

## 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

## LAB CHRONICLE

<b>OrderID:</b>	Q3852	<b>OrderDate:</b>	12/12/2025 10:58:00 AM
<b>Client:</b>	Pacific Commercial Services Inc.	<b>Project:</b>	Red Hill Pipeline Demo
<b>Contact:</b>	Wendi Zheng	<b>Location:</b>	G12

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3852-01	TK 9&10 12"	SOIL			12/10/25 08:00			12/12/25
			Corrosivity	9045D				
			Ignitability	1030				
Q3852-02	AI COVE 11 12"	SOIL			12/10/25 08:15			12/12/25
			Corrosivity	9045D				
			Ignitability	1030				
Q3852-03	AI COVE 15&16 12"	SOIL			12/10/25 08:30			12/12/25
			Corrosivity	9045D				
			Ignitability	1030				
Q3852-04	TK 9&10 20"	SOIL			12/10/25 08:45			12/12/25
			Corrosivity	9045D				
			Ignitability	1030				
Q3852-05	AI COVE 16 20"	SOIL			12/10/25 09:00			12/12/25
			Corrosivity	9045D				

### LAB CHRONICLE

Q3852-06	TK 7&8 20"	SOIL	Ignitability	1030		12/16/25 10:47	
					<b>12/10/25 09:15</b>		<b>12/12/25</b>
			Corrosivity	9045D		12/15/25 10:37	
			Ignitability	1030		12/16/25 10:55	



# SAMPLE DATA

## Report of Analysis

Client: Pacific Commercial Services Inc.  
Project: Red Hill Pipeline Demo  
Client Sample ID: TK 9&10 12"  
Lab Sample ID: Q3852-01

Date Collected: 12/10/25 08:00  
Date Received: 12/12/25  
SDG No.: Q3852  
Matrix: SOIL  
% Solid: 100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	5.19	H	1	0	0	0	pH		12/15/25 09:44	9045D
Ignitability	NO		1	0	0	0	oC		12/16/25 10:10	1030

Comments: pH result reported at temperature 21.5 °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: Pacific Commercial Services Inc.  
Project: Red Hill Pipeline Demo  
Client Sample ID: AI COVE 11 12"  
Lab Sample ID: Q3852-02

Date Collected: 12/10/25 08:15  
Date Received: 12/12/25  
SDG No.: Q3852  
Matrix: SOIL  
% Solid: 100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	5.28	H	1	0	0	0	pH		12/15/25 09:50	9045D
Ignitability	NO		1	0	0	0	oC		12/16/25 10:24	1030

Comments: pH result reported at temperature 21.7 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

## Report of Analysis

Client: Pacific Commercial Services Inc.  
Project: Red Hill Pipeline Demo  
Client Sample ID: AI COVE 15&16 12"  
Lab Sample ID: Q3852-03

Date Collected: 12/10/25 08:30  
Date Received: 12/12/25  
SDG No.: Q3852  
Matrix: SOIL  
% Solid: 100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	5.11	H	1	0	0	0	pH		12/15/25 10:00	9045D
Ignitability	NO		1	0	0	0	oC		12/16/25 10:32	1030

Comments: pH result reported at temperature 21.7 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

## Report of Analysis

Client: Pacific Commercial Services Inc.  
Project: Red Hill Pipeline Demo  
Client Sample ID: TK 9&10 20"  
Lab Sample ID: Q3852-04

Date Collected: 12/10/25 08:45  
Date Received: 12/12/25  
SDG No.: Q3852  
Matrix: SOIL  
% Solid: 100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	5.21	H	1	0	0	0	pH		12/15/25 10:10	9045D
Ignitability	NO		1	0	0	0	oC		12/16/25 10:40	1030

Comments: pH result reported at temperature 21.9 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits



## Report of Analysis

Client: Pacific Commercial Services Inc.  
Project: Red Hill Pipeline Demo  
Client Sample ID: AI COVE 16 20"  
Lab Sample ID: Q3852-05

Date Collected: 12/10/25 09:00  
Date Received: 12/12/25  
SDG No.: Q3852  
Matrix: SOIL  
% Solid: 100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	5.42	H	1	0	0	0	pH		12/15/25 10:30	9045D
Ignitability	NO		1	0	0	0	oC		12/16/25 10:47	1030

Comments: pH result reported at temperature 21.7 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	Pacific Commercial Services Inc.	Date Collected:	12/10/25 09:15
Project:	Red Hill Pipeline Demo	Date Received:	12/12/25
Client Sample ID:	TK 7&8 20"	SDG No.:	Q3852
Lab Sample ID:	Q3852-06	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	5.14	H	1	0	0	0	pH		12/15/25 10:37	9045D
Ignitability	NO		1	0	0	0	oC		12/16/25 10:55	1030

Comments: pH result reported at temperature 21.5 °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:** Pacific Commercial Services Inc.

