:21:56	
ICB1	S	Total CN	P	0.5075	µg/l	4/30/2025 10:21:57	
CCV1	S	Total CN	P	237.3858	µg/l	4/30/2025 10:21:59	
CCB1	S	Total CN	P	0.3716	µg/l	4/30/2025 10:22:02	
PB167753BL	S	Total CN	P	-0.0626	µg/l	4/30/2025 10:22:04	
PB167753BS	S	Total CN	P	91.3504	µg/l	4/30/2025 10:29:30	
LOWPB167753	S	Total CN	P	10.1451	µg/l	4/30/2025 10:29:31	
HIGHPB167753	S	Total CN	P	465.5386	µg/l	4/30/2025 10:29:33	
Q1883-01	S	Total CN	P	0.7661	µg/l	4/30/2025 10:29:37	
Q1883-03	S	Total CN	P	0.7342	µg/l	4/30/2025 10:29:38	
Q1883-05	S	Total CN	P	0.3506	µg/l	4/30/2025 10:29:39	
Q1883-07	S	Total CN	P	3.0036	µg/l	4/30/2025 10:29:40	
Q1883-09	S	Total CN	P	1.9941	µg/l	4/30/2025 10:37:04	
Q1883-11	S	Total CN	P	0.5988	µg/l	4/30/2025 10:37:05	
CCV2	S	Total CN	P	233.7325	µg/l	4/30/2025 10:37:09	
CCB2	S	Total CN	P	0.3322	µg/l	4/30/2025 10:37:12	
Q1883-13	S	Total CN	P	0.1613	µg/l	4/30/2025 10:37:13	
Q1883-15	S	Total CN	P	0.3503	µg/l	4/30/2025 10:37:14	
Q1883-15DUP	S	Total CN	P	0.398	µg/l	4/30/2025 10:44:38	
Q1883-15MS	S	Total CN	P	33.4678	µg/l	4/30/2025 10:44:41	
Q1883-15MSD	S	Total CN	P	33.524	µg/l	4/30/2025 10:44:42	
Q1902-02	S	Total CN	P	0.1359	µg/l	4/30/2025 10:44:44	
Q1907-01	S	Total CN	P	3.2911	µg/l	4/30/2025 11:01:04	
CCV3	S	Total CN	P	254.8572	µg/l	4/30/2025 11:03:38	
CCB3	S	Total CN	P	0.3266	µg/l	4/30/2025 11:03:39	

Calibration results

Aquakem 7.2AQ1

Page: 1

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

Reviewed by : RM

Instrument ID : Konelab

4/30/2025 9:47

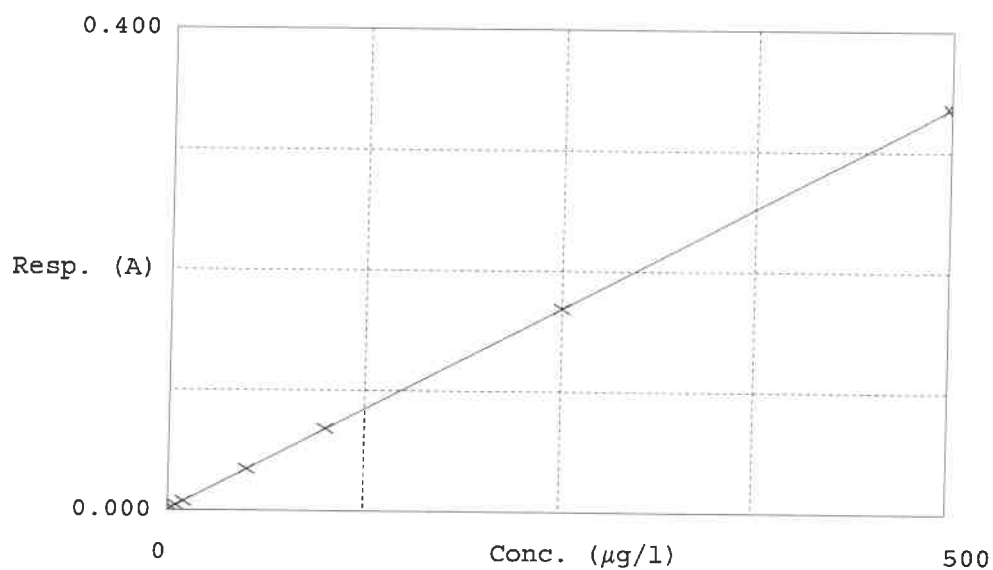
Test Total CN

Accepted 4/30/2025 9:47

Factor 1492
Bias 0.001

Coeff. of det. 0.999998

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.0PPBCN	0.001	-0.1667	0.0000	-
2	5.0PPBCN	0.004	4.9771	5.0000	-0.5
3	10PPBCN	0.008	9.7002	10.0000	-3.0
4	50PPBCN	0.035	49.9686	50.0000	-0.1
5	100PPBCN	0.068	100.5264	100.0000	0.5
6	250PPBCN	0.169	250.1804	250.0000	0.1
7	500PPBCN	0.336	499.8139	500.0000	0.0

04/30/2025
R17

LB135

Test results

Aquakem 7.2AQ1

Page: 1

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

Reviewed by : RM

Instrument ID : Konelab

4/30/2025 14:23

Test: Ammonia-N

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	0.918	0.0	0.186	
ICB1	0.013	0.0	0.015	
CCV1	0.938	0.0	0.189	
CCB1	0.010	0.0	0.015	
RL CHECK	0.095	0.0	0.031	
PB167793BL	0.010	0.0	0.015	
PB167793BS	0.951	0.0	0.192	
Q1889-01	0.092	0.0	0.030	
Q1889-01DUP	0.095	0.0	0.031	
Q1889-01MS	1.072	0.0	0.214	
Q1889-01MSD	1.103	0.0	0.220	
Q1889-02	0.036	0.0	0.020	
Q1889-03	0.030	0.0	0.019	
Q1903-01	0.028	0.0	0.018	
CCV2	1.016	0.0	0.204	
CCB2	0.014	0.0	0.016	
Q1903-02	0.055	0.0	0.023	
Q1903-03	0.038	0.0	0.020	
Q1907-01	0.023	0.0	0.017	
Q1872-07	24.543	0.0	4.622	
Q1872-07DLX20	1.138	0.0	0.227	
CCV3	0.972	0.0	0.196	
CCB3	0.017	0.0	0.016	

95% (50-150)

04/30/2025

RM

Init abs., Test limit hig

N 23
 Mean 1.444
 SD 5.0574
 CV% 350.30

Aquakem v. 7.2AQ1

Results from time period:

Wed Apr 30 13:01:48 2025

Wed Apr 30 14:19:56 2025

Sample Id	Sam/Ctr/cf	Test short r	Test type	Result	Result unit	Result date and tir	Stat
0.0PPM	A	Ammonia-1	P	0.0165	mg/l	4/30/2025 13:01	
0.1PPM	A	Ammonia-1	P	0.1119	mg/l	4/30/2025 13:01	
0.2PPM	A	Ammonia-1	P	0.1896	mg/l	4/30/2025 13:01	
0.4PPM	A	Ammonia-1	P	0.3931	mg/l	4/30/2025 13:01	
1.0PPM	A	Ammonia-1	P	0.9753	mg/l	4/30/2025 13:01	
1.3PPM	A	Ammonia-1	P	1.3315	mg/l	4/30/2025 13:01	
2.0PPM	A	Ammonia-1	P	2.0154	mg/l	4/30/2025 13:01	
ICV1	S	Ammonia-1	P	0.918	mg/l	4/30/2025 13:41	
ICB1	S	Ammonia-1	P	0.0127	mg/l	4/30/2025 13:41	
CCV1	S	Ammonia-1	P	0.9381	mg/l	4/30/2025 13:41	
CCB1	S	Ammonia-1	P	0.0105	mg/l	4/30/2025 13:41	
RL CHECK	S	Ammonia-1	P	0.0947	mg/l	4/30/2025 13:41	
PB167793BL	S	Ammonia-1	P	0.0103	mg/l	4/30/2025 13:41	
PB167793BS	S	Ammonia-1	P	0.9509	mg/l	4/30/2025 13:51	
Q1889-01	S	Ammonia-1	P	0.0921	mg/l	4/30/2025 13:51	
Q1889-01DUP	S	Ammonia-1	P	0.0948	mg/l	4/30/2025 13:51	
Q1889-01MS	S	Ammonia-1	P	1.0719	mg/l	4/30/2025 13:51	
Q1889-01MSD	S	Ammonia-1	P	1.1028	mg/l	4/30/2025 13:51	
Q1889-02	S	Ammonia-1	P	0.0356	mg/l	4/30/2025 13:51	
Q1889-03	S	Ammonia-1	P	0.0301	mg/l	4/30/2025 13:51	
Q1903-01	S	Ammonia-1	P	0.028	mg/l	4/30/2025 14:02	
CCV2	S	Ammonia-1	P	1.0163	mg/l	4/30/2025 14:02	
CCB2	S	Ammonia-1	P	0.0139	mg/l	4/30/2025 14:02	
Q1903-02	S	Ammonia-1	P	0.055	mg/l	4/30/2025 14:02	
Q1903-03	S	Ammonia-1	P	0.0376	mg/l	4/30/2025 14:02	
Q1907-01	S	Ammonia-1	P	0.0229	mg/l	4/30/2025 14:02	
Q1872-07	S	Ammonia-1	P	24.5428	mg/l	4/30/2025 14:13	
Q1872-07DLX20	S	Ammonia-1	P	1.1381	mg/l	4/30/2025 14:13	
CCV3	S	Ammonia-1	P	0.9717	mg/l	4/30/2025 14:19	
CCB3	S	Ammonia-1	P	0.0166	mg/l	4/30/2025 14:19	

Calibration results

Aquakem 7.2AQ1

Page: 1

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

4/30/2025 13:04

Reviewed by: RM

Instrument ID: Konelab

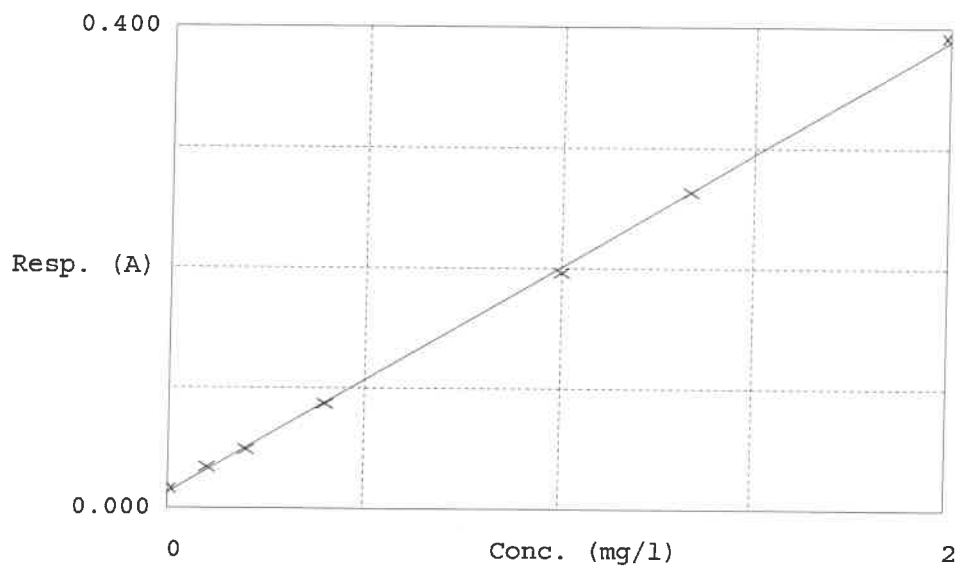
Test Ammonia-N

Accepted 4/30/2025 13:04

Factor 5.325
Bias 0.013

Coeff. of det. 0.999579

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.00PPM	0.016	0.0165	0.0000	-
2	NH3-2PPM	0.034	0.1119	0.1000	11.9
3	NH3-2PPM	0.049	0.1896	0.2000	-5.2
4	NH3-2PPM	0.087	0.3931	0.4000	-1.7
5	NH3-2PPM	0.196	0.9753	1.0000	-2.5
6	NH3-2PPM	0.263	1.3315	1.3333	2.4
7	NH3-2PPM	0.392	2.0154	2.0000	0.8

04/30/2025
RM

Analysis Method: 9034

ANALYST: rubina

Parameter: Reactive Sulfide

SUPERVISOR REVIEW BY: Iwona

Run Number: LB135629

Constant: 16000

Normality1: 0.025

Normality2: 0.025

Reagent/Standard	Lot/Log #
SODIUM THIOSULFATE, 0.025N, 4LITRE	W3105
IODINE SOLUTION .025N 1L	W3114
Starch Solution, 4L	W3149

Seq	Lab ID	True Value (mg/l)	DF	Initial Weight (g)	Final Volume (ml)	T1 (ml)	T2 Initial	T2 Final	T2 Diff. (ml)	T1 - T2 Diff (mL)	Value Corrected With Blank	Result (ppm)	Anal Date	Anal Time
1	PB167811BL		1	5.00	50	2.00	0.00	1.92	1.92	0.08	0.00	0.00	05/01/2025	11:00
2	Q1905-04		1	5.06	50	2.00	0.00	1.88	1.88	0.12	0.04	3.16	05/01/2025	11:03
3	Q1905-04DUP		1	5.06	50	2.00	0.00	1.88	1.88	0.12	0.04	3.16	05/01/2025	11:06
4	Q1905-08		1	5.04	50	2.00	0.00	1.84	1.84	0.16	0.08	6.35	05/01/2025	11:08
5	Q1907-02		1	5.03	50	2.00	0.00	1.90	1.90	0.10	0.02	1.59	05/01/2025	11:11
6	Q1912-04		1	5.07	50	2.00	0.00	1.86	1.86	0.14	0.06	4.73	05/01/2025	11:14
7	Q1912-08		1	5.01	50	2.00	0.00	1.86	1.86	0.14	0.06	4.79	05/01/2025	11:17
8	Q1915-01		1	5.07	50	2.00	0.00	1.90	1.90	0.10	0.02	1.58	05/01/2025	11:20
9	Q1916-04		1	5.05	50	2.00	0.00	1.88	1.88	0.12	0.04	3.17	05/01/2025	11:23
10	Q1917-04		1	5.07	50	2.00	0.00	1.90	1.90	0.10	0.02	1.58	05/01/2025	11:25
11	Q1922-04		1	5.02	50	2.00	0.00	1.86	1.86	0.14	0.06	4.78	05/01/2025	11:27
12	Q1922-08		1	5.03	50	2.00	0.00	1.90	1.90	0.10	0.02	1.59	05/01/2025	11:30

