

Cover Page

Order ID : Q2473

Project ID : NOHO RFI No. SC64025 NYC

Client : JPCL Engineering

Lab Sample Number

Q2473-01
Q2473-02
Q2473-03
Q2473-04
Q2473-05
Q2473-06
Q2473-07
Q2473-08

Client Sample Number

PIT#1
PIT#2
PIT#3
PIT#4
PIT#1
PIT#2
PIT#3
PIT#4

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: 7/7/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

DATA REPORTING QUALIFIERS- INORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2473

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 Custody

✓

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: 07/07/2025

LAB CHRONICLE

OrderID:	Q2473	OrderDate:	7/1/2025 12:14:15 PM
Client:	JPCL Engineering	Project:	NOHO RFI No. SC64025 NYC
Contact:	Paul Rotondi	Location:	--Select--,A12,A43,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2473-01	PIT#1	SOIL			07/01/25 08:20			07/01/25
			Corrosivity	9045D			07/02/25 10:00	
			Cyanide	9012B		07/02/25	07/02/25 11:40	
			Ignitability	1030			07/02/25 08:55	
			Reactive Cyanide	9012B		07/01/25	07/02/25 10:16	
			Reactive Sulfide	9034		07/03/25	07/03/25 16:33	
Q2473-02	PIT#2	SOIL			07/01/25 08:30			07/01/25
			Corrosivity	9045D			07/02/25 10:10	
			Cyanide	9012B		07/02/25	07/02/25 11:48	
			Ignitability	1030			07/02/25 09:10	
			Reactive Cyanide	9012B		07/01/25	07/02/25 10:27	
			Reactive Sulfide	9034		07/03/25	07/03/25 16:35	
Q2473-03	PIT#3	SOIL			07/01/25 08:40			07/01/25
			Corrosivity	9045D			07/02/25 10:25	
			Cyanide	9012B		07/02/25	07/02/25 11:48	

LAB CHRONICLE

Q2473-04	PIT#4	SOIL	Ignitability	1030			07/02/25 09:18	07/01/25 08:50	07/01/25
			Reactive Cyanide	9012B		07/01/25	07/02/25 10:27		
			Reactive Sulfide	9034		07/03/25	07/03/25 16:37		
			Corrosivity	9045D			07/02/25 10:30		
			Cyanide	9012B		07/02/25	07/02/25 11:48		
			Ignitability	1030			07/02/25 09:25		
			Reactive Cyanide	9012B		07/01/25	07/02/25 10:27		
			Reactive Sulfide	9034		07/03/25	07/03/25 16:39		



SAMPLE DATA

Report of Analysis

Client:	JPCL Engineering	Date Collected:	07/01/25 08:20
Project:	NOHO RFI No. SC64025 NYC	Date Received:	07/01/25
Client Sample ID:	PIT#1	SDG No.:	Q2473
Lab Sample ID:	Q2473-01	Matrix:	SOIL
		% Solid:	90

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	11.3	H	1	0	0	pH		07/02/25 10:00	9045D
Cyanide	0.17	J	1	0.046	0.28	mg/Kg	07/02/25 08:30	07/02/25 11:40	9012B
Ignitability	NO		1	0	0	oC		07/02/25 08:55	1030
Reactive Cyanide	0.0083	U	1	0.0083	0.049	mg/Kg	07/01/25 14:35	07/02/25 10:16	9012B
Reactive Sulfide	6.36	J	1	0.20	10.0	mg/Kg	07/03/25 14:00	07/03/25 16:33	9034

Comments: pH result reported at temperature 24.0 °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

Report of Analysis

Client:	JPCL Engineering	Date Collected:	07/01/25 08:30
Project:	NOHO RFI No. SC64025 NYC	Date Received:	07/01/25
Client Sample ID:	PIT#2	SDG No.:	Q2473
Lab Sample ID:	Q2473-02	Matrix:	SOIL
		% Solid:	90.1

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	11.1	H	1	0	0	pH		07/02/25 10:10	9045D
Cyanide	0.064	J	1	0.046	0.27	mg/Kg	07/02/25 08:30	07/02/25 11:48	9012B
Ignitability	NO		1	0	0	oC		07/02/25 09:10	1030
Reactive Cyanide	0.0084	U	1	0.0084	0.050	mg/Kg	07/01/25 14:35	07/02/25 10:27	9012B
Reactive Sulfide	6.34	J	1	0.20	10.0	mg/Kg	07/03/25 14:00	07/03/25 16:35	9034

Comments: pH result reported at temperature 23.8 °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

Report of Analysis

Client:	JPCL Engineering	Date Collected:	07/01/25 08:40
Project:	NOHO RFI No. SC64025 NYC	Date Received:	07/01/25
Client Sample ID:	PIT#3	SDG No.:	Q2473
Lab Sample ID:	Q2473-03	Matrix:	SOIL
		% Solid:	88.4

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	10.8	H	1	0	0	pH		07/02/25 10:25	9045D
Cyanide	0.21	J	1	0.046	0.27	mg/Kg	07/02/25 08:30	07/02/25 11:48	9012B
Ignitability	NO		1	0	0	oC		07/02/25 09:18	1030
Reactive Cyanide	0.0084	U	1	0.0084	0.050	mg/Kg	07/01/25 14:35	07/02/25 10:27	9012B
Reactive Sulfide	3.16	J	1	0.20	10.0	mg/Kg	07/03/25 14:00	07/03/25 16:37	9034

Comments: pH result reported at temperature 23.7 °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

Report of Analysis

Client:	JPCL Engineering	Date Collected:	07/01/25 08:50
Project:	NOHO RFI No. SC64025 NYC	Date Received:	07/01/25
Client Sample ID:	PIT#4	SDG No.:	Q2473
Lab Sample ID:	Q2473-04	Matrix:	SOIL
		% Solid:	90.7

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	11.3	H	1	0	0	pH		07/02/25 10:30	9045D
Cyanide	0.25	J	1	0.046	0.27	mg/Kg	07/02/25 08:30	07/02/25 11:48	9012B
Ignitability	NO		1	0	0	oC		07/02/25 09:25	1030
Reactive Cyanide	0.0083	U	1	0.0083	0.050	mg/Kg	07/01/25 14:35	07/02/25 10:27	9012B
Reactive Sulfide	6.37	J	1	0.20	10.0	mg/Kg	07/03/25 14:00	07/03/25 16:39	9034

Comments: pH result reported at temperature 23.4 °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

Initial and Continuing Calibration Verification

Client: JPCL Engineering

SDG No.: Q2473

Project: NOHO RFI No. SC64025 NYC

RunNo.: LB136351

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: Corrosivity	ICV	pH	7.02	7	100	90-110	07/02/2025
Sample ID: Corrosivity	CCV1	pH	2.02	2.00	101	90-110	07/02/2025
Sample ID: Corrosivity	CCV2	pH	12.02	12.00	100	90-110	07/02/2025

Initial and Continuing Calibration Verification

Client: JPCL Engineering

SDG No.: Q2473

Project: NOHO RFI No. SC64025 NYC

RunNo.: LB136353

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Reactive Cyanide	mg/L	0.097	0.099	98	85-115	07/02/2025
Sample ID: CCV1 Reactive Cyanide	mg/L	0.24	0.25	96	90-110	07/02/2025
Sample ID: CCV2 Reactive Cyanide	mg/L	0.25	0.25	100	90-110	07/02/2025
Sample ID: CCV3 Reactive Cyanide	mg/L	0.25	0.25	100	90-110	07/02/2025

Initial and Continuing Calibration Verification

Client: JPCL Engineering

SDG No.: Q2473

Project: NOHO RFI No. SC64025 NYC

RunNo.: LB136358

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Cyanide	mg/L	0.096	0.099	97	90-110	07/02/2025
Sample ID: CCV1 Cyanide	mg/L	0.24	0.25	96	90-110	07/02/2025
Sample ID: CCV2 Cyanide	mg/L	0.24	0.25	96	90-110	07/02/2025
Sample ID: CCV3 Cyanide	mg/L	0.25	0.25	100	90-110	07/02/2025
Sample ID: CCV4 Cyanide	mg/L	0.25	0.25	100	90-110	07/02/2025

Initial and Continuing Calibration Blank Summary

Client: JPCL Engineering

SDG No.: Q2473

Project: NOHO RFI No. SC64025 NYC

RunNo.: LB136353

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	07/02/2025
Sample ID: CCB1 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/02/2025
Sample ID: CCB2 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/02/2025
Sample ID: CCB3 Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/02/2025

