Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

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

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LAB CHRONICLE

OrderID:	Q1447	**OrderDate:**	2/26/2025 2:32:53 PM
Client:	G Environmental	**Project:**	Nelson
Contact:	Gary Landis	**Location:**	H31,H33,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1447-01	**WC1**	**SOIL**			**02/23/25 16:00**			**02/26/25**
			Paint Filter	9095B			02/27/25 09:15	
			pH	9045D			02/27/25 08:45	
Q1447-02	**WC1**	**SOIL**			**02/23/25 16:00**			**02/26/25**
			Ignitability	1030			02/28/25 10:17	
			Reactive Cyanide	9012B		02/26/25	02/27/25 10:07	
			Reactive Sulfide	9034		02/28/25	02/28/25 11:23	

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SAMPLE DATA

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Report of Analysis

Client:	G Environmental	Date Collected:	02/23/25 16:00
Project:	Nelson	Date Received:	02/26/25
Client Sample ID:	WC1	SDG No.:	Q1447
Lab Sample ID:	Q1447-01	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Paint Filter	1.00	U	1	1.00	1.00	ml/100gm		02/27/25 09:15	9095B
pH	6.86	H	1	0	0	pH		02/27/25 08:45	9045D

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

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Report of Analysis

Client:	G Environmental	Date Collected:	02/23/25 16:00
Project:	Nelson	Date Received:	02/26/25
Client Sample ID:	WC1	SDG No.:	Q1447
Lab Sample ID:	Q1447-02	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ignitability	NO		1	0	0	oC		02/28/25 10:17	1030
Reactive Cyanide	0.042	U	1	0.042	0.24	mg/Kg	02/26/25 16:00	02/27/25 10:07	9012B
Reactive Sulfide	3.16	J	1	0.19	10.0	mg/Kg	02/28/25 08:40	02/28/25 11:23	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

QC RESULT SUMMARY

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Initial and Continuing Calibration Verification

Client: G Environmental **SDG No.:** Q1447

Project: Nelson **RunNo.:** LB134827

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV						
pH		pH	7.00	7	100	90-110	02/27/2025
Sample ID:	CCV1						
pH		pH	2.01	2.00	101	90-110	02/27/2025
Sample ID:	CCV2						
pH		pH	12.02	12.00	100	90-110	02/27/2025

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Initial and Continuing Calibration Verification

Client: G Environmental **SDG No.:** Q1447

Project: Nelson **RunNo.:** LB134831

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Reactive Cyanide	mg/L	0.096	0.099	97	85-115	02/27/2025
Sample ID: CCV1						
Reactive Cyanide	mg/L	0.24	0.25	96	90-110	02/27/2025
Sample ID: CCV2						
Reactive Cyanide	mg/L	0.24	0.25	96	90-110	02/27/2025
Sample ID: CCV3						
Reactive Cyanide	mg/L	0.24	0.25	96	90-110	02/27/2025

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Initial and Continuing Calibration Blank Summary

Client: G Environmental **SDG No.:** Q1447

Project: Nelson **RunNo.:** LB134831

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	02/27/2025
Sample ID: CCB1							
Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	02/27/2025
Sample ID: CCB2							
Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	02/27/2025
Sample ID: CCB3							
Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	02/27/2025

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Preparation Blank Summary

Client: G Environmental **SDG No.:** Q1447

Project: Nelson

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: PB166865BL							
Reactive Sulfide	mg/Kg	< 5.0000	5.0000	U	0.186	10	02/28/2025
Sample ID: PB166899BL							
Reactive Cyanide	mg/Kg	< 0.1250	0.1250	U	0.044	0.25	02/27/2025

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Duplicate Sample Summary

Client: G Environmental
Project: Nelson
Client ID: TP-1-WCDUP

SDG No.: Q1447
Sample ID: Q1420-04
Percent Solids for Spike Sample: 100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Reactive Cyanide	mg/Kg	+/-20	0.042	U	0.043	U	1	0		02/27/2025
Reactive Sulfide	mg/Kg	+/-20	1.58	J	1.58	J	1	0		02/28/2025

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Duplicate Sample Summary

Client: G Environmental
Project: Nelson
Client ID: VNJ-227DUP

SDG No.: Q1447
Sample ID: Q1427-01
Percent Solids for Spike Sample: 85.6

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Paint Filter	ml/100gm	+/-20	1.00	U	1.00	U	1	0		02/27/2025

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Duplicate Sample Summary

Client: G Environmental
Project: Nelson
Client ID: WC1DUP

SDG No.: Q1447
Sample ID: Q1447-01
Percent Solids for Spike Sample: 100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
pH	pH	+/-20	6.86		6.87		1	0.15		02/27/2025

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Duplicate Sample Summary

Client: G Environmental
Project: Nelson
Client ID: WC1DUP

SDG No.: Q1447
Sample ID: Q1447-02
Percent Solids for Spike Sample: 100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ignitability	oC	+/-20	NO		NO		1	0		02/28/2025

RAW DATA

Reviewed By:Iwona
On:2/27/2025 10:23:33 AM
Inst Id :Filter/Gravimetric

Analytical Summary Report

Analysis Method: 9095B
Reviewed By: rubina
Parameter: Paint Filter
Supervisor Review By: Iwona
Run Number: LB134812
BalanceID: WC SC-7

Seq	LabID	ClientID	Dilution	Weight(g)	Inst.Conc (ml/100g)	Anal Date	Anal Time
1	Q1427-01	VNJ-227	1	100.06	0.00	02/27/2025	09:30
2	Q1427-01DUP	VNJ-227DUP	1	100.06	0.00	02/27/2025	09:38
3	Q1428-01	NB-07-022525	1	100.02	0.00	02/27/2025	09:45
4	Q1440-01	OR-02-022625	1	100.07	0.00	02/27/2025	09:52
5	Q1441-01	HD-02-022625	1	100.07	0.00	02/27/2025	10:00
6	Q1442-03	351	1	100.03	0.00	02/27/2025	10:07
7	Q1447-01	WC1	1	100.05	0.00	02/27/2025	10:15