T1 = Titrant1

T2 = Titrant2

T2 Diff = T2 Final - T2 Initial

Value Corrected With Blank = ((T1 - T2 Diff) - Blank Correction(BL))

Result = ((T1 * Normality1) - ((T1 - Value Corrected With Blank) * Normality2)) * Constant / Initial Volume

Extraction and Analytical Summary Report

Analysis Method: 9071B
Test: Oil and Grease
Run Number: LB135676
Analysis Date: 05/06/2025
BalanceID: WC SC-6
OvenID: EXT OVEN-3

ANALYST: jignesh
REVIEWED BY: Iwona
Extraction Date: 05/06/2025
Extraction IN Time: 08:30
Extraction OUT Time: 09:25
Thermometer ID: EXT OVEN#3

Dish #	Lab ID	Client ID	Matrix	pH	Sample Weight (g)	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	LB135676BL	LB135676BL	SOLID		20.02	100	2.7486	2.7486	0	2.7487	2.7487	0.0001	5
2	LB135676BS	LB135676BS	SOLID		20.01	100	2.9303	2.9303	0	2.9322	2.9322	0.0019	94.95
3	Q1907-01	CO-8R-WC	SOLID		20.03	100	3.0649	3.0649	0	3.1070	3.1070	0.0421	2101.85
4	Q1907-01DUP	CO-8R-WCDUP	SOLID		20.02	100	3.0092	3.0092	0	3.0515	3.0515	0.0423	2112.89
5	Q1907-01MS	CO-8R-WC	SOLID		20.05	100	3.0531	3.0531	0	3.0969	3.0969	0.0438	2184.54
6	Q1907-01MSD	CO-8R-WC	SOLID		20.04	100	3.0325	3.0325	0	3.0769	3.0769	0.0444	2215.57
7	Q1929-02	WC-A4-02-C	SOLID		20.03	100	3.0515	3.0515	0	3.0610	3.0610	0.0095	474.29
8	Q1929-06	WC-A1-03-C	SOLID		20.05	100	3.0816	3.0816	0	3.0905	3.0905	0.0089	443.89
9	Q1929-10	WC-A1-04-C	SOLID		20.04	100	3.0224	3.0224	0	3.0454	3.0454	0.0230	1147.7

QC Batch# LB135676

Test: Oil and Grease

Analysis Date: 05/06/2025

Chemicals Used:

Chemical Name	Chemical Lot #
HEXANE	W3204
pH Paper 0-14	NA
Sodium Sulfate	EP2607
1:1 HCL	NA
Silica Gel	NA
Sand	E2865

Standards Used:

Standard Name	Amount Used	Standard Lot #
LCSS	1.00 ML	WP112785
LCSSD	NA	NA
MS/MSD	1.00 ML	WP112786

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 : 11:01

1.0000 gram Balance: 1.0004 (0.9950-1.0050) In Time1: 10:25

Bal Check Time: 08:40 Out OVEN TEMP1: 71 °C Dessicator Time Out1: 11:35

Out Time1: 11:00

After Analysis

0.0020 gram Balance: 0.0021 (0.0018-0.0022) In OVEN TEMP2 : 70 °C Dessicator Time In2 : 13:01

1.0000 gram Balance: 1.0003 (0.9950-1.0050) In Time2: 12:10

Bal Check Time: 13:36 Out OVEN TEMP2: 70 °C Dessicator Time Out2: 13:35

Out Time2: 13:00

WORKLIST(Hardcopy Internal Chain)

UR B5076

WorkList Name : OIL & GREASE Q1929

WorkList ID : 189332

Department : Wet-Chemistry

Date : 05-06-2025 08:18:04

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1907-01	CO-8R-WC	Solid	Oil and Grease	Cool 4 deg C	WALS01	L51	04/28/2025	9071B
Q1929-02	WC-A4-02-C	Solid	Oil and Grease	Cool 4 deg C	ENTA05	L41	04/29/2025	9071B
Q1929-06	WC-A1-03-C	Solid	Oil and Grease	Cool 4 deg C	ENTA05	L41	04/30/2025	9071B
Q1929-10	WC-A1-04-C	Solid	Oil and Grease	Cool 4 deg C	ENTA05	L41	04/30/2025	9071B

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

05/06/25 08:25
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:

05/06/25 15:10
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Iwona

Parameter: COD

SUPERVISOR REVIEW BY: jignesh

Run Number: LB135683

Reagent/Standard	Lot/Log #
COD ICV-LCS std, 50ppm	WP112972
COD calibration std. 100 ppm	WP112969
COD calibration std. 10 ppm	WP112967
COD calibration std. 150 ppm	WP112970
COD calibration std. 50 ppm	WP112968
COD calibration std. 0 ppm	WP112966
COD CCV std, 50ppm	WP112971
COD Digestion Vials Low Level 0-150Mg/L	W3127

Temp In (C): 148	Date In: 05/06/2025	Time In: 09:25
Temp Out (C): 151	Date Out: 05/06/2025	Time Out: 11:25

Intercept: 0.8854

Slope: 0.9825

Regression: 0.9999

Seq	Lab ID	TrueValue (mg/l)	DF	MATRIX	Reading	Result (mg/l)	%D	Anal Date	Anal Time
1	CAL1	0	1	Water	0.000	-0.901		05/06/2025	13:05
2	CAL2	10	1	Water	11.000	10.295	2.9	05/06/2025	13:05
3	CAL3	50	1	Water	51.000	51.007	2	05/06/2025	13:06
4	CAL4	100	1	Water	99.000	99.862	-0.1	05/06/2025	13:06
5	CAL5	150	1	Water	148.000	149.735	-0.2	05/06/2025	13:07

Analytical Summary Report

Analysis Method: SM5220 D

ANALYST: Iwona

Parameter: COD

SUPERVISOR REVIEW BY: jignesh

Run Number: LB135683

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	49.000	48.972	05/06/2025	13:07
2	ICB		NA	NA	1	Water	0.000	-0.901	05/06/2025	13:08
3	CCV1	50	NA	NA	1	Water	51.000	51.007	05/06/2025	13:15
4	CCB1		NA	NA	1	Water	1.000	0.117	05/06/2025	13:15
5	LB135683BL		1	50	1	Solid	1.000	0.117	05/06/2025	13:16
6	LB135683BS	50	1	50	1	Solid	51.000	51.007	05/06/2025	13:16
7	Q1907-01		1.04	50	1	Solid	102.000	102.916	05/06/2025	13:17
8	Q1907-01DUP		1.03	50	1	Solid	101.000	101.898	05/06/2025	13:17
9	Q1907-01MS	50	1.07	50	1	Solid	142.000	143.628	05/06/2025	13:18
10	Q1907-01MSD	50	1.04	50	1	Solid	141.000	142.610	05/06/2025	13:18
11	CCV2	50	NA	NA	1	Water	48.000	47.954	05/06/2025	13:19
12	CCB2		NA	NA	1	Water	1.000	0.117	05/06/2025	13:19

WORKLIST(Hardcopy Internal Chain)

LB 135683

WorkList Name : COD-050525

WorkList ID : 189330

Department : Wet-Chemistry

Date : 05-05-2025 16:43:06

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1907-01	CO-8R-WC	Solid	COD	Cool 4 deg C	WALS01	L51	04/28/2025	SM5220 D

Date/Time

05/06/25 09:15

Raw Sample Received by:

12(WC)

Raw Sample Relinquished by:

JS(WC)

Date/Time

05/06/25 09:45

Raw Sample Received by:

JS(WC)

Raw Sample Relinquished by:

12(WC)

SOP ID : M9012B-Total, Amenable and Reactive Cyanide-20

SDG No : N/A

Start Digest Date: 04/29/2025 Time : 14:00 Temp : 124 °C

Matrix : SOIL

End Digest Date: 04/29/2025 Time : 15:30 Temp : 126 °C

Pipette ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#1

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Block ID : MC-1, MC-2

Filter paper ID : N/A

Prep Technician Signature:

Weigh By : JP

pH Meter ID : N/A

Supervisor Signature:

Standard Name	MLS USED	STD REF. # FROM LOG
LCSS	1.0ML	WP111296
MS/MSD SPIKE SOL.	1.0ML	WP111295
PBS003	50.0ML	W3112
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
0.25N NaOH	50.0ML	WP111294
50% v/v H2SO4	5.0ML	WP112826
51% w/v MgCL2	2.0ML	WP112827
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
S0	S0	N/A	N/A
S5.0	S5.0	N/A	N/A
S10.0	S10.0	N/A	N/A
S100.0	S100.0	N/A	N/A
S250.0	S250.0	N/A	N/A
S500.0	S500.0	N/A	N/A
ICV	ICV	0.5ML	W3012
ICB	ICB	N/A	N/A
CCV	CCV	N/A	N/A
CCB	CCB	N/A	N/A
Midrange	Midrange	N/A	N/A
HIGHSTD	HIGHSTD	5.0ML	WP111295
LOWSTD	LOWSTD	0.1ML	WP111295

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/29/2025 15:45	JP / WC	RM (WC)
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167753BL	PBS753	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB167753BS	LCS753	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-01	OU4-PCS-TC-27-042325	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-03	OU4-PCS-TC-28-042325	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-05	OU4-PCS-TC-29-042325	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-07	OU4-PCS-TC-30-042325	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-09	OU4-PCS-TC-31-042325	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-11	OU4-PCS-TC-32-042325	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-13	OU4-PCS-18-042325	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-15	OU4-PCS-19-042325	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-15DUP	OU4-PCS-19-042325DUP	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-15MS	OU4-PCS-19-042325MS	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1883-15MSD	OU4-PCS-19-042325MSD	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1902-02	343	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1907-01	CO-8R-WC	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : cn q1883 WorkList ID : 189151 Department : Distillation Date : 04-25-2025 12:16:28

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1883-01	OU4-PCS-TC-27-042325	Solid	Cyanide	Cool 4 deg C	NOBI03	L41	04/23/2025	9012B
Q1883-03	OU4-PCS-TC-28-042325	Solid	Cyanide	Cool 4 deg C	NOBI03	L41	04/23/2025	9012B
Q1883-05	OU4-PCS-TC-29-042325	Solid	Cyanide	Cool 4 deg C	NOBI03	L41	04/23/2025	9012B
Q1883-07	OU4-PCS-TC-30-042325	Solid	Cyanide	Cool 4 deg C	NOBI03	L41	04/23/2025	9012B
Q1883-09	OU4-PCS-TC-31-042325	Solid	Cyanide	Cool 4 deg C	NOBI03	L41	04/23/2025	9012B
Q1883-11	OU4-PCS-TC-32-042325	Solid	Cyanide	Cool 4 deg C	NOBI03	L41	04/23/2025	9012B
Q1883-13	OU4-VSL-18-042325	Solid	Cyanide	Cool 4 deg C	NOBI03	L41	04/23/2025	9012B
Q1883-15	OU4-VSL-19-042325	Solid	Cyanide	Cool 4 deg C	NOBI03	L41	04/23/2025	9012B
Q1902-02	343	Solid	Cyanide	Cool 4 deg C	PSEG03	L41	04/28/2025	9012B
Q1907-01	CO-8R-WC	Solid	Cyanide	Cool 4 deg C	WALS01	L51	04/28/2025	9012B

Date/Time 04/29/2025 13:15
 Raw Sample Received by: SA WOLY
 Raw Sample Relinquished by: SPAN

Date/Time 04/29/2025 14:20
 Raw Sample Received by: CPD SMY
 Raw Sample Relinquished by: SA WOLY

SOP ID : M3060A,7196A-Hex.Chromium-26

SDG No : N/A

Matrix : SOIL

Pipette ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#3

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

Weigh By : JP

Start Digest Date: 04/29/2025 Time : 09:00 Temp : 90 °C

End Digest Date: 04/29/2025 Time : 10:00 Temp : 95 °C

1 batch 04/29/2025
04/29/2025

10:30
11:30

90 °C
95 °C

Digestion tube ID : M6054

Filter paper ID : 400213

pH Meter ID : WC pH meter-1

Block Thermometer ID : WC-Block#1

Prep Technician Signature:

Supervisor Signature:

Standard Name	MLS USED	STD REF. # FROM LOG
PRE-DIGESTION SPIKE	2.0ML	WP111315
INSOLUBLE SPIKE	0.02GM	W2202
POST-DIGESTION SPIKE	2.0ML	WP111315
LCSS	1.0ML	WP111316
PBS003	50.ML	W3112

Chemical Used	ML/SAMPLE USED	Lot Number
MAGNESIUM CHLORIDE	0.4GM	W3152
PHOSPHATE BUFFER	0.5ML	WP110498
HEX. DIGESTION SOLN.	50.0ML	WP112686
5M HNO3	5-7ML	WP112830
5N H2SO4	1-3ML	WP112831
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Vol(ml)	Comment
CAL1	CAL1	2.5ML	W3112
CAL2	CAL2	0.2ML	WP112880
CAL3	CAL3	0.5ML	WP112880
CAL4	CAL4	1ML	WP112880
CAL5	CAL5	0.2ML	WP111315
CAL6	CAL6	1ML	WP111315
CAL7	CAL7	2.0ML	WP111315
ICV	ICV	1ML	WP111316
ICB	ICB	2.5ML	W3112
CCV	CCV	1ML	WP111315
CCB	CCB	2.5ML	W3112