Initial and Continuing Calibration Blank Summary

Client: JPCL Engineering

SDG No.: Q2473

Project: NOHO RFI No. SC64025 NYC

RunNo.: LB136358

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	07/02/2025
Sample ID: CCB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/02/2025
Sample ID: CCB2 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/02/2025
Sample ID: CCB3 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/02/2025
Sample ID: CCB4 Cyanide	mg/L	< 0.0025	0.0025	U	0.00096	0.005	07/02/2025

Preparation Blank Summary

Client: JPCL Engineering

SDG No.: Q2473

Project: NOHO RFI No. SC64025 NYC

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: PB168681BL Reactive Cyanide	mg/Kg	< 0.0250	0.0250	U	0.0084	0.05	07/02/2025
Sample ID: PB168682BL Reactive Sulfide	mg/Kg	< 5.0000	5.0000	U	0.201	10	07/03/2025
Sample ID: PB168686BL Cyanide	mg/Kg	< 0.1250	0.1250	U	0.042	0.25	07/02/2025

Matrix Spike Summary

Client:	JPCL Engineering	SDG No.:	Q2473
Project:	NOHO RFI No. SC64025 NYC	Sample ID:	Q2473-01
Client ID:	PIT#1MS	Percent Solids for Spike Sample:	90

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	1.80		0.17	J	2.2	1	74	*	07/02/2025

Matrix Spike Summary

Client:	JPCL Engineering	SDG No.:	Q2473
Project:	NOHO RFI No. SC64025 NYC	Sample ID:	Q2473-01
Client ID:	PIT#1MSD	Percent Solids for Spike Sample:	90

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	1.80		0.17	J	2.2	1	74	*	07/02/2025

Duplicate Sample Summary

Client: JPCL Engineering	SDG No.: Q2473
Project: NOHO RFI No. SC64025 NYC	Sample ID: Q2447-08
Client ID: COMP-1DUP	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	0.0084	U	0.0084	U	1	0		07/02/2025
Reactive Sulfide	mg/Kg	+/-20	1.58	J	1.58	J	1	0		07/03/2025

Duplicate Sample Summary

Client: JPCL Engineering	SDG No.: Q2473
Project: NOHO RFI No. SC64025 NYC	Sample ID: Q2473-01
Client ID: PIT#1DUP	Percent Solids for Spike Sample: 90

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Cyanide	mg/Kg	+/-20	0.17	J	0.16	J	1	6		07/02/2025
Ignitability	oC	+/-20	NO		NO		1	0		07/02/2025

Duplicate Sample Summary

Client:	JPCL Engineering	SDG No.:	Q2473
Project:	NOHO RFI No. SC64025 NYC	Sample ID:	Q2473-01
Client ID:	PIT#1MSD	Percent Solids for Spike Sample:	90

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Cyanide	mg/Kg	+/-20	1.80		1.80		1	0		07/02/2025

Duplicate Sample Summary

Client: JPCL Engineering	SDG No.: Q2473
Project: NOHO RFI No. SC64025 NYC	Sample ID: Q2478-04
Client ID: WC-1DUP	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	8.91		8.92		1	0.11		07/02/2025

Laboratory Control Sample Summary

Client: JPCL Engineering

SDG No.: Q2473

Project: NOHO RFI No. SC64025 NYC

Run No.: LB136358

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB168686BS							
Cyanide	mg/Kg	5	4.80		96	1	85-115	07/02/2025



RAW DATA

Analytical Summary Report

Analysis Method: 9045D

Analyst By : jignesh

Parameter: Corrosivity

Supervisor Review By : Iwona

Run Number: LB136351

Slope : 98.5

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
pH 12.00 Buffer	W3200

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

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

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

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.2	4.01	07/02/2025	09:30
2	CAL2	1	Water	NA	NA	20.2	7.00	07/02/2025	09:31
3	CAL3	1	Water	NA	NA	20.2	10.02	07/02/2025	09:33
4	ICV	1	Water	NA	NA	20.2	7.02	07/02/2025	09:37
5	CCV1	1	Water	NA	NA	20.2	2.02	07/02/2025	09:40
6	Q2473-01	1	Solid	20.02	20	24.0	11.32	07/02/2025	10:00
7	Q2473-02	1	Solid	20.03	20	23.8	11.09	07/02/2025	10:10
8	Q2473-03	1	Solid	20.04	20	23.7	10.85	07/02/2025	10:25
9	Q2473-04	1	Solid	20.03	20	23.4	11.26	07/02/2025	10:30
10	Q2478-04	1	Solid	20.02	20	23.7	8.91	07/02/2025	10:37
11	Q2478-04DUP	1	Solid	20.03	20	23.9	8.92	07/02/2025	10:40
12	CCV2	1	Water	NA	NA	20.3	12.02	07/02/2025	10:44

WORKLIST(Hardcopy Internal Chain)

VB136351

WorkList Name : corrosivity q2473 WorkList ID : 190494 Department : Wet-Chemistry Date : 07-02-2025 07:40:14

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2473-01	H PIT#1	Solid	Corrosivity	Cool 4 deg C	JPCL01	A43	07/01/2025	9045D
Q2473-02	H PIT#2	Solid	Corrosivity	Cool 4 deg C	JPCL01	A43	07/01/2025	9045D
Q2473-03	H PIT#3	Solid	Corrosivity	Cool 4 deg C	JPCL01	A43	07/01/2025	9045D
Q2473-04	H PIT#4	Solid	Corrosivity	Cool 4 deg C	JPCL01	A43	07/01/2025	9045D
Q2478-04	A WC-1	Solid	Corrosivity	Cool 4 deg C	PSEG03	A42	07/30/2025	9045D

Date/Time 07/02/25 08:00
 Raw Sample Received by: Sh WC
 Raw Sample Relinquished by: Sh WC

Date/Time 07/02/25
 Raw Sample Received by: Sh WC
 Raw Sample Relinquished by: Sh WC

LB136353

Reviewed By: Iwona
On: 7/2/2025 2:43:35
PM
Inst Id: Konelab 20
LB: LB136353

Test results

Aquakem 7.2AQ1

Page:

Alliance Technical Group

284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM

Instrument ID : Konelab

7/2/2025 10:34

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	96.556	0.0	0.079	
ICB1	0.230	0.0	0.001	
CCV1	242.173	0.0	0.196	
CCB1	-0.267	0.0	0.001	
PB168681BL	-0.334	0.0	0.001	
Q2447-08	-0.527	0.0	0.001	
Q2447-08DUP	-0.458	0.0	0.001	
Q2447-09	-0.398	0.0	0.001	
Q2447-10	-0.520	0.0	0.001	
Q2452-04	-0.423	0.0	0.001	
Q2452-08	-0.378	0.0	0.001	
Q2459-04	-0.494	0.0	0.001	
Q2469-04	-0.567	0.0	0.001	
Q2473-01	-0.532	0.0	0.001	
CCV2	247.912	0.0	0.201	
CCB2	-0.490	0.0	0.001	
Q2473-02	-0.478	0.0	0.001	
Q2473-03	-0.193	0.0	0.001	
Q2473-04	-0.542	0.0	0.001	
Q2478-04	-0.323	0.0	0.001	
CCV3	247.387	0.0	0.200	
CCB3	-0.228	0.0	0.001	
N	22			
Mean	37.596			
SD	87.1613			
CV%	231.84			

Aquakem v. 7.2AQ1

Results from time period:

Wed Jul 02 08:37:41 2025

Wed Jul 02 10:33:04 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	-0.4825	µg/l	7/2/2025 9:38:56	
5.0PPBCN	A	Total CN	P	4.4845	µg/l	7/2/2025 9:38:57	
10PPBCN	A	Total CN	P	9.4318	µg/l	7/2/2025 9:38:58	
50PPBCN	A	Total CN	P	50.3085	µg/l	7/2/2025 9:38:59	
100PPBCN	A	Total CN	P	102.0452	µg/l	7/2/2025 9:39:00	
250PPBCN	A	Total CN	P	249.272	µg/l	7/2/2025 9:39:01	
500PPBCN	A	Total CN	P	499.9406	µg/l	7/2/2025 9:39:02	
ICV1	S	Total CN	P	96.5559	µg/l	7/2/2025 10:08:53	
ICB1	S	Total CN	P	0.2304	µg/l	7/2/2025 10:08:55	
CCV1	S	Total CN	P	242.1727	µg/l	7/2/2025 10:08:57	
CCB1	S	Total CN	P	-0.2675	µg/l	7/2/2025 10:08:58	
PB168681BL	S	Total CN	P	-0.3342	µg/l	7/2/2025 10:09:00	
Q2447-08	S	Total CN	P	-0.5273	µg/l	7/2/2025 10:16:24	
Q2447-08DUP	S	Total CN	P	-0.4579	µg/l	7/2/2025 10:16:25	
Q2447-09	S	Total CN	P	-0.3978	µg/l	7/2/2025 10:16:27	
Q2447-10	S	Total CN	P	-0.5204	µg/l	7/2/2025 10:16:28	
Q2452-04	S	Total CN	P	-0.4235	µg/l	7/2/2025 10:16:29	
Q2452-08	S	Total CN	P	-0.3779	µg/l	7/2/2025 10:16:30	
Q2459-04	S	Total CN	P	-0.4935	µg/l	7/2/2025 10:16:31	
Q2469-04	S	Total CN	P	-0.567	µg/l	7/2/2025 10:16:32	
Q2473-01	S	Total CN	P	-0.5316	µg/l	7/2/2025 10:16:33	
CCV2	S	Total CN	P	247.9116	µg/l	7/2/2025 10:21:15	
CCB2	S	Total CN	P	-0.4903	µg/l	7/2/2025 10:27:15	
Q2473-02	S	Total CN	P	-0.4779	µg/l	7/2/2025 10:27:16	
Q2473-03	S	Total CN	P	-0.1933	µg/l	7/2/2025 10:27:17	
Q2473-04	S	Total CN	P	-0.5423	µg/l	7/2/2025 10:27:18	
Q2478-04	S	Total CN	P	-0.3235	µg/l	7/2/2025 10:27:19	
CCV3	S	Total CN	P	247.387	µg/l	7/2/2025 10:33:00	
CCB3	S	Total CN	P	-0.228	µg/l	7/2/2025 10:33:02	

Calibration results

Aquakem 7.2AQ1

Page:

Alliance Technical Group
284 Sheffield Street, Mountainside, NJ 07092

7/2/2025 9:40

Reviewed by : RM

Instrument ID : Konelab

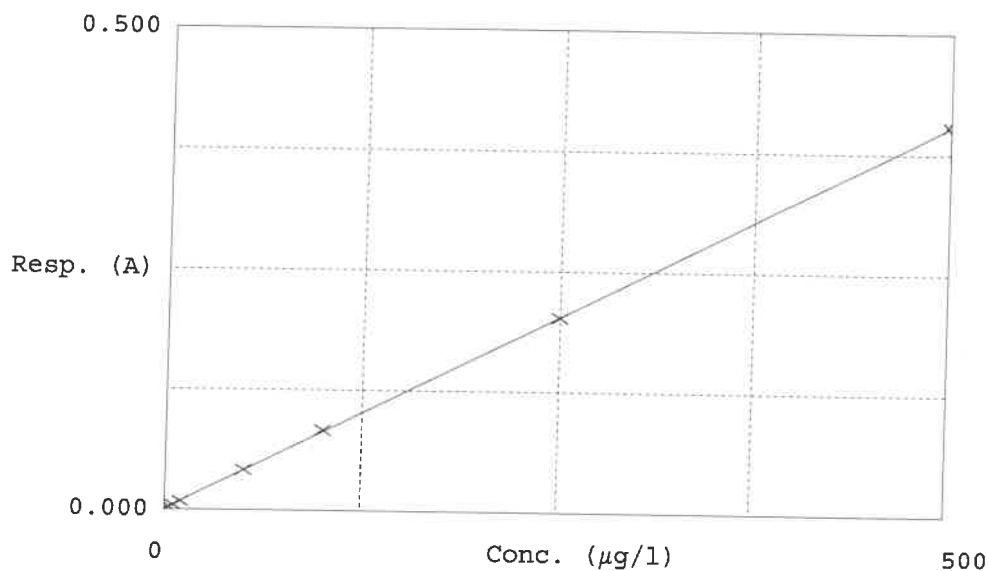
Test Total CN

Accepted 7/2/2025 9:40

Factor 1241
Bias 0.001

Coeff. of det. 0.999973

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.0PPBCN	0.001	-0.4825	0.0000	
2	5.0PPBCN	0.005	4.4845	5.0000	-10.3
3	10PPBCN	0.009	9.4318	10.0000	-5.7
4	50PPBCN	0.042	50.3085	50.0000	0.6
5	100PPBCN	0.083	102.0452	100.0000	2.0
6	250PPBCN	0.202	249.2720	250.0000	-0.3
7	500PPBCN	0.404	499.9406	500.0000	0.0

07/02/2025
RM

LB1363

Test results

Aquakem 7.2AQ1

Page: 1

Alliance Technical Group
284 Sheffield Street, Mountainside, NJ 07092

7/2/2025 12:27

Reviewed by : RM

Instrument ID : Konelab

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	96.305	0.0	0.079	
ICB1	-0.246	0.0	0.001	
CCV1	238.492	0.0	0.193	
CCB1	-0.255	0.0	0.001	
PB168686BL	-0.259	0.0	0.001	
PB168686BS	96.845	0.0	0.079	
LOWPB168686	9.197	0.0	0.009	
HIGHPB168686	479.560	0.0	0.387	
Q2473-01	3.154	0.0	0.004	
Q2473-01DUP	2.916	0.0	0.003	
Q2473-01MS	33.154	0.0	0.028	
Q2473-01MSD	32.619	0.0	0.027	
Q2473-02	1.164	0.0	0.002	
Q2473-03	3.839	0.0	0.004	
CCV2	243.807	0.0	0.197	
CCB2	0.008	0.0	0.001	
Q2473-04	4.527	0.0	0.005	
CCV3	245.936	0.0	0.199	
CCB3	0.089	0.0	0.001	
Q2473-01A	41.750	0.0	0.035	
CCV4	247.649	0.0	0.201	
CCB4	-0.338	0.0	0.001	

91% (90-110)

95% (90-110)

07/02/2025
RM

N	22
Mean	80.905
SD	128.5094
CV%	158.84

Aquakem v. 7.2AQ1

Results from time period:

Wed Jul 02 11:33:13 2025

Wed Jul 02 12:23:39 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	-0.4825	µg/l	7/2/2025 9:38:56
5.0PPBCN	A	Total CN	P	4.4845	µg/l	7/2/2025 9:38:57
10PPBCN	A	Total CN	P	9.4318	µg/l	7/2/2025 9:38:58
50PPBCN	A	Total CN	P	50.3085	µg/l	7/2/2025 9:38:59
100PPBCN	A	Total CN	P	102.0452	µg/l	7/2/2025 9:39:00
250PPBCN	A	Total CN	P	249.272	µg/l	7/2/2025 9:39:01
500PPBCN	A	Total CN	P	499.9406	µg/l	7/2/2025 9:39:02
ICV1	S	Total CN	P	96.3053	µg/l	7/2/2025 11:33:14
ICB1	S	Total CN	P	-0.246	µg/l	7/2/2025 11:33:16
CCV1	S	Total CN	P	238.4917	µg/l	7/2/2025 11:33:18
CCB1	S	Total CN	P	-0.2553	µg/l	7/2/2025 11:33:19
PB168686BL	S	Total CN	P	-0.2587	µg/l	7/2/2025 11:33:21
PB168686BS	S	Total CN	P	96.8448	µg/l	7/2/2025 11:33:23
LOWPB168686	S	Total CN	P	9.1975	µg/l	7/2/2025 11:40:46
HIGHPB168686	S	Total CN	P	479.5602	µg/l	7/2/2025 11:40:51
Q2473-01	S	Total CN	P	3.1542	µg/l	7/2/2025 11:40:52
Q2473-01DUP	S	Total CN	P	2.9163	µg/l	7/2/2025 11:40:53
Q2473-01MS	S	Total CN	P	33.1543	µg/l	7/2/2025 11:48:20
Q2473-01MSD	S	Total CN	P	32.6186	µg/l	7/2/2025 11:48:21
Q2473-02	S	Total CN	P	1.1642	µg/l	7/2/2025 11:48:22
Q2473-03	S	Total CN	P	3.839	µg/l	7/2/2025 11:48:23
CCV2	S	Total CN	P	243.807	µg/l	7/2/2025 11:48:27
CCB2	S	Total CN	P	0.0083	µg/l	7/2/2025 11:48:29
Q2473-04	S	Total CN	P	4.5272	µg/l	7/2/2025 11:48:30
CCV3	S	Total CN	P	245.936	µg/l	7/2/2025 11:53:07
CCB3	S	Total CN	P	0.0892	µg/l	7/2/2025 11:53:09
Q2473-01A	S	Total CN	P	41.7503	µg/l	7/2/2025 12:23:34
CCV4	S	Total CN	P	247.6493	µg/l	7/2/2025 12:23:36
CCB4	S	Total CN	P	-0.3381	µg/l	7/2/2025 12:23:38