WORKLIST(Hardcopy Internal Chain)

L6134812

WorkList Name : pf-2-26 **WorkList ID :** 187884 **Department :** Wet-Chemistry **Date :** 02-26-2025 08:23:33

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1447-01	WC1	Solid	Paint Filter	Cool 4 deg C	GENV01	H33	02/23/2025	9095B
Q1427-01 F	VNJ-227	Solid	Paint Filter	Cool 4 deg C	PSEG03	H21	02/25/2025	9095B
Q1442-03 C	351	Solid	Paint Filter	Cool 4 deg C	PSEG03	N31	02/26/2025	9095B
Q1428-01 F	NB-07-022525	Solid	Paint Filter	Cool 4 deg C	PSEG05	H21	02/25/2025	9095B
Q1440-01 E	OR-02-022625	Solid	Paint Filter	Cool 4 deg C	PSEG05	H41	02/26/2025	9095B
Q1441-01 E	HD-02-022625	Solid	Paint Filter	Cool 4 deg C	PSEG05	H31	02/26/2025	9095B

Date/Time 02/27/2025 08.20
Raw Sample Received by: RM (WC)
Raw Sample Relinquished by: MP (COC)

Date/Time 02/27/2025 09.30
Raw Sample Received by: MP (COC)
Raw Sample Relinquished by: RM (WC)

Reviewed By:Iwona
On:2/27/2025 1:15:23 PM
Inst Id :WC PH METER-1

Analytical Summary Report

Analysis Method: 9045D
Analyst By : jignesh
Parameter: pH
Supervisor Review By : Iwona
Run Number: LB134827
Slope : 98.5
BalanceID: WC SC-7
pH Meter ID : WC PH METER-1

Calibration Standards	Chemtech Log#
PH 4 BUFFER SOLUTION	W3107
BUFFER PH 7.00 GREEN 1PINT PK6	W3093
PH 10.01 BUFFER,COLOR CD 475ML	W3094
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	02/27/2025	08:25
2	CAL2	1	Water	NA	NA	20.2	7.00	02/27/2025	08:26
3	CAL3	1	Water	NA	NA	20.2	10.02	02/27/2025	08:30
4	ICV	1	Water	NA	NA	20.2	7.00	02/27/2025	08:33
5	CCV1	1	Water	NA	NA	20.3	2.01	02/27/2025	08:37
6	Q1447-01	1	Solid	20.02	20	23.4	6.86	02/27/2025	08:45
7	Q1447-01DUP	1	Solid	20.03	20	23.5	6.87	02/27/2025	08:46
8	CCV2	1	Water	NA	NA	20.2	12.02	02/27/2025	08:50

WORKLIST(Hardcopy Internal Chain)

LB 134827

WorkList Name : ph s q1447 **WorkList ID :** 187913 **Department :** Wet-Chemistry **Date :** 02-27-2025 08:12:49

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1447-01	WC1	Solid	pH	Cool 4 deg C	GENV01	H33	02/23/2025	9045D

Date/Time 02/27/25 08:15

Raw Sample Received by: JR WC1

Raw Sample Relinquished by: CP SM

Date/Time 02/27/25 12:30

Raw Sample Received by: CP SM

Raw Sample Relinquished by: JR WC1

LB13

Test results | Aquakem 7.2AQ1 | Page: 1

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2/27/2025 10:15 | Reviewed by : NF | Instrument ID : Konelab

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	96.122	0.0	0.074	
ICB1	0.228	0.0	0.002	
CCV1	243.235	0.0	0.184	
CCB1	0.328	0.0	0.002	
PB166899BL	-0.053	0.0	0.002	
Q1420-04	-0.009	0.0	0.002	
Q1420-04DUP	-0.233	0.0	0.002	
Q1420-08	-0.112	0.0	0.002	
Q1427-02	-0.347	0.0	0.002	
Q1442-01	-0.336	0.0	0.002	
Q1442-02	-0.350	0.0	0.002	
Q1443-01	-0.075	0.0	0.002	
Q1447-02	-0.089	0.0	0.002	
PB166900BL	0.155	0.0	0.002	
CCV2	243.975	0.0	0.185	
CCB2	-0.209	0.0	0.002	
Q1435-01	-0.295	0.0	0.002	
Q1435-01DUP	0.351	0.0	0.002	
CCV3	244.132	0.0	0.185	
CCB3	0.230	0.0	0.002	

N	20
Mean	41.332
SD	89.8422
CV%	217.36

Aquakem v. 7.2AQ1
Results from time period:
Thu Feb 27 09:24:44 2025
Thu Feb 27 10:13:02 2025

Sample Id	Sam/Ctr/cA	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	-0.3624	µg/l	2/27/2025 9:24:44	
5.0PPBCN	A	Total CN	P	4.4439	µg/l	2/27/2025 9:24:45	
10PPBCN	A	Total CN	P	9.5345	µg/l	2/27/2025 9:24:46	
50PPBCN	A	Total CN	P	48.6003	µg/l	2/27/2025 9:24:47	
100PPBCN	A	Total CN	P	99.3908	µg/l	2/27/2025 9:24:48	
250PPBCN	A	Total CN	P	256.2326	µg/l	2/27/2025 9:24:49	
500PPBCN	A	Total CN	P	497.1604	µg/l	2/27/2025 9:24:50	
ICV1	S	Total CN	P	96.1224	µg/l	2/27/2025 9:59:41	
ICB1	S	Total CN	P	0.2283	µg/l	2/27/2025 9:59:43	
CCV1	S	Total CN	P	243.2347	µg/l	2/27/2025 9:59:44	
CCB1	S	Total CN	P	0.3276	µg/l	2/27/2025 9:59:46	
PB166899BL	S	Total CN	P	-0.0529	µg/l	2/27/2025 9:59:48	
Q1420-04	S	Total CN	P	-0.0093	µg/l	2/27/2025 9:59:50	
Q1420-04DUP	S	Total CN	P	-0.2326	µg/l	2/27/2025 10:07:13	
Q1420-08	S	Total CN	P	-0.1125	µg/l	2/27/2025 10:07:14	
Q1427-02	S	Total CN	P	-0.3472	µg/l	2/27/2025 10:07:15	
Q1442-01	S	Total CN	P	-0.3358	µg/l	2/27/2025 10:07:16	
Q1442-02	S	Total CN	P	-0.35	µg/l	2/27/2025 10:07:17	
Q1443-01	S	Total CN	P	-0.0752	µg/l	2/27/2025 10:07:18	
Q1447-02	S	Total CN	P	-0.0891	µg/l	2/27/2025 10:07:19	
PB166900BL	S	Total CN	P	0.1553	µg/l	2/27/2025 10:07:22	
CCV2	S	Total CN	P	243.9754	µg/l	2/27/2025 10:07:23	
CCB2	S	Total CN	P	-0.2086	µg/l	2/27/2025 10:12:56	
Q1435-01	S	Total CN	P	-0.2947	µg/l	2/27/2025 10:12:57	
Q1435-01DUP	S	Total CN	P	0.3506	µg/l	2/27/2025 10:12:58	
CCV3	S	Total CN	P	244.1325	µg/l	2/27/2025 10:13:01	
CCB3	S	Total CN	P	0.2298	µg/l	2/27/2025 10:13:02	

