

## Cover Page

**Order ID :** Q1803

**Project ID :** NYC DOT Harper Street Yard North

**Client :** Scalamandre – Tully JV

**Lab Sample Number**

Q1803-01  
Q1803-02

**Client Sample Number**

WEST-BAY  
FUEL-MONITORING

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: 4/18/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

## **CASE NARRATIVE**

**Scalamandre – Tully JV**

**Project Name: NYC DOT Harper Street Yard North**

**Project # N/A**

**Chemtech Project # Q1803**

**Test Name: Corrosivity, Ignitability, Reactive Cyanide, Reactive Sulfide**

### **A. Number of Samples and Date of Receipt:**

2 Solid samples were received on 04/14/2025.

### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Ignitability, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction and TCLP-FULL. This data package contains results for Corrosivity, Ignitability, Reactive Cyanide, Reactive Sulfide.

### **C. Analytical Techniques:**

The analysis of Ignitability was based on method 1030, The analysis of Reactive Cyanide was based on method 9012B, The analysis of Reactive Sulfide was based on method 9034 and The analysis of Corrosivity was based on method 9045D.

### **D. QA/ QC Samples:**

The Holding Times were met for all samples except for FUEL-MONITORING of Corrosivity, for WEST-BAY of Corrosivity as samples were receive out of holding time. The Blank Spike met requirements for all samples. The Duplicate analysis met criteria for all samples. The Blank analysis did not indicate the presence of lab contamination. The Calibration met the requirements.

### **E. Additional Comments:**

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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. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_\_\_\_

## DATA REPORTING QUALIFIERS- INORGANIC

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

<b>J</b>	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).
<b>U</b>	Indicates the analyte was analyzed for, but not detected.
<b>ND</b>	Indicates the analyte was analyzed for, but not detected
<b>E</b>	Indicates the reported value is estimated because of the presence of interference
<b>M</b>	Indicates Duplicate injection precision not met.
<b>N</b>	Indicates the spiked sample recovery is not within control limits.
<b>S</b>	Indicates the reported value was determined by the Method of Standard Addition (MSA).
<b>*</b>	Indicates that the duplicate analysis is not within control limits.
<b>+</b>	Indicates the correlation coefficient for the MSA is less than 0.995.
<b>D</b>	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
<b>M</b>	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
<b>OR</b>	Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.
<b>Q</b>	Indicates the LCS did not meet the control limits requirements
<b>H</b>	Sample Analysis Out Of Hold Time

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q1803

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: PRATHA PARGHI

Date: 04/18/2025

## LAB CHRONICLE

<b>OrderID:</b>	Q1803	<b>OrderDate:</b>	4/14/2025 12:10:17 PM
<b>Client:</b>	Scalamandre – Tully JV	<b>Project:</b>	NYC DOT Harper Street Yard North
<b>Contact:</b>	William J. Muenckler	<b>Location:</b>	L31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
<b>Q1803-01</b>	<b>WEST-BAY</b>	<b>SOIL</b>			<b>04/10/25 12:30</b>			<b>04/14/25</b>
			Corrosivity	9045D			04/14/25 16:10	
			Ignitability	1030			04/14/25 13:22	
			Reactive Cyanide	9012B		04/15/25	04/15/25 14:49	
			Reactive Sulfide	9034		04/15/25	04/15/25 15:39	
<b>Q1803-02</b>	<b>FUEL-MONITORING</b>	<b>SOIL</b>			<b>04/10/25 12:30</b>			<b>04/14/25</b>
			Corrosivity	9045D			04/14/25 16:14	
			Ignitability	1030			04/14/25 13:30	
			Reactive Cyanide	9012B		04/15/25	04/15/25 14:49	
			Reactive Sulfide	9034		04/15/25	04/15/25 15:41	



# SAMPLE DATA

## Report of Analysis

Client:	Scalamandre – Tully JV	Date Collected:	04/10/25 12:30
Project:	NYC DOT Harper Street Yard North	Date Received:	04/14/25
Client Sample ID:	WEST-BAY	SDG No.:	Q1803
Lab Sample ID:	Q1803-01	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	8.70	H	1	0	0	pH		04/14/25 16:10	9045D
Ignitability	NO		1	0	0	oC		04/14/25 13:22	1030
Reactive Cyanide	0.014	J	1	0.0083	0.050	mg/Kg	04/15/25 08:45	04/15/25 14:49	9012B
Reactive Sulfide	4.76	J	1	0.20	10.0	mg/Kg	04/15/25 12:30	04/15/25 15:39	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

## Report of Analysis

Client:	Scalamandre – Tully JV	Date Collected:	04/10/25 12:30
Project:	NYC DOT Harper Street Yard North	Date Received:	04/14/25
Client Sample ID:	FUEL-MONITORING	SDG No.:	Q1803
Lab Sample ID:	Q1803-02	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	8.56	H	1	0	0	pH		04/14/25 16:14	9045D
Ignitability	NO		1	0	0	oC		04/14/25 13:30	1030
Reactive Cyanide	0.0087	J	1	0.0083	0.050	mg/Kg	04/15/25 08:45	04/15/25 14:49	9012B
Reactive Sulfide	1.58	J	1	0.20	10.0	mg/Kg	04/15/25 12:30	04/15/25 15:41	9034

Comments: pH result reported at temperature 23.1 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits



# QC RESULT SUMMARY

## Initial and Continuing Calibration Verification

**Client:** Scalamandre – Tully JV

**SDG No.:** Q1803

**Project:** NYC DOT Harper Street Yard North

**RunNo.:** LB135420

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: Corrosivity	ICV	pH	7.02	7	100	90–110	04/14/2025
Sample ID: Corrosivity	CCV1	pH	2.01	2.00	101	90–110	04/14/2025
Sample ID: Corrosivity	CCV2	pH	12.02	12.00	100	90–110	04/14/2025

## Initial and Continuing Calibration Verification

**Client:** Scalamandre – Tully JV

**SDG No.:** Q1803

**Project:** NYC DOT Harper Street Yard North

**RunNo.:** LB135440

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: <b>ICV1</b> Reactive Cyanide	mg/L	0.09	0.099	91	85-115	04/15/2025
Sample ID: <b>CCV1</b> Reactive Cyanide	mg/L	0.24	0.25	96	90-110	04/15/2025
Sample ID: <b>CCV2</b> Reactive Cyanide	mg/L	0.23	0.25	92	90-110	04/15/2025
Sample ID: <b>CCV3</b> Reactive Cyanide	mg/L	0.23	0.25	92	90-110	04/15/2025
Sample ID: <b>CCV4</b> Reactive Cyanide	mg/L	0.25	0.25	100	90-110	04/15/2025

### Initial and Continuing Calibration Blank Summary

**Client:** Scalamandre – Tully JV

**SDG No.:** Q1803

**Project:** NYC DOT Harper Street Yard North

**RunNo.:** LB135440

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: <b>ICB1</b> Reactive Cyanide	mg/L	0.0014	0.0025	J	0.00096	0.005	04/15/2025
Sample ID: <b>CCB1</b> Reactive Cyanide	mg/L	0.0014	0.0025	J	0.00096	0.005	04/15/2025
Sample ID: <b>CCB2</b> Reactive Cyanide	mg/L	0.0012	0.0025	J	0.00096	0.005	04/15/2025
Sample ID: <b>CCB3</b> Reactive Cyanide	mg/L	0.0013	0.0025	J	0.00096	0.005	04/15/2025
Sample ID: <b>CCB4</b> Reactive Cyanide	mg/L	0.0015	0.0025	J	0.00096	0.005	04/15/2025

