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

DATA PACKAGE

GENERAL CHEMISTRY

PROJECT NAME : FORT MEADE MD TIPTON AIRFIELD PARCEL RI - 0111169

WESTON SOLUTIONS

1400 Weston Way

PO Box 2653

West Chester, PA - 19380

Phone No: 610-701-7400

ORDER ID : Q1570

ATTENTION : Nathan Fretz

Laboratory Certification ID # 20012

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Cover Page

Order ID : Q1570

Project ID : Fort Meade MD Tipton Airfield Parcel RI - 0111169

Client : Weston Solutions

Lab Sample Number	Client Sample Number
Q1570-01	TAP-IDW-SOIL-031325-01
Q1570-02	TAP-IDW-SOIL-031325-02

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

Signature : _____

Date: 3/19/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Weston Solutions
Project Name: Fort Meade MD Tipton Airfield Parcel RI - 0111169
Project # N/A
Chemtech Project # Q1570
Test Name: Reactive Cyanide,Reactive Sulfide

A. Number of Samples and Date of Receipt:
2 Solid samples were received on 03/14/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Reactive Cyanide and Reactive Sulfide. This data package contains results for Reactive Cyanide,Reactive Sulfide.

C. Analytical Techniques:
The analysis of Reactive Cyanide was based on method 9012B and The analysis of Reactive Sulfide was based on method 9034.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.

E. Additional Comments:

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

Signature_____

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

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1570 MATRIX: Solid

METHOD: 9012B,9034

		NA	NO	YES
1.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
2.	Matrix Spike Duplicate Recoveries Met Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Blank Spike met requirements for all samples.			
3.	Sample Duplicate Analysis Met QC Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
4.	Digestion Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

_____ _____

QA REVIEW Date

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1570

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

QA Review Signature: SOHIL JODHANI **Date:** 03/19/2025

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

LAB CHRONICLE

OrderID:	Q1570	**OrderDate:**	3/14/2025 10:45:00 AM
Client:	Weston Solutions	**Project:**	Fort Meade MD Tipton Airfield Parcel RI - 0111169
Contact:	Nathan Fretz	**Location:**	I33

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1570-01	**TAP-IDW-SOIL-03132 5-01**	**SOIL**			**03/13/25 10:20**			**03/14/25**
			Reactive Cyanide	9012B		03/14/25	03/14/25 15:50	
			Reactive Sulfide	9034		03/17/25	03/18/25 11:53	
Q1570-02	**TAP-IDW-SOIL-03132 5-02**	**SOIL**			**03/13/25 10:50**			**03/14/25**
			Reactive Cyanide	9012B		03/14/25	03/14/25 15:50	
			Reactive Sulfide	9034		03/17/25	03/18/25 11:56	

SAMPLE DATA

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Report of Analysis

Client:	Weston Solutions	Date Collected:	03/13/25 10:20
Project:	Fort Meade MD Tipton Airfield Parcel RI - 0111169	Date Received:	03/14/25
Client Sample ID:	TAP-IDW-SOIL-031325-01	SDG No.:	Q1570
Lab Sample ID:	Q1570-01	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Reactive Cyanide	0.13	U	1	0.044	0.13	0.25	mg/Kg	03/14/25 13:50	03/14/25 15:50	9012B
Reactive Sulfide	4.73	J	1	0.20	5.00	10.0	mg/Kg	03/17/25 15:20	03/18/25 11:53	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

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Report of Analysis

Client:	Weston Solutions	Date Collected:	03/13/25 10:50
Project:	Fort Meade MD Tipton Airfield Parcel RI - 0111169	Date Received:	03/14/25
Client Sample ID:	TAP-IDW-SOIL-031325-02	SDG No.:	Q1570
Lab Sample ID:	Q1570-02	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Reactive Cyanide	0.12	U	1	0.043	0.12	0.25	mg/Kg	03/14/25 13:50	03/14/25 15:50	9012B
Reactive Sulfide	1.59	J	1	0.20	5.00	10.0	mg/Kg	03/17/25 15:20	03/18/25 11:56	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:	Weston Solutions	**SDG No.:**	Q1570
Project:	Fort Meade MD Tipton Airfield Parcel RI - 0111169	**RunNo.:**	LB135043