Calibration results Aquakem 7.2AQ1

CHEMTECH CONSULTING GROUP INC
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Reviewed by : NF Instrument ID : Konelab

2/27/2025 9:27

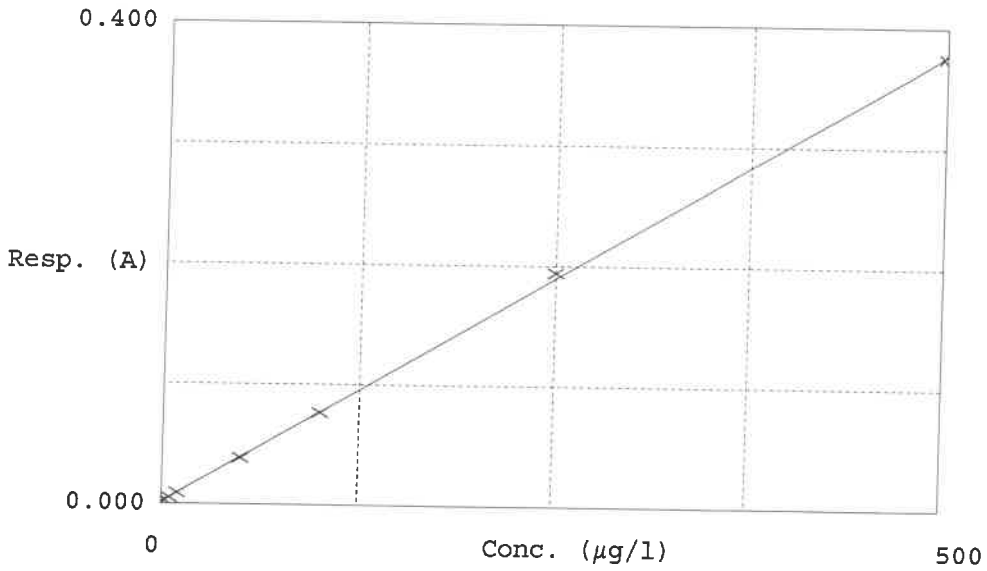
Test Total CN

Accepted 2/27/2025 9:27

Factor 1333
Bias 0.002

Coeff. of det. 0.999757

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors (Rc)
1	0.0PPBCN	0.002	-0.3624	0.0000	
2	5.0PPBCN	0.005	4.4439	5.0000	-11.1
3	10PPBCN	0.009	9.5345	10.0000	-4.7
4	50PPBCN	0.038	48.6003	50.0000	-2.8
5	100PPBCN	0.076	99.3908	100.0000	-0.6
6	250PPBCN	0.194	256.2326	250.0000	2.5
7	500PPBCN	0.375	497.1604	500.0000	-0.6

NF
02.27.2025

Reviewed By:Iwona
On:2/28/2025 1:12:13 PM
Inst Id :FLAME
LB :LB134841

Analytical Summary Report

Analysis Method: 1030 **Reviewed By:** rubina

Parameter: Ignitability **Supervisor Review By:** Iwona

Run Number: LB134841

Seq	LabID	ClientID	DF	matrix	Result Status	Burning Rate	Anal Date	Anal Time
1	Q1427-01	VNJ-227	1	Solid	NO	0.00	02/28/2025	09:40
2	Q1427-02	VNJ-227	1	Solid	NO	0.00	02/28/2025	09:48
3	Q1442-01	280	1	Solid	NO	0.00	02/28/2025	09:55
4	Q1442-02	281	1	Solid	NO	0.00	02/28/2025	10:02
5	Q1443-01	3733	1	Solid	NO	0.00	02/28/2025	10:10
6	Q1447-02	WC1	1	Solid	NO	0.00	02/28/2025	10:17
7	Q1447-02DUP	WC1DUP	1	Solid	NO	0.00	02/28/2025	10:25

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

WORKLIST(Hardcopy Internal Chain)

LB134841

WorkList Name : ign-02-27 **WorkList ID :** 187918 **Department :** Wet-Chemistry **Date :** 02-27-2025 08:21:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1447-02 F	WC1	Solid	Ignitability	Cool 4 deg C	GENV01	H33	02/23/2025	1030
Q1427-01 CR	VNJ-227	Solid	Ignitability	Cool 4 deg C	PSEG03	H21	02/25/2025	1030
Q1427-02 F	VNJ-227	Solid	Ignitability	Cool 4 deg C	PSEG03	H21	02/25/2025	1030
Q1442-01 C	280	Solid	Ignitability	Cool 4 deg C	PSEG03	N31	02/26/2025	1030
Q1442-02 B	281	Solid	Ignitability	Cool 4 deg C	PSEG03	N31	02/26/2025	1030
Q1443-01 B	3733	Solid	Ignitability	Cool 4 deg C	PSEG03	H31	02/26/2025	1030