Calibration results

Aquakem 7.2AQ1

Page:

Alliance Technical Group
284 Sheffield Street, Mountainside, NJ 07092

7/2/2025 9:40

Reviewed by : RM

Instrument ID : Konelab

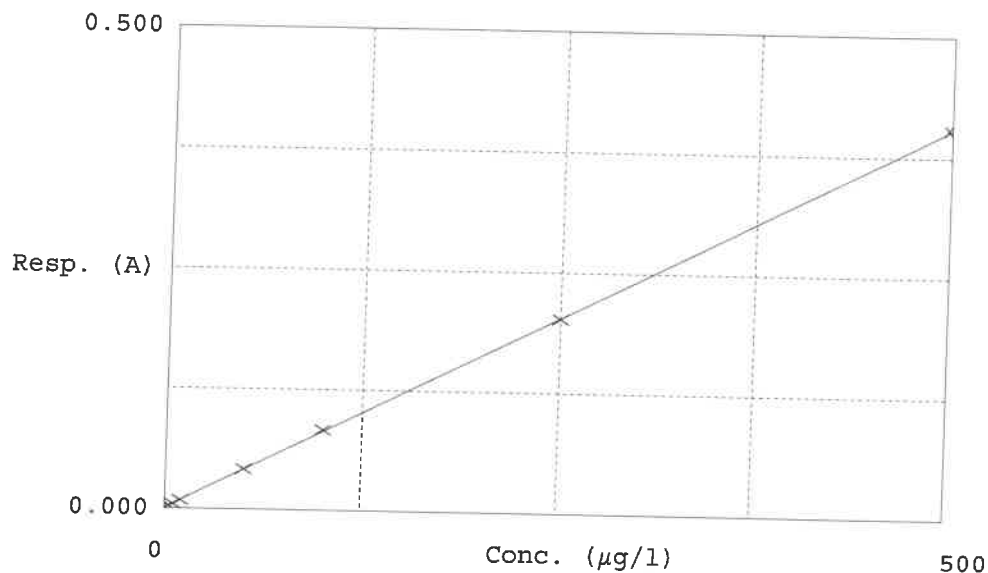
Test Total CN

Accepted 7/2/2025 9:40

Factor 1241
Bias 0.001

Coeff. of det. 0.999973

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.0PPBCN	0.001	-0.4825	0.0000	-
2	5.0PPBCN	0.005	4.4845	5.0000	-10.3
3	10PPBCN	0.009	9.4318	10.0000	-5.7
4	50PPBCN	0.042	50.3085	50.0000	0.6
5	100PPBCN	0.083	102.0452	100.0000	2.0
6	250PPBCN	0.202	249.2720	250.0000	-0.3
7	500PPBCN	0.404	499.9406	500.0000	0.0

07/02/2025
RM

Analytical Summary Report

Analysis Method: 1030
Parameter: Ignitability
Run Number: LB136360

Reviewed By: Eman

Supervisor Review By: Iwona

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Anal Time
1	Q2473-01	PIT#1	1	Solid	NO	0.00	07/02/2025	08:55
2	Q2473-01DUP	PIT#1DUP	1	Solid	NO	0.00	07/02/2025	09:02
3	Q2473-02	PIT#2	1	Solid	NO	0.00	07/02/2025	09:10
4	Q2473-03	PIT#3	1	Solid	NO	0.00	07/02/2025	09:18
5	Q2473-04	PIT#4	1	Solid	NO	0.00	07/02/2025	09:25
6	Q2478-01	WC-1	1	Solid	NO	0.00	07/02/2025	09:33
7	Q2478-04	WC-1	1	Solid	NO	0.00	07/02/2025	09:40

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

WORKLIST(Hardcopy Internal Chain)

16136360

WorkList Name : IGN-070225

WorkList ID : 190501

Department : Wet-Chemistry

Date : 07-02-2025 08:10:38

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2473-01	PIT#1	Solid	Ignitability	Cool 4 deg C	JPCL01	A43	07/01/2025	1030
Q2473-02	PIT#2	Solid	Ignitability	Cool 4 deg C	JPCL01	A43	07/01/2025	1030
Q2473-03	PIT#3	Solid	Ignitability	Cool 4 deg C	JPCL01	A43	07/01/2025	1030
Q2473-04	PIT#4	Solid	Ignitability	Cool 4 deg C	JPCL01	A43	07/01/2025	1030
Q2478-01	WC-1	Solid	Ignitability	Cool 4 deg C	PSEG03	A42	07/30/2025	1030
Q2478-04	WC-1	Solid	Ignitability	Cool 4 deg C	PSEG03	A42	07/30/2025	1030

Date/Time 07/02/25 08:20
 Raw Sample Received by: EM(WC)
 Raw Sample Relinquished by: [Signature]

Date/Time 07/02/25 09:55
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: EM(WC)

Analysis Method: 9034

ANALYST: rubina

Parameter: Reactive Sulfide

SUPERVISOR REVIEW BY: Iwona

Run Number: LB136372

Constant: 16000

Normality1: 0.025

Normality2: 0.025

Reagent/Standard	Lot/Log #
SODIUM THIOSULFATE, 0.025N, 4LITRE	W3105
IODINE SOLUTION .025N 1L	W3213
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	PB168682BL		1	5.00	50	2.00	0.00	1.94	1.94	0.06	0.00	0.00	07/03/2025	16:10
2	Q2447-08		1	5.05	50	2.00	0.00	1.92	1.92	0.08	0.02	1.58	07/03/2025	16:12
3	Q2447-08DUP		1	5.05	50	2.00	0.00	1.92	1.92	0.08	0.02	1.58	07/03/2025	16:14
4	Q2447-09		1	5.07	50	2.00	0.00	1.86	1.86	0.14	0.08	6.31	07/03/2025	16:17
5	Q2447-10		1	5.06	50	2.00	0.00	1.90	1.90	0.10	0.04	3.16	07/03/2025	16:20
6	Q2452-04		1	5.02	50	2.00	0.00	1.90	1.90	0.10	0.04	3.19	07/03/2025	16:22
7	Q2452-08		1	5.01	50	2.00	0.00	1.88	1.88	0.12	0.06	4.79	07/03/2025	16:24
8	Q2459-04		1	5.01	50	2.00	0.00	1.88	1.88	0.12	0.06	4.79	07/03/2025	16:27
9	Q2469-04		1	5.06	50	2.00	0.00	1.90	1.90	0.10	0.04	3.16	07/03/2025	16:30
10	Q2473-01		1	5.03	50	2.00	0.00	1.86	1.86	0.14	0.08	6.36	07/03/2025	16:33
11	Q2473-02		1	5.05	50	2.00	0.00	1.86	1.86	0.14	0.08	6.34	07/03/2025	16:35
12	Q2473-03		1	5.07	50	2.00	0.00	1.90	1.90	0.10	0.04	3.16	07/03/2025	16:37

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

Analysis Method: 9034

Parameter: Reactive Sulfide

Run Number: LB136372

ANALYST: rubina

SUPERVISOR REVIEW BY: Iwona

Constant: 16000

Normality1: 0.025

Normality2: 0.025

Reagent/Standard	Lot/Log #
SODIUM THIOSULFATE, 0.025N, 4LITRE	W3105
IODINE SOLUTION .025N 1L	W3213
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
13	Q2473-04		1	5.02	50	2.00	0.00	1.86	1.86	0.14	0.08	6.37	07/03/2025	16:39
14	Q2478-04		1	5.02	50	2.00	0.00	1.90	1.90	0.10	0.04	3.19	07/03/2025	16:42
15	Q2493-04		1	5.05	50	2.00	0.00	1.88	1.88	0.12	0.06	4.75	07/03/2025	16:45