**SDG No.:** Q3852

**Project:** Red Hill Pipeline Demo

**RunNo.:** LB138215

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: Corrosivity	ICV	pH	6.99	7	100	90-110	12/15/2025
Sample ID: Corrosivity	CCV1	pH	2.01	2.00	101	90-110	12/15/2025
Sample ID: Corrosivity	CCV2	pH	12.02	12.00	100	90-110	12/15/2025

## Duplicate Sample Summary

<b>Client:</b> Pacific Commercial Services Inc.	<b>SDG No.:</b> Q3852
<b>Project:</b> Red Hill Pipeline Demo	<b>Sample ID:</b> Q3852-01
<b>Client ID:</b> TK 9&10 12"DUP	<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
Ignitability	oC	+/-20	NO		NO		1	0		12/16/2025

## Duplicate Sample Summary

<b>Client:</b> Pacific Commercial Services Inc.	<b>SDG No.:</b> Q3852
<b>Project:</b> Red Hill Pipeline Demo	<b>Sample ID:</b> Q3862-04
<b>Client ID:</b> TP02-MH09-WCDUP	<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	10.7		10.7		1	0.19		12/15/2025

## Duplicate Sample Summary

<b>Client:</b> Pacific Commercial Services Inc.	<b>SDG No.:</b> Q3852
<b>Project:</b> Red Hill Pipeline Demo	<b>Sample ID:</b> Q3881-03
<b>Client ID:</b> DM-X-76DUP	<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
Ignitability	oC	+/-20	NO		NO		1	0		12/16/2025



# RAW DATA



## Analytical Summary Report

Analysis Method: 9045D

Analyst By : jignesh

Parameter: Corrosivity

Supervisor Review By : Iwona

Run Number: LB138215

Slope : 98.5

BalanceID: MSC-3

pH Meter ID : WC PH METER-1

Calibration Standards	Chemtech Log#
PH 4 BUFFER SOLUTION	W3264
BUFFER PH 7.00 GREEN 1PINT PK6	W3093
PH 10.01 BUFFER, COLOR CD 475ML	W3191
buffer solution pH 7 yellow	W3217
Buffer Solution, PH2 (500ml)	W3161
pH 12.00 Buffer	W3200

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

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

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

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.2	4.01	12/15/2025	09:25
2	CAL2	1	Water	NA	NA	20.2	7.00	12/15/2025	09:26
3	CAL3	1	Water	NA	NA	20.3	10.02	12/15/2025	09:27
4	ICV	1	Water	NA	NA	20.3	6.99	12/15/2025	09:30
5	CCV1	1	Water	NA	NA	20.2	2.01	12/15/2025	09:35
6	Q3852-01	1	Solid	20.02	20	21.5	5.19	12/15/2025	09:44
7	Q3852-02	1	Solid	20.03	20	21.7	5.28	12/15/2025	09:50
8	Q3852-03	1	Solid	20.02	20	21.7	5.11	12/15/2025	10:00
9	Q3852-04	1	Solid	20.03	20	21.9	5.21	12/15/2025	10:10
10	Q3852-05	1	Solid	20.02	20	21.7	5.42	12/15/2025	10:30
11	Q3852-06	1	Solid	20.03	20	21.5	5.14	12/15/2025	10:37
12	Q3853-04	1	Solid	20.02	20	21.7	9.72	12/15/2025	10:45
13	Q3855-02	1	Solid	20.03	20	22.6	5.84	12/15/2025	10:55
14	Q3862-04	1	Solid	20.02	20	21.2	10.66	12/15/2025	11:00
15	Q3862-04DUP	1	Solid	20.03	20	21.3	10.68	12/15/2025	11:10
16	CCV2	1	Water	NA	NA	20.3	12.02	12/15/2025	11:15

# WORKLIST(Hardcopy Internal Chain)

138215

WorkList Name : corrsivity q3852      WorkList ID : 193639      Department : Wet-Chemistry      Date : 12-15-2025 07:50:16

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3852-01	TK 9&10 12"	Solid	Corrosivity	Cool 4 deg C	PACI01	G12	12/10/2025	9045D
Q3852-02	AI COVE 11 12"	Solid	Corrosivity	Cool 4 deg C	PACI01	G12	12/10/2025	9045D
Q3852-03	AI COVE 15&16 12"	Solid	Corrosivity	Cool 4 deg C	PACI01	G12	12/10/2025	9045D
Q3852-04	TK 9&10 20"	Solid	Corrosivity	Cool 4 deg C	PACI01	G12	12/10/2025	9045D
Q3852-05	AI COVE 16 20"	Solid	Corrosivity	Cool 4 deg C	PACI01	G12	12/10/2025	9045D
Q3852-06	TK 7&8 20"	Solid	Corrosivity	Cool 4 deg C	PACI01	G12	12/10/2025	9045D
Q3853-04	TP01-MH11	Solid	Corrosivity	Cool 4 deg C	PSEG03	D31	12/12/2025	9045D
Q3855-02	326	Solid	Corrosivity	Cool 4 deg C	PSEG03	H11	12/12/2025	9045D
Q3862-04	TP02-MH09-WC	Solid	Corrosivity	Cool 4 deg C	PSEG03	H31	12/11/2025	9045D