Extraction Conformance/Non-Conformance Comments:

N/A

04/29/2025

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

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167785BL	PBS785	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
PB167785BS	LCS785	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1892-01	MH-G	2.57	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1892-05	MH-H	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1892-09	MH-U2	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1900-01	WC-1	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1900-05	WC-2	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1900-09	WC-3	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1901-02	B-167-SB01	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1901-02DUP	B-167-SB01DUP	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1901-02MSPre	B-167-SB01MSPRE	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1901-02MS2Ins	B-167-SB01MS2INS	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1901-02MS3Post	B-167-SB01MS3POST	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1901-03	B-170-SB01	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1901-04	B-167-SB02	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1901-05	B-170-SB02	2.56	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1903-01	COMP-4	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1903-02	COMP-5	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1903-03	COMP-6	2.25	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1904-01	VNJ-210	2.23	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1906-01	WC-4	2.56	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1906-05	WC-5	2.58	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1906-09	WC-6	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1906-13	WC-7	2.57	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1907-01	CO-8R-WC	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A

SOP ID : M9012B-Total, Amenable and Reactive Cyanide-20

SDG No : N/A

Start Digest Date: 04/30/2025 Time : 08:50 Temp : N/A

Matrix : SOIL

End Digest Date: 04/30/2025 Time : 10:20 Temp : N/A

Pipette ID : N/A

Balance ID : WC SC-7

Hood ID : HOOD#1

Digestion tube ID : M5595

Block Thermometer ID : N/A

Block ID : MC-1, MC-2

Filter paper ID : N/A

Prep Technician Signature: *RM*

Weigh By : RM

pH Meter ID : N/A

Supervisor Signature: *12*

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

Chemical Used	ML/SAMPLE USED	Lot Number
0.25N NaOH	50.0ML	WP111294
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Comment

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/30/2025 10:35	<i>RM wcy</i>	<i>RM wcy</i>
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167792BL	PBS792	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1904-02	VNJ-210	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1905-04	MH-G	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1905-04DUP	MH-GDUP	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1905-08	MH-H	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1906-04	WC-4	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1906-08	WC-5	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1906-12	WC-6	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1906-16	WC-7	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1907-02	CO-8R-WC	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1912-04	MH-E	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1912-08	MH-F	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1915-01	WC-04282025	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : rcn-04-30

WorkList ID : 189231

Department : Distillation

Date : 04-30-2025 08:14:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1904-02	VNJ-210	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	04/28/2025	9012B
Q1905-04	MH-G	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L51	04/28/2025	9012B
Q1905-08	MH-H	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L51	04/28/2025	9012B
Q1906-04	WC-4	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	04/28/2025	9012B
Q1906-08	WC-5	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	04/28/2025	9012B
Q1906-12	WC-6	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	04/28/2025	9012B
Q1906-16	WC-7	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	04/28/2025	9012B
Q1907-02	CO-8R-WC	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	04/28/2025	9012B
Q1912-04	MH-E	Solid	Reactive Cyanide	Cool 4 deg C	WALS01	L51	04/28/2025	9012B
Q1912-08	MH-F	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L51	04/29/2025	9012B
Q1915-01	WC-04282025	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L51	04/29/2025	9012B
					CAMP02	L41	04/28/2025	9012B

Date/Time 04/30/2025 08:20
 Raw Sample Received by: RM CWG
 Raw Sample Relinquished by: JH Cede

Date/Time 04/30/2025 10:40
 Raw Sample Received by: JH Cede
 Raw Sample Relinquished by: RM CWG

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

SDG No : N/A

Matrix : SOIL

Pipette ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#2

Block ID : WC-DIST-BLOCK-1

Weigh By : RM

Start Digest Date: 04/30/2025 Time : 09:25 Temp : 150 °C

End Digest Date: 04/30/2025 Time : 10:25 Temp : 158 °C

11 batch
04/30/2025 10:50 150°C RM
04/30/2025 11:50 160°C

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Filter paper ID : N/A

Prep Technician Signature: RM

pH Meter ID : N/A

Supervisor Signature: 12

Standardized Name	MLS USED	STD REF. # FROM LOG
LCSS	1.0ML	WP112614
MS/MSD SPIKE SOL.	1.0ML	WP112613
PBW	50.0ML	W3112
RL CHECK	0.1ML	WP112613
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
BORATE BUFFER	2.5ML	WP111325
NAOH 6N	0.5-2.0ML	WP111318
H2SO4 0.04N	5.0ML	WP112828
pH Paper 0-14	N/A	W3140
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

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

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/30/2025 12:05	RM CWC	RM CWC
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167793BL	PBS793	1.00	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
PB167793BS	LCS793	1.00	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1872-07	HW0425-PT-NUT-SOIL	1.00	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1889-01DUP	COMP-1DUP	1.02	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1889-01MS	COMP-1MS	1.03	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1889-01MSD	COMP-1MSD	1.02	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1889-01	COMP-1	1.02	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1889-02	COMP-2	1.04	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1889-03	COMP-3	1.01	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1903-01	COMP-4	1.04	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1903-02	COMP-5	1.04	50	N/A	N/A	N/A	N/A	AFTER ADDING 6N NAOH PH IS 9.5	N/A
Q1903-03	COMP-6	1.02	50	N/A	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A
Q1907-01	CO-8R-WC	1.02	50	N/A	N/A	N/A	N/A	PH AFTER ADDING DIST BUFFER>11	N/A

SOP ID : M9030B-Sulfide-12

SDG No : N/A

Matrix : SOIL

Pipette ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#1

Block ID : MC-1, MC-2

Weigh By : RM

Start Digest Date: 05/01/2025 Time : 08:50 Temp : N/A

End Digest Date: 05/01/2025 Time : 10:20 Temp : N/A

Digestion tube ID : M5595

Block Thermometer ID : N/A

Filter paper ID : N/A

Prep Technician Signature: RM

pH Meter ID : N/A

Supervisor Signature: JZ

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

Chemical Used	ML/SAMPLE USED	Lot Number
0.5M ZINC ACETATE	5.0ML	WP111004
FORMALDEHYDE	2.0ML	W2725
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

05/01/2025

N/A

RM

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

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167811BL	PBS811	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1905-04DUP	MH-GDUP	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1905-04	MH-G	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1905-08	MH-H	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1907-02	CO-8R-WC	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1912-04	MH-E	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1912-08	MH-F	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1915-01	WC-04282025	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1916-04	WC-12	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1917-04	MH-JJ	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1922-04	MH-R	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1922-08	MH-S	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : RSUL 5-01

WorkList ID : 189255

Department : Distillation

Date : 05-01-2025 08:17:34

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1905-04	MH-G	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L51	04/28/2025	9034
Q1905-08	MH-H	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L51	04/28/2025	9034
Q1907-02	CO-8R-WC	Solid	Reactive Sulfide	Cool 4 deg C	WALS01	L51	04/28/2025	9034
Q1912-04	MH-E	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L51	04/29/2025	9034
Q1912-08	MH-F	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L51	04/29/2025	9034
Q1915-01	WC-04282025	Solid	Reactive Sulfide	Cool 4 deg C	CAMP02	L41	04/28/2025	9034
Q1916-04	WC-12	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L41	04/30/2025	9034
Q1917-04	MH-JJ	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L41	04/30/2025	9034
Q1922-04	MH-R	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L31	04/30/2025	9034
Q1922-08	MH-S	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L31	04/30/2025	9034

Date/Time 05/01/2025 08:17
 Raw Sample Received by: RMWC
 Raw Sample Relinquished by: RMWC

Date/Time 05/01/2025 10:16
 Raw Sample Received by: JG CoQC
 Raw Sample Relinquished by: RMWC

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135585

Review By	jignesh	Review On	4/29/2025 11:59:03 AM
Supervise By	Iwona	Supervise On	4/29/2025 12:15:01 PM
SubDirectory	LB135585	Test	Corrosivity
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	W3178,W3093,W3191,W3071,W3161,W3072		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	04/29/25 08:20		Jignesh	OK
2	CAL2	CAL2	CAL	04/29/25 08:21		Jignesh	OK
3	CAL3	CAL3	CAL	04/29/25 08:22		Jignesh	OK
4	ICV	ICV	ICV	04/29/25 08:25		Jignesh	OK
5	CCV1	CCV1	CCV	04/29/25 08:30		Jignesh	OK
6	Q1901-08	B-167-SB01	SAM	04/29/25 08:35		Jignesh	OK
7	Q1901-09	B-170-SB01	SAM	04/29/25 08:40		Jignesh	OK
8	Q1901-10	B-167-SB02	SAM	04/29/25 08:44		Jignesh	OK
9	Q1901-11	B-170-SB02	SAM	04/29/25 08:47		Jignesh	OK
10	Q1904-02	VNJ-210	SAM	04/29/25 08:55		Jignesh	OK
11	Q1905-04	MH-G	SAM	04/29/25 09:00		Jignesh	OK
12	Q1905-08	MH-H	SAM	04/29/25 09:10		Jignesh	OK
13	Q1906-04	WC-4	SAM	04/29/25 09:15		Jignesh	OK
14	Q1906-08	WC-5	SAM	04/29/25 09:20		Jignesh	OK
15	Q1906-12	WC-6	SAM	04/29/25 09:30		Jignesh	OK
16	CCV2	CCV2	CCV	04/29/25 09:35		Jignesh	OK
17	Q1906-16	WC-7	SAM	04/29/25 09:35		Jignesh	OK
18	Q1907-02	CO-8R-WC	SAM	04/29/25 09:44		Jignesh	OK

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135585

Review By	jignesh	Review On	4/29/2025 11:59:03 AM
Supervise By	Iwona	Supervise On	4/29/2025 12:15:01 PM
SubDirectory	LB135585	Test	Corrosivity
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	W3178,W3093,W3191,W3071,W3161,W3072		

19	Q1907-02DUP	CO-8R-WCDUP	DUP	04/29/25 09:45		Jignesh	OK
20	CCV3	CCV3	CCV	04/29/25 09:50		Jignesh	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB135587

Review By	jignesh	Review On	4/30/2025 10:46:38 AM
Supervise By	Iwona	Supervise On	4/30/2025 1:25:29 PM
SubDirectory	LB135587	Test	TS
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	LB135587BL	LB135587BL	MB	04/29/25 11:00		jignesh	OK
2	Q1907-01	CO-8R-WC	SAM	04/29/25 11:00		jignesh	OK
3	Q1907-01DUP	CO-8R-WCDUP	DUP	04/29/25 11:00		jignesh	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB135588

Review By	jignesh	Review On	4/30/2025 10:58:41 AM
Supervise By	Iwona	Supervise On	4/30/2025 1:25:16 PM
SubDirectory	LB135588	Test	TVS
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	LB135588BL	LB135588BL	MB	04/29/25 15:30		jignesh	OK
2	Q1907-01	CO-8R-WC	SAM	04/29/25 15:30		jignesh	OK
3	Q1907-01DUP	CO-8R-WCDUP	DUP	04/29/25 15:30		jignesh	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135596

Review By	rubina	Review On	4/29/2025 3:09:23 PM
Supervise By	Iwona	Supervise On	4/29/2025 3:10:25 PM
SubDirectory	LB135596	Test	Hexavalent Chromium
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	WP112869,WP112831,WP112830,WP111249		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	04/29/25 13:30		rubina	OK
2	CAL2	CAL2	CAL	04/29/25 13:31		rubina	OK
3	CAL3	CAL3	CAL	04/29/25 13:32		rubina	OK
4	CAL4	CAL4	CAL	04/29/25 13:33		rubina	OK
5	CAL5	CAL5	CAL	04/29/25 13:34		rubina	OK
6	CAL6	CAL6	CAL	04/29/25 13:35		rubina	OK
7	CAL7	CAL7	CAL	04/29/25 13:36		rubina	OK
8	ICV	ICV	ICV	04/29/25 13:37		rubina	OK
9	ICB	ICB	ICB	04/29/25 13:38		rubina	OK
10	CCV1	CCV1	CCV	04/29/25 13:39		rubina	OK
11	CCB1	CCB1	CCB	04/29/25 13:40		rubina	OK
12	RL Check	RL Check	SAM	04/29/25 13:41		rubina	OK
13	PB167785BL	PB167785BL	MB	04/29/25 13:42		rubina	OK
14	PB167785BS	PB167785BS	LCS	04/29/25 13:43		rubina	OK
15	Q1892-01	MH-G	SAM	04/29/25 13:44		rubina	OK
16	Q1892-05	MH-H	SAM	04/29/25 13:45		rubina	OK
17	Q1892-09	MH-U2	SAM	04/29/25 13:46		rubina	OK
18	Q1900-01	WC-1	SAM	04/29/25 13:47		rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135596

Review By	rubina	Review On	4/29/2025 3:09:23 PM
Supervise By	Iwona	Supervise On	4/29/2025 3:10:25 PM
SubDirectory	LB135596	Test	Hexavalent Chromium
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	WP112869,WP112831,WP112830,WP111249		