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

SOP ID : M9012B-Total, Amenable and Reactive Cyanide-21

SDG No : N/A

Matrix : SOIL

Pipette ID : N/A

Balance ID : WC SC-7

Hood ID : HOOD#1

Block ID : MC-1,MC-2

Weigh By : RM

Start Digest Date: 07/01/2025 Time : 14:35 Temp : N/A

End Digest Date: 07/01/2025 Time : 16:05 Temp : N/A

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : N/A

Prep Technician Signature: RM

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

LAB SAMPLE ID	CLIENT SAMPLE ID	Comment

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
07/01/2025 16:15	RM (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
PB168681BL	PBS681	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2447-08DUP	COMP-1DUP	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2447-08	COMP-1	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2447-09	COMP-2	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2447-10	LAW-25-0100	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2452-04	TP-5	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2452-08	EP-2	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2459-04	TP-1	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2469-04	WC-1	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-01	PIT#1	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-02	PIT#2	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-03	PIT#3	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-04	PIT#4	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2478-04	WC-1	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : RCN-7-01

WorkList ID : 190489

Department : Distillation

Date : 07-01-2025 13:44:20

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2447-08	COMP-1	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03		06/27/2025	9012B
Q2447-09	COMP-2	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D51	06/27/2025	9012B
Q2447-10	LAW-25-0100	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	D51	06/27/2025	9012B
Q2452-04	TP-5	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	A22	06/27/2025	9012B
Q2452-08	EP-2	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	A22	06/27/2025	9012B
Q2459-04	TP-1	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	A51	06/28/2025	9012B
Q2469-04	WC-1	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	A61	06/30/2025	9012B
Q2473-01	PIT#1	Solid	Reactive Cyanide	Cool 4 deg C	JPCL01	A43	07/01/2025	9012B
Q2473-02	PIT#2	Solid	Reactive Cyanide	Cool 4 deg C	JPCL01	A43	07/01/2025	9012B
Q2473-03	PIT#3	Solid	Reactive Cyanide	Cool 4 deg C	JPCL01	A43	07/01/2025	9012B
Q2473-04	PIT#4	Solid	Reactive Cyanide	Cool 4 deg C	JPCL01	A43	07/01/2025	9012B
Q2478-04	WC-1	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	A42	07/30/2025	9012B

Date/Time 07/01/2025 13:55

Raw Sample Received by: RM (w)

Raw Sample Relinquished by: JRCoo

Date/Time 07/01/2025 14:45

Raw Sample Received by: JRCoo

Raw Sample Relinquished by: RM (w)

SOP ID : M9030B-Sulfide-13

SDG No : N/A

Start Digest Date: 07/03/2025 Time : 14:00 Temp : N/A

Matrix : SOIL

End Digest Date: 07/03/2025 Time : 15:30 Temp : N/A

Pipette ID : WC

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

Standard 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	WP113086
FORMALDEHYDE	2.0ML	W3220
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:

N/A

07/03/2025 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
PB168682BL	PBS682	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2447-08DUP	COMP-1DUP	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2447-08	COMP-1	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2447-09	COMP-2	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2447-10	LAW-25-0100	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2452-04	TP-5	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2452-08	EP-2	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2459-04	TP-1	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2469-04	WC-1	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-01	PIT#1	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-02	PIT#2	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-03	PIT#3	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-04	PIT#4	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2478-04	WC-1	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2493-04	WC-11	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : rsul-7-3

WorkList ID : 190548

Department : Distillation

Date : 07-03-2025 13:08:36

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2447-08	COMP-1	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03		06/27/2025	9034
Q2447-09	COMP-2	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	D51	06/27/2025	9034
Q2447-10	LAW-25-0100	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	D51	06/27/2025	9034
Q2452-04	TP-5	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	A22	06/27/2025	9034
Q2452-08	EP-2	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	A22	06/27/2025	9034
Q2459-04	TP-1	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	A51	06/28/2025	9034
Q2469-04	WC-1	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	A61	06/30/2025	9034
Q2473-01	PIT#1	Solid	Reactive Sulfide	Cool 4 deg C	JPCL01	A43	07/01/2025	9034
Q2473-02	PIT#2	Solid	Reactive Sulfide	Cool 4 deg C	JPCL01	A43	07/01/2025	9034
Q2473-03	PIT#3	Solid	Reactive Sulfide	Cool 4 deg C	JPCL01	A43	07/01/2025	9034
Q2473-04	PIT#4	Solid	Reactive Sulfide	Cool 4 deg C	JPCL01	A43	07/01/2025	9034
Q2478-04	WC-1	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	A42	07/30/2025	9034
Q2493-04	WC-11	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	A43	07/02/2025	9034

Date/Time 07/03/2025 13:15
 Raw Sample Received by: RM (w/c)
 Raw Sample Relinquished by: JF (w/c)

Date/Time 07/03/2025 14:20
 Raw Sample Received by: JF (w/c)
 Raw Sample Relinquished by: RM (w/c)

SOP ID : M9012B-Total, Amenable and Reactive Cyanide-21

SDG No : N/A

Matrix : SOIL

Pippete ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#1

Block ID : MC-1,MC-2

Weigh By : JP

Start Digest Date: 07/02/2025 Time : 08:30 Temp : 123 °C

End Digest Date: 07/02/2025 Time : 10:00 Temp : 126 °C

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : WC CYANIDE

Prep Technician Signature:

Supervisor Signature:

Standardized Name	MLS USED	STD REF. # FROM LOG
LCSS	1.0ML	WP112995
MS/MSD SPIKE SOL.	0.40ML	WP113319
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	WP113319
LOWSTD	LOWSTD	0.1ML	WP113319

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
07/02/2025 10:10	JP / WC	RMCWC
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB168686BL	PBS686	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB168686BS	LCS686	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-01DUP	PIT#1DUP	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-01MS	PIT#1MS	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-01MSD	PIT#1MSD	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-01	PIT#1	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-02	PIT#2	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-03	PIT#3	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q2473-04	PIT#4	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : cn q2473

WorkList ID : 190495

Department : Distillation

Date : 07-02-2025 07:40:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2473-01	PIT#1	Solid	Cyanide	Cool 4 deg C	JPCL01	A12	07/01/2025	9012B
Q2473-02	PIT#2	Solid	Cyanide	Cool 4 deg C	JPCL01	A12	07/01/2025	9012B
Q2473-03	PIT#3	Solid	Cyanide	Cool 4 deg C	JPCL01	A12	07/01/2025	9012B
Q2473-04	PIT#4	Solid	Cyanide	Cool 4 deg C	JPCL01	A12	07/01/2025	9012B

Date/Time 07/02/2025 07:50
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 07/02/2025 08:50
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB136351

Review By	jignesh	Review On	7/2/2025 9:43:14 AM
Supervise By	Iwona	Supervise On	7/7/2025 9:15:50 AM
SubDirectory	LB136351	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,W3200		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	07/02/25 09:30		Jignesh	OK
2	CAL2	CAL2	CAL	07/02/25 09:31		Jignesh	OK
3	CAL3	CAL3	CAL	07/02/25 09:33		Jignesh	OK
4	ICV	ICV	ICV	07/02/25 09:37		Jignesh	OK
5	CCV1	CCV1	CCV	07/02/25 09:40		Jignesh	OK
6	Q2473-01	PIT#1	SAM	07/02/25 10:00		Jignesh	OK
7	Q2473-02	PIT#2	SAM	07/02/25 10:10		Jignesh	OK
8	Q2473-03	PIT#3	SAM	07/02/25 10:25		Jignesh	OK
9	Q2473-04	PIT#4	SAM	07/02/25 10:30		Jignesh	OK
10	Q2478-04	WC-1	SAM	07/02/25 10:37		Jignesh	OK
11	Q2478-04DUP	WC-1DUP	DUP	07/02/25 10:40		Jignesh	OK
12	CCV2	CCV2	CCV	07/02/25 10:44		Jignesh	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB136353

Review By	rubina	Review On	7/2/2025 1:08:34 PM
Supervise By	Iwona	Supervise On	7/2/2025 2:43:35 PM
SubDirectory	LB136353	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP113770,WP113771,WP113772,WP113773,WP113774,WP113775,WP113776		
ICV Standard	WP113777		
CCV Standard	WP113771		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP112643,WP112900,WP113778		