Date/Time 12-15-25 08:00  
 Raw Sample Received by: SS WOC  
 Raw Sample Relinquished by: RJ (EX-1006)

Date/Time 12-15-25 13:30  
 Raw Sample Received by: RJ (EX-1006)  
 Raw Sample Relinquished by: SS WOC

## Analytical Summary Report

Analysis Method: 1030  
Parameter: Ignitability  
Run Number: LB138232

Reviewed By: Eman  
Supervisor Review By: Iwona

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Anal Time
1	Q3852-01	TK 9& ;10 12& ;	1	Solid	NO	0.00	12/16/2025	10:10
2	Q3852-01DUP	TK 9& ;10 12& ;	1	Solid	NO	0.00	12/16/2025	10:17
3	Q3852-02	AI COVE 11 12& ;qu	1	Solid	NO	0.00	12/16/2025	10:24
4	Q3852-03	AI COVE 15& ;amp; ;1	1	Solid	NO	0.00	12/16/2025	10:32
5	Q3852-04	TK 9& ;amp; ;10 20& ;a	1	Solid	NO	0.00	12/16/2025	10:40
6	Q3852-05	AI COVE 16 20& ;qu	1	Solid	NO	0.00	12/16/2025	10:47
7	Q3852-06	TK 7& ;amp; ;8 20& ;an	1	Solid	NO	0.00	12/16/2025	10:55
8	Q3853-01	TP01-MH11	1	Solid	NO	0.00	12/16/2025	11:02
9	Q3853-04	TP01-MH11	1	Solid	NO	0.00	12/16/2025	11:10
10	Q3855-01	326	1	Solid	NO	0.00	12/16/2025	11:17
11	Q3855-02	326	1	Solid	NO	0.00	12/16/2025	11:25
12	Q3862-01	TP02-MH09-WC	1	Solid	NO	0.00	12/16/2025	11:32
13	Q3862-04	TP02-MH09-WC	1	Solid	NO	0.00	12/16/2025	11:40
14	Q3864-24	B145 (8-10) 121025	1	Solid	NO	0.00	12/16/2025	11:47
15	Q3864-25	B145 (10-11.5) 121025	1	Solid	NO	0.00	12/16/2025	11:55
16	Q3865-01	B146 (8-10) 121025	1	Solid	NO	0.00	12/16/2025	12:02
17	Q3865-02	B146 (10-12) 121025	1	Solid	NO	0.00	12/16/2025	12:10
18	Q3871-01	LAW-25-0194	1	Solid	NO	0.00	12/16/2025	12:17
19	Q3871-03	LAW-25-0195	1	Solid	NO	0.00	12/16/2025	12:25
20	Q3871-05	LAW-25-0192-0193-COM	1	Solid	NO	0.00	12/16/2025	12:32
21	Q3872-01	ARS20-0006	1	Solid	NO	0.00	12/16/2025	12:40
22	Q3872-03	MOO-25-0367	1	Solid	NO	0.00	12/16/2025	12:47
23	Q3873-02	COMP-1	1	Solid	NO	0.00	12/16/2025	12:55
24	Q3873-04	COMP-2	1	Solid	NO	0.00	12/16/2025	13:02
25	Q3876-01	B148 (8-10) 121225	1	Solid	NO	0.00	12/16/2025	13:10
26	Q3876-02	B148 (10-12) 121225	1	Solid	NO	0.00	12/16/2025	13:17
27	Q3876-03	B150 (8-10) 121225	1	Solid	NO	0.00	12/16/2025	13:25
28	Q3876-04	B150 (10-12) 121225	1	Solid	NO	0.00	12/16/2025	13:32
29	Q3876-05	Q3876-04MS	1	Solid	NO	0.00	12/16/2025	13:40
30	Q3876-06	Q3876-04MSD	1	Solid	NO	0.00	12/16/2025	13:47
31	Q3876-07	DUP-6-121225	1	Solid	NO	0.00	12/16/2025	13:52
32	Q3876-08	B151 (6-8) 121225	1	Solid	NO	0.00	12/16/2025	14:00
33	Q3876-09	B151 (8-10) 121225	1	Solid	NO	0.00	12/16/2025	14:07
34	Q3876-10	B151 (10-12) 121225	1	Solid	NO	0.00	12/16/2025	14:15
35	Q3880-01	BG-SET-2	1	Solid	NO	0.00	12/16/2025	14:22
36	Q3881-03	DM-X-76	1	Solid	NO	0.00	12/16/2025	14:30