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: **ICV1**						
Reactive Cyanide	mg/L	0.092	0.099	93	85-115	03/14/2025
Sample ID: **CCV1**						
Reactive Cyanide	mg/L	0.24	0.25	96	90-110	03/14/2025
Sample ID: **CCV2**						
Reactive Cyanide	mg/L	0.24	0.25	96	90-110	03/14/2025
Sample ID: **CCV3**						
Reactive Cyanide	mg/L	0.25	0.25	100	90-110	03/14/2025

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Initial and Continuing Calibration Blank Summary

Client:	Weston Solutions	**SDG No.:**	Q1570
Project:	Fort Meade MD Tipton Airfield Parcel RI - 0111169	**RunNo.:**	LB135043

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	03/14/2025
Sample ID: CCB1							
Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	03/14/2025
Sample ID: CCB2							
Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	03/14/2025
Sample ID: CCB3							
Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	03/14/2025

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Preparation Blank Summary

Client: Weston Solutions **SDG No.:** Q1570

Project: Fort Meade MD Tipton Airfield Parcel RI - 0111169

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: PB167122BL							
Reactive Cyanide	mg/Kg	< 0.1250	0.1250	U	0.044	0.25	03/14/2025
Sample ID: PB167149BL							
Reactive Sulfide	mg/Kg	< 5.0000	5.0000	U	0.201	10	03/18/2025

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Duplicate Sample Summary

Client: Weston Solutions
SDG No.: Q1570
Project: Fort Meade MD Tipton Airfield Parcel RI - 0111169
Sample ID: Q1547-05
Client ID: OR-620-JB-COMP-01DUP
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		03/14/2025

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Duplicate Sample Summary

Client: Weston Solutions
SDG No.: Q1570
Project: Fort Meade MD Tipton Airfield Parcel RI - 0111169
Sample ID: Q1568-04
Client ID: JC-03-03132025DUP
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 Sulfide	mg/Kg	+/-20	1.59	J	1.59	J	1	0		03/18/2025

RAW DATA

LB135

Test results | Aquakem 7.2AQ1 | Page: 1

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

3/14/2025 15:59 | Reviewed by : NP | Instrument ID : Konelab

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	91.890	0.0	0.083	
ICB1	0.358	0.0	0.001	
CCV1	240.269	0.0	0.215	
CCB1	0.100	0.0	0.001	
PB167122BL	-0.215	0.0	0.000	
Q1547-05	-0.392	0.0	0.000	
Q1547-05DUP	-0.286	0.0	0.000	
Q1547-10	-0.449	0.0	0.000	
Q1552-05	-0.583	0.0	0.000	
Q1568-04	-0.203	0.0	0.000	
Q1570-01	-0.456	0.0	0.000	
Q1570-02	-0.221	0.0	0.000	
Q1574-02	-0.377	0.0	0.000	
PB167141BL	-0.170	0.0	0.000	
CCV2	238.115	0.0	0.213	
CCB2	0.281	0.0	0.001	
Q1563-01	-0.423	0.0	0.000	
Q1563-01DUP	-0.316	0.0	0.000	
Q1563-02	-0.239	0.0	0.000	
Q1577-03	-0.552	0.0	0.000	
CCV3	252.134	0.0	0.226	
CCB3	0.376	0.0	0.001	