## Preparation Blank Summary

**Client:** Scalamandre – Tully JV

**SDG No.:** Q1803

**Project:** NYC DOT Harper Street Yard North

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: <b>PB167580BL</b>							
Reactive Sulfide	mg/Kg	< 5.0000	5.0000	U	0.201	10	04/15/2025
Sample ID: <b>PB167581BL</b>							
Reactive Cyanide	mg/Kg	0.0096	0.0250	J	0.0084	0.05	04/15/2025

## Duplicate Sample Summary

<b>Client:</b> Scalamandre – Tully JV	<b>SDG No.:</b> Q1803
<b>Project:</b> NYC DOT Harper Street Yard North	<b>Sample ID:</b> Q1764-01
<b>Client ID:</b> BUR-25-0020DUP	<b>Percent Solids for Spike Sample:</b> 95.2

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ignitability	oC	+/-20	NO		NO		1	0		04/14/2025

## Duplicate Sample Summary

<b>Client:</b> Scalamandre – Tully JV	<b>SDG No.:</b> Q1803
<b>Project:</b> NYC DOT Harper Street Yard North	<b>Sample ID:</b> Q1779-04
<b>Client ID:</b> TP-22DUP	<b>Percent Solids for Spike Sample:</b> 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	0.0095	J	0.0096	J	1	1		04/15/2025
Reactive Sulfide	mg/Kg	+/-20	1.59	J	1.59	J	1	0		04/15/2025

## Duplicate Sample Summary

<b>Client:</b> Scalamandre – Tully JV	<b>SDG No.:</b> Q1803
<b>Project:</b> NYC DOT Harper Street Yard North	<b>Sample ID:</b> Q1800-03
<b>Client ID:</b> WC-A4-01-CDUP	<b>Percent Solids for Spike Sample:</b> 100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Corrosivity	pH	+/-20	12.3		12.3		1	0.08		04/14/2025



# RAW DATA

## Analytical Summary Report

Analysis Method: 1030  
Parameter: Ignitability  
Run Number: LB135415

Reviewed By: Iwona

Supervisor Review By: sohil

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Anal Time
1	Q1764-01	BUR-25-0020	1	Solid	NO	0.00	04/14/2025	12:00
2	Q1764-01DUP	BUR-25-0020DUP	1	Solid	NO	0.00	04/14/2025	12:07
3	Q1767-04	NWB-2106	1	Solid	NO	0.00	04/14/2025	12:15
4	Q1787-09	TP-1	1	Solid	NO	0.00	04/14/2025	12:22
5	Q1787-12	TP-1	1	Solid	NO	0.00	04/14/2025	12:30
6	Q1788-01	WC-1	1	Solid	NO	0.00	04/14/2025	12:38
7	Q1788-04	WC-1	1	Solid	NO	0.00	04/14/2025	12:45
8	Q1791-07	290502	1	Solid	NO	0.00	04/14/2025	12:52
9	Q1794-01	40325-C-G-COMP	1	Solid	NO	0.00	04/14/2025	13:00
10	Q1795-01	40425	1	Solid	NO	0.00	04/14/2025	13:08
11	Q1800-03	WC-A4-01-C	1	Solid	NO	0.00	04/14/2025	13:15
12	Q1803-01	WEST-BAY	1	Solid	NO	0.00	04/14/2025	13:22
13	Q1803-02	FUEL-MONITORING	1	Solid	NO	0.00	04/14/2025	13:30

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

# WORKLIST(Hardcopy Internal Chain)

66135415

WorkList Name : ign-04-14      WorkList ID : 188894      Department : Wet-Chemistry      Date : 04-14-2025 11:04:02

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1764-01	BUR-25-0020	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/10/2025	1030
Q1767-04	NWB-2106	Solid	Ignitability	Cool 4 deg C	PSEG03	F11	04/10/2025	1030
Q1787-09	TP-1	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/10/2025	1030
Q1787-12	TP-1	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/10/2025	1030
Q1788-01	WC-1	Solid	Ignitability	Cool 4 deg C	PSEG03	L31	04/11/2025	1030
Q1788-04	WC-1	Solid	Ignitability	Cool 4 deg C	PSEG03	L31	04/11/2025	1030
Q1791-07	290502	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/11/2025	1030
Q1794-01	40325-C-G-COMP	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/11/2025	1030
Q1795-01	40425	Solid	Ignitability	Cool 4 deg C	PSEG03	L41	04/11/2025	1030
Q1800-03	WC-A4-01-C	Solid	Ignitability	Cool 4 deg C	ENTA05	L41	04/11/2025	1030
Q1803-01	WEST-BAY	Solid	Ignitability	Cool 4 deg C	SCAL01	L31	04/10/2025	1030
Q1803-02	FUEL-MONITORING	Solid	Ignitability	Cool 4 deg C	SCAL01	L31	04/10/2025	1030

Date/Time      04/14/2025      11:50  
Raw Sample Received by:      12/507  
Raw Sample Relinquished by:      12/507

Date/Time      04/14/2025      13:40  
Raw Sample Received by:      12/507  
Raw Sample Relinquished by:      12/507

## Analytical Summary Report

Analysis Method: 9045D

Analyst By : jignesh

Parameter: Corrosivity

Supervisor Review By : Iwona

Run Number: LB135420

Slope : 99.2

BalanceID: WC SC-7

pH Meter ID : WC PH METER-1

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

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

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

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

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	04/14/2025	15:30
2	CAL2	1	Water	NA	NA	20.2	7.00	04/14/2025	15:31
3	CAL3	1	Water	NA	NA	20.3	10.02	04/14/2025	15:33
4	ICV	1	Water	NA	NA	20.3	7.02	04/14/2025	15:35
5	CCV1	1	Water	NA	NA	20.2	2.01	04/14/2025	15:40
6	Q1800-03	1	Solid	20.02	20	24.7	12.25	04/14/2025	16:00
7	Q1800-03DUP	1	Solid	20.03	20	24.8	12.26	04/14/2025	16:01
8	Q1803-01	1	Solid	20.02	20	23.4	8.70	04/14/2025	16:10
9	Q1803-02	1	Solid	20.04	20	23.1	8.56	04/14/2025	16:14
10	Q1808-02	1	Solid	20.05	20	24.6	9.61	04/14/2025	16:20
11	Q1808-04	1	Solid	20.04	20	24.2	7.53	04/14/2025	16:25
12	CCV2	1	Water	NA	NA	20.3	12.02	04/14/2025	16:30