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

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Ana
37	Q3881-03DUP	DM-X-76DUP	1	Solid	NO	0.00	12/16/2025	14:38

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

# WORKLIST(Hardcopy Internal Chain)

16138232

WorkList Name : IGN-121625

WorkList ID : 193678

Department : Wet-Chemistry

Date : 12-16-2025 08:36:50

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3852-01	TK 9&10 12"	Solid	Ignitability	Cool 4 deg C	PACI01	G12	12/10/2025	1030
Q3852-02	AI COVE 11 12"	Solid	Ignitability	Cool 4 deg C	PACI01	G12	12/10/2025	1030
Q3852-03	AI COVE 15&16 12"	Solid	Ignitability	Cool 4 deg C	PACI01	G12	12/10/2025	1030
Q3852-04	TK 9&10 20"	Solid	Ignitability	Cool 4 deg C	PACI01	G12	12/10/2025	1030
Q3852-05	AI COVE 16 20"	Solid	Ignitability	Cool 4 deg C	PACI01	G12	12/10/2025	1030
Q3852-06	TK 7&8 20"	Solid	Ignitability	Cool 4 deg C	PACI01	G12	12/10/2025	1030
Q3853-01	TP01-MH11	Solid	Ignitability	Cool 4 deg C	PACI01	G12	12/10/2025	1030
Q3853-04	TP01-MH11	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	12/12/2025	1030
Q3855-01	326	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	12/12/2025	1030
Q3855-02	326	Solid	Ignitability	Cool 4 deg C	PSEG03	H11	12/12/2025	1030
Q3862-01	TP02-MH09-WC	Solid	Ignitability	Cool 4 deg C	PSEG03	H11	12/12/2025	1030
Q3862-04	TP02-MH09-WC	Solid	Ignitability	Cool 4 deg C	PSEG03	H31	12/11/2025	1030
Q3864-24	B145(8-10)121025	Solid	Ignitability	Cool 4 deg C	WOOD06	D41	12/10/2025	1030
Q3864-25	B145(10-11.5)121025	Solid	Ignitability	Cool 4 deg C	WOOD06	D41	12/10/2025	1030
Q3865-01	B146(8-10)121025	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/10/2025	1030
Q3865-02	B146(10-12)121025	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/10/2025	1030
Q3871-01	LAW-25-0194	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	12/12/2025	1030
Q3871-03	LAW-25-0195	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	12/12/2025	1030
Q3871-05	LAW-25-0192-0193-COMP	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	12/12/2025	1030
Q3872-01	ARS20-0006	Solid	Ignitability	Cool 4 deg C	PSEG03	D31	12/12/2025	1030
Q3872-03	MOO-25-0367	Solid	Ignitability	Cool 4 deg C	PSEG03	H21	12/12/2025	1030

Date/Time

12/16/25 10:00

Raw Sample Received by:

Em(wc)

Raw Sample Relinquished by:

Em(wc)

Date/Time

12/16/25 15:00

Raw Sample Received by:

Em(wc)

Raw Sample Relinquished by:

Em(wc)

# WORKLIST(Hardcopy Internal Chain)

WorkList Name : IGN-121625

WorkList ID : 193678

Department : Wet-Chemistry

Date : 12-16-2025 08:36:50

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3873-02	COMP-1	Solid	Ignitability	Cool 4 deg C	PSEG03	H21	12/12/2025	1030
Q3873-04	COMP-2	Solid	Ignitability	Cool 4 deg C	PSEG03	H21	12/12/2025	1030
Q3876-01	B148(8-10)121225	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/12/2025	1030
Q3876-02	B148(10-12)121225	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/12/2025	1030
Q3876-03	B150(8-10)121225	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/12/2025	1030
Q3876-04	B150(10-12)121225	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/12/2025	1030
Q3876-05	Q3876-04MS	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/12/2025	1030
Q3876-06	Q3876-04MSD	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/12/2025	1030
Q3876-07	DUP-6-121225	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/12/2025	1030
Q3876-08	B151(6-8)121225	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/12/2025	1030
Q3876-09	B151(8-10)121225	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/12/2025	1030
Q3876-10	B151(10-12)121225	Solid	Ignitability	Cool 4 deg C	WOOD06	D31	12/12/2025	1030
Q3880-01	BG-SET-2	Solid	Ignitability	Cool 4 deg C	PSEG04	D31	12/15/2026	1030
Q3881-03	DM-X-76	Solid	Ignitability	Cool 4 deg C	JPL01	D31	12/15/2025	1030

Date/Time 12/16/25 10:00  
 Raw Sample Received by: EM(WC)  
 Raw Sample Relinquished by: Hanc

Date/Time 12/16/25 15:00  
 Raw Sample Received by: JHACJ  
 Raw Sample Relinquished by: EM(WC)