19	Q1900-05	WC-2	SAM	04/29/25 13:48		rubina	OK
20	Q1900-09	WC-3	SAM	04/29/25 13:49		rubina	OK
21	Q1901-02	B-167-SB01	SAM	04/29/25 13:50		rubina	OK
22	Q1901-02DUP	B-167-SB01DUP	DUP	04/29/25 13:51		rubina	OK
23	CCV2	CCV2	CCV	04/29/25 13:52		rubina	OK
24	CCB2	CCB2	CCB	04/29/25 13:53		rubina	OK
25	Q1901-02MSPre	B-167-SB01MS	MS	04/29/25 13:54		rubina	OK
26	Q1901-02MS2Ins	B-167-SB01MS	MS	04/29/25 13:55		rubina	OK
27	Q1901-02MS3Post	B-167-SB01MS	MS	04/29/25 13:56		rubina	OK
28	Q1901-03	B-170-SB01	SAM	04/29/25 13:57		rubina	OK
29	Q1901-04	B-167-SB02	SAM	04/29/25 13:58		rubina	OK
30	Q1901-05	B-170-SB02	SAM	04/29/25 13:59		rubina	OK
31	Q1903-01	COMP-4	SAM	04/29/25 14:00		rubina	OK
32	Q1903-02	COMP-5	SAM	04/29/25 14:01		rubina	OK
33	Q1903-03	COMP-6	SAM	04/29/25 14:02		rubina	OK
34	Q1904-01	VNJ-210	SAM	04/29/25 14:03		rubina	OK
35	CCV3	CCV3	CCV	04/29/25 14:04		rubina	OK
36	CCB3	CCB3	CCB	04/29/25 14:05		rubina	OK
37	Q1906-01	WC-4	SAM	04/29/25 14:06		rubina	OK
38	Q1906-05	WC-5	SAM	04/29/25 14:07		rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135596

Review By	rubina	Review On	4/29/2025 3:09:23 PM
Supervise By	Iwona	Supervise On	4/29/2025 3:10:25 PM
SubDirectory	LB135596	Test	Hexavalent Chromium
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	WP112869,WP112831,WP112830,WP111249		

39	Q1906-09	WC-6	SAM	04/29/25 14:08		rubina	OK
40	Q1906-13	WC-7	SAM	04/29/25 14:09		rubina	OK
41	Q1907-01	CO-8R-WC	SAM	04/29/25 14:10		rubina	OK
42	CCV4	CCV4	CCV	04/29/25 14:11		rubina	OK
43	CCB4	CCB4	CCB	04/29/25 14:12		rubina	OK

Instrument ID: FILTER/GRAVIMETRIC

Daily Analysis Runlog For Sequence/QC Batch ID # LB135599

Review By	rubina	Review On	4/29/2025 4:23:35 PM
Supervise By	Iwona	Supervise On	4/29/2025 4:23:48 PM
SubDirectory	LB135599	Test	Paint Filter
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	Q1892-01	MH-G	SAM	04/29/25 14:30		Iwona	OK
2	Q1892-01DUP	MH-GDUP	DUP	04/29/25 14:38		Iwona	OK
3	Q1892-05	MH-H	SAM	04/29/25 14:45		Iwona	OK
4	Q1892-09	MH-U2	SAM	04/29/25 14:52		Iwona	OK
5	Q1896-01	295-BERGEN-RO	SAM	04/29/25 15:00		Iwona	OK
6	Q1905-01	MH-G	SAM	04/29/25 15:07		Iwona	OK
7	Q1905-05	MH-H	SAM	04/29/25 15:15		Iwona	OK
8	Q1906-01	WC-4	SAM	04/29/25 15:23		Iwona	OK
9	Q1906-05	WC-5	SAM	04/29/25 15:30		Iwona	OK
10	Q1906-09	WC-6	SAM	04/29/25 15:37		Iwona	OK
11	Q1906-13	WC-7	SAM	04/29/25 15:45		Iwona	OK
12	Q1907-01	CO-8R-WC	SAM	04/29/25 15:52		Iwona	OK

Instrument ID: FLAME

Daily Analysis Runlog For Sequence/QC Batch ID # LB135603

Review By	Iwona	Review On	4/30/2025 3:52:54 PM
Supervise By	jignesh	Supervise On	4/30/2025 3:54:01 PM
SubDirectory	LB135603	Test	Ignitability
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	Q1901-08	B-167-SB01	SAM	04/30/25 12:00		Iwona	OK
2	Q1901-08DUP	B-167-SB01DUP	DUP	04/30/25 12:08		Iwona	OK
3	Q1901-09	B-170-SB01	SAM	04/30/25 12:15		Iwona	OK
4	Q1901-10	B-167-SB02	SAM	04/30/25 12:23		Iwona	OK
5	Q1901-11	B-170-SB02	SAM	04/30/25 12:30		Iwona	OK
6	Q1904-01	VNJ-210	SAM	04/30/25 12:37		Iwona	OK
7	Q1904-02	VNJ-210	SAM	04/30/25 12:45		Iwona	OK
8	Q1905-01	MH-G	SAM	04/30/25 12:53		Iwona	OK
9	Q1905-04	MH-G	SAM	04/30/25 13:00		Iwona	OK
10	Q1905-05	MH-H	SAM	04/30/25 13:07		Iwona	OK
11	Q1905-08	MH-H	SAM	04/30/25 13:14		Iwona	OK
12	Q1906-04	WC-4	SAM	04/30/25 13:30		Iwona	OK
13	Q1906-05	WC-5	SAM	04/30/25 13:38		Iwona	OK
14	Q1906-08	WC-5	SAM	04/30/25 13:45		Iwona	OK
15	Q1906-09	WC-6	SAM	04/30/25 13:52		Iwona	OK
16	Q1906-12	WC-6	SAM	04/30/25 14:00		Iwona	OK
17	Q1906-13	WC-7	SAM	04/30/25 14:08		Iwona	OK
18	Q1906-16	WC-7	SAM	04/30/25 14:15		Iwona	OK

Instrument ID: FLAME

Daily Analysis Runlog For Sequence/QC Batch ID # LB135603

Review By	Iwona	Review On	4/30/2025 3:52:54 PM
Supervise By	jignesh	Supervise On	4/30/2025 3:54:01 PM
SubDirectory	LB135603	Test	Ignitability
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

19	Q1906-01	WC-4	SAM	04/30/25 14:22		Iwona	OK
20	Q1907-02	CO-8R-WC	SAM	04/30/25 14:22		Iwona	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135605

Review By	rubina	Review On	4/30/2025 5:09:40 PM
Supervise By	Iwona	Supervise On	5/1/2025 12:51:31 PM
SubDirectory	LB135605	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP112882,WP112883,WP112884,WP112885,WP112886,WP112887,WP112888		
ICV Standard	W3012		
CCV Standard	WP112883		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111296		
Chk Standard	WP112643,WP111035,WP112890		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	04/30/25 09:44		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	04/30/25 09:44		rubina	OK
3	10PPBCN	10PPBCN	CAL3	04/30/25 09:44		rubina	OK
4	50PPBCN	50PPBCN	CAL4	04/30/25 09:44		rubina	OK
5	100PPBCN	100PPBCN	CAL5	04/30/25 09:44		rubina	OK
6	250PPBCN	250PPBCN	CAL6	04/30/25 09:44		rubina	OK
7	500PPBCN	500PPBCN	CAL7	04/30/25 09:44		rubina	OK
8	ICV1	ICV1	ICV	04/30/25 10:21		rubina	OK
9	ICB1	ICB1	ICB	04/30/25 10:21		rubina	OK
10	CCV1	CCV1	CCV	04/30/25 10:21		rubina	OK
11	CCB1	CCB1	CCB	04/30/25 10:22		rubina	OK
12	PB167753BL	PB167753BL	MB	04/30/25 10:22		rubina	OK
13	PB167753BS	PB167753BS	LCS	04/30/25 10:29		rubina	OK
14	LOWPB167753	LOWPB167753	SAM	04/30/25 10:29		rubina	OK
15	HIGHPB167753	HIGHPB167753	SAM	04/30/25 10:29		rubina	OK
16	Q1883-01	OU4-PCS-TC-27-042	SAM	04/30/25 10:29		rubina	OK
17	Q1883-03	OU4-PCS-TC-28-042	SAM	04/30/25 10:29		rubina	OK
18	Q1883-05	OU4-PCS-TC-29-042	SAM	04/30/25 10:29		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135605

Review By	rubina	Review On	4/30/2025 5:09:40 PM
Supervise By	Iwona	Supervise On	5/1/2025 12:51:31 PM
SubDirectory	LB135605	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP112882,WP112883,WP112884,WP112885,WP112886,WP112887,WP112888		
ICV Standard	W3012		
CCV Standard	WP112883		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111296		
Chk Standard	WP112643,WP111035,WP112890		

19	Q1883-07	OU4-PCS-TC-30-042	SAM	04/30/25 10:29		rubina	OK
20	Q1883-09	OU4-PCS-TC-31-042	SAM	04/30/25 10:37		rubina	OK
21	Q1883-11	OU4-PCS-TC-32-042	SAM	04/30/25 10:37		rubina	OK
22	CCV2	CCV2	CCV	04/30/25 10:37		rubina	OK
23	CCB2	CCB2	CCB	04/30/25 10:37		rubina	OK
24	Q1883-13	OU4-VSL-18-042325	SAM	04/30/25 10:37		rubina	OK
25	Q1883-15	OU4-VSL-19-042325	SAM	04/30/25 10:37		rubina	OK
26	Q1883-15DUP	OU4-VSL-19-042325	DUP	04/30/25 10:44		rubina	OK
27	Q1883-15MS	OU4-VSL-19-042325	MS	04/30/25 10:44		rubina	OK
28	Q1883-15MSD	OU4-VSL-19-042325	MSD	04/30/25 10:44		rubina	OK
29	Q1902-02	343	SAM	04/30/25 10:44		rubina	OK
30	Q1907-01	CO-8R-WC	SAM	04/30/25 11:01		rubina	OK
31	CCV3	CCV3	CCV	04/30/25 11:03		rubina	OK
32	CCB3	CCB3	CCB	04/30/25 11:03		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135608

Review By	rubina	Review On	5/1/2025 9:02:04 AM
Supervise By	Iwona	Supervise On	5/1/2025 12:51:40 PM
SubDirectory	LB135608	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP112882,WP112883,WP112884,WP112885,WP112886,WP112887,WP112888		
ICV Standard	WP112889		
CCV Standard	WP112883		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP112643,WP111035,WP112890		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	04/30/25 09:44		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	04/30/25 09:44		rubina	OK
3	10PPBCN	10PPBCN	CAL3	04/30/25 09:44		rubina	OK
4	50PPBCN	50PPBCN	CAL4	04/30/25 09:44		rubina	OK
5	100PPBCN	100PPBCN	CAL5	04/30/25 09:44		rubina	OK
6	250PPBCN	250PPBCN	CAL6	04/30/25 09:44		rubina	OK
7	500PPBCN	500PPBCN	CAL7	04/30/25 09:44		rubina	OK
8	ICV1	ICV1	ICV	04/30/25 11:39		rubina	OK
9	ICB1	ICB1	ICB	04/30/25 11:39		rubina	OK
10	CCV1	CCV1	CCV	04/30/25 11:39		rubina	OK
11	CCB1	CCB1	CCB	04/30/25 11:39		rubina	OK
12	PB167792BL	PB167792BL	MB	04/30/25 11:39		rubina	OK
13	Q1904-02	VNJ-210	SAM	04/30/25 11:46		rubina	OK
14	Q1905-04	MH-G	SAM	04/30/25 11:46		rubina	OK
15	Q1905-04DUP	MH-GDUP	DUP	04/30/25 11:46		rubina	OK
16	Q1905-08	MH-H	SAM	04/30/25 11:46		rubina	OK
17	Q1906-04	WC-4	SAM	04/30/25 11:46		rubina	OK
18	Q1906-08	WC-5	SAM	04/30/25 11:46		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135608

Review By	rubina	Review On	5/1/2025 9:02:04 AM
Supervise By	Iwona	Supervise On	5/1/2025 12:51:40 PM
SubDirectory	LB135608	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP112882,WP112883,WP112884,WP112885,WP112886,WP112887,WP112888		
ICV Standard	WP112889		
CCV Standard	WP112883		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP112643,WP111035,WP112890		

19	Q1906-12	WC-6	SAM	04/30/25 11:46		rubina	OK
20	Q1906-16	WC-7	SAM	04/30/25 11:46		rubina	OK
21	Q1907-02	CO-8R-WC	SAM	04/30/25 11:46		rubina	OK
22	CCV2	CCV2	CCV	04/30/25 11:54		rubina	OK
23	CCB2	CCB2	CCB	04/30/25 11:54		rubina	OK
24	Q1912-04	MH-E	SAM	04/30/25 11:54		rubina	OK
25	Q1912-08	MH-F	SAM	04/30/25 11:54		rubina	OK
26	Q1915-01	WC-04282025	SAM	04/30/25 11:54		rubina	OK
27	PB167802BL	PB167802BL	MB	04/30/25 12:01		rubina	OK
28	Q1913-02	WC-12-A-202504	SAM	04/30/25 12:01		rubina	OK
29	Q1913-02DUP	WC-12-A-202504DUP	DUP	04/30/25 12:01		rubina	OK
30	Q1913-04	WC-13-A-202504	SAM	04/30/25 12:01		rubina	OK
31	CCV3	CCV3	CCV	04/30/25 12:05		rubina	OK
32	CCB3	CCB3	CCB	04/30/25 12:05		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135612