# WORKLIST(Hardcopy Internal Chain)

UB 135420

WorkList Name : corrosivity q1800

WorkList ID : 188909

Department : Wet-Chemistry

Date : 04-14-2025 13:50:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1800-03	WC-A4-01-C	Solid	Corrosivity	Cool 4 deg C	ENTA05	L41	04/11/2025	9045D
Q1803-01	WEST-BAY	Solid	Corrosivity	Cool 4 deg C	SCAL01	L31	04/10/2025	9045D
Q1803-02	FUEL-MONITORING	Solid	Corrosivity	Cool 4 deg C	SCAL01	L31	04/10/2025	9045D
Q1808-02	OILY-SOIL-PILE	Solid	Corrosivity	Cool 4 deg C	PSEG03	L51	04/14/2025	9045D
Q1808-04	LAW-25-0060	Solid	Corrosivity	Cool 4 deg C	PSEG03	L51	04/14/2025	9045D

Date/Time 06-14-25 15:20

Raw Sample Received by: JB WPC

Raw Sample Relinquished by: JB WPC

Date/Time

06/14/25

18:00

Raw Sample Received by:

JB WPC

Raw Sample Relinquished by:

JB WPC

6135440

Test results

Aquakem 7.2AQ1

Page: 1

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

4/15/2025 15:11

Reviewed by : RM

Instrument ID : Konelab

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	90.121	0.0	0.073	
ICB1	1.376	0.0	0.001	
CCV1	236.852	0.0	0.192	
CCB1	1.425	0.0	0.001	
PB167581BL	0.957	0.0	0.000	
Q1779-04	0.963	0.0	0.000	
Q1779-04DUP	0.971	0.0	0.000	
Q1779-08	1.197	0.0	0.000	
Q1781-04	0.678	0.0	0.000	
Q1781-08	1.378	0.0	-0.000	
Q1781-12	1.360	0.0	0.001	
Q1787-12	1.281	0.0	0.001	
Q1788-04	1.163	0.0	0.000	
Q1791-07	1.632	0.0	0.000	
CCV2	234.399	0.0	0.001	
CCB2	1.231	0.0	0.190	
Q1800-03	0.708	0.0	0.000	
Q1803-01	1.364	0.0	-0.000	
Q1803-02	0.881	0.0	0.001	
Q1808-02	1.534	0.0	0.000	
Q1808-04	1.656	0.0	0.001	
PB167582BL	1.188	0.0	0.001	
Q1791-09	1.315	0.0	0.000	
Q1791-09DUP	1.361	0.0	0.000	
Q1791-10	1.350	0.0	0.001	
Q1791-11	1.468	0.0	0.000	
CCV3	234.658	0.0	0.001	
CCB3	1.285	0.0	0.191	
Q1791-12	1.163	0.0	0.000	
Q1791-13	1.426	0.0	0.000	
Q1810-01	1.618	0.0	0.001	
Q1810-02	1.275	0.0	0.001	
Q1791-14	1.346	0.0	0.000	
CCV4	245.397	0.0	0.000	
CCB4	1.490	0.0	0.199	
			0.001	
N	35			
Mean	30.842			
SD	76.9272			
CV%	249.42			

Aquakem v. 7.2AQ1

Results from time period:

Tue Apr 15 13:21:58 2025

Tue Apr 15 15:08:18 2025

Sample Id	Sam/Ctr/c/	Test short nar	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	0.9849	µg/l	4/15/2025 13:5143	
5.0PPBCN	A	Total CN	P	5.79	µg/l	4/15/2025 13:5144	
10PPBCN	A	Total CN	P	10.9704	µg/l	4/15/2025 13:5145	
50PPBCN	A	Total CN	P	49.8348	µg/l	4/15/2025 13:5146	
100PPBCN	A	Total CN	P	97.14	µg/l	4/15/2025 13:5147	
250PPBCN	A	Total CN	P	249.4372	µg/l	4/15/2025 13:5148	
500PPBCN	A	Total CN	P	500.8426	µg/l	4/15/2025 13:5149	
ICV1	S	Total CN	P	90.1206	µg/l	4/15/2025 14:3409	
ICB1	S	Total CN	P	1.3756	µg/l	4/15/2025 14:3411	
CCV1	S	Total CN	P	236.8517	µg/l	4/15/2025 14:3413	
CCB1	S	Total CN	P	1.425	µg/l	4/15/2025 14:3415	
PB167581BL	S	Total CN	P	0.9571	µg/l	4/15/2025 14:3416	
Q1779-04	S	Total CN	P	0.9633	µg/l	4/15/2025 14:4143	
Q1779-04DUP	S	Total CN	P	0.9709	µg/l	4/15/2025 14:4145	
Q1779-08	S	Total CN	P	1.1969	µg/l	4/15/2025 14:4146	
Q1781-04	S	Total CN	P	0.678	µg/l	4/15/2025 14:4147	
Q1781-08	S	Total CN	P	1.3782	µg/l	4/15/2025 14:4148	
Q1781-12	S	Total CN	P	1.3601	µg/l	4/15/2025 14:4149	
Q1787-12	S	Total CN	P	1.2812	µg/l	4/15/2025 14:4150	
Q1788-04	S	Total CN	P	1.1627	µg/l	4/15/2025 14:4151	
Q1791-07	S	Total CN	P	1.6319	µg/l	4/15/2025 14:4918	
CCV2	S	Total CN	P	234.3995	µg/l	4/15/2025 14:4920	
CCB2	S	Total CN	P	1.2307	µg/l	4/15/2025 14:4921	
Q1800-03	S	Total CN	P	0.7075	µg/l	4/15/2025 14:4923	
Q1803-01	S	Total CN	P	1.3639	µg/l	4/15/2025 14:4924	
Q1803-02	S	Total CN	P	0.8813	µg/l	4/15/2025 14:4925	
Q1808-02	S	Total CN	P	1.5337	µg/l	4/15/2025 14:4926	
Q1808-04	S	Total CN	P	1.656	µg/l	4/15/2025 14:4927	
PB167582BL	S	Total CN	P	1.1883	µg/l	4/15/2025 14:5651	
Q1791-09	S	Total CN	P	1.3152	µg/l	4/15/2025 14:5653	
Q1791-09DUP	S	Total CN	P	1.3611	µg/l	4/15/2025 14:5656	
Q1791-10	S	Total CN	P	1.3495	µg/l	4/15/2025 14:5657	
Q1791-11	S	Total CN	P	1.4682	µg/l	4/15/2025 14:5658	
CCV3	S	Total CN	P	234.6582	µg/l	4/15/2025 15:0426	
CCB3	S	Total CN	P	1.2849	µg/l	4/15/2025 15:0428	
Q1791-12	S	Total CN	P	1.1634	µg/l	4/15/2025 15:0429	
Q1791-13	S	Total CN	P	1.4259	µg/l	4/15/2025 15:0430	
Q1810-01	S	Total CN	P	1.6183	µg/l	4/15/2025 15:0432	
Q1810-02	S	Total CN	P	1.275	µg/l	4/15/2025 15:0433	
Q1791-14	S	Total CN	P	1.3461	µg/l	4/15/2025 15:0434	
CCV4	S	Total CN	P	245.3972	µg/l	4/15/2025 15:0816	
CCB4	S	Total CN	P	1.4898	µg/l	4/15/2025 15:0817	