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

**Daily Analysis Runlog For Sequence/QC Batch ID # LB138215**

Review By	jignesh	Review On	12/15/2025 10:26:54 AM
Supervise By	Iwona	Supervise On	12/15/2025 12:31:02 PM
SubDirectory	LB138215	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	W3264,W3093,W3191,W3217,W3161,W3200		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	12/15/25 09:25		Jignesh	OK
2	CAL2	CAL2	CAL	12/15/25 09:26		Jignesh	OK
3	CAL3	CAL3	CAL	12/15/25 09:27		Jignesh	OK
4	ICV	ICV	ICV	12/15/25 09:30		Jignesh	OK
5	CCV1	CCV1	CCV	12/15/25 09:35		Jignesh	OK
6	Q3852-01	TK 9&10 12"	SAM	12/15/25 09:44		Jignesh	OK
7	Q3852-02	AI COVE 11 12"	SAM	12/15/25 09:50		Jignesh	OK
8	Q3852-03	AI COVE 15&16 12"	SAM	12/15/25 10:00		Jignesh	OK
9	Q3852-04	TK 9&10 20"	SAM	12/15/25 10:10		Jignesh	OK
10	Q3852-05	AI COVE 16 20"	SAM	12/15/25 10:30		Jignesh	OK
11	Q3852-06	TK 7&8 20"	SAM	12/15/25 10:37		Jignesh	OK
12	Q3853-04	TP01-MH11	SAM	12/15/25 10:45		Jignesh	OK
13	Q3855-02	326	SAM	12/15/25 10:55		Jignesh	OK
14	Q3862-04	TP02-MH09-WC	SAM	12/15/25 11:00		Jignesh	OK
15	Q3862-04DUP	TP02-MH09-WCDUP	DUP	12/15/25 11:10		Jignesh	OK
16	CCV2	CCV2	CCV	12/15/25 11:15		Jignesh	OK

**Instrument ID:** FLAME

**Daily Analysis Runlog For Sequence/QC Batch ID # LB138232**

Review By	Eman	Review On	12/16/2025 4:28:28 PM
Supervise By	Iwona	Supervise On	12/16/2025 4:29:48 PM
SubDirectory	LB138232	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	Q3852-01	TK 9&10 12"	SAM	12/16/25 10:10		Eman	OK
2	Q3852-01DUP	TK 9&10 12"DUP	DUP	12/16/25 10:17		Eman	OK
3	Q3852-02	AI COVE 11 12"	SAM	12/16/25 10:24		Eman	OK
4	Q3852-03	AI COVE 15&16 12"	SAM	12/16/25 10:32		Eman	OK
5	Q3852-04	TK 9&10 20"	SAM	12/16/25 10:40		Eman	OK
6	Q3852-05	AI COVE 16 20"	SAM	12/16/25 10:47		Eman	OK
7	Q3852-06	TK 7&8 20"	SAM	12/16/25 10:55		Eman	OK
8	Q3853-01	TP01-MH11	SAM	12/16/25 11:02		Eman	OK
9	Q3853-04	TP01-MH11	SAM	12/16/25 11:10		Eman	OK
10	Q3855-01	326	SAM	12/16/25 11:17		Eman	OK
11	Q3855-02	326	SAM	12/16/25 11:25		Eman	OK
12	Q3862-01	TP02-MH09-WC	SAM	12/16/25 11:32		Eman	OK
13	Q3862-04	TP02-MH09-WC	SAM	12/16/25 11:40		Eman	OK
14	Q3864-24	B145(8-10)121025	SAM	12/16/25 11:47		Eman	OK
15	Q3864-25	B145(10-11.5)121025	SAM	12/16/25 11:55		Eman	OK
16	Q3865-01	B146(8-10)121025	SAM	12/16/25 12:02		Eman	OK
17	Q3865-02	B146(10-12)121025	SAM	12/16/25 12:10		Eman	OK
18	Q3871-01	LAW-25-0194	SAM	12/16/25 12:17		Eman	OK



Instrument ID: FLAME

**Daily Analysis Runlog For Sequence/QC Batch ID # LB138232**

Review By	Eman	Review On	12/16/2025 4:28:28 PM
Supervise By	Iwona	Supervise On	12/16/2025 4:29:48 PM
SubDirectory	LB138232	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		