Review By	rubina	Review On	5/1/2025 9:04:33 AM
Supervise By	Iwona	Supervise On	5/1/2025 12:51:47 PM
SubDirectory	LB135612	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP112894		
ICV Standard	WP112896		
CCV Standard	WP112895		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP112614		
Chk Standard	WP112897,WP111745,WP111385,WP111660		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	04/30/25 13:01		rubina	OK
2	0.1PPM	0.1PPM	CAL2	04/30/25 13:01		rubina	OK
3	0.2PPM	0.2PPM	CAL3	04/30/25 13:01		rubina	OK
4	0.4PPM	0.4PPM	CAL4	04/30/25 13:01		rubina	OK
5	1.0PPM	1.0PPM	CAL5	04/30/25 13:01		rubina	OK
6	1.3PPM	1.3PPM	CAL6	04/30/25 13:01		rubina	OK
7	2.0PPM	2.0PPM	CAL7	04/30/25 13:01		rubina	OK
8	ICV1	ICV1	ICV	04/30/25 13:41		rubina	OK
9	ICB1	ICB1	ICB	04/30/25 13:41		rubina	OK
10	CCV1	CCV1	CCV	04/30/25 13:41		rubina	OK
11	CCB1	CCB1	CCB	04/30/25 13:41		rubina	OK
12	RL	RL	SAM	04/30/25 13:41		rubina	OK
13	PB167793BL	PB167793BL	MB	04/30/25 13:41		rubina	OK
14	PB167793BS	PB167793BS	LCS	04/30/25 13:51		rubina	OK
15	Q1889-01	COMP-1	SAM	04/30/25 13:51		rubina	OK
16	Q1889-01DUP	COMP-1DUP	DUP	04/30/25 13:51		rubina	OK
17	Q1889-01MS	COMP-1MS	MS	04/30/25 13:51		rubina	OK
18	Q1889-01MSD	COMP-1MSD	MSD	04/30/25 13:51		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB135612

Review By	rubina	Review On	5/1/2025 9:04:33 AM
Supervise By	Iwona	Supervise On	5/1/2025 12:51:47 PM
SubDirectory	LB135612	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP112894		
ICV Standard	WP112896		
CCV Standard	WP112895		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP112614		
Chk Standard	WP112897,WP111745,WP111385,WP111660		

19	Q1889-02	COMP-2	SAM	04/30/25 13:51		rubina	OK
20	Q1889-03	COMP-3	SAM	04/30/25 13:51		rubina	OK
21	Q1903-01	COMP-4	SAM	04/30/25 14:02		rubina	OK
22	CCV2	CCV2	CCV	04/30/25 14:02		rubina	OK
23	CCB2	CCB2	CCB	04/30/25 14:02		rubina	OK
24	Q1903-02	COMP-5	SAM	04/30/25 14:02		rubina	OK
25	Q1903-03	COMP-6	SAM	04/30/25 14:02		rubina	OK
26	Q1907-01	CO-8R-WC	SAM	04/30/25 14:02		rubina	OK
27	Q1872-07	HW0425-PT-NUT-SO	SAM	04/30/25 14:13	High	rubina	Dilution
28	Q1872-07DL	HW0425-PT-NUT-SO	SAM	04/30/25 14:13	Report 20X	rubina	Confirms
29	CCV3	CCV3	CCV	04/30/25 14:19		rubina	OK
30	CCB3	CCB3	CCB	04/30/25 14:19		rubina	OK

Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QC Batch ID # LB135629

Review By	rubina	Review On	5/1/2025 2:49:43 PM
Supervise By	Iwona	Supervise On	5/1/2025 3:16:25 PM
SubDirectory	LB135629	Test	Reactive Sulfide
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	W3105,W3114,W3149		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	PB167811BL	PB167811BL	MB	05/01/25 11:00		rubina	OK
2	Q1905-04	MH-G	SAM	05/01/25 11:03		rubina	OK
3	Q1905-04DUP	MH-GDUP	DUP	05/01/25 11:06		rubina	OK
4	Q1905-08	MH-H	SAM	05/01/25 11:08		rubina	OK
5	Q1907-02	CO-8R-WC	SAM	05/01/25 11:11		rubina	OK
6	Q1912-04	MH-E	SAM	05/01/25 11:14		rubina	OK
7	Q1912-08	MH-F	SAM	05/01/25 11:17		rubina	OK
8	Q1915-01	WC-04282025	SAM	05/01/25 11:20		rubina	OK
9	Q1916-04	WC-12	SAM	05/01/25 11:23		rubina	OK
10	Q1917-04	MH-JJ	SAM	05/01/25 11:25		rubina	OK
11	Q1922-04	MH-R	SAM	05/01/25 11:27		rubina	OK
12	Q1922-08	MH-S	SAM	05/01/25 11:30		rubina	OK

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QC Batch ID # LB135676

Review By	jignesh	Review On	5/6/2025 1:56:38 PM
Supervise By	Iwona	Supervise On	5/6/2025 1:58:59 PM
SubDirectory	LB135676	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,NA,EP2607,NA,NA,E2865,WP112785,NA,WP112786		

Sr#	SampleID	ClientID	QcType	Date	Comment	Operator	Status
1	LB135676BL	LB135676BL	MB	05/06/25 10:25		jignesh	OK
2	LB135676BS	LB135676BS	LCS	05/06/25 10:25		jignesh	OK
3	Q1907-01	CO-8R-WC	SAM	05/06/25 10:25		jignesh	OK
4	Q1907-01DUP	CO-8R-WCDUP	DUP	05/06/25 10:25		jignesh	OK
5	Q1907-01MS	CO-8R-WCMS	MS	05/06/25 10:25		jignesh	OK
6	Q1907-01MSD	CO-8R-WCMSD	MSD	05/06/25 10:25		jignesh	OK
7	Q1929-02	WC-A4-02-C	SAM	05/06/25 10:25		jignesh	OK
8	Q1929-06	WC-A1-03-C	SAM	05/06/25 10:25		jignesh	OK
9	Q1929-10	WC-A1-04-C	SAM	05/06/25 10:25		jignesh	OK

Instrument ID: SPECTROPHOTOMETER-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB135683

Review By	Iwona	Review On	5/6/2025 1:26:40 PM
Supervise By	jignesh	Supervise On	5/6/2025 1:27:26 PM
SubDirectory	LB135683	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	WP112972,WP112969,WP112967,WP112970,WP112968,WP112966,WP112971,W3127		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	05/06/25 13:05		Iwona	OK
2	CAL2	CAL2	CAL	05/06/25 13:05		Iwona	OK
3	CAL3	CAL3	CAL	05/06/25 13:06		Iwona	OK
4	CAL4	CAL4	CAL	05/06/25 13:06		Iwona	OK
5	CAL5	CAL5	CAL	05/06/25 13:07		Iwona	OK
6	ICV	ICV	ICV	05/06/25 13:07		Iwona	OK
7	ICB	ICB	ICB	05/06/25 13:08		Iwona	OK
8	CCV1	CCV1	CCV	05/06/25 13:15		Iwona	OK
9	CCB1	CCB1	CCB	05/06/25 13:15		Iwona	OK
10	LB135683BL	LB135683BL	MB	05/06/25 13:16		Iwona	OK
11	LB135683BS	LB135683BS	LCS	05/06/25 13:16		Iwona	OK
12	Q1907-01	CO-8R-WC	SAM	05/06/25 13:17		Iwona	OK
13	Q1907-01DUP	CO-8R-WCDUP	DUP	05/06/25 13:17		Iwona	OK
14	Q1907-01MS	CO-8R-WCMS	MS	05/06/25 13:18	0.5ml WP112971 + 9.5ml Sample	Iwona	OK
15	Q1907-01MSD	CO-8R-WCMSD	MSD	05/06/25 13:18	0.5ml WP112971 + 9.5ml Sample	Iwona	OK
16	CCV2	CCV2	CCV	05/06/25 13:19		Iwona	OK
17	CCB2	CCB2	CCB	05/06/25 13:19		Iwona	OK

Prep Standard - Chemical Standard Summary

Order ID : Q1907

Test : Ammonia,COD,Corrosivity,Cyanide,Hexavalent Chromium,Ignitability,Oil and Grease,Paint Filter,Percent Solids,Reactive Cyanide,Reactive Sulfide,TS,TVS

Prepbatch ID : PB167753,PB167785,PB167792,PB167793,PB167811,

Sequence ID/Qc Batch ID: LB135585,LB135587,LB135588,LB135596,LB135599,LB135603,LB135605,LB135608,LB135612,LB135615

Standard ID :

EP2607,WP110498,WP111004,WP111035,WP111249,WP111294,WP111295,WP111296,WP111315,WP111316,WP111317,WP111318,WP111325,WP111385,WP111660,WP111745,WP112611,WP112612,WP112613,WP112614,WP112643,WP112686,WP112785,WP112786,WP112826,WP112827,WP112828,WP112830,WP112831,WP112869,WP112881,WP112882,WP112883,WP112884,WP112885,WP112886,WP112887,WP112888,WP112889,WP112890,WP112894,WP112895,WP112896,WP112897,WP112964,WP112965,WP112966,WP112967,WP112968,WP112969,WP112970,WP112971,WP112972,

Chemical ID :

E2865,E3551,E3917,E3921,M6041,M6121,M6126,M6158,W2202,W2511,W2651,W2652,W2666,W2668,W2700,W2708,W2725,W2784,W2817,W2858,W2871,W2882,W2926,W2979,W3009,W3012,W3019,W3071,W3072,W3082,W3093,W3105,W3112,W3113,W3114,W3127,W3132,W3138,W3139,W3140,W3149,W3152,W3154,W3161,W3163,W3169,W3174,W3178,W3191,W3195,W3196,W3204,



<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	EP2607	04/25/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SC ALE_2 (EX-SC-2)	None	Riteshkumar Patel 04/25/2025
<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>
190	HEX CHROME PHOSPHATE BUFFER	WP110498	10/31/2024	04/29/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych 10/31/2024
<u>FROM</u> 0.84500L of W3112 + 68.04000gram of W2708 + 87.09000gram of W2511 = 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>
160	0.5M ZINC ACETATE	WP111004	12/09/2024	05/13/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC)	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 12/09/2024
<u>FROM</u> 0.88900L of W3112 + 1.00000ml of M6121 + 110.00000gram of W2926 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
607	PYRIDINE-BARBITURIC ACID	WP111035	12/09/2024	04/30/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCS-5)	Glass Pipette-A	Iwona Zarych 12/10/2024
<u>FROM</u>	145.00000ml of W3112 + 15.00000gram of W2882 + 15.00000ml of M6121 + 75.00000ml of W3019 = Final Quantity: 250.000 ml							

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3354	Hexchrome Cleaning Solution	WP111249	12/30/2024	05/13/2025	Rubina Mughal	None	None	Iwona Zarych
								01/02/2025

FROM 182.00000ml of M6121 + 727.00000ml of W3112 + 91.00000ml of M6126 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
11	Sodium hydroxide absorbing solution 0.25 N	WP111294	01/07/2025	07/07/2025	Niha Farheen Shaik	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych
								01/07/2025

FROM 21.00000L of W3112 + 210.00000gram of W3113 = Final Quantity: 21.000 L

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3850	Cyanide MS-MSD spiking solution, 5PPM	WP111295	01/07/2025	07/07/2025	Niha Farheen Shaik	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 01/07/2025

FROM 1.00000ml of W3154 + 199.00000ml of WP111294 = Final Quantity: 200.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3371	Cyanide LCS Spike Solution, 5PPM	WP111296	01/07/2025	07/07/2025	Niha Farheen Shaik	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 01/07/2025

FROM 1.00000ml of W3138 + 199.00000ml of WP111294 = Final Quantity: 200.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1993	HEXAVALENTCHROMIUM STOCK STD 1, 50PPM	WP111315	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 0.14140gram of W2651 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1994	HEXAVALENTCHROMIUM STOCK STD 2, 50PPM	WP111316	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 0.14140gram of W2652 + 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>
1796	NaOH, 0.1N	WP111317	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_7 (WCS-6)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 4.00000gram of W3113 + 996.00000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1471	NaOH Solution, 6N	WP111318	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_7 (WCS-6)	None	Iwona Zarych 01/09/2025
<u>FROM</u> 240.00000gram of W3113 + 760.00000ml of W3112 = Final Quantity: 1000.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1494	BORATE BUFFER	WP111325	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych 01/09/2025
<u>FROM</u>	100.00000L of W3112 + 9.50000gram of W2700 + 88.00000ml of WP111317 = Final Quantity: 100.000 L							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
290	Phenol reagent for Ammonia	WP111385	01/13/2025	07/13/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 01/13/2025
<u>FROM</u>	3.20000gram of W3113 + 8.30000gram of W2858 + 88.80000ml of W3112 = Final Quantity: 100.000 ml							



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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
289	Sodium Hypochlorite for Ammonia	WP111745	02/03/2025	07/31/2025	Rubina Mughal	None	None	Iwona Zarych 02/03/2025
<u>FROM</u>	50.00000ml of W3112 + 50.00000ml of W3174 = Final Quantity: 100.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
153	Ammonia Stock Std. (1000 ppm)	WP112611	04/07/2025	10/07/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 04/07/2025
<u>FROM</u> 3.81900gram of W3196 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1895	Ammonia Stock Std, 1000PPM-SS	WP112612	04/07/2025	10/07/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 04/07/2025
<u>FROM</u>	3.81900gram of W3195 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1322	Ammonia Intermediate Std, 50PPM	WP112613	04/07/2025	05/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/07/2025
<u>FROM</u> 95.00000ml of W3112 + 5.00000ml of WP112611 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1639	Ammonia Intermediate Std-Second source, 50PPM	WP112614	04/07/2025	05/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/07/2025
<u>FROM</u> 95.00000ml of W3112 + 5.00000ml of WP112612 = Final Quantity: 100.000 ml								

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
148	hexchrome digestion fluid	WP112686	04/14/2025	05/14/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych 04/14/2025
<u>FROM</u> 120.00000gram of W3163 + 4.00000L of W3112 + 80.00000gram of W3113 = Final Quantity: 4000.000 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>
3931	Spiking std for 9071B	WP112785	04/22/2025	10/03/2025	Jignesh Parikh	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 04/22/2025
<u>FROM</u>	1.00000gram of W2817 + 1.00000gram of W2871 + 1000.00000ml of E3917 = 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>
3873	Spiking solution for 9071B - SS	WP112786	04/22/2025	10/03/2025	Jignesh Parikh	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 04/22/2025
<u>FROM</u> 1.00000gram of W3009 + 1.00000gram of W3082 + 1000.00000L of E3917 = Final Quantity: 1000.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1714	Sulfuric Acid, 50% (v/v)	WP112826	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych
								04/25/2025