Date/Time 02/28/2025 08.10
Raw Sample Received by: RM (WC)
Raw Sample Relinquished by:

Date/Time 02/28/2025 10.45
Raw Sample Received by:
Raw Sample Relinquished by: RM (WC)

CHEMTECH

Analytical Summary Report

Analysis Method: 9034
Parameter: Reactive Sulfide
Run Number: LB134847

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
1	PB166865BL		1	5.00	50	2.00	0.00	1.94	1.94	0.06	0.00	0.00	02/28/2025	11:03
2	Q1420-04		1	5.05	50	2.00	0.00	1.92	1.92	0.08	0.02	1.58	02/28/2025	11:06
3	Q1420-04DUP		1	5.05	50	2.00	0.00	1.92	1.92	0.08	0.02	1.58	02/28/2025	11:08
4	Q1420-08		1	5.03	50	2.00	0.00	1.86	1.86	0.14	0.08	6.36	02/28/2025	11:10
5	Q1427-02		1	5.07	50	2.00	0.00	1.90	1.90	0.10	0.04	3.16	02/28/2025	11:13
6	Q1442-01		1	5.04	50	2.00	0.00	1.88	1.88	0.12	0.06	4.76	02/28/2025	11:15
7	Q1442-02		1	5.01	50	2.00	0.00	1.92	1.92	0.08	0.02	1.60	02/28/2025	11:18
8	Q1443-01		1	5.07	50	2.00	0.00	1.86	1.86	0.14	0.08	6.31	02/28/2025	11:20
9	Q1447-02		1	5.06	50	2.00	0.00	1.90	1.90	0.10	0.04	3.16	02/28/2025	11:23
10	Q1453-01		1	5.07	50	2.00	0.00	1.88	1.88	0.12	0.06	4.73	02/28/2025	11:26
11	Q1454-03		1	5.08	50	2.00	0.00	1.90	1.90	0.10	0.04	3.15	02/28/2025	11:28
12	Q1458-03		1	5.02	50	2.00	0.00	1.90	1.90	0.10	0.04	3.19	02/28/2025	11:31

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

CHEMTECH

Analytical Summary Report

Analysis Method: 9034
Parameter: Reactive Sulfide
Run Number: LB134847

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	Q1464-01		1	5.04	50	2.00	0.00	1.88	1.88	0.12	0.06	4.76	02/28/2025	11:34
14	Q1464-02		1	5.08	50	2.00	0.00	1.90	1.90	0.10	0.04	3.15	02/28/2025	11:37
15	Q1465-01		1	5.04	50	2.00	0.00	1.86	1.86	0.14	0.08	6.35	02/28/2025	11:40

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

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Sulfide Preparation Sheet

PB166865

SOP ID : M9030B-Sulfide-12

SDG No : N/A

Matrix : SOIL

Pippete ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#1

Block ID : MC-1,MC-2

Weigh By : RM

Start Digest Date: 02/28/2025 **Time :** 08:40 **Temp :** N/A

End Digest Date: 02/28/2025 **Time :** 10:10 **Temp :** N/A

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : N/A

Prep Technician Signature: RM

Supervisor Signature: 12

Standared 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:

02/28/2025 RM

N/A

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

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Sulfide Preparation Sheet

PB166865

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB166865BL	PBS865	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1420-04DUP	TP-1-WCDUP	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1420-04	TP-1-WC	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1420-08	TP-2-WC	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1427-02	VNJ-227	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1442-01	280	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1442-02	281	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1443-01	3733	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1447-02	WC1	5.06	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1453-01	MOO-25-0061	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1454-03	LAW-25-0043	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1458-03	SP-SOIL	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1464-01	COMP-1	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1464-02	COMP-2	5.08	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1465-01	ST-OILY-DEBRIS	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Cyanide Preparation Sheet

PB166899

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

SDG No : N/A

Matrix : SOIL

Pippete ID : N/A

Balance ID : WC SC-7

Hood ID : HOOD#1

Block ID : MC-1, MC-2

Weigh By : NF

Start Digest Date: 02/26/2025 **Time :** 16:00 **Temp :** N/A

End Digest Date: 02/26/2025 **Time :** 17:30 **Temp :** N/A

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : N/A

Prep Technician Signature: NF

Supervisor Signature: 12

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

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

LAB SAMPLE ID	CLIENT SAMPLE ID		Comment

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
02.26.2025 17:40	NF (WC)	NF(WC)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Cyanide Preparation Sheet

PB166899

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB166899BL	PBS899	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1420-04DUP	TP-1-WCDUP	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1420-04	TP-1-WC	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1420-08	TP-2-WC	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1427-02	VNJ-227	1.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1442-01	280	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1442-02	281	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1443-01	3733	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1447-02	WC1	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A

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Instrument ID: FILTER/GRAVIMETRIC

Daily Analysis Runlog For Sequence/QCBatch ID # LB134812

Review By	rubina	Review On	2/27/2025 10:54:31 AM
Supervise By	Iwona	Supervise On	2/27/2025 10:23:33 AM
SubDirectory	LB134812	Test	Paint Filter

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	N/A

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	Q1427-01	VNJ-227	SAM	02/27/25 09:30		rubina	OK
2	Q1427-01DUP	VNJ-227DUP	DUP	02/27/25 09:38		rubina	OK
3	Q1428-01	NB-07-022525	SAM	02/27/25 09:45		rubina	OK
4	Q1440-01	OR-02-022625	SAM	02/27/25 09:52		rubina	OK
5	Q1441-01	HD-02-022625	SAM	02/27/25 10:00		rubina	OK
6	Q1442-03	351	SAM	02/27/25 10:07		rubina	OK
7	Q1447-01	WC1	SAM	02/27/25 10:15		rubina	OK

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Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB134827

Review By	jignesh	Review On	2/27/2025 10:05:34 AM
Supervise By	Iwona	Supervise On	2/27/2025 1:15:23 PM
SubDirectory	LB134827	Test	pH

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	W3107,W3093,W3094,W3071,W3161,W3072