19	Q3871-03	LAW-25-0195	SAM	12/16/25 12:25		Eman	OK
20	Q3871-05	LAW-25-0192-0193-C	SAM	12/16/25 12:32		Eman	OK
21	Q3872-01	ARS20-0006	SAM	12/16/25 12:40		Eman	OK
22	Q3872-03	MOO-25-0367	SAM	12/16/25 12:47		Eman	OK
23	Q3873-02	COMP-1	SAM	12/16/25 12:55		Eman	OK
24	Q3873-04	COMP-2	SAM	12/16/25 13:02		Eman	OK
25	Q3876-01	B148(8-10)121225	SAM	12/16/25 13:10		Eman	OK
26	Q3876-02	B148(10-12)121225	SAM	12/16/25 13:17		Eman	OK
27	Q3876-03	B150(8-10)121225	SAM	12/16/25 13:25		Eman	OK
28	Q3876-04	B150(10-12)121225	SAM	12/16/25 13:32		Eman	OK
29	Q3876-05	Q3876-04MS	SAM	12/16/25 13:40		Eman	OK
30	Q3876-06	Q3876-04MSD	SAM	12/16/25 13:47		Eman	OK
31	Q3876-07	DUP-6-121225	SAM	12/16/25 13:52		Eman	OK
32	Q3876-08	B151(6-8)121225	SAM	12/16/25 14:00		Eman	OK
33	Q3876-09	B151(8-10)121225	SAM	12/16/25 14:07		Eman	OK
34	Q3876-10	B151(10-12)121225	SAM	12/16/25 14:15		Eman	OK
35	Q3880-01	BG-SET-2	SAM	12/16/25 14:22		Eman	OK
36	Q3881-03	DM-X-76	SAM	12/16/25 14:30		Eman	OK
37	Q3881-03DUP	DM-X-76DUP	DUP	12/16/25 14:38		Eman	OK

## Prep Standard - Chemical Standard Summary

**Order ID :** Q3852

**Test :** Corrosivity,Ignitability,Percent Solids

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** LB138215,LB138232,

**Standard ID :**

**Chemical ID :**

W3093,W3161,W3191,W3200,W3217,W3264,

## CHEMICAL RECEIPT LOG BOOK

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

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14455-3 / buffer solution pH 7 yellow	2504D34	03/31/2027	07/02/2025 / jignesh	06/26/2025 / lwona	W3217

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	2506L41	05/31/2027	12/09/2025 / jignesh	12/03/2025 / jignesh	W3264



## Certificate of Analysis

W3093  
004121  
04/03/2024  
16

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

Lot Number: 4401F99

Product Number: 1551

Manufacture Date: JAN 08, 2024

Expiration Date: DEC 2025

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

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

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

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

Test	Specification	Result
Appearance	Yellow liquid	Passed

\*Not a certified value.

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

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

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

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

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



Paul Brandon (01/08/2024)

Production Manager

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

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

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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**

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RICCA CHEMICAL COMPANY®

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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





# Certificate of Analysis

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

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

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

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

Test	Specification	Result
Appearance	Colorless liquid	Passed

\*Not a certified value.

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

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

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

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



Jose Pena (04/08/2025)  
Operations Manager

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

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# Certificate of Analysis

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

**Lot Number:** 2504D34

**Product Number:** 1551

**Manufacture Date:** APR 03, 2025

**Expiration Date:** MAR 2027

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 (from ACS)

Test	Specification	Result
Appearance	Yellow liquid	Passed *Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.003	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 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)
1551-2.5	10 L Cubitainer®	24 months
1551-20	20 x 20 mL pack	24 months
1551-32	1 L natural poly	24 months
1551-5	20 L Cubitainer®	24 months

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



Jose Pena (04/03/2025)  
Operations Manager

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

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**RICCA CHEMICAL COMPANY®**

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# Certificate of Analysis

W3264  
009421  
12/09/12  
2025  
58

**Buffer, Reference Standard, pH 4.00 ± 0.01 at 25°C (Color Coded Red)****Lot Number: 2506L41****Product Number: 1501****Manufacture Date: JUN 16, 2025****Expiration Date: MAY 2027**

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)	4.000	0.02	185i, 186-I-g, 186-II-g

Specification	Reference
Commercial Buffer Solutions	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)
1501-1	4 L natural poly	24 months
1501-1CT	4 L Cubitainer®	24 months
1501-32	1 L natural poly	24 months
1501-5	20 L Cubitainer®	24 months

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



PERCENT SOLID

Supervisor: Iwona  
Analyst: jignesh  
Date: 12/16/2025

OVENTEMP IN Celsius(°C): 107  
Time IN: 17:20  
In Date: 12/12/2025  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104  
Time OUT: 08:25  
Out Date: 12/13/2025  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLID-OVEN