=====  
Calibration results      Aquakem 7.2AQ1      Page:      =====

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

4/15/2025 13:52      Reviewed by : RM      Instrument ID : Konelab

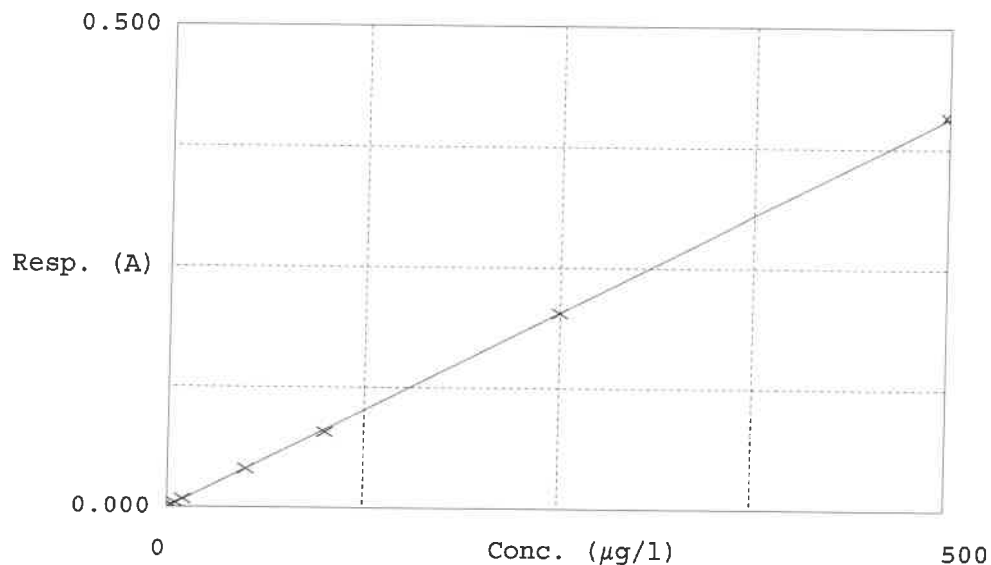
Test      Total CN

Accepted      4/15/2025      13:52

Factor      1227  
Bias      -0.001

Coeff. of det.      0.999943

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.0PPBCN	0.000	0.9849	0.0000	
2	5.0PPBCN	0.004	5.7900	5.0000	15.8
3	10PPBCN	0.008	10.9704	10.0000	9.7
4	50PPBCN	0.040	49.8348	50.0000	-0.3
5	100PPBCN	0.079	97.1400	100.0000	-2.9
6	250PPBCN	0.203	249.4372	250.0000	-0.2
7	500PPBCN	0.408	500.8426	500.0000	0.2

04/15/2025  
RM

Analysis Method: 9034

ANALYST: rubina

Parameter: Reactive Sulfide

SUPERVISOR REVIEW BY: Iwona

Run Number: LB135442

Constant: 16000

Normality1: 0.025

Normality2: 0.025

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

Seq	Lab ID	True Value (mg/l)	DF	Initial Weight (g)	Final Volume (ml)	T1 (ml)	T2 Initial	T2 Final	T2 Diff. (ml)	T1 - T2 Diff (mL)	Value Corrected With Blank	Result (ppm)	Anal Date	Anal Time
1	PB167580BL		1	5.00	50	2.00	0.00	1.92	1.92	0.08	0.00	0.00	04/15/2025	15:10
2	Q1779-04		1	5.02	50	2.00	0.00	1.90	1.90	0.10	0.02	1.59	04/15/2025	15:13
3	Q1779-04DUP		1	5.02	50	2.00	0.00	1.90	1.90	0.10	0.02	1.59	04/15/2025	15:16
4	Q1779-08		1	5.04	50	2.00	0.00	1.88	1.88	0.12	0.04	3.17	04/15/2025	15:18
5	Q1781-04		1	5.01	50	2.00	0.00	1.90	1.90	0.10	0.02	1.60	04/15/2025	15:20
6	Q1781-08		1	5.07	50	2.00	0.00	1.88	1.88	0.12	0.04	3.16	04/15/2025	15:23
7	Q1781-12		1	5.01	50	2.00	0.00	1.86	1.86	0.14	0.06	4.79	04/15/2025	15:25
8	Q1787-12		1	5.07	50	2.00	0.00	1.90	1.90	0.10	0.02	1.58	04/15/2025	15:27
9	Q1788-04		1	5.05	50	2.00	0.00	1.90	1.90	0.10	0.02	1.58	04/15/2025	15:30
10	Q1791-07		1	5.07	50	2.00	0.00	1.90	1.90	0.10	0.02	1.58	04/15/2025	15:33
11	Q1800-03		1	5.06	50	2.00	0.00	1.86	1.86	0.14	0.06	4.74	04/15/2025	15:36
12	Q1803-01		1	5.04	50	2.00	0.00	1.86	1.86	0.14	0.06	4.76	04/15/2025	15:39

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: LB135442

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	W3114
Starch Solution, 4L	W3149

Seq	Lab ID	True Value (mg/l)	DF	Initial Weight (g)	Final Volume (ml)	T1 (ml)	T2 Initial	T2 Final	T2 Diff. (ml)	T1 - T2 Diff (mL)	Value Corrected With Blank	Result (ppm)	Anal Date	Anal Time
13	Q1803-02		1	5.07	50	2.00	0.00	1.90	1.90	0.10	0.02	1.58	04/15/2025	15:41
14	Q1808-02		1	5.08	50	2.00	0.00	1.90	1.90	0.10	0.02	1.57	04/15/2025	15:43
15	Q1808-04		1	5.01	50	2.00	0.00	1.88	1.88	0.12	0.04	3.19	04/15/2025	15:45

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 : M9030B-Sulfide-12

SDG No : N/A

Start Digest Date: 04/15/2025 Time : 12:30 Temp : N/A

Matrix : SOIL

End Digest Date: 04/15/2025 Time : 14:00 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

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

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

Extraction Conformance/Non-Conformance Comments:

04/15/2025 RM

N/A

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
PB167580BL	PBS580	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1779-04DUP	TP-22DUP	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1779-04	TP-22	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1779-08	TP-23	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1781-04	WC-13	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1781-08	WC-12	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1781-12	WC-11	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1787-12	TP-1	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1788-04	WC-1	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1791-07	290502	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1800-03	WC-A4-01-C	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1803-01	WEST-BAY	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1803-02	FUEL-MONITORING	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1808-02	OILY-SOIL-PILE	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1808-04	LAW-25-0060	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A

# WORKLIST(Hardcopy Internal Chain)

WorkList Name : rsul-4-15

WorkList ID : 188920

Department : Distillation

Date : 04-15-2025 08:11:43

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1779-04	TP-22	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	F11	04/10/2025	9034
Q1779-08	TP-23	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	F11	04/10/2025	9034
Q1781-04	WC-13	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	F11	04/10/2025	9034
Q1781-08	WC-12	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	F11	04/10/2025	9034
Q1781-12	WC-11	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	F11	04/10/2025	9034
Q1787-12	TP-1	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L41	04/10/2025	9034
Q1788-04	WC-1	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L31	04/11/2025	9034
Q1791-07	290502	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L41	04/11/2025	9034
Q1800-03	WC-A4-01-C	Solid	Reactive Sulfide	Cool 4 deg C	ENTA05	L41	04/11/2025	9034
Q1803-01	WEST-BAY	Solid	Reactive Sulfide	Cool 4 deg C	SCAL01	L31	04/10/2025	9034
Q1803-02	FUEL-MONITORING	Solid	Reactive Sulfide	Cool 4 deg C	SCAL01	L31	04/10/2025	9034
Q1808-02	OILY-SOIL-PILE	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L51	04/14/2025	9034
Q1808-04	LAW-25-0060	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	L51	04/14/2025	9034