Sr#	SampleID	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	07/02/25 09:38		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	07/02/25 09:38		rubina	OK
3	10PPBCN	10PPBCN	CAL3	07/02/25 09:38		rubina	OK
4	50PPBCN	50PPBCN	CAL4	07/02/25 09:38		rubina	OK
5	100PPBCN	100PPBCN	CAL5	07/02/25 09:39		rubina	OK
6	250PPBCN	250PPBCN	CAL6	07/02/25 09:39		rubina	OK
7	500PPBCN	500PPBCN	CAL7	07/02/25 09:39		rubina	OK
8	ICV1	ICV1	ICV	07/02/25 10:08		rubina	OK
9	ICB1	ICB1	ICB	07/02/25 10:08		rubina	OK
10	CCV1	CCV1	CCV	07/02/25 10:08		rubina	OK
11	CCB1	CCB1	CCB	07/02/25 10:08		rubina	OK
12	PB168681BL	PB168681BL	MB	07/02/25 10:09		rubina	OK
13	Q2447-08	COMP-1	SAM	07/02/25 10:16		rubina	OK
14	Q2447-08DUP	COMP-1DUP	DUP	07/02/25 10:16		rubina	OK
15	Q2447-09	COMP-2	SAM	07/02/25 10:16		rubina	OK
16	Q2447-10	LAW-25-0100	SAM	07/02/25 10:16		rubina	OK
17	Q2452-04	TP-5	SAM	07/02/25 10:16		rubina	OK
18	Q2452-08	EP-2	SAM	07/02/25 10:16		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB136353

Review By	rubina	Review On	7/2/2025 1:08:34 PM
Supervise By	Iwona	Supervise On	7/2/2025 2:43:35 PM
SubDirectory	LB136353	Test	Reactive Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP113770,WP113771,WP113772,WP113773,WP113774,WP113775,WP113776		
ICV Standard	WP113777		
CCV Standard	WP113771		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	WP112643,WP112900,WP113778		

19	Q2459-04	TP-1	SAM	07/02/25 10:16		rubina	OK
20	Q2469-04	WC-1	SAM	07/02/25 10:16		rubina	OK
21	Q2473-01	PIT#1	SAM	07/02/25 10:16		rubina	OK
22	CCV2	CCV2	CCV	07/02/25 10:21		rubina	OK
23	CCB2	CCB2	CCB	07/02/25 10:27		rubina	OK
24	Q2473-02	PIT#2	SAM	07/02/25 10:27		rubina	OK
25	Q2473-03	PIT#3	SAM	07/02/25 10:27		rubina	OK
26	Q2473-04	PIT#4	SAM	07/02/25 10:27		rubina	OK
27	Q2478-04	WC-1	SAM	07/02/25 10:27		rubina	OK
28	CCV3	CCV3	CCV	07/02/25 10:33		rubina	OK
29	CCB3	CCB3	CCB	07/02/25 10:33		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB136358

Review By	rubina	Review On	7/2/2025 2:17:44 PM
Supervise By	Iwona	Supervise On	7/2/2025 2:43:43 PM
SubDirectory	LB136358	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP113770,WP113771,WP113772,WP113773,WP113774,WP113775,WP113776		
ICV Standard	W3012		
CCV Standard	WP113771		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP112995		
Chk Standard	WP112643,WP112900,WP113778		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	07/02/25 09:38		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	07/02/25 09:38		rubina	OK
3	10PPBCN	10PPBCN	CAL3	07/02/25 09:38		rubina	OK
4	50PPBCN	50PPBCN	CAL4	07/02/25 09:38		rubina	OK
5	100PPBCN	100PPBCN	CAL5	07/02/25 09:39		rubina	OK
6	250PPBCN	250PPBCN	CAL6	07/02/25 09:39		rubina	OK
7	500PPBCN	500PPBCN	CAL7	07/02/25 09:39		rubina	OK
8	ICV1	ICV1	ICV	07/02/25 11:33		rubina	OK
9	ICB1	ICB1	ICB	07/02/25 11:33		rubina	OK
10	CCV1	CCV1	CCV	07/02/25 11:33		rubina	OK
11	CCB1	CCB1	CCB	07/02/25 11:33		rubina	OK
12	PB168686BL	PB168686BL	MB	07/02/25 11:33		rubina	OK
13	PB168686BS	PB168686BS	LCS	07/02/25 11:33		rubina	OK
14	LOWPB168686	LOWPB168686	SAM	07/02/25 11:40		rubina	OK
15	HIGHPB168686	HIGHPB168686	SAM	07/02/25 11:40		rubina	OK
16	Q2473-01	PIT#1	SAM	07/02/25 11:40		rubina	OK
17	Q2473-01DUP	PIT#1DUP	DUP	07/02/25 11:40		rubina	OK
18	Q2473-01MS	PIT#1MS	MS	07/02/25 11:48		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB136358

Review By	rubina	Review On	7/2/2025 2:17:44 PM
Supervise By	Iwona	Supervise On	7/2/2025 2:43:43 PM
SubDirectory	LB136358	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP113770,WP113771,WP113772,WP113773,WP113774,WP113775,WP113776		
ICV Standard	W3012		
CCV Standard	WP113771		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP112995		
Chk Standard	WP112643,WP112900,WP113778		

19	Q2473-01MSD	PIT#1MSD	MSD	07/02/25 11:48		rubina	OK
20	Q2473-02	PIT#2	SAM	07/02/25 11:48		rubina	OK
21	Q2473-03	PIT#3	SAM	07/02/25 11:48		rubina	OK
22	CCV2	CCV2	CCV	07/02/25 11:48		rubina	OK
23	CCB2	CCB2	CCB	07/02/25 11:48		rubina	OK
24	Q2473-04	PIT#4	SAM	07/02/25 11:48		rubina	OK
25	CCV3	CCV3	CCV	07/02/25 11:53		rubina	OK
26	CCB3	CCB3	CCB	07/02/25 11:53		rubina	OK
27	Q2473-01A	PIT#1A	PS	07/02/25 12:23		rubina	OK
28	CCV4	CCV4	CCV	07/02/25 12:23		rubina	OK
29	CCB4	CCB4	CCB	07/02/25 12:23		rubina	OK

Instrument ID: FLAME

Daily Analysis Runlog For Sequence/QC Batch ID # LB136360

Review By	Eman	Review On	7/2/2025 2:54:38 PM
Supervise By	Iwona	Supervise On	7/2/2025 2:55:50 PM
SubDirectory	LB136360	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	Q2473-01	PIT#1	SAM	07/02/25 08:55		Eman	OK
2	Q2473-01DUP	PIT#1DUP	DUP	07/02/25 09:02		Eman	OK
3	Q2473-02	PIT#2	SAM	07/02/25 09:10		Eman	OK
4	Q2473-03	PIT#3	SAM	07/02/25 09:18		Eman	OK
5	Q2473-04	PIT#4	SAM	07/02/25 09:25		Eman	OK
6	Q2478-01	WC-1	SAM	07/02/25 09:33		Eman	OK
7	Q2478-04	WC-1	SAM	07/02/25 09:40		Eman	OK

Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QC Batch ID # LB136372

Review By	rubina	Review On	7/3/2025 4:46:46 PM
Supervise By	Iwona	Supervise On	7/3/2025 4:48:23 PM
SubDirectory	LB136372	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,W3213,W3149		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	PB168682BL	PB168682BL	MB	07/03/25 16:10			OK
2	Q2447-08	COMP-1	SAM	07/03/25 16:12			OK
3	Q2447-08DUP	COMP-1DUP	DUP	07/03/25 16:14			OK
4	Q2447-09	COMP-2	SAM	07/03/25 16:17			OK
5	Q2447-10	LAW-25-0100	SAM	07/03/25 16:20			OK
6	Q2452-04	TP-5	SAM	07/03/25 16:22			OK
7	Q2452-08	EP-2	SAM	07/03/25 16:24			OK
8	Q2459-04	TP-1	SAM	07/03/25 16:27			OK
9	Q2469-04	WC-1	SAM	07/03/25 16:30			OK
10	Q2473-01	PIT#1	SAM	07/03/25 16:33			OK
11	Q2473-02	PIT#2	SAM	07/03/25 16:35			OK
12	Q2473-03	PIT#3	SAM	07/03/25 16:37			OK
13	Q2473-04	PIT#4	SAM	07/03/25 16:39			OK
14	Q2478-04	WC-1	SAM	07/03/25 16:42			OK
15	Q2493-04	WC-11	SAM	07/03/25 16:45			OK

Prep Standard - Chemical Standard Summary

Order ID : Q2473

Test : Corrosivity,Cyanide,Ignitability,Percent Solids,Reactive Cyanide,Reactive Sulfide

Prepbatch ID : PB168681,PB168682,PB168686,

Sequence ID/Qc Batch ID: LB136351,LB136353,LB136358,LB136360,LB136372,

Standard ID :

WP111294,WP112643,WP112826,WP112827,WP112900,WP112995,WP113086,WP113319,WP113769,WP113770,WP113771,WP113772,WP113773,WP113774,WP113775,WP113776,WP113777,WP113778,