QC:LB138211

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
Q3850-05	SVOC-GPC-BLANK	1	1.00	1.00	2.00	2.00	100.0	
Q3850-06	PEST-GPC-BLANK	2	1.00	1.00	2.00	2.00	100.0	
Q3850-07	PEST-GPC-BLANK-SPIKE	3	1.00	1.00	2.00	2.00	100.0	
Q3850-08	SVOC-GPC2-BLANK	4	1.00	1.00	2.00	2.00	100.0	
Q3850-09	PEST-GPC2-BLANK	5	1.00	1.00	2.00	2.00	100.0	
Q3850-10	PEST -GPC2-BLANK-SPIKE	6	1.00	1.00	2.00	2.00	100.0	
Q3851-01	MRS/NRS	7	1.14	10.73	11.87	1.27	1.2	
Q3851-02	Delumper Feed	8	1.13	10.47	11.6	2.91	17.0	
Q3851-03	MIX	9	1.16	10.42	11.58	1.46	2.9	
Q3852-01	TK 9&10 12"	10	1.00	1.00	2.00	2.00	100.0	form sample
Q3852-02	AI COVE 11 12"	11	1.00	1.00	2.00	2.00	100.0	form sample
Q3852-03	AI COVE 15&16 12"	12	1.00	1.00	2.00	2.00	100.0	form sample
Q3852-04	TK 9&10 20"	13	1.00	1.00	2.00	2.00	100.0	form sample
Q3852-05	AI COVE 16 20"	14	1.00	1.00	2.00	2.00	100.0	form sample
Q3852-06	TK 7&8 20"	15	1.00	1.00	2.00	2.00	100.0	form sample
Q3853-01	TP01-MH11	16	1.12	11.52	12.64	11.04	86.1	
Q3853-02	TP01-MH11-VOC	17	1.15	11.07	12.22	10.63	85.6	
Q3853-03	TP01-MH11-EPH	18	1.16	11.57	12.73	10.72	82.6	
Q3854-01	ETGI-360	19	1.16	10.58	11.74	10.9	92.1	
Q3854-02	ETGI-360-E2	20	1.15	11.01	12.16	10.85	88.1	
Q3855-01	326	21	1.00	1.00	2.00	2.00	100.0	debris sample
Q3858-01	1211	22	1.00	1.00	2.00	2.00	100.0	wipe sample
Q3859-01	HD-02-121225	23	1.11	10.49	11.6	9.92	84.0	
Q3859-02	HD-02-121225-E2	24	1.14	10.61	11.75	10.00	83.5	
Q3860-01	MA-CONCRETE	25	1.00	1.00	2.00	2.00	100.0	Concreate sample
Q3861-01	EO-03-121225	26	1.13	10.58	11.71	10.92	92.5	
Q3861-02	EO-03-121225-E2	27	1.13	10.20	11.33	10.56	92.5	
Q3862-01	TP02-MH09-WC	28	1.13	11.27	12.4	10.97	87.3	



PERCENT SOLID

Supervisor: Iwona  
Analyst: jignesh  
Date: 12/16/2025

OVENTEMP IN Celsius(°C): 107  
Time IN: 17:20  
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Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104  
Time OUT: 08:25  
Out Date: 12/13/2025  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLID-OVEN

QC:LB138211

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
Q3862-02	TP02-MH09-VOC	29	1.11	10.24	11.35	9.55	82.4	
Q3862-03	TP02-MH09-EPH	30	1.13	10.24	11.37	9.61	82.8	
Q3862-04	TP02-MH09-WC	31	1.13	11.27	12.4	10.97	87.3	

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

# WORKLIST(Hardcopy Internal Chain)

5132211

WorkList Name : %1-121225      WorkList ID : 193614      Department : Wet-Chemistry      Date : 12-12-2025 08:06:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3850-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	ALLI03	A11	12/05/2025	Chemtech -SO
Q3850-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	ALLI03	A11	12/05/2025	Chemtech -SO
Q3850-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	ALLI03	A11	12/05/2025	Chemtech -SO
Q3850-08	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	ALLI03	A11	12/05/2025	Chemtech -SO
Q3850-09	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	ALLI03	A11	12/05/2025	Chemtech -SO
Q3850-10	PEST -GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	ALLI03	A11	12/05/2025	Chemtech -SO
Q3851-01	MRS/NRS	Solid	Percent Solids	Cool 4 deg C	ALSE01	G11	11/30/2025	Chemtech -SO
Q3851-02	Delumper Feed	Solid	Percent Solids	Cool 4 deg C	ALSE01	G11	11/30/2025	Chemtech -SO
Q3851-03	MIX	Solid	Percent Solids	Cool 4 deg C	ALSE01	G11	11/30/2025	Chemtech -SO
Q3852-01	TK 9&10 12"	Solid	Percent Solids	Cool 4 deg C	PACI01	G12	12/10/2025	Chemtech -SO
Q3852-02	AI COVE 11 12"	Solid	Percent Solids	Cool 4 deg C	PACI01	G12	12/10/2025	Chemtech -SO
Q3852-03	AI COVE 15&16 12"	Solid	Percent Solids	Cool 4 deg C	PACI01	G12	12/10/2025	Chemtech -SO
Q3852-04	TK 9&10 20"	Solid	Percent Solids	Cool 4 deg C	PACI01	G12	12/10/2025	Chemtech -SO
Q3852-05	AI COVE 16 20"	Solid	Percent Solids	Cool 4 deg C	PACI01	G12	12/10/2025	Chemtech -SO
Q3852-06	TK 7&8 20"	Solid	Percent Solids	Cool 4 deg C	PACI01	G12	12/10/2025	Chemtech -SO
Q3853-01	TP01-MH11	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	12/12/2025	Chemtech -SO
Q3853-02	TP01-MH11-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	12/12/2025	Chemtech -SO
Q3853-03	TP01-MH11-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	12/12/2025	Chemtech -SO
Q3854-01	ETGI-360	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	12/12/2025	Chemtech -SO
Q3854-02	ETGI-360-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	12/12/2025	Chemtech -SO
Q3855-01	326	Solid	Percent Solids	Cool 4 deg C	PSEG03	H11	12/12/2025	Chemtech -SO