Date/Time 04/15/2025 08:15  
 Raw Sample Received by: RM (w/c)  
 Raw Sample Relinquished by: RM (w/c)

Date/Time 04/15/2025 12:50  
 Raw Sample Received by: Ad (w/c)  
 Raw Sample Relinquished by: RM (w/c)

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

SDG No : N/A

Start Digest Date: 04/15/2025 Time : 08:45 Temp : N/A

Matrix : SOIL

End Digest Date: 04/15/2025 Time : 10:15 Temp : N/A

Pipette ID : N/A

Balance ID : WC SC-7

Hood ID : HOOD#1

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Block ID : MC-1, MC-2

Filter paper ID : N/A

Prep Technician Signature: RM

Weigh By : RM

pH Meter ID : N/A

Supervisor Signature: 12

Standard Name	MLS USED	STD REF. # FROM LOG
PBS003	50ML	W3112
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

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

LAB SAMPLE ID	CLIENT SAMPLE ID	Comment

## Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/15/2025 10:25	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
PB167581BL	PBS581	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1779-04DUP	TP-22DUP	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1779-04	TP-22	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1779-08	TP-23	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1781-04	WC-13	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1781-08	WC-12	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1781-12	WC-11	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1787-12	TP-1	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1788-04	WC-1	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1791-07	290502	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1800-03	WC-A4-01-C	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1803-01	WEST-BAY	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1803-02	FUEL-MONITORING	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1808-02	OILY-SOIL-PILE	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1808-04	LAW-25-0060	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A

# WORKLIST(Hardcopy Internal Chain)

WorkList Name : rcn-4-15

WorkList ID : 188923

Department : Distillation

Date : 04-15-2025 08:11:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1779-04	TP-22	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	F11	04/10/2025	9012B
Q1779-08	TP-23	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	F11	04/10/2025	9012B
Q1781-04	WC-13	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	F11	04/10/2025	9012B
Q1781-08	WC-12	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	F11	04/10/2025	9012B
Q1781-12	WC-11	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	F11	04/10/2025	9012B
Q1787-12	TP-1	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	F11	04/10/2025	9012B
Q1788-04	WC-1	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	04/10/2025	9012B
Q1791-07	290502	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L31	04/11/2025	9012B
Q1800-03	WC-A4-01-C	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L41	04/11/2025	9012B
Q1803-01	WEST-BAY	Solid	Reactive Cyanide	Cool 4 deg C	ENTA05	L41	04/11/2025	9012B
Q1803-02	FUEL-MONITORING	Solid	Reactive Cyanide	Cool 4 deg C	SCAL01	L31	04/10/2025	9012B
Q1808-02	OILY-SOIL-PILE	Solid	Reactive Cyanide	Cool 4 deg C	SCAL01	L31	04/10/2025	9012B
Q1808-04	LAW-25-0060	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	L51	04/14/2025	9012B
					PSEG03	L51	04/14/2025	9012B

Date/Time 04/15/2025 08:15  
 Raw Sample Received by: RM (w/c)  
 Raw Sample Relinquished by: [Signature]

Date/Time 04/15/2025 12:50  
 Raw Sample Received by: [Signature]  
 Raw Sample Relinquished by: RM (w/c)

**Instrument ID:** FLAME

**Daily Analysis Runlog For Sequence/QC Batch ID # LB135415**

Review By	Iwona	Review On	4/14/2025 4:46:46 PM
Supervise By	sohil	Supervise On	4/14/2025 4:47:22 PM
SubDirectory	LB135415	Test	Ignitability
<b>STD. NAME</b>	<b>STD REF.#</b>		
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	Q1764-01	BUR-25-0020	SAM	04/14/25 12:00		rubina	OK
2	Q1764-01DUP	BUR-25-0020DUP	DUP	04/14/25 12:07		rubina	OK
3	Q1767-04	NWB-2106	SAM	04/14/25 12:15		rubina	OK
4	Q1787-09	TP-1	SAM	04/14/25 12:22		rubina	OK
5	Q1787-12	TP-1	SAM	04/14/25 12:30		rubina	OK
6	Q1788-01	WC-1	SAM	04/14/25 12:38		rubina	OK
7	Q1788-04	WC-1	SAM	04/14/25 12:45		rubina	OK
8	Q1791-07	290502	SAM	04/14/25 12:52		rubina	OK
9	Q1794-01	40325-C-G-COMP	SAM	04/14/25 13:00		rubina	OK
10	Q1795-01	40425	SAM	04/14/25 13:08		rubina	OK
11	Q1800-03	WC-A4-01-C	SAM	04/14/25 13:15		rubina	OK
12	Q1803-01	WEST-BAY	SAM	04/14/25 13:22		rubina	OK
13	Q1803-02	FUEL-MONITORING	SAM	04/14/25 13:30		rubina	OK

**Instrument ID:** WC PH METER-1

**Daily Analysis Runlog For Sequence/QC Batch ID # LB135420**

Review By	jignesh	Review On	4/15/2025 8:31:49 AM
Supervise By	Iwona	Supervise On	4/15/2025 12:03:10 PM
SubDirectory	LB135420	Test	Corrosivity
<b>STD. NAME</b>	<b>STD REF.#</b>		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	W3178,W3093,W3191,W3071,W3161,W3072		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	04/14/25 15:30		Jignesh	OK
2	CAL2	CAL2	CAL	04/14/25 15:31		Jignesh	OK
3	CAL3	CAL3	CAL	04/14/25 15:33		Jignesh	OK
4	ICV	ICV	ICV	04/14/25 15:35		Jignesh	OK
5	CCV1	CCV1	CCV	04/14/25 15:40		Jignesh	OK
6	Q1800-03	WC-A4-01-C	SAM	04/14/25 16:00		Jignesh	OK
7	Q1800-03DUP	WC-A4-01-CDUP	DUP	04/14/25 16:01		Jignesh	OK
8	Q1803-01	WEST-BAY	SAM	04/14/25 16:10		Jignesh	OK
9	Q1803-02	FUEL-MONITORING	SAM	04/14/25 16:14		Jignesh	OK
10	Q1808-02	OILY-SOIL-PILE	SAM	04/14/25 16:20		Jignesh	OK
11	Q1808-04	LAW-25-0060	SAM	04/14/25 16:25		Jignesh	OK
12	CCV2	CCV2	CCV	04/14/25 16:30		Jignesh	OK

**Instrument ID:** KONELAB

**Daily Analysis Runlog For Sequence/QC Batch ID # LB135440**

Review By	Review On	
Supervise By	Supervise On	
SubDirectory	LB135440	Test Reactive Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP112702,WP112703,WP112704,WP112705,WP112706,WP112707,WP112708
ICV Standard	WP112709
CCV Standard	WP112703
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP112643,WP111035,WP112710