N	22
Mean	37.211
SD	86.1845
CV%	231.61

Calibration results Aquakem 7.2AQ1

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

3/14/2025 15:16 Reviewed by : NF Instrument ID : Konelab

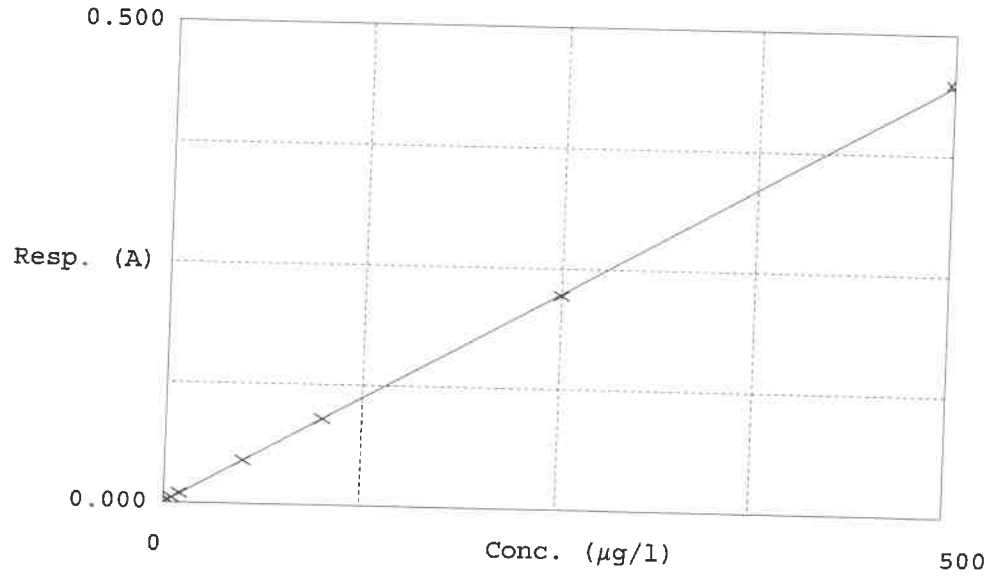
Test Total CN

Accepted 3/14/2025 15:16

Factor 1120
Bias 0.001

Coeff. of det. 0.999967

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.0PPBCN	0.001	0.6800	0.0000	-
2	5.0PPBCN	0.005	5.3131	5.0000	6.3
3	10PPBCN	0.010	10.5088	10.0000	5.1
4	50PPBCN	0.045	49.9260	50.0000	-0.1
5	100PPBCN	0.089	99.5273	100.0000	-0.5
6	250PPBCN	0.222	247.9123	250.0000	-0.8
7	500PPBCN	0.448	501.1324	500.0000	0.2

Re

NF

03/14/2025

Aquakem v. 7.2AQ1
Results from time period:
Fri Mar 14 12:02:34 2025
Fri Mar 14 15:57:26 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	0.68	µg/l	3/14/2025 15:15:24	
5.0PPBCN	A	Total CN	P	5.3131	µg/l	3/14/2025 15:15:25	
10PPBCN	A	Total CN	P	10.5088	µg/l	3/14/2025 15:15:26	
50PPBCN	A	Total CN	P	49.926	µg/l	3/14/2025 15:15:27	
100PPBCN	A	Total CN	P	99.5273	µg/l	3/14/2025 15:15:28	
250PPBCN	A	Total CN	P	247.9123	µg/l	3/14/2025 15:15:29	
500PPBCN	A	Total CN	P	501.1324	µg/l	3/14/2025 15:15:30	
ICV1	S	Total CN	P	91.8905	µg/l	3/14/2025 15:42:30	
ICB1	S	Total CN	P	0.3575	µg/l	3/14/2025 15:42:31	
CCV1	S	Total CN	P	240.2691	µg/l	3/14/2025 15:42:33	
CCB1	S	Total CN	P	0.0995	µg/l	3/14/2025 15:42:35	
PB167122BL	S	Total CN	P	-0.2154	µg/l	3/14/2025 15:42:37	
Q1547-05	S	Total CN	P	-0.3918	µg/l	3/14/2025 15:42:38	
Q1547-05DUP	S	Total CN	P	-0.2857	µg/l	3/14/2025 15:42:39	
Q1547-10	S	Total CN	P	-0.4491	µg/l	3/14/2025 15:50:04	
Q1552-05	S	Total CN	P	-0.5826	µg/l	3/14/2025 15:50:05	
Q1568-04	S	Total CN	P	-0.2028	µg/l	3/14/2025 15:50:06	
Q1570-01	S	Total CN	P	-0.4556	µg/l	3/14/2025 15:50:07	
Q1570-02	S	Total CN	P	-0.2214	µg/l	3/14/2025 15:50:08	
Q1574-02	S	Total CN	P	-0.377	µg/l	3/14/2025 15:50:09	
PB167141BL	S	Total CN	P	-0.1696	µg/l	3/14/2025 15:50:12	
CCV2	S	Total CN	P	238.1149	µg/l	3/14/2025 15:50:13	
CCB2	S	Total CN	P	0.2813	µg/l	3/14/2025 15:50:14	
Q1563-01	S	Total CN	P	-0.4229	µg/l	3/14/2025 15:54:51	
Q1563-01DUP	S	Total CN	P	-0.316	µg/l	3/14/2025 15:54:52	
Q1563-02	S	Total CN	P	-0.2394	µg/l	3/14/2025 15:54:53	
Q1577-03	S	Total CN	P	-0.5517	µg/l	3/14/2025 15:54:54	
CCV3	S	Total CN	P	252.1339	µg/l	3/14/2025 15:57:25	
CCB3	S	Total CN	P	0.3764	µg/l	3/14/2025 15:57:26	