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	02/27/25 08:25		Jignesh	OK
2	CAL2	CAL2	CAL	02/27/25 08:26		Jignesh	OK
3	CAL3	CAL3	CAL	02/27/25 08:30		Jignesh	OK
4	ICV	ICV	ICV	02/27/25 08:33		Jignesh	OK
5	CCV1	CCV1	CCV	02/27/25 08:37		Jignesh	OK
6	Q1447-01	WC1	SAM	02/27/25 08:45		Jignesh	OK
7	Q1447-01DUP	WC1DUP	DUP	02/27/25 08:46		Jignesh	OK
8	CCV2	CCV2	CCV	02/27/25 08:50		Jignesh	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB134831

Review By	Niha	Review On	2/28/2025 8:56:12 AM
Supervise By	Iwona	Supervise On	2/28/2025 9:57:02 AM
SubDirectory	LB134831	Test	Reactive Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP112081,WP112082,WP112083,WP112084,WP112085,WP112086,WP112087
ICV Standard	WP112089
CCV Standard	WP112082
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP111035,WP110103,WP112088

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	02/27/25 09:24		Niha	OK
2	5.0PPBCN	5.0PPBCN	CAL2	02/27/25 09:24		Niha	OK
3	10PPBCN	10PPBCN	CAL3	02/27/25 09:24		Niha	OK
4	50PPBCN	50PPBCN	CAL4	02/27/25 09:24		Niha	OK
5	100PPBCN	100PPBCN	CAL5	02/27/25 09:24		Niha	OK
6	250PPBCN	250PPBCN	CAL6	02/27/25 09:24		Niha	OK
7	500PPBCN	500PPBCN	CAL7	02/27/25 09:24		Niha	OK
8	ICV1	ICV1	ICV	02/27/25 09:59		Niha	OK
9	ICB1	ICB1	ICB	02/27/25 09:59		Niha	OK
10	CCV1	CCV1	CCV	02/27/25 09:59		Niha	OK
11	CCB1	CCB1	CCB	02/27/25 09:59		Niha	OK
12	PB166899BL	PB166899BL	MB	02/27/25 09:59		Niha	OK
13	Q1420-04	TP-1-WC	SAM	02/27/25 09:59		Niha	OK
14	Q1420-04DUP	TP-1-WCDUP	DUP	02/27/25 10:07		Niha	OK
15	Q1420-08	TP-2-WC	SAM	02/27/25 10:07		Niha	OK
16	Q1427-02	VNJ-227	SAM	02/27/25 10:07		Niha	OK
17	Q1442-01	280	SAM	02/27/25 10:07		Niha	OK
18	Q1442-02	281	SAM	02/27/25 10:07		Niha	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB134831

Review By	Niha	Review On	2/28/2025 8:56:12 AM
Supervise By	Iwona	Supervise On	2/28/2025 9:57:02 AM
SubDirectory	LB134831	Test	Reactive Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP112081,WP112082,WP112083,WP112084,WP112085,WP112086,WP112087
ICV Standard	WP112089
CCV Standard	WP112082
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP111035,WP110103,WP112088

19	Q1443-01	3733	SAM	02/27/25 10:07		Niha	OK
20	Q1447-02	WC1	SAM	02/27/25 10:07		Niha	OK
21	PB166900BL	PB166900BL	MB	02/27/25 10:07		Niha	OK
22	CCV2	CCV2	CCV	02/27/25 10:07		Niha	OK
23	CCB2	CCB2	CCB	02/27/25 10:12		Niha	OK
24	Q1435-01	286107	SAM	02/27/25 10:12		Niha	OK
25	Q1435-01DUP	286107DUP	DUP	02/27/25 10:12		Niha	OK
26	CCV3	CCV3	CCV	02/27/25 10:13		Niha	OK
27	CCB3	CCB3	CCB	02/27/25 10:13		Niha	OK

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Instrument ID: FLAME

Daily Analysis Runlog For Sequence/QCBatch ID # LB134841

Review By	rubina	Review On	2/28/2025 1:12:05 PM
Supervise By	Iwona	Supervise On	2/28/2025 1:12:13 PM
SubDirectory	LB134841	Test	Ignitability

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	N/A

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	Q1427-01	VNJ-227	SAM	02/28/25 09:40		rubina	OK
2	Q1427-02	VNJ-227	SAM	02/28/25 09:48		rubina	OK
3	Q1442-01	280	SAM	02/28/25 09:55		rubina	OK
4	Q1442-02	281	SAM	02/28/25 10:02		rubina	OK
5	Q1443-01	3733	SAM	02/28/25 10:10		rubina	OK
6	Q1447-02	WC1	SAM	02/28/25 10:17		rubina	OK
7	Q1447-02DUP	WC1DUP	DUP	02/28/25 10:25		rubina	OK

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Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QCBatch ID # LB134847

Review By	rubina	Review On	2/28/2025 1:13:01 PM
Supervise By	Iwona	Supervise On	2/28/2025 1:13:09 PM
SubDirectory	LB134847	Test	Reactive Sulfide

STD. NAME	STD REF.#
ICAL Standard	N/A
ICV Standard	N/A
CCV Standard	N/A
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	W3105,W3114,W3149

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	PB166865BL	PB166865BL	MB	02/28/25 11:03		rubina	OK
2	Q1420-04	TP-1-WC	SAM	02/28/25 11:06		rubina	OK
3	Q1420-04DUP	TP-1-WCDUP	DUP	02/28/25 11:08		rubina	OK
4	Q1420-08	TP-2-WC	SAM	02/28/25 11:10		rubina	OK
5	Q1427-02	VNJ-227	SAM	02/28/25 11:13		rubina	OK
6	Q1442-01	280	SAM	02/28/25 11:15		rubina	OK
7	Q1442-02	281	SAM	02/28/25 11:18		rubina	OK
8	Q1443-01	3733	SAM	02/28/25 11:20		rubina	OK
9	Q1447-02	WC1	SAM	02/28/25 11:23		rubina	OK
10	Q1453-01	MOO-25-0061	SAM	02/28/25 11:26		rubina	OK
11	Q1454-03	LAW-25-0043	SAM	02/28/25 11:28		rubina	OK
12	Q1458-03	SP-SOIL	SAM	02/28/25 11:31		rubina	OK
13	Q1464-01	COMP-1	SAM	02/28/25 11:34		rubina	OK
14	Q1464-02	COMP-2	SAM	02/28/25 11:37		rubina	OK
15	Q1465-01	ST-OILY-DEBRIS	SAM	02/28/25 11:40		rubina	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q1447