Date/Time 12-12-25 15:15  
 Raw Sample Received by: JG WOC  
 Raw Sample Relinquished by: RS LETA-Web

Date/Time 12-12-25 17:40  
 Raw Sample Received by: RS LETA-Web  
 Raw Sample Relinquished by: JG WOC



# WORKLIST(Hardcopy Internal Chain)

87 138211

WorkList Name : %1-121225      WorkList ID : 193614      Department : Wet-Chemistry      Date : 12-12-2025 08:06:12

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3858-01	1211	Solid	Percent Solids	Cool 4 deg C	PSEG03	H21	12/12/2025	Chemtech -SO
Q3859-01	HD-02-121225	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	12/12/2025	Chemtech -SO
Q3859-02	HD-02-121225-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	12/12/2025	Chemtech -SO
Q3860-01	MA-CONCRETE	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	12/12/2025	Chemtech -SO
Q3861-01	EO-03-121225	Solid	Percent Solids	Cool 4 deg C	PSEG05	H21	12/12/2025	Chemtech -SO
Q3861-02	EO-03-121225-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	H21	12/12/2025	Chemtech -SO
Q3862-01	TP02-MH09-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	12/11/2025	Chemtech -SO
Q3862-02	TP02-MH09-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	12/11/2025	Chemtech -SO
Q3862-03	TP02-MH09-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	12/11/2025	Chemtech -SO
Q3862-04	TP02-MH09-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	12/11/2025	Chemtech -SO

Date/Time 12-12-25 13115  
 Raw Sample Received by: SB WJC  
 Raw Sample Relinquished by: R3 (ETA-646)

Date/Time 12-12-25 17160  
 Raw Sample Received by: R3 (ETA-646)  
 Raw Sample Relinquished by: SB WJC



# SHIPPING DOCUMENTS

CLIENT INFORMATION

CLIENT PROJECT INFORMATION

CLIENT BILLING INFORMATION

REPORT TO BE SENT TO:  
COMPANY: Pacific Commercial Servs. Inc.  
ADDRESS: 91-254 Olai Street  
CITY: Kapolei STATE: HI ZIP: 96707  
ATTENTION: Wendi Zheng  
PHONE: 8087290889 FAX: 8088459773

PROJECT NAME: Red Hill pipeline Demo  
PROJECT NO.: 304608-01 LOCATION: Red Hill  
PROJECT MANAGER: Daniel Barragan  
e-mail: wendi.zheng@pashi.com  
PHONE: 8087290889 FAX: 8088459773

BILL TO: pashi@lightyear.cloud # 304608-01  
ADDRESS: 91-254 Olai Street  
CITY: Kapolei STATE: HI ZIP: 96707  
ATTENTION: Wendi Zheng PHONE: 8087290889

ANALYSIS

DATA TURNAROUND INFORMATION

DATA DELIVERABLE INFORMATION

FAX (RUSH) \_\_\_\_\_ DAYS\*  
HARDCOPY (DATA PACKAGE): 10 DAYS\*  
EDD: 10 DAYS\*

\*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

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

1. Ignitability 2. Corrosivity 3. TCLP RCRA DM 4. TCLP VOC 5. TCLP SVOC 6. TCLP Pesticides 7. TCLP Herbicide 8. 9.

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	TK 9 #10 12"	foam	X		12/10/15	8:00	4	X	X	X	X	X	X	X			
2.	Alcove 11 12"	foam	X			8:15	4	X	X	X	X	X	X	X			
3.	Alcove 15 #16 12"	foam	X			8:30	4	X	X	X	X	X	X	X			
4.	TK 9 #10 20"	foam	X			8:45	4	X	X	X	X	X	X	X			
5.	Alcove 16 20"	foam	X			9:00	4	X	X	X	X	X	X	X			
6.	TK 7 #8 20"	foam	X			9:15	4	X	X	X	X	X	X	X			
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. Wendi Zheng	DATE/TIME: 12/10/15 9:30	RECEIVED BY: 1. [Signature]	Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP 2.4°C
RELINQUISHED BY SAMPLER: 2. [Signature]	DATE/TIME: 12/12/25 10:34	RECEIVED BY: 2. [Signature]	Comments: IR-Gun #1
RELINQUISHED BY SAMPLER: 3. [Signature]	DATE/TIME:	RECEIVED BY: 3. [Signature]	Page ____ of CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO

### Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312