CHEMTECH

Analytical Summary Report

Analysis Method: 9034
Parameter: Reactive Sulfide
Run Number: LB135069

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	PB167149BL		1	5.00	50	2.00	0.00	1.90	1.90	0.10	0.00	0.00	03/18/2025	11:45
2	Q1568-04		1	5.04	50	2.00	0.00	1.88	1.88	0.12	0.02	1.59	03/18/2025	11:48
3	Q1568-04DUP		1	5.04	50	2.00	0.00	1.88	1.88	0.12	0.02	1.59	03/18/2025	11:50
4	Q1570-01		1	5.07	50	2.00	0.00	1.84	1.84	0.16	0.06	4.73	03/18/2025	11:53
5	Q1570-02		1	5.03	50	2.00	0.00	1.88	1.88	0.12	0.02	1.59	03/18/2025	11:56
6	Q1574-02		1	5.04	50	2.00	0.00	1.86	1.86	0.14	0.04	3.17	03/18/2025	11:58
7	Q1590-01		1	5.01	50	2.00	0.00	1.86	1.86	0.14	0.04	3.19	03/18/2025	12:01

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 Cyanide Preparation Sheet

PB167122

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

SDG No : N/A

Start Digest Date: 03/14/2025 **Time :** 13:50 **Temp :** N/A

Matrix : SOIL

End Digest Date: 03/14/2025 **Time :** 15:20 **Temp :** N/A

Pippete ID : N/A

Balance ID : WC SC-7

Hood ID : HOOD#1

Digestion tube ID : M5595

Block Thermometer ID : N/A

Block ID : MC-1, MC-2

Filter paper ID : N/A

Prep Technician Signature: NF

Weigh By : NF

pH Meter ID : N/A

Supervisor Signature: [signature]

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
03.14.2025, 15:30	NF/WC	NF/WC
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Cyanide Preparation Sheet

PB167122

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167122BL	PBS122	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1547-05DUP	OR-620-JB-COMP-01DUP	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1547-05	OR-620-JB-COMP-01	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1547-10	OR-620-JB-COMP-02	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1552-05	NB-418-JB-COMP	1.05	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1568-04	JC-03-03132025	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1570-01	TAP-IDW-SOIL-031325-01	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1570-02	TAP-IDW-SOIL-031325-02	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1574-02	WC1	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : RCN S-03142025 **WorkList ID :** 188286 **Department :** Distillation **Date :** 03-14-2025 11:48:32