Test : Ignitability,Paint Filter,Percent Solids,pH,Reactive Cyanide,Reactive Sulfide

Prepbatch ID : PB166865,PB166899,

Sequence ID/Qc Batch ID: LB134812,LB134827,LB134831,LB134841,LB134847,

Standard ID :
WP110103,WP111004,WP111035,WP111294,WP111296,WP112080,WP112081,WP112082,WP112083,WP112084,WP112085,WP112086,WP112087,WP112088,WP112089,

Chemical ID :
M6121,W2668,W2725,W2882,W2926,W3019,W3071,W3072,W3093,W3094,W3105,W3107,W3112,W3113,W3114,W3138,W3139,W3149,W3154,W3161,

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
539	CN BUFFER	WP110103	10/08/2024	04/08/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 10/08/2024

FROM 138.00000gram of W2668 + 862.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
160	0.5M ZINC ACETATE	WP111004	12/09/2024	05/13/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCSC-7)	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 12/09/2024

FROM 0.88900L of W3112 + 1.00000ml of M6121 + 110.00000gram of W2926 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
607	PYRIDINE-BARBITURIC ACID	WP111035	12/09/2024	04/30/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	Glass Pipette-A	Iwona Zarych 12/10/2024

FROM 145.00000ml of W3112 + 15.00000gram of W2882 + 15.00000ml of M6121 + 75.00000ml of W3019 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
11	Sodium hydroxide absorbing solution 0.25 N	WP111294	01/07/2025	07/07/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 01/07/2025

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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3371	Cyanide LCS Spike Solution, 5PPM	WP111296	01/07/2025	07/07/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 01/07/2025

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3456	Cyanide Intermediate Working Std, 5PPM	WP112080	02/27/2025	02/28/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 02/28/2025

FROM 0.25000ml of W3154 + 49.75000ml of WP111294 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4	Calibation standard 500 ppb	WP112081	02/27/2025	02/28/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 02/28/2025

FROM 45.00000ml of WP111294 + 5.00000ml of WP112080 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3761	Calibration-CCV CN Standard 250 ppb	WP112082	02/27/2025	02/28/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 02/28/2025

FROM 2.50000ml of WP112080 + 47.50000ml of WP111294 = Final Quantity: 50.000 ml

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Fax : 908 789 8922

Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
6	Calibration Standard 100 ppb	WP112083	02/27/2025	02/28/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 02/28/2025

FROM 1.00000ml of WP112080 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
7	Calibration Standard 50 ppb	WP112084	02/27/2025	02/28/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 02/28/2025

FROM 0.50000ml of WP112080 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
8	Calibration Standard 10 ppb	WP112085	02/27/2025	02/28/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 02/28/2025

FROM 1.00000ml of WP112081 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
9	Calibration Standard 5 ppb	WP112086	02/27/2025	02/28/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 02/28/2025

FROM 0.50000ml of WP112081 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
167	0 ppb CN calibration std	WP112087	02/27/2025	02/28/2025	Niha Farheen Shaik	None	None	Iwona Zarych 02/28/2025

FROM 50.00000ml of WP111294 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1582	Chloramine T solution, 0.014M	WP112088	02/27/2025	02/28/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 02/28/2025

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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2168	RCN ICV STD, 100 PPB	WP112089	02/27/2025	02/28/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 02/28/2025

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

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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, CRYS, 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 / Iwona	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,CRYS,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 / Iwona	04/03/2023 / Iwona	W3019

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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.	1601-1 / PH 10.01 BUFFER,COLOR CD 475ML	4310g83	03/31/2025	04/03/2024 / jignesh	04/02/2024 / jignesh	W3094

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

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	AL14055-3	02/27/2026	09/05/2024 / jignesh	05/13/2024 / jignesh	W3107

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CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL35830-4 / IODINE SOLUTION .025N 1L	2405D89	05/31/2025	07/10/2024 / Iwona	07/10/2024 / Iwona	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 / Iwona	08/28/2024 / Iwona	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 / Iwona	09/09/2024 / Iwona	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 / Iwona	10/16/2024 / Iwona	W3149

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	RC2543-4 / CYANIDE STD 1000PPM 4OZ	1411J58	05/31/2025	12/02/2024 / Iwona	12/02/2024 / Iwona	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 / Iwona	12/09/2024 / Iwona	W3161

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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

Sigma-Aldrich.

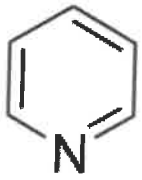
W3019
Rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Pyridine - anhydrous, 99.8%

Product Number:	**270970**
Batch Number:	**SHBQ2113**
Brand:	SIAL
CAS Number:	110-86-1
MDL Number:	MFCD00011732
Formula:	C5H5N
Formula Weight:	79.10 g/mol
Quality Release Date:	15 DEC 2022



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

Larry Coers, Director
Quality Control
Sheboygan Falls, WI US

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W3072
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

W2723, W2724, W2725, W2726 Received on 6/22/20 by AP

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 (SO4)		0.002	<0.0020	%
Titrable acid		0.006	<0.0060	meq/g

Heather Sinn,
_____
Quality Control Manager
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EMD Millipore Corporation, an affiliate of Merck KGaA, Darmstadt, Germany
290 Concord Road
Billerica, MA 01821
U.S.A

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

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6121

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

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.190
ACS - Bromide (Br)	<= 0.005 %	< 0.005
ACS - Extractable Organic Substances	<= 5 ppm	1
ACS - Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities - Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities - Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities - Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities - Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities - Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 1.0 ppb	< 0.2