Sr#	SampleID	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	04/15/25 13:51		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	04/15/25 13:51		rubina	OK
3	10PPBCN	10PPBCN	CAL3	04/15/25 13:51		rubina	OK
4	50PPBCN	50PPBCN	CAL4	04/15/25 13:51		rubina	OK
5	100PPBCN	100PPBCN	CAL5	04/15/25 13:51		rubina	OK
6	250PPBCN	250PPBCN	CAL6	04/15/25 13:51		rubina	OK
7	500PPBCN	500PPBCN	CAL7	04/15/25 13:51		rubina	OK
8	ICV1	ICV1	ICV	04/15/25 14:34		rubina	OK
9	ICB1	ICB1	ICB	04/15/25 14:34		rubina	OK
10	CCV1	CCV1	CCV	04/15/25 14:34		rubina	OK
11	CCB1	CCB1	CCB	04/15/25 14:34		rubina	OK
12	PB167581BL	PB167581BL	MB	04/15/25 14:34		rubina	OK
13	Q1779-04	TP-22	SAM	04/15/25 14:41		rubina	OK
14	Q1779-04DUP	TP-22DUP	DUP	04/15/25 14:41		rubina	OK
15	Q1779-08	TP-23	SAM	04/15/25 14:41		rubina	OK
16	Q1781-04	WC-13	SAM	04/15/25 14:41		rubina	OK
17	Q1781-08	WC-12	SAM	04/15/25 14:41		rubina	OK
18	Q1781-12	WC-11	SAM	04/15/25 14:41		rubina	OK

Instrument ID: KONELAB

**Daily Analysis Runlog For Sequence/QC Batch ID # LB135440**

Review By	Review On
Supervise By	Supervise On
SubDirectory LB135440	Test Reactive Cyanide
<b>STD. NAME</b>	<b>STD REF.#</b>
ICAL Standard	WP112702,WP112703,WP112704,WP112705,WP112706,WP112707,WP112708
ICV Standard	WP112709
CCV Standard	WP112703
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP112643,WP111035,WP112710

19	Q1787-12	TP-1	SAM	04/15/25 14:41		rubina	OK
20	Q1788-04	WC-1	SAM	04/15/25 14:41		rubina	OK
21	Q1791-07	290502	SAM	04/15/25 14:49		rubina	OK
22	CCV2	CCV2	CCV	04/15/25 14:49		rubina	OK
23	CCB2	CCB2	CCB	04/15/25 14:49		rubina	OK
24	Q1800-03	WC-A4-01-C	SAM	04/15/25 14:49		rubina	OK
25	Q1803-01	WEST-BAY	SAM	04/15/25 14:49		rubina	OK
26	Q1803-02	FUEL-MONITORING	SAM	04/15/25 14:49		rubina	OK
27	Q1808-02	OILY-SOIL-PILE	SAM	04/15/25 14:49		rubina	OK
28	Q1808-04	LAW-25-0060	SAM	04/15/25 14:49		rubina	OK
29	PB167582BL	PB167582BL	MB	04/15/25 14:56		rubina	OK
30	Q1791-09	VB16193	SAM	04/15/25 14:56		rubina	OK
31	Q1791-09DUP	VB16193DUP	DUP	04/15/25 14:56		rubina	OK
32	Q1791-10	280722	SAM	04/15/25 14:56		rubina	OK
33	Q1791-11	280791	SAM	04/15/25 14:56		rubina	OK
34	CCV3	CCV3	CCV	04/15/25 15:04		rubina	OK
35	CCB3	CCB3	CCB	04/15/25 15:04		rubina	OK
36	Q1791-12	V1207	SAM	04/15/25 15:04		rubina	OK
37	Q1791-13	279312	SAM	04/15/25 15:04		rubina	OK
38	Q1810-01	MOO-25-0117	SAM	04/15/25 15:04		rubina	OK

Instrument ID: KONELAB

**Daily Analysis Runlog For Sequence/QC Batch ID # LB135440**

Review By	Review On
Supervise By	Supervise On
SubDirectory LB135440	Test Reactive Cyanide
STD. NAME	STD REF.#
ICAL Standard	WP112702,WP112703,WP112704,WP112705,WP112706,WP112707,WP112708
ICV Standard	WP112709
CCV Standard	WP112703
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP112643,WP111035,WP112710

39	Q1810-02	MOO-25-0118	SAM	04/15/25 15:04		rubina	OK
40	Q1791-14	VB16164	SAM	04/15/25 15:04		rubina	OK
41	CCV4	CCV4	CCV	04/15/25 15:08		rubina	OK
42	CCB4	CCB4	CCB	04/15/25 15:08		rubina	OK

**Instrument ID:** TITRAMETRIC

**Daily Analysis Runlog For Sequence/QC Batch ID # LB135442**

Review By	rubina	Review On	4/15/2025 4:38:41 PM
Supervise By	Iwona	Supervise On	4/15/2025 4:44:09 PM
SubDirectory	LB135442	Test	Reactive Sulfide
<b>STD. NAME</b>	<b>STD REF.#</b>		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	W3105,W3114,W3149		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	PB167580BL	PB167580BL	MB	04/15/25 15:10		rubina	OK
2	Q1779-04	TP-22	SAM	04/15/25 15:13		rubina	OK
3	Q1779-04DUP	TP-22DUP	DUP	04/15/25 15:16		rubina	OK
4	Q1779-08	TP-23	SAM	04/15/25 15:18		rubina	OK
5	Q1781-04	WC-13	SAM	04/15/25 15:20		rubina	OK
6	Q1781-08	WC-12	SAM	04/15/25 15:23		rubina	OK
7	Q1781-12	WC-11	SAM	04/15/25 15:25		rubina	OK
8	Q1787-12	TP-1	SAM	04/15/25 15:27		rubina	OK
9	Q1788-04	WC-1	SAM	04/15/25 15:30		rubina	OK
10	Q1791-07	290502	SAM	04/15/25 15:33		rubina	OK
11	Q1800-03	WC-A4-01-C	SAM	04/15/25 15:36		rubina	OK
12	Q1803-01	WEST-BAY	SAM	04/15/25 15:39		rubina	OK
13	Q1803-02	FUEL-MONITORING	SAM	04/15/25 15:41		rubina	OK
14	Q1808-02	OILY-SOIL-PILE	SAM	04/15/25 15:43		rubina	OK
15	Q1808-04	LAW-25-0060	SAM	04/15/25 15:45		rubina	OK

## Prep Standard - Chemical Standard Summary

**Order ID :** Q1803

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

**Prepbatch ID :** PB167580,PB167581,

**Sequence ID/Qc Batch ID:** LB135415,LB135420,LB135440,LB135442,

**Standard ID :**

WP111004,WP111035,WP111294,WP111296,WP112643,WP112701,WP112702,WP112703,WP112704,WP112705,WP112706,WP112707,WP112708,WP112709,WP112710,

**Chemical ID :**

M6121,W2668,W2725,W2882,W2926,W3019,W3071,W3072,W3093,W3105,W3112,W3113,W3114,W3138,W3139,W3149,W3154,W3161,W3178,W3191,

<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	<a href="#">WP111004</a>	12/09/2024	05/13/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC)	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 12/09/2024
<b><u>FROM</u></b> 0.88900L of W3112 + 1.00000ml of M6121 + 110.00000gram of W2926 = Final Quantity: 1000.000 ml								