Chemical ID :

M6041,M6151,W2668,W2926,W3012,W3019,W3071,W3093,W3105,W3112,W3113,W3139,W3149,W3152,W3161,W3173,W3178,W3191,W3200,W3203,W3213,W3214,W3220,



<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_SCALE_5 (WC SC-5)	None	Iwona Zarych 01/07/2025
<u>FROM</u> 21.00000L of W3112 + 210.00000gram of W3113 = Final Quantity: 21.000 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>
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							

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>
607	PYRIDINE-BARBITURIC ACID	WP112900	05/01/2025	08/18/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	Glass Pipette-A	Iwona Zarych 05/01/2025
<u>FROM</u>	145.00000ml of W3112 + 15.00000gram of W3203 + 15.00000ml of M6151 + 75.00000ml of W3019 = Final Quantity: 250.000 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	WP112995	05/07/2025	07/07/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 05/07/2025
<u>FROM</u>	1.00000ml of W3173 + 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>
160	0.5M ZINC ACETATE	WP113086	05/15/2025	08/18/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 05/15/2025
<u>FROM</u> 0.88900L of W3112 + 1.00000ml of M6151 + 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>
3850	Cyanide MS-MSD spiking solution, 5PPM	WP113319	06/02/2025	07/07/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 06/02/2025
<u>FROM</u>	1.00000ml of W3214 + 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>
3456	Cyanide Intermediate Working Std, 5PPM	WP113769	07/02/2025	07/03/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 0.25000ml of W3214 + 49.75000ml of WP111294 = Final Quantity: 50.000 ml</p>								

<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	WP113770	07/02/2025	07/03/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 07/02/2025
<u>FROM</u> 45.00000ml of WP111294 + 5.00000ml of WP113769 = 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	WP113771	07/02/2025	07/03/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 2.50000ml of WP113769 + 47.50000ml of WP111294 = Final Quantity: 50.000 ml</p>								

<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	WP113772	07/02/2025	07/03/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych 07/02/2025
<u>FROM</u>	1.00000ml of WP113769 + 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	WP113773	07/02/2025	07/03/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>(WC)</p> <p>FROM 0.50000ml of WP113769 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml</p>								

<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	WP113774	07/02/2025	07/03/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
<p>FROM 1.00000ml of WP113770 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml</p>								

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>
9	Calibration Standard 5 ppb	WP113775	07/02/2025	07/03/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 07/02/2025

FROM 0.50000ml of WP113770 + 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	WP113776	07/02/2025	07/03/2025	Rubina Mughal	None	None	Iwona Zarych 07/02/2025

FROM 50.00000ml of WP111294 = Final Quantity: 50.000 ml

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2168	RCN ICV STD, 100 PPB	WP113777	07/02/2025	07/03/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych 07/02/2025

FROM 1.00000ml of WP112995 + 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	WP113778	07/02/2025	07/03/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	Glass Pipette-A	Iwona Zarych 07/02/2025

FROM 0.08000gram of W3139 + 20.00000ml of W3112 = Final Quantity: 20.000 ml

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-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)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	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.	J4296-1 / ZINC ACETATE, DIHYD, CRYST, ACS, 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 #
EPA	/ ICV-CN	ICV6-400	12/31/2025	01/08/2025 / lwona	02/20/2020 / lwona	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 / lwona	04/03/2023 / lwona	W3019

CHEMICAL RECEIPT LOG BOOK

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.	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,4LIT RE	4403S13	09/30/2025	04/22/2024 / Iwona	04/22/2024 / Iwona	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 / Iwona	07/03/2024 / Iwona	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 / Iwona	07/08/2024 / Iwona	W3113

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 / Iwona	09/09/2024 / Iwona	W3139

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL70850-8 / Starch Solution, 4L	4408P62	08/31/2026	10/16/2024 / Iwona	10/16/2024 / Iwona	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 / Iwona	11/25/2024 / Iwona	W3152

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 / Iwona	12/09/2024 / Iwona	W3161

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	45010168	07/17/2025	01/24/2025 / Iwona	01/24/2025 / Iwona	W3173

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

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

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-BX0035-3 / Barbituric Acid, 100 gms	WXBF3271V	05/16/2029	04/21/2025 / lwona	04/21/2025 / lwona	W3203

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	MK25A21527	01/20/2029	05/21/2025 / lwona	05/21/2025 / lwona	W3213

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	1505H73	11/30/2025	05/21/2025 / lwona	05/21/2025 / lwona	W3214

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	MKCW7614	12/31/2026	06/26/2025 / lwona	06/26/2025 / lwona	W3220


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.

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:

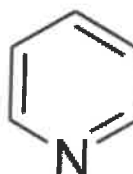
C₅H₅N

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.





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™



M 6041-4b
MS

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

Certificate of Analysis

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

>>> Continued on page 2 >>>

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

 **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™**



M6151

R → 11/15/25

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

Certificate of Analysis

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

>>> Continued on page 2 >>>

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

 **avantorsm**



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

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

>>> Continued on page 3 >>>

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



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

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

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

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

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

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	$\leq 0.01 \%$	< 0.01
Chloride (Cl)	$\leq 5 \text{ ppm}$	< 5
ACS – Sulfate (SO_4)	$\leq 0.003 \%$	< 0.003
Calcium (Ca)	$\leq 0.005 \%$	< 0.005
Potassium (K)	$\leq 0.01 \%$	< 0.01
Heavy Metals (as Pb)	$\leq 0.001 \%$	< 0.001
Trace Impurities – Iron (Fe)	$\leq 0.001 \%$	< 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

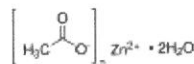
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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)	$\leq 5 \text{ ppm}$	$< 5 \text{ ppm}$
Iron (Fe)	$\leq 5 \text{ ppm}$	$< 5 \text{ ppm}$
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.



**RICCA CHEMICAL COMPANY®**

1490 Lammers Pike

Batesville, IN 47006

<http://www.riccachemical.com>

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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."

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Certificate of Analysis



Sodium Hydroxide (Pellets)

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

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

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

Storage: Room Temperature

Pellets

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

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.



Sodium Hydroxide (Pellets)

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

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

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

Storage: Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.

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

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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

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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

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

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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: January 16, 2025

Lot Number: **45010168**

Expiration Date: July 17, 2025

Test	Specification	Result
Appearance (clarity)	clear solution	clear solution
Appearance (color)	colorless	colorless
Concentration (CN)	0.990 - 1.010mg/mL	1.000mg/mL
Concentration (CN)	990 - 1,010ppm	1,000ppm
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

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 org	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
2025011610:36:11bsturges-0-0

ISO9001:2015 Registration #0306-01

**RICCA CHEMICAL COMPANY®**

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

Certificate of Analysis

W21758 58

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

Lot Number: 2411A93

Product Number: 1501

Manufacture Date: NOV 04, 2024

Expiration Date: OCT 2026

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

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

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

Test	Specification	Result
Appearance	Red liquid	Passed

*Not a certified value.

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

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

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

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

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



RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

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

Lot Number: 2410F80

Product Number: 1601

Manufacture Date: OCT 09, 2024

Expiration Date: MAR 2026

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

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

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

Test	Specification	Result
Appearance	Blue liquid	Passed

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

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

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

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

Version: 1.3

Lot Number: 2410F80

Product Number: 1601

Page 1 of 2



Certificate of Analysis

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

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

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

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

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

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

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

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



Jose Pena (04/08/2025)
Operations Manager

This product was tested in an ISO 17025 Accredited Laboratory

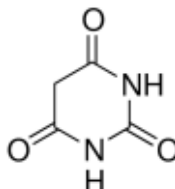
This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Certificate of Analysis

Product Name:

Barbituric acid - ReagentPlus®, 99%

Product Number: 185698
Batch Number: WXBFB3271V
Brand: SIAL
CAS Number: 67-52-7
Formula: C₄H₄N₂O₃
Formula Weight: 128.09 g/mol
Quality Release Date: 16 MAY 2024



Test	Specification	Result
Appearance (Colour)	White to Off-White	White
Appearance (Form)	Powder	Powder
Infrared spectrum	Conforms to Structure	Conforms
Purity (Titration by NaOH)	98.5 - 101.5 %	100.4 %
GC (area %)	≥ 98 %	100 %
VPCT		



Kang Chen
Quality Manager
Wuxi, China CN

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.