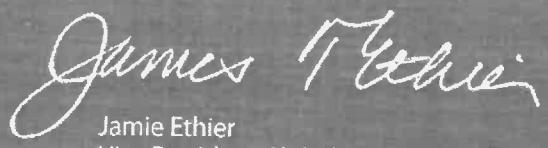
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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

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

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

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



Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
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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

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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 ($NaH_2PO_4 \cdot H_2O$)	98.0 - 102.0 %	99.5
pH of 5% Solution at 25°C	4.1 - 4.5	4.3
Insoluble Matter	<= 0.01 %	< 0.01
Chloride (Cl)	<= 5 ppm	< 5
ACS - Sulfate (SO_4)	<= 0.003 %	< 0.003
Calcium (Ca)	<= 0.005 %	<0.005
Potassium (K)	<= 0.01 %	< 0.01
Heavy Metals (as Pb)	<= 0.001 %	< 0.001
Trace Impurities - Iron (Fe)	<= 0.001 %	< 0.001

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

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

Jamie Ethier
Vice President Global Quality

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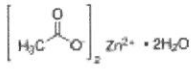
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

W2926
open 7/5/22
received
on
7/5/22

Certificate of Analysis

Product Name:
Zinc acetate dihydrate - ACS reagent, ≥98%



Product Number:	**383058**
Batch Number:	**MKCQ9159**
Brand:	SIGALD
CAS Number:	5970-45-6
MDL Number:	MFCD00066961
Formula:	C4H6O4Zn · 2H2O
Formula Weight:	219.51 g/mol
Quality Release Date:	06 JAN 2022

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystal or Chunk(s)	Powder
Infrared Spectrum	Conforms to Structure	Conforms
Insoluble Matter	≤ 0.005 %	0.003 %
Calcium (Ca)	≤ 0.005 %	0.003 %
Chloride (Cl)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 5 ppm	< 5 ppm
Potassium (K)	≤ 0.01 %	0.00 %
Magnesium (Mg)	≤ 0.005 %	0.003 %
Sodium (Na)	≤ 0.05 %	0.03 %
Lead (Pb)	≤ 0.002 %	< 0.001 %
pH	6.0 - 7.0	6.1
Sulfate (SO4)	≤ 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

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W3093 0941 04/03/2024 LG

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
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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W3094 78 opuc: 04/03/2025

Certificate of Analysis

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

Lot Number: 4310G83 **Product Number:** 1601

Manufacture Date: OCT 09, 2023
Expiration Date: MAR 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	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	*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	10.003	0.02	186-I-g, 186-II-g, 191d

Specification	Reference
Commercial Buffer Solutions	ASTM (D 1293 B)
Buffer C	ASTM (D 5464)
Buffer C	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)
1601-16	500 mL natural poly	18 months
1601-5	20 L Cubitainer®	18 months

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

Paul Brandon (10/09/2023)
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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W3105 Received on 4/22/24 by IZ

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-Cl 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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W3107
38

Certificate of Analysis

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

Lot Number: 4403F90 **Product Number:** 1501

Manufacture Date: MAR 09, 2024
Expiration Date: FEB 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)	4.000	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 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)
1501-2.5	10 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)

Paul Brandon (03/09/2024)
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

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:

Pellets

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

Storage: Room Temperature

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.

Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: **0583**

Grade: **ACS GRADE**

Batch Number: **23B1556310**

Chemical Formula:	NaOH	Manufacture Date:	12/14/2022
Molecular Weight:	40	Expiration Date:	12/31/2025
CAS #:	1310-73-2		
Appearance:		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.

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Certificate of Analysis

Iodine (Iodine-Iodide), 0.0250 Normal (N/40), 1 mL = 0.4008 mg S^{2-}

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

LabChem
Part of TCP Analytical Group
Jackson's Pointe Commerce Park- Building 1000
1010 Jackson's Pointe Court, Zelienople, PA 16063

Certificate of Analysis

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

Product Code: **LC13545**

Manufacture Date: August 01, 2024

Lot Number: **44080060**

Expiration Date: January 30, 2025

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

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

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

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

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

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

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

Michael Monteleone

Michael Monteleone
Chemistry Supervisor - Quality Control

ISO9001:2015 Registration #0306-01

2024080113:32:16bsturges-0-0

ThermoFisher SCIENTIFIC

Certificate of Analysis

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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W3149 Received on 10/16/24 by IZ

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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-Cl 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-Cl 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)

Paul Brandon (08/28/2024)
Production Manager

RICCA CHEMICAL COMPANY®
W3154 Rec. on 12/2/24 by IZ

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Certificate of Analysis

Cyanide Standard, 1000 ppm CN^-

Lot Number: 1411J58 **Product Number:** 2543

Manufacture Date: NOV 22, 2024
Expiration Date: MAY 2025

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certifiec traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.
Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225 % (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

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

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

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

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

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

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

Luis Briceno (11/22/2024)
Operations Supervisor

RICCA CHEMICAL COMPANY®

W3161 Rec. on 12/09/24 by IZ

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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

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 2/27/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 02/26/2025
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: 02/27/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134817