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



<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	<a href="#">WP111294</a>	01/07/2025	07/07/2025	Niha Farheen Shaik	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych  01/07/2025
<b><u>FROM</u></b>	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>
3371	Cyanide LCS Spike Solution, 5PPM	<a href="#">WP111296</a>	01/07/2025	07/07/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 01/07/2025
<u>FROM</u>	1.00000ml of W3138 + 199.00000ml of WP111294 = Final Quantity: 200.000 ml							

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3456	Cyanide Intermediate Working Std, 5PPM	<a href="#">WP112701</a>	04/15/2025	04/16/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych 04/15/2025
<b><u>FROM</u></b>	0.25000ml of W3154 + 49.75000ml 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>
4	Calibration standard 500 ppb	<a href="#">WP112702</a>	04/15/2025	04/16/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych  04/15/2025
<b>FROM</b> 45.00000ml of WP111294 + 5.00000ml of WP112701 = 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	<a href="#">WP112703</a>	04/15/2025	04/16/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych  04/15/2025
<b>FROM</b> 2.50000ml of WP112701 + 47.50000ml of WP111294 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
6	Calibration Standard 100 ppb	<a href="#">WP112704</a>	04/15/2025	04/16/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/15/2025
<u>FROM</u>	1.00000ml of WP112701 + 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	<a href="#">WP112705</a>	04/15/2025	04/16/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 04/15/2025
<b><u>FROM</u></b> 0.50000ml of WP112701 + 49.50000ml 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>
8	Calibration Standard 10 ppb	<a href="#">WP112706</a>	04/15/2025	04/16/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych  04/15/2025
<b>FROM</b> 1.00000ml of WP112702 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
9	Calibration Standard 5 ppb	<a href="#">WP112707</a>	04/15/2025	04/16/2025	Rubina Mughal	None	WETCHEM_F IPETTE_3 (WC)	Iwona Zarych  04/15/2025
<b>FROM</b> 0.50000ml of WP112702 + 49.50000ml 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>
167	0 ppb CN calibration std	<a href="#">WP112708</a>	04/15/2025	04/16/2025	Rubina Mughal	None	None	Iwona Zarych
								04/15/2025

**FROM** 50.00000ml of WP111294 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2168	RCN ICV STD, 100 PPB	<a href="#">WP112709</a>	04/15/2025	04/16/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3	Iwona Zarych
							(WC)	04/15/2025

**FROM** 1.00000ml of WP111296 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1582	Chloramine T solution, 0.014M	<a href="#">WP112710</a>	04/15/2025	04/16/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	Glass Pipette-A	Iwona Zarych  04/15/2025
<u>FROM</u>	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-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

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.	EMD-FX0410-5 / FORMALDEHYDE SOLUTION 450ML	60045	06/22/2025	08/19/2024 / lwona	06/22/2020 / apatel	W2725

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J4296-1 / ZINC ACETATE, DIHYD, CRYST, 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 #
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.	AL14940-1 / Buffer Solution, PH12 (500ml)	2310P21	04/30/2025	01/02/2024 / JIGNESH	12/07/2023 / Iwona	W3072

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

## CHEMICAL RECEIPT LOG BOOK

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL70850-8 / Starch Solution, 4L	4408P62	08/31/2026	10/16/2024 / lwona	10/16/2024 / lwona	W3149

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

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

### CHEMICAL RECEIPT LOG BOOK

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

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**

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W3019  
rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: [www.sigmaaldrich.com](http://www.sigmaaldrich.com)Email USA: [techserv@sial.com](mailto:techserv@sial.com)Outside USA: [eurtechserv@sial.com](mailto: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:

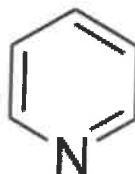
C<sub>5</sub>H<sub>5</sub>N

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](http://Sigma-Aldrich.com). For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



**RICCA CHEMICAL COMPANY®**

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

W 3072  
REC. 12/01/23  
12

# Certificate of Analysis

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

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

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

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

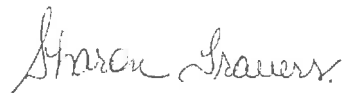
\*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	12.005	0.02	186-I-g, 186-II-g, 191d

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1615-1	4 L natural poly	18 months
1615-16	500 mL clear PET-G	18 months
1615-32	1 L natural poly	18 months
1615-5	20 L Cubitainer®	18 months

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



Sharon Travers (10/24/2023)

Operations Manager

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

**This product was tested in an ISO 17025 Accredited Laboratory**

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## Certificate of Analysis

Date of Release: 2/26/2020

Name: Formaldehyde Solution  
GR ACS  
Meets ACS Specifications

Item No: FX0410 all size codes

Lot / Batch No: 60045

Country of Origin: USA

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

Heather Sinn,

-----  
Quality Control Manager

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

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

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

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

avantor™



R → 16/13/24  
Met dig

M 6121

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

## Certificate of Analysis

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

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

Avantor Performance Materials, LLC

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

Material No.: 9530-33

Batch No.: 0000275677

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

For Laboratory, Research or Manufacturing Use

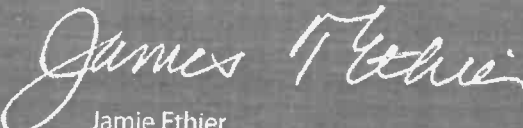
Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr &amp; 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

1.00132.0000 Barbituric acid for analysis EMSURE®  
Batch N020065932

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

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

Ioannis Chartomatsidis  
Responsible laboratory manager quality control

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

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)	$\leq 5$ ppm	$< 5$
ACS – Sulfate ( $\text{SO}_4$ )	$\leq 0.003$ %	$< 0.003$
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

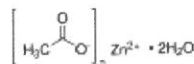
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700  
Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

## 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)	$\leq 5$ ppm	$< 5$ ppm
Iron (Fe)	$\leq 5$ ppm	$< 5$ ppm
Potassium (K)	$\leq 0.01\%$	0.00 %
Magnesium (Mg)	$\leq 0.005\%$	0.003 %
Sodium (Na)	$\leq 0.05\%$	0.03 %
Lead (Pb)	$\leq 0.002\%$	$< 0.001\%$
pH	6.0 - 7.0	6.1
Sulfate (SO <sub>4</sub> )	$\leq 0.005\%$	$< 0.005\%$
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](http://Sigma-Aldrich.com). For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.





## Certificate of Analysis

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

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Contents of Certificates and Labels."

**This product was tested in an ISO 17025 Accredited Laboratory**

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# Certificate of Analysis

## Sodium Thiosulfate, 0.0250 Normal (N/40)

**Lot Number:** 4403S13

**Product Number:** 7900

**Manufacture Date:** MAR 29, 2024

**Expiration Date:** SEP 2025

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

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

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

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

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

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

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



Paul Brandon (03/29/2024)

Production Manager

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.