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1547-05	OR-620-JB-COMP-01	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	I41	03/11/2025	9012B
Q1547-10	OR-620-JB-COMP-02	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	I41	03/11/2025	9012B
Q1552-05	NB-418-JB-COMP-01	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	I41	03/11/2025	9012B
Q1568-04	JC-03-03132025	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	I31	03/12/2025	9012B
Q1570-01	TAP-IDW-SOIL-031325-01	Solid	Reactive Cyanide	Cool 4 deg C	PSEG03	I41	03/13/2025	9012B
Q1570-02	TAP-IDW-SOIL-031325-02	Solid	Reactive Cyanide	Cool 4 deg C	WEST04	I33	03/13/2025	9012B
Q1574-02	WC1	Solid	Reactive Cyanide	Cool 4 deg C	WEST04	I33	03/13/2025	9012B
Q1574-02	WC1	Solid	Reactive Cyanide	Cool 4 deg C	GENV01	I41	03/12/2025	9012B

Date/Time 03.14.2025, 13:40

Raw Sample Received by: NF(WC)

Raw Sample Relinquished by: WC)

Date/Time 03.14.2025, 15:00

Raw Sample Received by: WC)

Raw Sample Relinquished by: NF(WC)

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Sulfide Preparation Sheet

PB167149

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: 03/17/2025 **Time :** 15:20 **Temp :** N/A

End Digest Date: 03/17/2025 **Time :** 16:50 **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:

N/A

03/17/2025 RM

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

Alliance TECHNICAL GROUP

Soil/Sludge Reactive Sulfide Preparation Sheet

PB167149

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167149BL	PBS149	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1568-04DUP	JC-03-03132025DUP	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1568-04	JC-03-03132025	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1570-01	TAP-IDW-SOIL-031325-01	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1570-02	TAP-IDW-SOIL-031325-02	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1574-02	WC1	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1590-01	3794	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : rsul -3-17 **WorkList ID :** 188303 **Department :** Distillation **Date :** 03-17-2025 08:16:11

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1568-04	JC-03-03132025	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	I41	03/13/2025	9034
Q1570-01	TAP-IDW-SOIL-031325-01	Solid	Reactive Sulfide	Cool 4 deg C	WEST04	I33	03/13/2025	9034
Q1570-02	TAP-IDW-SOIL-031325-02	Solid	Reactive Sulfide	Cool 4 deg C	WEST04	I33	03/13/2025	9034
Q1574-02	WC1	Solid	Reactive Sulfide	Cool 4 deg C	WEST04	I33	03/13/2025	9034
Q1590-01	3794	Solid	Reactive Sulfide	Cool 4 deg C	PSEG03	I51	03/17/2025	9034

Date/Time 03/17/2025 14:50

Raw Sample Received by: RM (WC)

Raw Sample Relinquished by:

Date/Time 03/17/2025 15:35

Raw Sample Received by:

Raw Sample Relinquished by: RM (WC)

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB135043

Review By	Niha	Review On	3/17/2025 10:58:12 AM
Supervise By	Iwona	Supervise On	3/17/2025 1:34:00 PM
SubDirectory	LB135043	Test	Reactive Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP112310,WP112311,WP112312,WP112313,WP112314,WP112315,WP112316
ICV Standard	WP112318
CCV Standard	WP112311
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP111035,WP110103,WP112317

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	03/14/25 15:15		Niha	OK
2	5.0PPBCN	5.0PPBCN	CAL2	03/14/25 15:15		Niha	OK
3	10PPBCN	10PPBCN	CAL3	03/14/25 15:15		Niha	OK
4	50PPBCN	50PPBCN	CAL4	03/14/25 15:15		Niha	OK
5	100PPBCN	100PPBCN	CAL5	03/14/25 15:15		Niha	OK
6	250PPBCN	250PPBCN	CAL6	03/14/25 15:15		Niha	OK
7	500PPBCN	500PPBCN	CAL7	03/14/25 15:15		Niha	OK
8	ICV1	ICV1	ICV	03/14/25 15:42		Niha	OK
9	ICB1	ICB1	ICB	03/14/25 15:42		Niha	OK
10	CCV1	CCV1	CCV	03/14/25 15:42		Niha	OK
11	CCB1	CCB1	CCB	03/14/25 15:42		Niha	OK
12	PB167122BL	PB167122BL	MB	03/14/25 15:42		Niha	OK
13	Q1547-05	OR-620-JB-COMP-01	SAM	03/14/25 15:42		Niha	OK
14	Q1547-05DUP	OR-620-JB-COMP-01	DUP	03/14/25 15:42		Niha	OK
15	Q1547-10	OR-620-JB-COMP-02	SAM	03/14/25 15:50		Niha	OK
16	Q1552-05	NB-418-JB-COMP-01	SAM	03/14/25 15:50		Niha	OK
17	Q1568-04	JC-03-03132025	SAM	03/14/25 15:50		Niha	OK
18	Q1570-01	TAP-IDW-SOIL-03132	SAM	03/14/25 15:50		Niha	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB135043