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
Q1440-01	OR-02-022625	5	1.15	8.81	9.96	9.06	89.8	
Q1440-02	OR-02-022625-E2	6	1.12	8.87	9.99	9.03	89.2	
Q1441-01	HD-02-022625	7	1.18	8.44	9.62	8.61	88.0	
Q1441-02	HD-02-022625-E2	8	1.15	8.82	9.97	8.76	86.3	
Q1442-01	280	1	1.00	1.00	2.00	2.00	100.0	debris
Q1442-02	281	2	1.15	8.50	9.65	9.00	92.4	
Q1442-03	351	3	1.15	8.81	9.96	8.86	87.5	
Q1442-04	351-E2	4	1.13	8.55	9.68	8.58	87.1	
Q1443-01	3733	9	1.15	0.85	2.00	2.00	100.0	debris
Q1444-01	HIH5032-1-1	10	1.00	1.00	2.00	2.00	100.0	pilc
Q1444-02	HIH5032-1-2	11	1.00	1.00	2.00	2.00	100.0	pilc
Q1445-01	FDH119M-1-1	12	1.00	1.00	2.00	2.00	100.0	pilc
Q1445-02	FDH119M-1-2	13	1.00	1.00	2.00	2.00	100.0	pilc
Q1445-03	FDH119M-2-1	14	1.00	1.00	2.00	2.00	100.0	pilc
Q1445-04	FDH119M-2-2	15	1.00	1.00	2.00	2.00	100.0	pilc
Q1445-05	BC274767-1-1	16	1.00	1.00	2.00	2.00	100.0	pilc
Q1445-06	BC274767-1-2	17	1.00	1.00	2.00	2.00	100.0	pilc
Q1445-07	029015-1-1	18	1.00	1.00	2.00	2.00	100.0	pilc
Q1445-08	029015-1-2	19	1.00	1.00	2.00	2.00	100.0	pilc
Q1447-01	WC1	20	1.16	8.60	9.76	9.11	92.4	
Q1448-01	PSP1	21	1.15	8.50	9.65	8.73	89.2	
Q1448-02	P1	22	1.17	8.42	9.59	8.69	89.3	
Q1448-03	P2	23	1.16	8.53	9.69	8.84	90.0	
Q1448-04	P3	24	1.15	8.79	9.94	8.78	86.8	
Q1448-05	P4	25	1.12	8.75	9.87	8.82	88.0	

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

WORKLIST(Hardcopy Internal Chain)

UB134817

WorkList Name : %1-022625 **WorkList ID :** 187879 **Department :** Wet-Chemistry **Date :** 02-26-2025 07:54:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1440-01	OR-02-022625	Solid	Percent Solids	Cool 4 deg C	PSEG05	H41	02/26/2025	Chemtech -SO
Q1440-02	OR-02-022625-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	H41	02/26/2025	Chemtech -SO
Q1441-01	HD-02-022625	Solid	Percent Solids	Cool 4 deg C	PSEG05	H31	02/26/2025	Chemtech -SO
Q1441-02	HD-02-022625-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	H31	02/26/2025	Chemtech -SO
Q1442-01	280	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1442-02	281	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1442-03	351	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	02/26/2025	Chemtech -SO
Q1442-04	351-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	N31	02/26/2025	Chemtech -SO
Q1443-01	3733	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1444-01	HIH5032-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1444-02	HIH5032-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1445-01	FDH119M-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1445-02	FDH119M-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1445-03	FDH119M-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1445-04	FDH119M-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1445-05	BC274767-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1445-06	BC274767-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1445-07	029015-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1445-08	029015-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1447-01	WC1	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/26/2025	Chemtech -SO
Q1448-01	PSP1	Solid	Percent Solids	Cool 4 deg C	GENV01	H33	02/23/2025	Chemtech -SO
					GENV01	H33	02/25/2025	Chemtech -SO

Date/Time 02126125 15:45

Raw Sample Received by: SB (WC)

Raw Sample Relinquished by: CB SM

Date/Time 02126125 17:30

Raw Sample Received by: CB SM

Raw Sample Relinquished by: SB (WC)

WORKLIST(Hardcopy Internal Chain)

VB 134817

WorkList Name : %1-022625 **WorkList ID :** 187879 **Department :** Wet-Chemistry **Date :** 02-26-2025 07:54:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1448-02	P1	Solid	Percent Solids	Cool 4 deg C	GENV01	H33	02/25/2025	Chemtech -SO
Q1448-03	P2	Solid	Percent Solids	Cool 4 deg C	GENV01	H33	02/25/2025	Chemtech -SO
Q1448-04	P3	Solid	Percent Solids	Cool 4 deg C	GENV01	H33	02/25/2025	Chemtech -SO
Q1448-05	P4	Solid	Percent Solids	Cool 4 deg C	GENV01	H33	02/25/2025	Chemtech -SO

Date/Time 02126125 15:45
Raw Sample Received by: JB (WC)
Raw Sample Relinquished by: CP SM

Date/Time 02126125 17:30
Raw Sample Received by: CP SM
Raw Sample Relinquished by: JB (WC)

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q1447
COC Number 2046139

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: G Environmental
ADDRESS: 8 Carriage
CITY Succasunna STATE: NJ ZIP: 07876
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Nelson
PROJECT NO.: LOCATION:
PROJECT MANAGER: GL
e-mail: gary@g-environmental.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: G Environmental PO#:
ADDRESS: 8 Carriage
CITY Succasunna STATE NJ ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) 5 DAYS*
HARDCOPY (DATA PACKAGE): 5-day DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

ANALYSIS

1. EPH
2. VOC/BN+15
3. PCBs
4. RCRA Cyanide/Sulfide
5. TAL Metals
6. TCLP Metals
7. paint filter
8. pH
9. Ignitability

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9	COMMENTS
1.	WC1	Soil	X		2/23/25	1600	2	X	X	X	X	X	X	X	X	X	
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

PRESERVATIVES — ← Specify Preservatives: A-HCl, B-HN03, C-H2SO4, D-NaOH, E-ICE, F-OTHER

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [signature]	2/26/25 1415	1. [signature]
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.1 °C

Comments: Waste Class [signature]

Page ____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT   YELLOW - ALLIANCE COPY   PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1447 GENV01
Client Name : G Environmental
Client Contact : Gary Landis
Invoice Name : G Environmental
Invoice Contact : Gary Landis

Order Date : 2/26/2025 2:32:53 PM
Project Name : Nelson
Receive DateTime : 2/26/2025 2:15:00 PM
Purchase Order :

Project Mgr :
Report Type : ~~Level I~~ NJ Reduce
EDD Type : Excel NJ
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1447-01	WC1	Solid	02/23/2025	16:00	VOC-TCLVOA-10		8260D		5 ~~10 Bus.~~ Days

Relinguished By :
Date / Time : 2-26-251505

Received By :
Date / Time : 02/26/25 15:05
Storage Area : VOA Refridgerator Room

Ng #6 F27