FROM 1000.00000ml of M6041 + 1000.00000ml of W3112 = Final Quantity: 2000.000 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>
3214	Magnesium Chloride For Cyanide 2.5M(51%W/V)	WP112827	04/25/2025	10/25/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych
								04/25/2025

FROM 500.00000ml of W3112 + 510.00000gram of W3152 = Final Quantity: 1000.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1597	0.04 N H2SO4	WP112828	04/25/2025	10/25/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<u>FROM</u>		1.00000ml of M6041 + 999.00000ml of W3112 = Final Quantity: 1000.000 ml						

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipettelD</u>	<u>Supervised By</u>
1836	HNO3 Hex-Chrome, 5M	WP112830	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych 04/25/2025
<u>FROM</u> 320.00000ml of M6158 + 680.00000ml of W3112 = Final Quantity: 1000.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
126	5N sulfuric acid	WP112831	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych
								04/25/2025

FROM 140.00000ml of M6041 + 860.00000ml of W3112 = Final Quantity: 1.000 L

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
114	hexavalent chromium color reagent	WP112869	04/28/2025	05/05/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych
								04/28/2025

FROM 0.25000gram of W2979 + 50.00000ml of E3921 = Final Quantity: 50.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3456	Cyanide Intermediate Working Std, 5PPM	WP112881	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/30/2025
<u>FROM</u> 0.25000ml of W3154 + 49.75000ml of WP111294 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4	Calibration standard 500 ppb	WP112882	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/30/2025
<u>FROM</u> 45.00000ml of WP111294 + 5.00000ml of WP112881 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3761	Calibration-CCV CN Standard 250 ppb	WP112883	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC) FROM 2.50000ml of WP112881 + 47.50000ml of WP111294 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
6	Calibration Standard 100 ppb	WP112884	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC) FROM 1.00000ml of WP112881 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
7	Calibration Standard 50 ppb	WP112885	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC) FROM 0.50000ml of WP112881 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
8	Calibration Standard 10 ppb	WP112886	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/30/2025
<u>FROM</u>	1.00000ml of WP112882 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
9	Calibration Standard 5 ppb	WP112887	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC) FROM 0.50000ml of WP112882 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
167	0 ppb CN calibration std	WP112888	04/30/2025	05/01/2025	Rubina Mughal	None	None	Iwona Zarych 04/30/2025
<u>FROM</u> 50.00000ml of WP111294 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2168	RCN ICV STD, 100 PPB	WP112889	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC) FROM 1.00000ml of WP111296 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1582	Chloramine T solution, 0.014M	WP112890	04/30/2025	05/01/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	Glass Pipette-A	Iwona Zarych 04/30/2025
<u>FROM</u>	0.08000gram of W3139 + 20.00000ml of W3112 = Final Quantity: 20.000 ml							

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
275	Ammonia Calibration Std. (2 ppm)	WP112894	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 05/01/2025
FROM 48.00000ml of W3112 + 2.00000ml of WP112613 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
285	Ammonia CCV Std. (1 ppm)	WP112895	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 05/01/2025
FROM 49.00000ml of W3112 + 1.00000ml of WP112613 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
286	Ammonia ICV Std. (1 ppm)	WP112896	04/30/2025	05/01/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/01/2025
<u>FROM</u> 49.00000ml of W3112 + 1.00000ml of WP112614 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
740	sodium nitroferricyanide for ammonia	WP112897	04/30/2025	05/30/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC-5)	None	Iwona Zarych 05/01/2025
<u>FROM</u> 0.05000gram of W2666 + 99.95000ml of W3112 = Final Quantity: 100.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2456	COD Stock std, 1000ppm	WP112964	05/06/2025	05/13/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCS-5)	None	Jignesh Parikh 05/06/2025
<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	WP112965	05/06/2025	05/13/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC SC-5)	None	Jignesh Parikh 05/06/2025
<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	WP112966	05/06/2025	05/13/2025	Iwona Zarych	None	None	Jignesh Parikh
								05/06/2025

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	WP112967	05/06/2025	05/13/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3	Jignesh Parikh
							(WC)	05/06/2025

FROM 9.90000ml of W3112 + 0.10000ml of WP112964 = 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>
137	COD calibration std. 50 ppm	WP112968	05/06/2025	05/13/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/06/2025

FROM 9.50000ml of W3112 + 0.50000ml of WP112964 = 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	WP112969	05/06/2025	05/13/2025	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Jignesh Parikh 05/06/2025

FROM 9.00000ml of W3112 + 1.00000ml of WP112964 = 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	WP112970	05/06/2025	05/13/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/06/2025
<u>FROM</u>	8.50000ml of W3112 + 1.50000ml of WP112964 = 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>
2458	COD CCV std, 50ppm	WP112971	05/06/2025	05/13/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/06/2025
<u>FROM</u> 9.50000ml of W3112 + 0.50000ml of WP112964 = 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	WP112972	05/06/2025	05/13/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/06/2025
<u>FROM</u> 9.50000ml of W3112 + 0.50000ml of WP112965 = Final Quantity: 10.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	06/30/2025	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	10/03/2025	04/03/2025 / Rajesh	03/31/2025 / Rajesh	E3917

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	6789	09/24/2025	03/14/2025 / Rajesh	03/13/2025 / Rajesh	E3921

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 #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	06/03/2025	12/03/2024 / Janvi	11/12/2024 / Janvi	M6126

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA14125-36 / LEAD (II) CHROMATE, ACS, 500G	U19B018	01/23/2027	01/23/2017 / apatel	01/23/2017 / apatel	W2202

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3252-1 / POTAS PHOSPHATE, DIBASIC PWD, ACS, 500G	0000207436	04/29/2025	05/22/2019 / AMANDEEP	03/21/2019 / apatel	W2511

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P188-500 / Potassium Dichromate, 500g(new-2nd lot)	194664	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2652

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3818-5 / SODIUM PHOSPHATE, MONOBAS/HYD, CRYST, ACS, 2.5 KG	0000225799	12/03/2025	04/05/2021 / Alexander	02/10/2020 / apatel	W2668

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRYST, ACS, 500G	99/2019-20	05/05/2025	05/05/2020 / apatel	05/05/2020 / apatel	W2708

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EMD-FX0410-5 / FORMALDEHYDE SOLUTION 450ML	60045	06/22/2025	08/19/2024 / lwona	06/22/2020 / apatel	W2725

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

CHEMICAL RECEIPT LOG BOOK

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-BX0035-3 / Barbituric Acid, 100 gms	1.00132.0100	04/30/2025	12/07/2021 /	11/30/2021 / apatel	W2882

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J4296-1 / ZINC ACETATE, DIHYD, CRYST, AC S, 500G	383058	07/05/2027	07/05/2022 / ketankumar	07/05/2022 / ketankumar	W2926

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	31390 / 1,5-Diphenylcarbazine	MKCR6636	12/09/2027	12/09/2022 / lwona	12/09/2022 / lwona	W2979

CHEMICAL RECEIPT LOG BOOK

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 / Iwona	02/27/2023 / Iwona	W3009

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	/ ICV-CN	ICV6-400	12/31/2025	01/08/2025 / Iwona	02/20/2020 / Iwona	W3012

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	270970-1L / Pyridine 1L	SHBQ2113	04/03/2028	04/03/2023 / Iwona	04/03/2023 / Iwona	W3019

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 / Iwona	W3071

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14940-1 / Buffer Solution, PH12 (500ml)	2310P21	04/30/2025	01/02/2024 / JIGNESH	12/07/2023 / Iwona	W3072

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 / Iwona	02/26/2024 / Iwona	W3082

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL35830-4 / IODINE SOLUTION .025N 1L	2405D89	05/31/2025	07/10/2024 / lwona	07/10/2024 / lwona	W3114

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	03/21/2025 / Niha	07/25/2024 / lwona	W3127

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	LC135457 / Cyanide Standard, 1000 PPM, Second Source	44080060	01/30/2025	09/06/2024 / lwona	08/28/2024 / lwona	W3138

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	JTE494-6 / CHLORAMINE-T BAKER 250GM	10239484	09/09/2029	09/09/2024 / lwona	09/09/2024 / lwona	W3139

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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.	01237-10KG / Magnesium Chloride Hexahydrate ACS 10KG	002126-2019-201	11/25/2029	11/25/2024 / lwona	11/25/2024 / lwona	W3152

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	RC2543-4 / CYANIDE STD 1000PPM 4OZ	1411J58	05/31/2025	12/02/2024 / lwona	12/02/2024 / lwona	W3154

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL13850-1 / Buffer Solution, PH2 (500ml)	2411E26	10/31/2026	12/09/2024 / lwona	12/09/2024 / lwona	W3161

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-SX0395-3 / SODIUM CARBONATE ANHYDR 2.5KG	24E3156178	09/30/2027	12/10/2024 / lwona	12/10/2024 / lwona	W3163

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

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

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

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	24L0356561	08/31/2027	03/19/2025 / lwona	03/19/2025 / lwona	W3195

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	MKCV1009	09/30/2026	03/19/2025 / lwona	03/19/2025 / lwona	W3196

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	25c0362005	04/30/2026	04/22/2025 / jignesh	04/18/2025 / jignesh	W3204

Certificate of analysis

Product No. 14125
Product: Lead(II) chromate, ACS, 98%
Lot No.: U19B018

Test	Limits	Results
Assay	98.0 % min	99.3 %
Soluble matter	0.15 % max	< 0.02 %
Carbon compounds	0.01 % max	< 0.01 %

Traceable to NIST? Yes

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

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

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

Order our products online [alfa.com](https://www.thermofisher.com)

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

This is to certify that units of the lot number above 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 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 above information is the actual analytical results obtained.

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

Potassium Phosphate, Dibasic, Powder
BAKER ANALYZED® A.C.S. Reagent

(dipotassium hydrogen phosphate)



Material No.: 3252-01
Batch No.: 0000207436
Manufactured Date: 2018/05/01
Retest Date: 2025/04/29
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (K ₂ HPO ₄) (by acidimetry)	>= 98.0 %	99.2
Insoluble Matter	<= 0.01 %	< 0.01
Loss on Drying at 105°C	<= 1.0 %	< 1.0
pH of 5% Solution at 25°C	8.5 – 9.6	9.1
Chloride (Cl)	<= 0.003 %	< 0.003
Fluoride (F)	<= 0.001 %	< 0.001
Nitrogen Compounds (as N)	<= 0.001 %	< 0.001
Sulfate (SO ₄)	<= 0.005 %	< 0.005
Trace Impurities – Iron (Fe)	<= 0.001 %	< 0.001
Sodium (Na)	<= 0.05 %	< 0.05
Trace Impurities – Arsenic (As)	<= 1.000 ppm	< 1.000
Trace Impurities – ACS – Heavy Metals (as Pb)	<= 5 ppm	< 5
Trace Impurities – Lead (Pb)	<= 5.000 ppm	< 5.000
Color (APHA), For Information Only		5

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

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



Phillipsburg, NJ 9001:2015, FSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

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

W2858 Received by AP on 07/07/2021

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

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

Retest date: January 7, 2026

Order our products online [alfa.com](https://www.alfa.com)**This document has been electronically generated and does not require a signature.**

This is to certify that units of the lot number above 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 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 above information is the actual analytical results obtained.

W2666 Recived on 02/10/2020 by AP

Product No.: 87683

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

Lot No.: W12F013

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

Order our products online [alfa.com](https://www.thermofisher.com/alfa)

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

This is to certify that units of the lot number above 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 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 above information is the actual analytical results obtained.

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.



W3019
rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA

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

Certificate of Analysis

Product Name:

Pyridine - anhydrous, 99.8%

Product Number:

270970

Batch Number:

SHBQ2113

Brand:

SIAL

CAS Number:

110-86-1

MDL Number:

MFCD00011732

Formula:

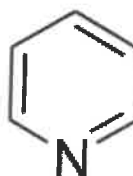
C₅H₅N

Formula Weight:

79.10 g/mol

Quality Release Date:

15 DEC 2022



Test	Specification	Result
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 99.75 %	99.99 %
Water (by Karl Fischer)	≤ 0.003 %	0.002 %
Residue on Evaporation	≤ 0.0005 %	< 0.0001 %


Larry Coers, Director
Quality Control
Sheboygan Falls, WI US

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



**RICCA CHEMICAL COMPANY®**

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

W 3072
REC. 12/01/23
12

Certificate of Analysis

Buffer, Reference Standard, pH 12.00 ± 0.01 at 25°C**Lot Number: 2310P21****Product Number: 1615****Manufacture Date: OCT 24, 2023****Expiration Date: APR 2025**

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

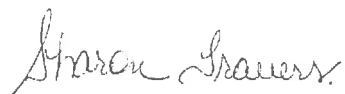
*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	12.005	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
1615-32	1 L natural poly	18 months
1615-5	20 L Cubitainer®	18 months

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



Sharon Travers (10/24/2023)

Operations 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

Date of Release: 2/26/2020

Name: Formaldehyde Solution
GR ACS
Meets ACS Specifications

Item No: FX0410 all size codes

Lot / Batch No: 60045

Country of Origin: USA

Characteristic	Requirement		Results	Units
	Min.	Max.		
Assay	36.5	38.0	36.71	%
Chloride (Cl)		5	<5	ppm
Color (APHA)		10	<10	
Form			Passes test	
Heavy metals (as Pb)		5	<5	ppm
Iron (Fe)		5	0.6	ppm
Residue after ignition		0.005	<0.0050	%
Sulfate (SO ₄)		0.002	<0.0020	%
Titrate acid		0.006	<0.0060	meq/g

Heather Sinn,

Quality Control Manager

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

EMD Millipore Corporation, an affiliate of Merck KGaA, Darmstadt, Germany
290 Concord Road
Billerica, MA 01821
U.S.A

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the U.S. and Canada.