Review By	Niha	Review On	3/17/2025 10:58:12 AM
Supervise By	Iwona	Supervise On	3/17/2025 1:34:00 PM
SubDirectory	LB135043	Test	Reactive Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP112310,WP112311,WP112312,WP112313,WP112314,WP112315,WP112316
ICV Standard	WP112318
CCV Standard	WP112311
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	N/A
Chk Standard	WP111035,WP110103,WP112317

19	Q1570-02	TAP-IDW-SOIL-03132	SAM	03/14/25 15:50		Niha	OK
20	Q1574-02	WC1	SAM	03/14/25 15:50		Niha	OK
21	PB167141BL	PB167141BL	MB	03/14/25 15:50		Niha	OK
22	CCV2	CCV2	CCV	03/14/25 15:50		Niha	OK
23	CCB2	CCB2	CCB	03/14/25 15:50		Niha	OK
24	Q1563-01	437	SAM	03/14/25 15:54		Niha	OK
25	Q1563-01DUP	437DUP	DUP	03/14/25 15:54		Niha	OK
26	Q1563-02	FERNOT-WATER	SAM	03/14/25 15:54		Niha	OK
27	Q1577-03	MOO-25-0072	SAM	03/14/25 15:54		Niha	OK
28	CCV3	CCV3	CCV	03/14/25 15:57		Niha	OK
29	CCB3	CCB3	CCB	03/14/25 15:57		Niha	OK

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Instrument ID: TITRAMETRIC

Daily Analysis Runlog For Sequence/QCBatch ID # LB135069

Review By	rubina	Review On	3/18/2025 1:01:07 PM
Supervise By	Iwona	Supervise On	3/18/2025 1:17:49 PM
SubDirectory	LB135069	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	PB167149BL	PB167149BL	MB	03/18/25 11:45		rubina	OK
2	Q1568-04	JC-03-03132025	SAM	03/18/25 11:48		rubina	OK
3	Q1568-04DUP	JC-03-03132025DUP	DUP	03/18/25 11:50		rubina	OK
4	Q1570-01	TAP-IDW-SOIL-03132	SAM	03/18/25 11:53		rubina	OK
5	Q1570-02	TAP-IDW-SOIL-03132	SAM	03/18/25 11:56		rubina	OK
6	Q1574-02	WC1	SAM	03/18/25 11:58		rubina	OK
7	Q1590-01	3794	SAM	03/18/25 12:01		rubina	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q1570

Test : Reactive Cyanide,Reactive Sulfide

Prepbatch ID : PB167122,PB167149,

Sequence ID/Qc Batch ID: LB135043,LB135069,

Standard ID :
WP110103,WP111004,WP111035,WP111294,WP111296,WP112309,WP112310,WP112311,WP112312,WP112313,WP112314,WP112315,WP112316,WP112317,WP112318,

Chemical ID :
M6121,W2668,W2725,W2882,W2926,W3019,W3105,W3112,W3113,W3114,W3138,W3139,W3149,W3154,

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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	WP112309	03/14/2025	03/15/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/18/2025

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	WP112310	03/14/2025	03/15/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/18/2025

FROM 45.00000ml of WP111294 + 5.00000ml of WP112309 = 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	WP112311	03/14/2025	03/15/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/18/2025

FROM 2.50000ml of WP112309 + 47.50000ml 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
6	Calibration Standard 100 ppb	WP112312	03/14/2025	03/15/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/18/2025