Material	BDHVBDH7206-1
Material Description	IODINE SOLUTION 0.025N
Lot	25A2461008
Expires end of	2029-Jan-20
Molecular mass	0
Last Quality Control	2025-Jan-24
Date of manufacture	2025-Jan-21
Made in	United States
Manufacturer Source Batch	MK25A21527

Additional information

Characteristics	Specifications	Measured values
Prepared to formulation on file	Confirmed	Confirmed
Appearance	Passes Test	Passes Test
Normality, N	0.0200 - 0.0300	0.0268

Signature

We certify that this batch conforms to the specifications listed above.

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

Michelle Bales - Sr. Manager Quality Assurance
 Avantor Performance Materials, LLC

For Professional use in Laboratory or Manufacturing. Not for use as an Active Pharmaceutical Ingredient or Food or Animal Feed. Suitability and intended use of the product remains the responsibility of the user.

VWR International LLC, Radnor Corporate Center, Building One, Suite 200, 100 Matsonford Road, Radnor, PA 19087, USA.

VWR International bv, Haasrode Research Park Zone 2020, Geldenaaksebaan 464, 3001 Leuven, Belgium

BDHVBDH72 25A2461008 Page 1 / 1

Certificate of Analysis

Cyanide Standard, 1000 ppm CN⁻

Lot Number: 1505H73

Product Number: 2543

Manufacture Date: MAY 08, 2025

Expiration Date: NOV 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 (from ACS)

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)



Ernest Mahan (05/08/2025)
Plant Manager

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

Certificate of Analysis

Product Name:

Formaldehyde solution - ACS reagent, 37 wt. % in H₂O, contains 10-15% Methanol as stabilizer (to prevent polymerization)

Product Number: 252549

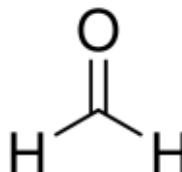
Batch Number: MKCW7614

Brand: SIAL

MDL Number: MFCD00003274

Quality Release Date: 05 DEC 2024

Recommended Retest Date: DEC 2026



Test	Specification	Result
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Titration by H ₂ SO ₄	36.5 - 38.0 %	36.6 %
Residue on ignition (Ash)	≤ 0.005 %	0.004 %
Color Test	≤ 10 APHA	5 APHA
Chloride (Cl)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 5 ppm	< 1 ppm
Heavy Metals	≤ 5 ppm	2 ppm
by ICP-OES		
Sulfate (SO ₄)	< = 0.002%	< = 0.002%
Titrateable Acid (meq/g)	≤ 0.006	< 0.006
Note	Confirmed	Conforms
Stabilized with 10% to 15% Methanol		
Meets ACS Requirements	Current ACS Specification	Conforms
Recommended Retest Period	-----	-----
2 Years		



Larry Coers, Director
Quality Control
Milwaukee, WI US

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





PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/2/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 07/01/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:22
Out Date: 07/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC:LB136342

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
Q2472-01	PN#1	1	1.00	1.00	2.00	2.00	100.0	CONCRETE SAMPLE , 100% SOLIDS
Q2473-01	PIT#1	2	1.14	10.18	11.32	10.3	90.0	
Q2473-02	PIT#2	3	1.18	10.50	11.68	10.64	90.1	
Q2473-03	PIT#3	4	1.19	10.64	11.83	10.6	88.4	
Q2473-04	PIT#4	5	1.18	10.77	11.95	10.95	90.7	
Q2475-01	SOIL-PILE	6	1.15	10.27	11.42	9.34	79.7	
Q2475-02	SOIL-PILE-E2	7	1.19	10.41	11.6	9.62	81.0	
Q2476-01	50731	8	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2478-01	WC-1	9	1.13	10.55	11.68	10.9	92.6	
Q2478-02	WC-1-EPH	10	1.19	10.69	11.88	11.02	92.0	
Q2478-03	WC-1-VOC	11	1.12	10.75	11.87	10.97	91.6	

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

WORKLIST(Hardcopy Internal Chain)

136342

WorkList Name : %1-070125

WorkList ID : 190476

Department : Wet-Chemistry

Date : 07-01-2025 08:41:08

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2473-01	PIT#1	Solid	Percent Solids	Cool 4 deg C	JPCL01	A12	07/01/2025	Chemtech -SO
Q2473-02	PIT#2	Solid	Percent Solids	Cool 4 deg C	JPCL01	A12	07/01/2025	Chemtech -SO
Q2473-03	PIT#3	Solid	Percent Solids	Cool 4 deg C	JPCL01	A12	07/01/2025	Chemtech -SO
Q2473-04	PIT#4	Solid	Percent Solids	Cool 4 deg C	JPCL01	A12	07/01/2025	Chemtech -SO
Q2472-01	PN#1	Solid	Percent Solids	Cool 4 deg C	PSEG03	A42	07/01/2025	Chemtech -SO
Q2475-01	SOIL-PILE	Solid	Percent Solids	Cool 4 deg C	PSEG03	A43	07/01/2025	Chemtech -SO
Q2475-02	SOIL-PILE-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	A43	07/01/2025	Chemtech -SO
Q2476-01	50731	Solid	Percent Solids	Cool 4 deg C	PSEG03	A11	07/01/2025	Chemtech -SO
Q2478-01	WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	A42	07/30/2025	Chemtech -SO
Q2478-02	WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	A42	07/30/2025	Chemtech -SO
Q2478-03	WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	A42	07/30/2025	Chemtech -SO

Date/Time 07/01/25 15:17

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 07/01/25 17:25

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: JPCL Engineering LLC
ADDRESS: 2 Clerico Ln, Bldg #1
CITY Hillsborough STATE: NJ ZIP: 08844
ATTENTION: PAUL ROTONDI
PHONE: 609 203-3846 FAX: N/A

CLIENT PROJECT INFORMATION

PROJECT NAME: SOIL Sampling NOHO
PROJECT NO.: RPT # SC64025 LOCATION: NY, NY
PROJECT MANAGER: P. Roton di
e-mail: PROtondi@JPCLEngineering.com
PHONE: 609 203-3846 FAX:

CLIENT BILLING INFORMATION

BILL TO: SAME AS Client PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

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

ANALYSIS
1 Cyanide/Hg/Vermes
2 Corr, Low Cyanide Sol.
3 TOLP
4 SVOC BWA 20
5 TPH
6 Herbicides
7 Pesticides
8 PCB
9 VOA

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	PIT #1	SOIL	X		7/1	8:00AM	13	/	/	/	/	/	/	/	/	/	
2.	PIT #2		X			8:30AM		/	/	/	/	/	/	/	/	/	
3.	PIT #3		X			8:40AM		/	/	/	/	/	/	/	/	/	
4.	PIT #4		X			8:50AM		/	/	/	/	/	/	/	/	/	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. Ali Yousef	DATE/TIME: 7/1 1140	RECEIVED BY: 1. [Signature]	Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP 32°C
RELINQUISHED BY SAMPLER: 2. [Signature]	DATE/TIME:	RECEIVED BY: 2. [Signature]	Comments: NORMAL TAT
RELINQUISHED BY SAMPLER: 3. [Signature]	DATE/TIME:	RECEIVED BY: 3. [Signature]	Page ____ of CLIENT: <input checked="" type="checkbox"/> Hand Delivered <input type="checkbox"/> Other
			Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO

Laboratory Certification

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2473	JPCL01	Order Date : 7/1/2025 12:14:15 PM	Project Mgr :
Client Name : JPCL Engineering		Project Name : NOHO RFI No. SC64025 N	Report Type : Level 2
Client Contact : Paul Rotondi		Receive DateTime : 7/1/2025 11:40:00 AM	EDD Type : EXCEL NJCLEANUP
Invoice Name : JPCL Engineering		Purchase Order :	Hard Copy Date :
Invoice Contact : Paul Rotondi			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2473-01	PIT#1	Solid	07/01/2025	08:20					
					VOC-TCLVOA-10		8260C	10 Bus. Days	
Q2473-02	PIT#2	Solid	07/01/2025	08:30					
					VOC-TCLVOA-10		8260C	10 Bus. Days	
Q2473-03	PIT#3	Solid	07/01/2025	08:40					
					VOC-TCLVOA-10		8260C	10 Bus. Days	
Q2473-04	PIT#4	Solid	07/01/2025	08:50					
					VOC-TCLVOA-10		8260C	10 Bus. Days	

Relinquished By :

Date / Time :

[Signature]
7/1/25 14:05

Received By :

Date / Time :

[Signature]
07/01/25 14:05 ng H b
F82

Storage Area : VOA Refridgerator Room