Certificate Of Analysis



Date of Release: 11/14/2019

W2700 Recived by AP on 3/11/2020

Name: **Sodium Borate, Decahydrate**
ACS

Item No: **SX0355 All Sizes**

Lot / Batch No: **2019111354**

Country of Origin: **India**

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

Joe Schoellkopf

Quality Control Manager

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

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

EMD Millipore Corporation

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

Form number: 00005624CA, Rev. 2.0



Certificate of Analysis

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

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

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

Catalog Number	P188	Quality Test / Release Date	08/12/2019
Lot Number	194664		
Description	POTASSIUM DICHROMATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Aug/2024
Chemical Origin	Inorganic-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.		
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Fine, orange-red crystals
ASSAY	%	>= 99	99.2
CALCIUM	%	<= 0.003	<0.003
CHLORIDE	%	<= 0.001	<0.001
LOSS ON DRYING @ 105 C	%	<= 0.05	<0.05
SULFATE (SO4)	%	<= 0.005	<0.005
INSOLUBLE MATTER	%	<= 0.005	0.003
IRON (Fe)	%	<= 0.001	<0.001
SODIUM (Na)	%	<= 0.02	<0.02
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Jerusa 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.

Sand
Purified
Washed and Ignited



Material No.: 3382-05
Batch No.: 0000243821
Manufactured Date: 2018/04/09
Retest Date: 2025/04/07
Revision No: 1

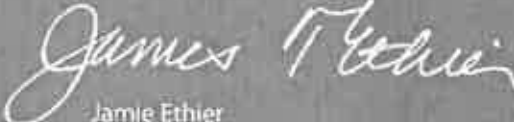
Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	$\leq 0.16\%$	0.01

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

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

E 2865


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



**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



R: 02/20/20
53

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

For ICP-MS use: dilute the ICV1 concentrate 50-fold with 1% (v/v) nitric acid; pipet 2 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415

For the cold vapor analysis of mercury by AA: dilute the ICV5 concentrate 100-fold with 2% (v/v) nitric acid; pipet 1 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400

For the analysis of cyanide: dilute the ICV6 concentrate 100-fold with Type II water; pipet 1 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS

ICV1-1014		
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)
Al	2520	504
Sb	1010	202
As	997	199
Ba	518	104
Be	514	103
Cd	514	103
Ca	10000	2000
Cr	517	103
Co	521	104
Cu	505	101
Fe	10100	2020
Pb	1030	206
Mg	5990	1198
Mn	524	105
Ni	525	105
K	9940	1988
Se	1030	206
Ag	252	50
Na	10100	2020
Tl	1040	208
V	504	101
Zn	1010	202

ICV5-0415		ICV6-0400	
Element	Concentration (µg/L) (after 100-fold dilution)	Analyte	Concentration (µg/L) (after 100-fold dilution)
Hg	4.0	CN ⁻	99

W3011
W3012
W3013
W3014
W3015

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™**

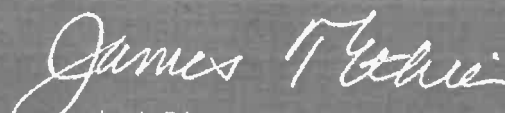


Material No.: 9673-33
Batch No.: 23D2462010

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

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

avantor™



R → 16/13/24
Met dig

M 6121

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

Certificate of Analysis

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

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

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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

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

For Laboratory, Research or Manufacturing Use

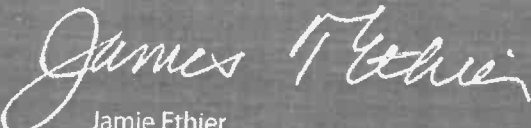
Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier

Vice President Global Quality

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

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Nitric Acid 69%
CMOS



R → 11/12/24

M6126

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

 **avantor**TM



Material No.: 9606-03
Batch No.: 24D1062002

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

For Microelectronic Use

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



Jamie Croak
Director Quality Operations, Bioscience Production

Nitric Acid 69%
CMOS

avantor™



R- 0210212025

m - 6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

 **avantorsTM**



Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

 **avantor™**



Material No.: 9606-03
Batch No.: 24D1062002

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

For Microelectronic Use

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



Jamie Croak
Director Quality Operations, Bioscience Production



Certificate of Analysis

1.00132.0000 Barbituric acid for analysis EMSURE®
Batch N020065932

	Spec. Values		Batch Values	
Assay (acidimetric)	≥ 99	%	99.6	%
Identity (IR-spectrum)	passes test		passes test	
Chloride (Cl)	≤ 40	ppm	≤ 40	ppm
Heavy metals (as Pb)	≤ 50	ppm	≤ 50	ppm
Fe (Iron)	≤ 10	ppm	≤ 10	ppm
Sulfated ash	≤ 0.1	%	≤ 0.1	%
Loss on Drying (105 °C)	≤ 0.1	%	≤ 0.1	%
Suitability as reagent (for cyanide determination)	passes test		passes test	

Date of release (DD.MM.YYYY) 17.04.2020
Minimum shelf life (DD.MM.YYYY) 30.04.2025

Ioannis Chartomatsidis
Responsible laboratory manager quality control

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



CHAMPA PURIE-CHEM INDUSTRIES

ISO 9001 : 2015 CERTIFIED COMPANY

Importers Exporters Manufacturers & Marketing of Fine Chemicals & Pharmaceuticals

262-263, G.I.D.C. Estate,

Makarpura,

Vadodara - 390 010.

Gujarat - INDIA.

Phone : (F) +91-265-2633314 / 2643723

Fax : (F) +91-265-2638036

E-mail : info@cpcindia.com

Web : www.cpcindia.com

W2708 Received on 05/05/20 by AP

CERTIFICATE OF ANALYSIS

PRODUCT	: POTASSIUM PHOSPHATE MONOBASIC Anhy. - ACS	
CERTIFICATE NO	: 99/2019- 20	DATE 26-08-2019
Date of receipt of sample	: 22.08.2019	Quantity : 1000 KGS
Batch No. /Lot No	: 99/2019- 20	
Mfg. Date	: Aug-2019	
1. Characteristic	: A White powder	
2. Identification	: Positive	
	RESULT OBTAINED	LIMITS
3. Clarity and colour of solution	: 10% solution is clear and colourless	
4. Assay (on dry basis)	: 99.27%	Min.99.00%
5. PH (5% solution)	: 4.4	4.1-4.5
6. Loss on Drying	: 0.1%	Max 0.2%
7. Heavy Metals	: 0.0003%	Max.0.001%
8. Iron	: 0.001%	Max 0.002%
9. Sulphate	: 0.001%	Max. 0.003%
10. Chloride	: 0.0005%	Max.0.001%
11. Insoluble Matter	: 0.003%	Max. 0.01%
12. Sodium	: 0.004%	Max. 0.005%
The sample does comply with specification as per Above.		
Analysed by	<u>J.A. PATHAK</u>	Quality Control Department

Sodium Phosphate, Monobasic, Monohydrate,
Crystal
BAKER ANALYZED® A.C.S. Reagent

(sodium dihydrogen phosphate, monohydrate)



Material No.: 3818-05
Batch No.: 0000225799
Manufactured Date: 2018/12/05
Retest Date: 2025/12/03
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

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

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

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


Jamie Ethier
Vice President Global Quality

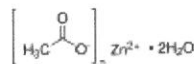
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Certificate of Analysis

Product Name:

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

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



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

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystal or Chunk(s)	Powder
Infrared Spectrum	Conforms to Structure	Conforms
Insoluble Matter	$\leq 0.005\%$	0.003 %
Calcium (Ca)	$\leq 0.005\%$	0.003 %
Chloride (Cl)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 5 ppm	< 5 ppm
Potassium (K)	$\leq 0.01\%$	0.00 %
Magnesium (Mg)	$\leq 0.005\%$	0.003 %
Sodium (Na)	$\leq 0.05\%$	0.03 %
Lead (Pb)	$\leq 0.002\%$	$< 0.001\%$
pH	6.0 - 7.0	6.1
Sulfate (SO ₄)	$\leq 0.005\%$	$< 0.005\%$
Complexometric EDTA	98.0 - 101.0 %	100.3 %
Meets ACS Requirements	Meets Requirements	Meets Requirements


Larry Coers, Director
Quality Control
Milwaukee, WI US

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



W 2979

Rec: 12/09/22

exp. 12/09/27

Product Name:

1,5-Diphenylcarbazide - ACS reagent

Product Number:

259225

Batch Number:

MKCR6636

Brand:

SIAL

CAS Number:

140-22-7

MDL Number:

MFCD00003013

Formula:

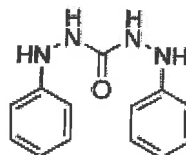
C₁₃H₁₄N₄O

Formula Weight:

242.28 g/mol

Quality Release Date:

02 JUN 2022



Certificate of Analysis

Test	Specification	Result
Appearance (Color)	Conforms to Requirements	Pink
Off-White to Pink, Light Purple or Tan		
Appearance (Form)	Powder or Chunks	Powder
Melting Point	173.0 - 176.0 °C	173.0 °C
Infrared Spectrum	Conforms to Structure	Conforms
Residue on ignition (Ash)	≤ 0.05 %	0.01 %
15 minutes, 800 Degrees Celsius		
Solubility	Pass	Pass
Sensitivity Test	Pass	Pass
Meets ACS Requirements	Current ACS Specification	Conforms



Larry Coers, Director
Quality Control
Milwaukee, WI US

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



Certificate of analysis

W3082 Received on 2/26/2026 by IZ

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

Appearance White flakes
Assay 98.7 %

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

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
094121
04/03/2024
16

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

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

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

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

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

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

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

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

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

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

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



Paul Brandon (01/08/2024)

Production Manager

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

This product was tested in an ISO 17025 Accredited Laboratory

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

Certificate of Analysis

Sodium Thiosulfate, 0.0250 Normal (N/40)

Lot Number: 4403S13

Product Number: 7900

Manufacture Date: MAR 29, 2024

Expiration Date: SEP 2025

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

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

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

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

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

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

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



Paul Brandon (03/29/2024)

Production Manager

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

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



Certificate of Analysis



Sodium Hydroxide (Pellets)

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

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

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

Storage: Room Temperature

Pellets

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

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.



Sodium Hydroxide (Pellets)

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

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

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

Storage: Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.

Certificate of Analysis

Iodine (Iodine-Iodide), 0.0250 Normal (N/40), 1 mL = 0.4008 mg S²⁻**Lot Number:** 2405D89**Product Number:** 3975**Manufacture Date:** MAY 10, 2024**Expiration Date:** MAY 2025

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Iodide	7681-11-0	ACS
Iodine	7553-56-2	ACS

Test	Specification	Result	NIST SRM#
Appearance	Dark brown liquid	Passed	
Assay (vs. Sodium Thiosulfate/Starch)	0.02498-0.02502 N at 20°C	0.02502 N at 20°C	136

Specification	Reference
Standard Iodine Solution, 0.0250 N	APHA (4500-S2- F)
Iodine Solution (approximately 0.025 N)	EPA (SW-846) (9031)
Standard Iodine Solution, 0.0250 N	EPA (376.1)
Iodine Solution (approximately 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)
3975-1	4 L amber glass	12 months
3975-16	500 mL amber glass	12 months
3975-32	1 L amber glass	12 months

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

Jose Pena (05/10/2024)
Operations Manager

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

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

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

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

Certificate of Analysis Results Entered By:

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

Certificate of Analysis Results Approved By:

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

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ



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

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

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



Part of TCP Analytical Group

Jackson's Pointe Commerce Park- Building 1000
1010 Jackson's Pointe Court, Zelienople, PA 16063

Certificate of Analysis

Cyanide Standard 1000 ppm (1ml = 1mg CN)

Product Code: **LC13545**

Manufacture Date: August 01, 2024

Lot Number: **44080060**

Expiration Date: January 30, 2025

Test	Specification	Result
Appearance (clarity)	clear solution	clear solution
Appearance (color)	colorless	colorless
Concentration (CN)	0.990 - 1.010mg/mL	1.008mg/mL
Concentration (CN)	990 - 1,010ppm	1,008ppm
Traceable to NIST SRM	Report	999b

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

The suffix of the product code may differ from what is on your product label. The suffix will designate the size and be associated with a numeric digit(s). Visit LabChem.com for more information

Suffix	1	2	3/3S/36/36S	4/4C	5	6	7	8	9	20	44	200	246	486
Size	500mL or g	1L or 1kg	2.5L/2.5L Coated/6x2.5L/6x2.5L Coated	4L	20L	10L	125mL	25g	100g	20x20mL	4x4L	200L	24x6mL	48x6mL

Michael Monteleone

Michael Monteleone
Chemistry Supervisor - Quality Control

ISO9001:2015 Registration #0306-01

2024080113:32:16bsturges-0-0

W3139 Received on 9/9/24 by IZ

Product No.: A12044
Product: Chloramine-T trihydrate, 98%
Lot No.: 10239484

Appearance:	White powder
Melting Point:	166°C(dec)
Assay (Iodometric titration):	100.5%
Identification (FTIR):	Conforms

Order our products online thermofisher.com/chemicals

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

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



Certificate of Analysis

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

Lot Number: 4408P62

Product Number: 8000

Manufacture Date: AUG 28, 2024

Expiration Date: AUG 2026

This product is Mercury-free.

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

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

Specification	Reference
Starch Solution	APHA (4500-S2- F)
Starch Indicator Solution	APHA (4500-CI B)
Starch Indicator	APHA (4500-SO32- B)
Starch indicator solution	APHA (2350 B)
Starch indicator solution	APHA (2350 E)
Starch Solution	APHA (510 B)
Starch Solution	APHA (5530 C)
Starch Indicator	APHA (4500-CI C)
Starch Indicator	EPA (345.1)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
8000-1	4 L natural poly	24 months
8000-16	500 mL natural poly	24 months
8000-32	1 L natural poly	24 months

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

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.