FROM 1.00000ml of WP112309 + 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	WP112313	03/14/2025	03/15/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/18/2025

FROM 0.50000ml of WP112309 + 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	WP112314	03/14/2025	03/15/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/18/2025

FROM 1.00000ml of WP112310 + 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	WP112315	03/14/2025	03/15/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/18/2025

FROM 0.50000ml of WP112310 + 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	WP112316	03/14/2025	03/15/2025	Niha Farheen Shaik	None	None	Iwona Zarych 03/18/2025

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	WP112317	03/14/2025	03/15/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 03/18/2025

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	WP112318	03/14/2025	03/15/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 03/18/2025

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 / Iwona	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.	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 #
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

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Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

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

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

Sigma-Aldrich.

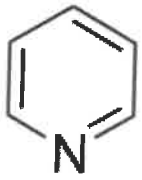
W3019
Rec 4/3/23

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

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

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

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

James Ethier
Jamie Ethier
Vice President Global Quality

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

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

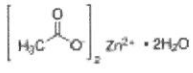
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

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."

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.

RICCA CHEMICAL COMPANY®

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Pocomoke City, MD 21851
http://www.riccachemical.com
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customerservice@riccachemical.com

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

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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Batesville, IN 47006
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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

448 West Fork Dr
Arlington, TX 76012
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Cyanide Standard, 1000 ppm CN^-

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

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

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

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

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

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

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

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

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

Luis Briceno (11/22/2024)
Operations Supervisor

SHIPPING DOCUMENTS

Q1570

Weston COC ID
Weston_20250313_1208

Chain of Custody Record/Lab Work Request

Page	1	of	1

Client:	Weston Solutions, Inc.		
Project Manager:	David Sembrot		
Street Address:	1400 Weston Way	City:	West Chester
Phone:	610-314-5456	ST, ZIP:	PA, 19038
e-mail:	david.sembrot@westonsolutions.com		
Sampled By:	Cheyenne Harrington		

Project Name:	Fort Meade RI	**Project POC:**	Nathan Fretz
PO Number	0111169	**Phone:**	484-524-5665
W.O. #:		**POC e-mail**	nathan.fretz@westonsolutions.com
Lab:	CHEMTECH-ALS Middletown	**Lab POC:**	Jessica Smith
TAT (days):	21	**Lab Phone:**	908-728-3147
Lab Address:	301 Fulling Mill Road, Middletown, PA 17057		

Matrix Codes
SS - Soil
SE - Sediment
SO - Solid
SL - Sludge
GW - Groundwater
W - Water
SB - Soil Boring
A - Air
DS - Drum Solids
DL - Drum Liquids
L - EP/TCLP Leachate
WI - Wipe
X - Other
F - Fish

Lab Use Only		
Temperature of cooler when received (°C)		
COC Tape was present and unbroken on outer package?	Y	N
Samples received in good condition?	Y	N
Labels indicate properly preserved?	Y	N
Received within holding times?	Y	N
Discrepancies between sample labels and COC record?	Y	N

Analyses Requested:	Reactive Sulfide by EPA 9034	Reactive Cyanide by EPA9012B										
Container Type:	Glass	Glass										
Container Size:	8 oz	8 oz										
Preservative:	Ice to 0 6 deg	Ice to										

#	Sample ID	G/C	Matrix	# Cont	MS/MSD	Date Collected	Time Collected												Special Instructions/Comments
1	TAP-IDW-SOIL-031325-01	c	DS	1	no	3/13/2025	10:20	X	X										
2	TAP-IDW-SOIL-031325-02	c	DS	1	no	3/13/2025	10:50	X	X										
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Shipping Airbill Number: 772696013376

Cooler Number: 1 of 1

	Relinquished By	Date	Time	Received By	Date	Time
1.)	[signature]	3/13/25	1305	[signature]	3/14/25	1000
2.)						
3.)						

Additional Comments

SAMPLES TO BE ANALYZED BY ALS MIDDLETOWN
QSM 6.0 Compliant

Deliverable Requirements: DoD Level IV report, EnviroData EDD, and ERIS-compatible EDD

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