# Certificate of Analysis

**Iodine (Iodine-Iodide), 0.0250 Normal (N/40), 1 mL = 0.4008 mg S<sup>2-</sup>****Lot Number:** 2405D89**Product Number:** 3975**Manufacture Date:** MAY 10, 2024**Expiration Date:** MAY 2025

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

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

Specification	Reference
Standard Iodine Solution, 0.0250 N	APHA (4500-S2- F)
Iodine Solution (approximately 0.025 N)	EPA (SW-846) (9031)
Standard Iodine Solution, 0.0250 N	EPA (376.1)
Iodine Solution (approximately 0.025 N)	EPA (SW-846) (9034)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
3975-1	4 L amber glass	12 months
3975-16	500 mL amber glass	12 months
3975-32	1 L amber glass	12 months

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

Jose Pena (05/10/2024)  
Operations Manager

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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: August 01, 2024

Lot Number: **44080060**

Expiration Date: January 30, 2025

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

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

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

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

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

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

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

*Michael Monteleone*

Michael Monteleone  
Chemistry Supervisor - Quality Control

ISO9001:2015 Registration #0306-01

2024080113:32:16bsturges-0-0

W3139 Received on 9/9/24 by IZ

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

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

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

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



# Certificate of Analysis

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

Lot Number: 4408P62

Product Number: 8000

Manufacture Date: AUG 28, 2024

Expiration Date: AUG 2026

This product is Mercury-free.

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

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

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

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

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

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

A handwritten signature in blue ink that reads "Paul Brandon". The signature is fluid and cursive, with the first name "Paul" and last name "Brandon" clearly distinguishable.

Paul Brandon (08/28/2024)  
Production Manager

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# Certificate of Analysis

## Cyanide Standard, 1000 ppm CN<sup>-</sup>

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

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

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

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

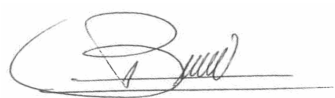
Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN <sup>-</sup> )	995-1005 ppm	1000 ppm

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 <sup>-</sup> )	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 <sup>-</sup> )	ASTM (D 4374)

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

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

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

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

Luis Briceno (11/22/2024)  
Operations Supervisor

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# Certificate of Analysis

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

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

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

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

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

\*Not a certified value.

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

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

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

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



Jose Pena (11/11/2024)  
Operations Manager

**This product was tested in an ISO 17025 Accredited Laboratory**

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

# Certificate of Analysis

031758 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)



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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



PERCENT SOLID

Supervisor: Iwona  
Analyst: jignesh  
Date: 4/15/2025

OVENTEMP IN Celsius(°C): 107  
Time IN: 17:00  
In Date: 04/14/2025  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
Time OUT: 08:15  
Out Date: 04/15/2025  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLID- OVEN

QC:LB135416

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
Q1800-02	WC-A4-01-C	1	1.14	10.66	11.8	9.84	81.6	
Q1803-01	WEST-BAY	2	1.15	10.18	11.33	9.91	86.1	
Q1803-02	FUEL-MONITORING	3	1.16	11.09	12.25	10.39	83.2	
Q1806-01	OR-03-041425	4	1.15	11.25	12.4	11.25	89.8	
Q1806-02	OR-03-041425-E2	5	1.18	10.23	11.41	10.29	89.1	
Q1807-01	OK-02-041425	6	1.19	11.03	12.22	11.16	90.4	
Q1807-02	OK-02-041425-E2	7	1.14	10.45	11.59	10.6	90.5	
Q1808-01	OILY-SOIL-PILE	8	1.14	9.87	11.01	9.64	86.1	
Q1808-03	LAW-25-0060	9	1.12	10.83	11.95	9.33	75.8	

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

# WORKLIST(Hardcopy Internal Chain)

135416

WorkList Name : %1-041425

WorkList ID : 188893

Department : Wet-Chemistry

Date : 04-14-2025 08:51:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1800-02	WC-A4-01-C	Solid	Percent Solids	Cool 4 deg C	ENTA05	L41	04/11/2025	Chemtech -SO
Q1803-01	WEST-BAY	Solid	Percent Solids	Cool 4 deg C	SCAL01	L31	04/10/2025	Chemtech -SO
Q1803-02	FUEL-MONITORING	Solid	Percent Solids	Cool 4 deg C	SCAL01	L31	04/10/2025	Chemtech -SO
Q1806-01	OR-03-041425	Solid	Percent Solids	Cool 4 deg C	PSEG05	L31	04/14/2025	Chemtech -SO
Q1806-02	OR-03-041425-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L31	04/14/2025	Chemtech -SO
Q1807-01	OK-02-041425	Solid	Percent Solids	Cool 4 deg C	PSEG05	L31	04/14/2025	Chemtech -SO
Q1807-02	OK-02-041425-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L31	04/14/2025	Chemtech -SO
Q1808-01	OILY-SOIL-PILE	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/14/2025	Chemtech -SO
Q1808-03	LAW-25-0060	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	04/14/2025	Chemtech -SO

Date/Time 04.14.25 15:30

Raw Sample Received by: SP (WOC)

Raw Sample Relinquished by: SP (WOC)

Date/Time 04.14.25

Raw Sample Received by: SP (WOC)

Raw Sample Relinquished by: SP (WOC)



# SHIPPING DOCUMENTS



284 Sheffield Street, Mountainside, NJ 07092

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## CHAIN OF CUSTODY RECORD

Alliance Project Number:

Q1803

COC Number:

CLIENT INFORMATION		PROJECT INFORMATION				BILLING INFORMATION															
COMPANY: Scalamandre Tully JV		PROJECT NAME: DOT Harper Street Yard				BILL TO: Same					PO#										
ADDRESS: 57 Seaview Blvd		PROJECT #: 23657		LOCATION:		ADDRESS:															
CITY: Pt Washington STATE: NY ZIP: 11050		PROJECT MANAGER:				CITY:					STATE: ZIP:										
ATTENTION: Dean Devoe		E-MAIL:				ATTENTION:					PHONE:										
PHONE: 718 446 7000 FAX:		PHONE: FAX:				ANALYSIS															
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION				PRESERVATIVES															
FAX: _____ DAYS* HARD COPY: _____ DAYS* EDD _____ DAYS* * TO BE APPROVED BY ALLIANCE STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS		* RESULTS ONLY <input type="checkbox"/> USEPA CLP <input type="checkbox"/> RESULTS + QC <input type="checkbox"/> New York State ASP "B" <input type="checkbox"/> New Jersey REDUCED <input type="checkbox"/> New York State ASP "A" <input type="checkbox"/> New Jersey CLP <input type="checkbox"/> Other _____ <input type="checkbox"/> EDD Format _____				Full TCLP RIC 1 2 3 4 5 6 7 8 9															
CHEMTECH SAMPLE ID		PROJECT SAMPLE IDENTIFICATION		SAMPLE MATRIX		SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles		COMMENTS									
						COMP GRAB		DATE TIME				<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other									
1.		West Bay		Soil				4/10/25 1230		X X											
2.		Fuel Monitoring		Soil				4/10/25 1230		X X											
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY																					
RELINQUISHED BY SAMPLER		DATE/TIME April 10, 2025		RECEIVED BY		Conditions of bottles or coolers at receipt: <input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant <input type="checkbox"/> Cooler Temp 3.0 MeOH extraction requires an additional 4oz. Jar for percent solid <input type="checkbox"/> Ice in Cooler?: _____ Comments:															
1. D Devoe				1.																	
RELINQUISHED BY		DATE/TIME		RECEIVED BY																	
2.				2.																	
RELINQUISHED BY		DATE/TIME		RECEIVED FOR LAB BY		SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight ALLIANCE: <input type="checkbox"/> Picked Up <input type="checkbox"/> Overnight															
3.				3.		Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO															
WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY																					

### 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