Chem-Impex International, Inc.

Tel: (630) 766-2112**E-mail:** sales@chemimpex.com**Shipping and Correspondence:**

935 Dillon Drive

Wood Dale, IL 60191

Fax: (630) 766-2218**Web site:** www.chemimpex.com**Manufacturing site:**

825 Dillon Drive

Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number	01237
Lot Number	002126-2019-201
Product	Magnesium chloride hexahydrate

Magnesium chloride•6H₂O

CAS Number	7791-18-6
Molecular Formula	MgCl ₂ •6H ₂ O
Molecular Weight	203.3

Appearance	White crystals
Solubility	167 g in 100 mL water
Melting Point	~ 115 °C
Heavy Metals	4.393 ppm
Anion	Nitrate (NO ₃) : < 0.001% Phosphate (PO ₄) : < 5 ppm Sulfate (SO ₄) : < 0.002%
Cation	Ammonium (NH ₄) : < 0.002% Barium (Ba) : 0.005% Calcium (Ca) : 0.01% Iron (Fe) : 4.5 ppm Manganese (Mn) : 0.624 ppm Potassium (K) : 0.004% Sodium (Na) : 0.000003% Strontium (Sr) : 0.005%
Insoluble material	0.0021%
Assay by titration	100.83%
Grade	ACS reagent
Storage	Store at RT

Certificate of Analysis

Catalog Number: 01237

Lot Number: 002126-2019-201

Remarks

See material safety data sheet for additional information

For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

A handwritten signature in black ink, appearing to read 'Bala Kumar', with a stylized flourish at the end.

Bala Kumar
Quality Control Manager



Certificate of Analysis

Cyanide Standard, 1000 ppm CN⁻

Lot Number: 1411J58**Product Number:** 2543**Manufacture Date:** NOV 22, 2024**Expiration Date:** MAY 2025

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.

Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225 % (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Cyanide	151-50-8	ACS
Sodium Hydroxide	1310-73-2	Reagent

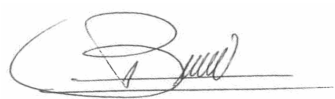
Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN ⁻)	995-1005 ppm	1000 ppm

Specification	Reference
Stock Standard Cyanide Solution	APHA (4500-CN- F)
Stock Cyanide Solution	APHA (4500-CN- E)
Stock Cyanide Solution	APHA (4500-CN- K)
Stock Cyanide Solution	APHA (4500-CN- H)
Cyanide Reference Solution (1000 mg/L)	EPA (SW-846) (7.3.3.2)
Cyanide Calibration Stock Solution (1,000 mg/L CN ⁻)	EPA (SW-846) (9213)
Stock Cyanide Solution	EPA (335.3)
Stock Cyanide Solution	EPA (335.2)
Cyanide Solution Stock	ASTM (D 4282)
Simple Cyanide Solution, Stock (1.0 g/L CN ⁻)	ASTM (D 4374)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
2543-16	500 mL amber poly	6 months
2543-32	1 L amber poly	6 months
2543-4	120 mL amber poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

A handwritten signature in black ink, appearing to read 'Luis Briceno', is written over a horizontal line.

Luis Briceno (11/22/2024)
Operations Supervisor

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.



W3163 Rec. on 12/10/24 by IZ

Certificate of Analysis



Material BDH9284-2.5KG
Material Description BDH SODIUM CARB ANHYD ACS 2.5KG
Grade U S P REAGENT (ACS GRADE)

Batch 24E3156178
Reassay Date 09/30/2027
CAS Number 497-19-8
Molecular Formula Na₂CO₃
Molecular Mass 105.99

Date of Manufacture 09/01/2023
Storage Room Temperature
Material is hygroscopic. Protect from Moisture.
Additional Product Description:

Characteristics	Specifications	Measured Values
Appearance	Fine white granular powder	Fine white granular powder
Calcium	<= 0.03 %	0.003 %
Chloride	<= 0.001 %	0.0003 %
Heavy Metals (as Pb)	<= 0.0005 %	0.0001 %
Insolubles	<= 0.01 %	0.001 %
Iron	<= 0.0005 %	0.0001 %
Loss on Heating	<= 1.0 %	0.03 %
Magnesium	<= 0.005 %	0.001 %
Phosphate	<= 0.001 %	0.001 %
Potassium	<= 0.005 %	0.003 %
Purity	>= 99.5 %	100.0 %
Silica	<= 0.005 %	0.001 %
Sulfur Compounds	<= 0.003 %	0.002 %
Extra Description:	Meets Reagent Specifications for testing USP/NF monographs	

Internal ID #: 710

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



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

Certificate of Analysis

Sodium Hypochlorite Solution, 5% available Chlorine

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

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

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

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

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

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

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

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

Jose Pena (01/17/2025)
Operations Manager

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

**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



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

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

Internal ID #: 710

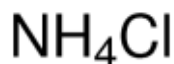
Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA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

W3196 Received on 03/19/2025 by IZ

Certificate of Analysis

Product Name:

Ammonium chloride - ACS reagent, ≥99.5%



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

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



Larry Coers, Director

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



Certificate of Analysis

Product Number: 213330
Batch Number: MKCV1009

Quality Control
Milwaukee, WI US

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



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



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/29/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 04/28/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:37
Out Date: 04/29/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135575

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1872-24	HW0425-PT-SOL-SOIL	8	0.92	10.30	11.22	8.82	76.7	
Q1901-01	B-170-SB00	1	1.14	5.55	6.69	6.28	92.6	
Q1901-02	B-167-SB01	2	1.14	10.22	11.36	9.58	82.6	
Q1901-03	B-170-SB01	3	1.19	10.31	11.5	9.75	83.0	
Q1901-04	B-167-SB02	4	1.15	9.78	10.93	6.35	53.2	
Q1901-05	B-170-SB02	5	1.14	10.16	11.3	8.77	75.1	
Q1902-01	343	6	1.19	10.23	11.42	10.7	93.0	
Q1902-02	343	7	1.13	10.19	11.32	10.33	90.3	
Q1903-01	COMP-4	9	1.18	11.14	12.32	10.46	83.3	
Q1903-02	COMP-5	10	1.16	10.50	11.66	9.44	78.9	
Q1903-03	COMP-6	11	1.17	10.60	11.77	10.06	83.9	
Q1904-01	VNJ-210	12	1.19	10.39	11.58	10.6	90.6	
Q1905-01	MH-G	13	1.15	10.35	11.5	10.38	89.2	
Q1905-02	MH-G-EPH	14	1.16	9.65	10.81	9.71	88.6	
Q1905-03	MH-G-VOC	15	1.16	10.33	11.49	10.36	89.1	
Q1905-05	MH-H	16	1.12	10.03	11.15	10.5	93.5	
Q1905-06	MH-H-EPH	17	1.13	10.30	11.43	10.5	91.0	
Q1905-07	MH-H-VOC	18	1.12	10.03	11.15	10.01	88.6	
Q1906-01	WC-4	19	1.15	9.85	11.00	10.14	91.3	
Q1906-02	WC-4-EPH	20	1.16	9.97	11.13	10.17	90.4	
Q1906-03	WC-4-VOC	21	1.18	9.99	11.17	9.91	87.4	
Q1906-05	WC-5	22	1.16	10.82	11.98	10.19	83.5	
Q1906-06	WC-5-EPH	23	1.13	10.41	11.54	9.94	84.6	
Q1906-07	WC-5-VOC	24	1.18	10.47	11.65	11.63	99.8	
Q1906-09	WC-6	25	1.14	10.04	11.18	10.4	92.2	
Q1906-10	WC-6-EPH	26	1.15	10.77	11.92	10.23	84.3	
Q1906-11	WC-6-VOC	27	1.14	10.47	11.61	10.86	92.8	
Q1906-13	WC-7	28	1.14	10.85	11.99	10.31	84.5	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 4/29/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 04/28/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:37
Out Date: 04/29/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135575

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
Q1906-14	WC-7-EPH	29	1.12	9.86	10.98	9.7	87.0	
Q1906-15	WC-7-VOC	30	1.13	10.27	11.4	10.23	88.6	
Q1907-01	CO-8R-WC	31	1.13	10.26	11.39	9.81	84.6	

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

WORKLIST(Hardcopy Internal Chain)

135545

WorkList Name : %1-042825

WorkList ID : 189159

Department : Wet-Chemistry

Date : 04-28-2025 07:59:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1872-24	HW0425-PT-SOL-SOIL	Solid	Percent Solids	Cool 4 deg C	ALLI03	QA Of	04/21/2025	Chemtech -SO
Q1903-01	COMP-4	Solid	Percent Solids	Cool 4 deg C	POWE02	L51	04/25/2025	Chemtech -SO
Q1903-02	COMP-5	Solid	Percent Solids	Cool 4 deg C	POWE02	L51	04/25/2025	Chemtech -SO
Q1903-03	COMP-6	Solid	Percent Solids	Cool 4 deg C	POWE02	L51	04/25/2025	Chemtech -SO
Q1901-01	B-170-SB00	Solid	Percent Solids	Cool 4 deg C	PORT06	L51	04/26/2025	Chemtech -SO
Q1901-02	B-167-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	L51	04/26/2025	Chemtech -SO
Q1901-03	B-170-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	L51	04/26/2025	Chemtech -SO
Q1901-04	B-167-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	L51	04/26/2025	Chemtech -SO
Q1901-05	B-170-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	L51	04/26/2025	Chemtech -SO
Q1902-01	343	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1902-02	343	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1904-01	VNJ-210	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1905-01	MH-G	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1905-02	MH-G-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1905-03	MH-G-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1906-13	WC-7	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-14	WC-7-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-15	WC-7-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-05	WC-5	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-06	WC-5-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-07	WC-5-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO

Date/Time 04/28/25 16:15
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 04/28/25 17:30
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

Handwritten signature

WorkList Name : %1-042825 WorkList ID : 189159 Department : Wet-Chemistry Date : 04-28-2025 07:59:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1906-09	WC-6	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-10	WC-6-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-11	WC-6-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1905-05	MH-H	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1905-06	MH-H-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1905-07	MH-H-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/28/2025	Chemtech -SO
Q1906-01	WC-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-02	WC-4-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1906-03	WC-4-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	04/28/2025	Chemtech -SO
Q1907-01	CO-8R-WC	Solid	Percent Solids	Cool 4 deg C	WALS01	L51	04/28/2025	Chemtech -SO

Date/Time 04/28/25 16:15
 Raw Sample Received by: *Handwritten signature*
 Raw Sample Relinquished by: *Handwritten signature*

Date/Time 04/28/25 17:30
 Raw Sample Received by: *Handwritten signature*
 Raw Sample Relinquished by: *Handwritten signature*



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Walsh Construction
ADDRESS: 150 Clare Rd, 11th Floor
CITY Little Falls STATE: NJ ZIP: 07424
ATTENTION: Benie Dion Gokan
PHONE: 646-285-7234 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Construction of Shaft 17B+18B
PROJECT NO.: 220084 LOCATION: Queens, NY
PROJECT MANAGER: Jesse Sylvestri
e-mail: jsylvestri@walshgroup.com
PHONE: 201-681-9740 FAX:

CLIENT BILLING INFORMATION

BILL TO: Walsh Construction PO#:
ADDRESS: 150 Clare Rd, 11th Floor
CITY Little Falls STATE: NJ ZIP: 07424
ATTENTION: Jesse Sylvestri PHONE: 201-681-9740

ANALYSIS

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

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

1. TCL VOCs (52100)
2. TCL SVOCs (52100)
3. TCL Metals (52100)
4. TCL VOCs (52100)
5. TCL SVOCs (52100)
6. TCL Metals (52100)
7. TCL VOCs (52100)
8. TCL SVOCs (52100)
9. TCL Metals (52100)

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		F+E	G	G	E	E	F+E	G	E	E	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER (method)	
								1	2	3	4	5	6	7	8	9		
1.	CO-0082-WC	Soil	X	X	4/28/25	11:50	25	X	X	X	X	X	X	X	X	X	13x 8oz, 1x 4oz	
2.																	2x terracore sets,	
3.																	1x encore set	
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>4/28/25 1220</u>	RECEIVED BY: 1. <u>Benie DG</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>3.0°C</u>
RELINQUISHED BY SAMPLER: 2. <u>Benie DG</u>	DATE/TIME: <u>4/28/25 2:00 PM</u>	RECEIVED BY: 2. <u>[Signature]</u> <u>4/28/25</u>	Comments: <u>RCRA Characteristics - Ignitability, Corrosivity, Reactivity (Sulfide & Cyanide)</u>
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: <u>4-28-25</u>	RECEIVED BY: 3. <u>[Signature]</u>	<u>Full analyte list in J. Peterson email on 4/22/25</u> <u>Bottle order # B2504038</u> <u>Temp 3.0°C Adjustment factor +1.7 IR Gun #1</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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1907	WALS01	Order Date : 4/28/2025 4:13:00 PM	Project Mgr :
Client Name : Walsh Construction Compa		Project Name : Walsh CO-032 Sampling	Report Type : Level 2 level 1
Client Contact : Jesse A. Sylvestri		Receive DateTime : 4/28/2025 12:00:00 AM	EDD Type : Excel NY
Invoice Name : Walsh Construction Compa		Purchase Order : 16:10	Hard Copy Date :
Invoice Contact : Jesse A. Sylvestri			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1907-01	CO-8R-WC	Solid	04/28/2025	11:50	VOC-TCLVOA-10		8260D		10 Bus. Days

Relinquished By : 

Date / Time : 4-28-25 1645

Received By : 

Date / Time : 4/28/25 1645

Storage Area : VOA Refridgerator Room